CARDINAL RESOURCES

July 31, 2019
Project No. 104-0012

Ms. Maria Jon
U.S. Environmental Protection Agency
Emergency and Remedial Response Division
Eastern New York Section
290 Broadway
New York, New York 10007

June 2019 Sampling Report - Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Dear Ms. Jon:

Please find transmitted along with this letter the *June 2019 Sampling Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York.* The report summarizes the methods and findings of the 2019 groundwater sampling program for Operable Unit 2. As you have requested, this is being provided electronically, with no paper copy provided.

Do not hesitate to call (412.374.0989) or email (bjones@cardinalres.com) to discuss the findings, or if you have any questions about this report.

Later this year we will be reaching out to you to discuss plans in advance of the next five-year review for this site, which will occur in 2020. This year, 2019, is the 20th anniversary of the Operable Unit 1 action, during which more than 34,000 tons of waste and contaminated soil were removed from the former lagoons.

Sincerely,

CARDINAL RESOURCES

Barbara H. Jones

Barbara H. Jones, Principal

cc: Carroll & Dubies PRP Group
Jonathan A. Murphy, Esq. - Representing Kolmar Laboratories, Inc.
Mr. Robert L. Casselberry - Representing Wickhen Products, Inc.
Ms. Tracey White – Representing Resolute Management, Inc. (P 033-054172-01)
Mr. Mark McClendon – CCL Industries, Inc.
Ms. Carole Gallagher, Esq. - Representing City of Port Jervis
Ms. Anne Secord – USFWS
Ms. Maureen Schuck – NYSDOH
Ms. K'Drea Fox - NYSDOH
Mr. Scott Deyette – NYSDEC

June 2019 Sampling Report

Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Prepared for:

Carroll and Dubies PRP Group

Prepared by:

Cardinal Resources Inc.
4410 Broadway Blvd.
Monroeville, Pennsylvania 15146

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July 2019

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1.0 Introduction

This report summarizes the methods and results of a field sampling program performed on June 4, 5, and 6 at the Carroll and Dubies Superfund Site (site), Town of Deerpark, Orange County, New York. Monitoring wells OW-2, OW-5, OW-6, OW-10R, OW-13R, OW-18, OW-19, OW-21, OW-22, and OW-24 were sampled. The purpose of this sampling program is to document volatile organic compound (VOC) concentrations in the outwash aquifer at the site. The field work followed the August 2005 Supplemental Sampling Work Plan (Cardinal Resources LLC [Cardinal Resources], 2005) approved by the United States Environmental Protection Agency (U.S. EPA), and incorporated the recommendations of the *November 2006 Sampling Report* (Cardinal Resources, 2007). The monitoring program reflects a reduced sampling approach, as agreed to in email exchanges with Ms. Maria Jon of U.S. EPA dated August 12, 2015 and September 16, 2015.

1.1 Site Setting

The three-acre site is located in the Town of Deerpark in Orange County, New York, which is approximately 3,000 feet northeast of the City of Port Jervis, New York (Figure 1). The site is situated on the northwestern flank of the Neversink Valley. Gold Creek lies approximately 1,500 feet to the east, and the Neversink River is located approximately 2,500 feet beyond Gold Creek.

The site is underlain by sand and gravel deposits of glacial and glaciofluvial origin. Groundwater monitoring wells on the site have been completed in the outwash unit, found above a low-permeability till zone that functions as an aquitard. The outwash unit consists of fine to coarse sand with fine to coarse gravel. The direction of groundwater flow is generally toward the southeast.

1.2 Land and Resource Use

Figure 2 shows land use features in the vicinity of the former Carroll and Dubies lagoons. The immediate surrounding area includes undeveloped woodlands to the north; undeveloped woodlands, quarry ponds, and commercial sand and gravel operations to the northeast; the closed City of Port Jervis landfill, the Orange County Transfer Station, and a concrete products company to the south; and a sparsely vegetated, shale bedrock hillside to the west. In 2004, the City of Port Jervis began a small sand and gravel operation on land it owns, immediately to the southeast of the

former lagoons, in the vicinity of OW-5 and OW-6. These conditions have remained stable during the period of site investigation and post-remediation monitoring, although truck traffic along the road adjacent to OW-17, OW-18, OW-19, OW-23, and OW-24 associated with the commercial sand and gravel operations to the northeast has increased over the past few years. During the June 2019 sampling event, the City of Port Jervis was not actively excavating and screening sand and gravel.

1.3 History of Waste Disposal and Contamination

In 1971, the three-acre Carroll and Dubies Site began operating as a disposal facility consisting of a series of lagoons. The majority of wastes disposed in the lagoons were septic waste, municipal sewage sludge, and solid waste. The site also received liquid industrial wastes from approximately 1971 to 1979.

Over time, waste constituents in the lagoons leached into groundwater and affected the outwash aquifer. VOCs were of particular concern because of their dispersion in the aquifer and relative risk. Benzene, vinyl chloride, and other VOCs were found through a series of investigations to exceed Applicable or Relevant and Appropriate Requirements (ARARs) in Site wells.

1.4 Overview of Remedies

The remedies selected for the site were defined by two operable units (OU), the waste lagoons themselves, and the impacted groundwater. Remedies were selected and executed to remove wastes from the lagoons, restore the site to a safe and stable condition, and promote and track improvements in groundwater quality.

1.4.1 OU-1 Remedy

The goals of the OU-1 remedy conducted in 1999 were to prevent further leaching of contaminants into groundwater, and to reduce the risks to potential future workers at the site who could come in contact with lagoon wastes. The steps in this process were:

- Excavation of all wastes from Lagoons 1, 2, 3, 4, 6, 7, and 8, along with surrounding soils that exceeded specified levels for indicator chemicals.
- Appropriate management of all excavated wastes and soils.
- Placement of imported clean fill in the excavations, followed by grading for drainage control and vegetation.

1.4.2 OU-2 Remedy

The goals of the ongoing OU-2 remedy, which was initiated in 1999, are to allow natural attenuation to reduce or eliminate the risks associated with the ingestion of site groundwater for future site workers and to protect Gold Creek from site-related impacts. A monitoring program was designed to address concerns primarily related to determining whether the source removal was successful and the site is stable. The steps in the OU-2 remedy are:

- Execution of a monitoring program in accordance with Work Plans and other documents prepared for the project and approved by the U.S. EPA.
- With each sampling round, a report is prepared for U.S. EPA that documents the progress made in achieving the remedial goals.

1.5 Current Site Conditions

In 2019, twenty years after completion of the OU-1 remedy, the areas where the former lagoons were located are densely vegetated. Monitoring wells virtually disappear in the vegetation. The tow path road is no longer passable for vehicles because of overgrowth, and it is not easy to navigate the path on foot. Employees at the waste transfer station, Public Works gravel pit, and shooting range keep an eye on the area; the entrance road is gated. In recent years there has not been evidence of trespass, and there has never been evidence of vandalism or site disturbance. The access road along which OW-17, OW-18, OW-19, OW-23, and OW-24 are located is busy with heavy truck traffic to and from the commercial sand and gravel quarry. These monitoring wells, like those near the former lagoons, are hidden in vegetation.

The photographs that follow, taken in June 2019, show how the former lagoon areas that had been excavated, backfilled, graded, and seeded with grass, have now naturalized with saplings and other native vegetation. Deer and other wildlife have been observed.



View of former impoundment area from tow path, looking north



View of former impoundment area from tow path, looking west

1.6 Reduced Sampling Approach

For an overview of the sampling history from 2006 to 2015 for OU-2, refer to the *March 2018 Sampling Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York*, dated April 2018. The introductory section in that report describes

the 2006 groundwater monitoring program in response to the first five-year review; the resumption of annual monitoring in 2007, continuing through 2011; and a modified sampling frequency of once every five quarters thereafter.

As part of the 2015 Five Year Review, U.S. EPA agreed to a reduced sampling approach. This approach, outlined in email exchanges (August 12, 2015; September 16, 2015), included a schedule for sample media:

- 3rd quarter 2015 groundwater, surface water/sediment
- 4th quarter 2016 groundwater
- 1st quarter 2018 groundwater, surface water/sediment
- 2nd quarter 2019 groundwater

The groundwater monitoring network included the following 10 wells:

OW-2	OW-18
OW-5	OW-19
OW-6	OW-21
OW-10R	OW-22
OW-13R	OW-24

Monitoring parameters included:

- 3rd quarter 2015 groundwater VOCs, redox, dissolved oxygen, pH, temperature, turbidity, and ethane/ethene; VOCs for surface water and sediment
- 4th quarter 2016 groundwater VOCs, redox, dissolved oxygen, pH, temperature, and turbidity
- 1st quarter 2018 groundwater VOCs, redox, dissolved oxygen, pH, temperature, and turbidity; VOCs for surface water and sediment
- 2nd quarter 2019 groundwater VOCs, redox, dissolved oxygen, pH, temperature, and turbidity

1.7 2019 NYSDEC Emerging Contaminants Program

Concurrently with the 2019 OU-2 groundwater sampling program, samples from three monitoring wells were also collected for analysis of 1,4-dioxane and PFAS for the New York State Department of Environmental Conservation's (NYSDEC's) Emerging Contaminants Program. See Section 2.4 for more details on this program; summary results are presented in this report. It is anticipated that this will be a single sampling event and will not be routine.

2.0 Groundwater Sample Collection

This section describes methods used to collect groundwater samples for analysis. The results of the groundwater sampling program are provided in Section 3.0.

2.1 Groundwater Elevations

Groundwater elevations were measured on June 4 to June 6, 2019. The depth to groundwater was measured from the reference point elevation using an electronic water-level meter and recorded on a monitoring well sampling form.

2.2 Wells and Equipment

Dedicated low-flow bladder pumps were used to purge and sample the monitoring well network, with the exception of wells OW-5, OW-13R, OW-18, OW-19, and OW-24, which were sampled with a portable bladder pump. OW-18 and OW-19 formerly had dedicated bladder pumps but the pumps are no longer operating. OW-13R and OW-24 have always been sampled with a portable bladder pump. OW-5 has a dedicated bladder pump, but it was removed to meet the special sampling criteria for the Emerging Contaminants Sampling Program for NYSDEC; see Section 2.4.

The portable bladder pump was decontaminated initially and after sampling each well by:

- Washing with low phosphate detergent and tap water
- Rinsing with tap water
- Rinsing with deionized water
- Air drying

Clean disposable high density polyethene (HDPE) tubing and a clean disposable HDPE bladder were used for each well sampled with the bladder pump.

2.3 Well Purging and Sampling

Groundwater samples were collected on June 4, 5, and 6, 2019. All wells were purged using low-flow techniques (between 100 and 200 milliliters per minute [mL/min]). During purging of each monitoring well, temperature, dissolved oxygen, reduction/ oxidation

(redox) potential, conductivity, pH, and turbidity were monitored and recorded on field forms in average intervals of 5 minutes.

The groundwater field parameters were measured with a YSI Model 556 MPS-10 multi-parameter unit equipped with a flow-through cell, with the exception of turbidity, which was measured in a separate field turbidimeter. All equipment was calibrated prior to use in the field. The goal was to obtain three consecutive readings of the field parameters within the following ranges:

- ±1.0 degree centigrade (°C) for temperature
- ±10 percent (%) for dissolved oxygen
- ±10 millivolts (mV) for redox potential
- ±3% for conductivity
- ±0.1 for pH
- ±10% or ±2 nephelometric turbidity units (NTUs) for turbidity (whichever is greater)

The final stabilized readings prior to sample collection for each of the monitoring wells are provided in Table 1.

Groundwater purged from wells sampled with the bladder pump was initially turbid but cleared with low-flow purging. Groundwater from OW-21 and OW-22, installed in the closed municipal landfill, and OW-19, downgradient of the landfill, was odorous. Samples were shipped on ice to Eurofins TestAmerica, Canton, North Canton, Ohio on June 6, 2019 for overnight delivery.

2.4 Emerging Contaminants Sampling Program

A sampling and analysis program for emerging contaminants at the Carroll and Dubies Superfund Site was done at the request of NYSDEC concurrently with this regular sampling and analysis program. Mr. Scott Deyette, Project Manager for NYSDEC Remedial Bureau C, sent a letter dated March 1, 2019 to the potentially responsible party (PRP) representative outlining the request. The letter explained that NYSDEC is undertaking an evaluation of remediation sites to better understand the risks posed by 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS). Further, the letter said that PFAS have not been historically evaluated at remediation sites, and 1,4-dioxane has not been evaluated at levels that are now thought to represent health concerns.

PFAS are synthetic chemicals manufactured and used in a variety of industries and are persistent in the environment. The synthetic chemical 1,4-dioxane has been used as a stabilizer in chlorinated solvents and has been found in groundwater at some sites where chlorinated volatile organic compounds (VOCs) are detected.

Three monitoring wells were sampled for this program, OW-5, OW-13R, and OW-24:

- OW-5 is downgradient of the location of historic lagoons and has detectable chlorinated VOCs.
- OW-13R is downgradient of the location of historic lagoons and sidegradient of the closed local landfill. Benzene is detected in this well; historically chlorinated VOCs were detected.
- OW-24 is farther downgradient and is nondetectable for VOCs.

OW-6 was originally proposed but OW-5 was substituted because the dedicated downhole pump was more readily removed.

Sample collection methods were consistent with the approved U.S. EPA sampling protocols that have been in place for this site. In addition, the guidelines provided by NYSDEC in a letter dated March 1, 2019 were followed, along with guidelines from the laboratory. Specifically:

- Sampling equipment and sample containers were stainless steel, high density polyethylene (HDPE), and polypropylene. This included a stainless-steel body QED Sample Pro bladder pump; QED HDPE disposable pump bladders; and fresh air and sample HDPE tubing for each sample location.
- Sampling equipment and sample containers were protected from contact with aluminum foil, low density polyethylene (LDPE), glass, or polytetrafluoroethylene (PTFE, or Teflon^{TM}).
- Sampling personnel avoided GORE-TEX clothing or other clothing such as rainwear that may have been treated with PFAS-containing waterproof materials.
- Sampling personnel avoided use of sunscreen, cosmetics, or lotions and wore cotton clothing washed without fabric softener.
- All PFAS samples were collected first and separately, so that sample containers for VOCs were not present until PFAS sample containers were filled and iced.

3.0 Groundwater Results

This section describes the results of the June 2019 groundwater sampling event and presents a discussion of site-wide groundwater conditions.

3.1 Groundwater Elevations

The groundwater elevations for this sampling round are presented in Table 2. Associated groundwater elevation contours are shown in Figure 3.

The groundwater elevations in the wells were on the average 0.47 feet lower than measured in March 2018. The direction and gradient of groundwater flow toward the southeast and Gold Creek were about the same. The same pattern was seen, with a few monitoring wells close to the hillside near former Lagoon 8 (OW-9, OW-10R, OW-15) having groundwater elevations between 439 feet mean sea level (msl) and 460 msl; the groundwater elevations in the remaining monitoring wells were all between 431 and 433 feet msl. Monitoring wells south of the quarry pond (OW-2, OW-5, OW-6, OW-8, MW-4) have a slightly higher average elevation than the other monitoring wells in the 431 to 433 feet msl range, reflecting a slight mounding effect from the quarry pond. The gradient from OW-15 southwest of the former lagoons to OW-22 in the closed landfill was about 0.10 in June 2019. From OW-22 to OW-18, near Gold Creek, the gradient was essentially flat at 0.0011. The steeper gradient on the western side of the site is due to the depth to bedrock along the valley wall. As the depth to bedrock increases towards the valley floor, the thickness of the alluvial fill increases and the groundwater gradient flattens.

3.2 Summary of Groundwater Quality Results

VOCs detected in groundwater analysis in the June 2019 sampling event are presented in Table 3 and Figure 4. The laboratory analytical report, including marked Form Is from the data validation process, is included in Appendix A. Historical data of detected organic compounds have been combined with the most recent data and are presented in Table B-1, Appendix B.

Six VOCs were detected in various monitoring wells during this sampling event, five of which exceeded regulatory standards or guidelines in one or more wells. Two monitoring wells, OW-21, in the closed landfill, and OW-24, downgradient to the east

near the gravel quarry road, were nondetectable for VOCs during this sampling round. Results were compared to NYSDEC Standards or Guidance Values (SGVs) and U.S. EPA Maximum Contaminant Levels (MCLs) for drinking water. Regulatory exceedances of VOCs in groundwater are reported in Table 4.

VOC concentrations in monitoring wells in June 2019 were generally comparable to the ranges previously observed, although lower in several cases compared to March 2018. Benzene, which was detected in five monitoring wells, was lower in four of the wells, and the same as March 2018 in OW-19, at 1.6 ug/L. In OW-2 and OW-5, total chlorinated VOC concentrations were substantially lower than in March 2018 by 37% and 65%, respectively; concentrations were about the same in OW-6. In the remainder of this section, specific groundwater trends and conditions are discussed in greater detail, including:

- Concentration trends for chlorinated VOCs
- Concentration trends for benzene
- Achievement of regulatory limits in monitoring wells
- MNA trends

3.3 Trends for Chlorinated VOCs

The chlorinated VOCs 1,2-dichloroethene, trichloroethene, and tetrachloroethene are the predominant constituents on the eastern side of the site in OW-2, OW-5, and OW-6 (Table 3; Figure 4). In June 2019 tetrachloroethene exceeded the MCL and SGV in each of these monitoring wells. 1,2-Dichloroethene exceeded the SGV in OW-2 and OW-6, and trichloroethene exceeded the MCL and SGV in OW-2 and OW-6. In OW-2, 1,2-dichloroethene and trichloroethene were at the lowest concentrations in June 2019 than have been reported to date.

Compared to OW-2, OW-5, and OW-6, groundwater on the western side (OW-10R, OW-13R, OW-18, OW-19, OW-21, OW-22) typically has lower redox and dissolved oxygen (is more reduced) and is more amenable to reductive dechlorination. See additional discussion in Section 3.6. For monitoring wells on the western side of the site, chlorinated VOCs in general showed a downward trend over time once OU-1 actions were complete. For example, while the concentration of chlorinated VOCs was higher in OW-13/OW-13R in 1999-2000 compared to OW-5 (Figure 5), favorable geochemical conditions resulted in a rapid and smooth decline. Chlorinated VOCs have not exceeded criteria at OW-13/13R since 2004 and have not been detected since 2014. In

OW-5, conditions for degradation have been somewhat less favorable and the decline has been slower and more variable (Figure 5).

In OW-2 and OW-6, the rate of decline in chlorinated VOC concentrations has been slowed by unfavorable geochemical conditions. Concentrations appeared to peak in the years following OU-1 actions, and since 2006 concentrations have been flat to gradually declining (Figure 6).

Chlorobenzene exceeded the NYSDEC SGV of 5 ug/L but not the MCL of 100 ug/L in groundwater during this sampling round, in OW-18, OW-19, and OW-22. The suspected main source of chlorobenzene in groundwater is the historic closed municipal landfill located between OW-10R to the northwest and OW-18 and OW-19 to the south (Figures 2 and 4). OW-22 is midway in between OW-10R (which was nondetectable for chlorobenzene in June 2019) and the downgradient monitoring wells. The closed landfill is suspected as the source because of the consistently higher concentrations within or downgradient of the landfill compared to upgradient concentrations, as shown below:

Position Relative to Closed Landfill	Monitoring Well	Chlorobenzene Average ug/L 2008-2019
Upgradient	OW-10R	2.2
Downgradient	OW-18	11.7
Downgradient	OW-19	10.2
Within	OW-22	7.3

3.4 Benzene Concentration Trends

As was described in detail in the *Supporting Documentation for Five-Year Review* (Cardinal Resources, 2005), different VOCs have predominated in different areas downgradient of the former lagoons. Benzene has predominated in several monitoring wells in the southwestern areas of the site, with historically the highest concentrations observed in OW-10R and OW-13R. The benzene concentrations in these wells have declined 50%, when comparing 2006-2009 average results with 2010-2019 average results. In June 2019 the benzene concentrations in these wells were 1.1 ug/L and 2.4

ug/L, respectively. In June 2019, the highest benzene concentration was measured in groundwater at OW-13R and OW-22, at 2.4 micrograms per liter (ug/L), below the U.S. EPA MCL of 5 ug/L. Benzene exceeded the SGV of 1 ug/L in OW-10R, OW-13R, OW-18, OW-19, and OW-22. In June 2019 benzene was not detected in OW-21; it was also nondetectable in March 2018, for the first time since monitoring began in 1994.

Benzene has exhibited an overall downward trend in OW-13R and OW-22, individual wells with historically high concentrations, as shown in Figure 7. This depiction shows how the benzene concentration in OW-13/13R has declined by more than two orders of magnitude between 2000 and 2019, from more than 600 ug/L to 2.4 ug/L in June 2019. The decline in the benzene concentration in the former source area reflects both degradation and dispersion of benzene within the plume to the south and west toward downgradient OW-22. Benzene in OW-22 has declined by more than an order of magnitude since OU-1 actions were complete, from 46 ug/l in 1999 to 2.4 ug/L in June 2019.

3.5 Achievement of MCLs and SGVs

Since completion of OU-1 remediation in 1999, many of the MCLs and state groundwater SGVs had been met in groundwater wells downgradient of the former lagoons. From 1999 through 2010 there was a substantial reduction in MCL and SGV exceedances; since 2010, conditions have remained about the same, indicating stability, as shown in the chart below:

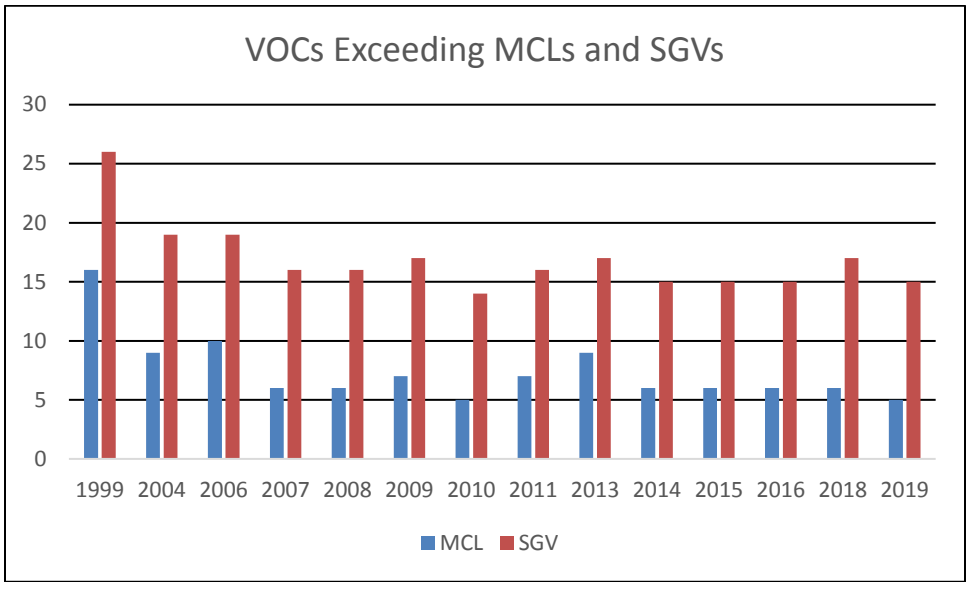


Table 4 summarizes MCL and SGV exceedances through the current sampling round. In 2019, 5 MCLs and 15 SGVs were exceeded within the monitoring network for the wells sampled.

3.6 Monitored Natural Attenuation (MNA) Trends

The number of MNA parameters measured were reduced with U.S. EPA approval beginning in 2015. Two parameters that are important MNA indicators, dissolved oxygen and redox, continue to be measured during field stabilization procedures (Table 1). Reduced conditions as indicated by low dissolved oxygen and low redox are favorable for reductive dechlorination of chlorinated VOCs, which is a natural attenuation process.

The patterns seen in June 2019 are consistent with the observations presented previously, with the areas predicted to be most amenable to degradation of chlorinated VOCs in monitoring wells to the south and west (OW-10R, OW-13R, OW-18, OW-19, OW-21, OW-22). Using data from Table 1, during this sampling round the average dissolved oxygen in these wells was 0.18 mg/L, and the average redox was -2.8 mV. In comparison, in OW-2, OW-5, and OW-6, monitoring wells where chlorinated VOCs have persisted, dissolved oxygen on average was 2.98 mg/L, and average redox was 109.3 mV.

In summary, for OW-10R, OW-13R, OW-18, OW-19, OW-21, and OW-22:

- Low dissolved oxygen and/or redox potential indicating reduced conditions were found; and
- Chlorinated VOCs cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene were not present.

By comparison, in OW-2, OW-5 and OW-6, dissolved oxygen and redox were relatively high, and cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene were detected.

3.7 Emerging Contaminants Sampling Results

Two separate laboratory data packages for 1,4-dioxane and PFAS analyses are provided along with the VOC laboratory report in Appendix A. Table 5 shows the detected and nondetectable results, and includes the samples (OW-5, OW-13R, and OW-24), a sample duplicate, field blank, and rinsate blank.

PFAS were detected in OW-5, which is consistent with the history of this well as having been impacted by chemical contaminants. Concentrations for individual PFAS compounds were below the NYSDEC-recommended level 10 ng/L for PFOA and PFOS. The detected analytes were:

PFBA	2.6 ng/L
PFHxA	2.1 ng/L
PFHpA	2.2 ng/L
PFOA	9.7 ng/L
PFHxS	2.5 ng/L
PFOS	8.4 ng/L

PFAS were not detected in OW-13R. Its reporting limits were higher than OW-5 or OW-24, at 9.1 to 10 ng/L, due to matrix interference. However, method detection limits (MDLs) for OW-13R were close to the 2 ng/L goal, and there were no detections at the MDL levels. There were no PFAS detections in OW-24, with reporting limits for individual compounds of 1.7 to 1.8 ng/L.

1,4-Dioxane was detected in OW-5 at 3.9 ug/L. 1,4-Dioxane was detected in one sample from OW-24 at 2.8 J ug/L, qualified by the laboratory as estimated because the result was less than the reporting limit of 3.0 ug/L. The field duplicate OW-24 DUP was reported at 4.2 ug/L. Based on data validation protocols, the OW-24 DUP result was also qualified with a J as estimated.

Considering the site history, it is not unexpected that PFAS and/or 1,4-dioxane were detected in low concentrations in two of the three wells sampled as part of the program. The presence of these emerging contaminants in groundwater at low levels does not change the protective conditions that are in place. Groundwater associated with the Carroll and Dubies Site is not a source of drinking water. U.S. EPA's review of site conditions during five-year reviews in 2005, 2010, and 2015 found that with stable to declining groundwater concentrations and institutional controls in place, conditions continue to be protective of human health and the environment, with no exposure pathways that could result in unacceptable risks.

Detected concentrations were close to or below recommended limits. In December 2018 the New York State Drinking Water Council recommended adoption of a Maximum Contaminant Level (MCL) of 10 ppt (ng/L) for PFOA and 10 ppt for PFOS. An MCL of 1.0 ug/L for 1,4-dioxane was also recommended. In comparison, U.S. EPA's April 2019 interim recommendations for groundwater that is a current or potential source of groundwater is 70 ppt or PFOA and 70 ppt for PFOS; U.S. EPA's lifetime advisory for 1,4-dioxane in drinking water (2012) is 200 ug/L. PFAS were not detected above New York or U.S. EPA recommended levels for drinking water, and 1,4-dioxane was not found above recommended U.S. EPA levels, as summarized in this table:

Source	PFOA (ng/L)	PFOS (ng/L)	1,4-Dioxane (ug/L)
NYS Drinking Water Council Recommended MCLs, 2018	10	10	1.0
U.S. EPA draft interim recommendations to address PFAS in groundwater, 2019; U.S. EPA lifetime advisory for 1,4-dioxane in drinking water, 2012	70	70	200
OW-5	9.7	8.4	3.9
OW-13R	10 U	9.5 U	0.26 U
OW-24/OW-24 DUP	1.8 U/1.9 U	1.7 U/1.7 U	3.0 UJ/4.2 J

U indicates not detected at reporting limit
J indicates estimated result

4.0 Data Quality Review

Data quality review was performed on the analytical data packages to assure that quality and usability requirements were met. The data quality review for the emerging contaminants is not discussed in detail here; it is provided in a separate report prepared for NYSDEC (*Report – Emerging Contaminants Sampling Program, Carroll and Dubies Superfund Site 336015*, July 2019). For 1,4-dioxane, the qualifier J (estimated) was added to the OW-24 DUP field duplicate. For the PFAS data package, the one qualifier placed on this data set by the Tier II review process was UJ (not detected but the reporting limit is approximate), for FTS4:2 in OW-5, due to high recovery of an internal surrogate. No other qualifications were made. Based on this Tier II review, the analytical results were usable and of acceptable quality; no results were rejected.

The remainder of this section discusses the data quality review process for the VOC data package.

4.1 Introduction

A Tier II data quality review of the sample data package was completed using U.S. EPA guidelines. The Tier II data evaluation consisted of a review of data package completeness and a quality control (QC) review, as summarized in the QC forms provided by the laboratory, covering:

- Signed transmittal page
- Data package narrative
- Sample transmittal documentation
- Reagent traceability summary
- Standard VOC QC forms for:
  - System monitoring compound (surrogate recovery)
  - Matrix spike/matrix spike duplicate (MS/MSD) recovery
  - Laboratory control samples
  - Method blank summary
  - Instrument performance check
  - Internal standard summary and retention time (RT) summary
  - Initial calibration data
  - Continuing calibration data
- Form Is and raw data for field samples, blanks, laboratory control samples, MS/MSDs

- Copies of logbook pages documenting sample preparation, extract transfer, instruments, and sample tracking
- Holding times
- Form Is and raw data for field and QC samples
- Field duplicates and field, trip, and equipment rinsate blanks

A checklist documenting the review of the data package is provided in Appendix C.

4.2 Results of VOC Data Review

The hand-marked, qualified Form Is are provided in Appendix A with the laboratory report. Summary tables included with this report reflect the qualified data. The data qualifier for this analytical package is:

- UJ: The analyte was not detected above the reporting limit, but the reporting limit is approximate.

The data package was complete and appropriately organized, and all relevant supporting information was provided.

4.2.1 Field QC Samples

Sample Collection Blanks: Three blanks related to sample collection (different from the method blanks prepared by the laboratory for internal QA/QC) were analyzed as part of this sampling round:

- Field Blank (FB): One field blank was collected. Acetone was reported at 10 ug/L, which is the quantitation (reporting) limit. No qualifications are made because acetone is a common laboratory contaminant and would only require qualification if reported at 10x the quantitation limit. Acetone was not detected in any field sample.

  Field blanks are prepared at the sampling site by pouring deionized water provided by the laboratory into laboratory-prepared VOA (volatile organic analyte) bottles, shipping the bottles with field samples, and having the samples analyzed along with field samples. These blanks are used as an indicator of airborne or other type of contamination occurring during the sampling process that could compromise sample quality.

- Trip Blank (TB): One trip blank was shipped with the samples. The trip blank was nondetectable at the laboratory reporting limits. Trip blanks are prepared in the laboratory by pouring deionized water into laboratory-prepared VOA bottles.

The filled containers are shipped with the sample containers to the site, remain in the sample coolers throughout the sampling process, are shipped back to the laboratory along with the field samples, and are analyzed along with the field samples. A trip blank is used as an indicator of airborne or other type of contamination that could occur during the shipping process to compromise sample quality.

- Rinsate Pump Blank: One pump rinsate blank was collected. The rinsate blank sample was stored, shipped, and analyzed along with the other field samples, and was nondetectable for VOCs. This blank was collected to check cleaning methods for the portable bladder pump used to sample several of the monitoring wells, to verify that sampling equipment and methods do not compromise sample quality. The pump was cleaned initially and after each of the monitoring wells where used. After sampling OW-19, deionized water was poured through and onto the pump body, then collected in VOA bottles.

Field Duplicate: A groundwater field duplicate was collected for OW-5 and OW-5 DUP.

The field duplicate is checked for relative percent difference (RPD) as:

$$\frac{|A - B| \times 100}{\frac{1}{2}(A + B)},$$ where A is sample value and B is duplicate value.

The RPD for aqueous samples is to be within 30%. For OW-5/OW-5 DUP analysis (three detections), the maximum RPD was 11.9%, with no qualifications.

Field MS/MSD Samples: Field matrix spike/matrix spike duplicate (MS/MSD) samples were collected OW-6 MS/MSD. The laboratory also performed an MS/MSD on OW-18. With a matrix spike, a compound of known concentration is added to the sample, and the sample is analyzed. The detected concentration is compared to the amount added. This procedure provides an indication about how the sample matrix (physical/chemical properties inherent to the sample) could affect the ability to detect target compounds. Relative percent differences (RPD) for OW-6 MSD were not met for 1,1,2-trichloro-1,2,2-trifluoroethane and chloroethane (recoveries were within limits). RPDs for OW-18 MSD exceeded the RPD limit for bromomethane. Results for these constituents and these samples are qualified as UJ (nondetectable but estimated).

4.2.2 Other Data Qualification and Data Usability

No other qualifiers were placed on samples as part of the data validation process other than those noted above. OW-6 and OW-2 required dilution prior to analysis, and the higher reporting limits reflect the dilutions. The review process and qualified data are

summarized in the table in Appendix C. The qualifications did not affect the usability of the data, and no results have been rejected.

5.0 Summary

The results of the 2019 sampling program for the Carroll and Dubies Site show:

- Groundwater elevations were lower on average by 0.47 feet, compared to the March 2018 groundwater elevations. No clear link has been observed between the concentrations of VOCs in groundwater and the season and/or groundwater elevations.
- Benzene was detected in five monitoring wells (OW-10R, OW-13R, OW-18, OW-19, and OW-22). The U.S. EPA MCL of 5 ug/L was not exceeded in any well. The NYSDEC SGV of 1 ug/L for benzene was exceeded in the five wells where detected. Benzene was lower in four of the five wells, compared to March 2018. The benzene concentration trends in OW-10R and OW-13R, where concentrations were once highest, show continued decline. The benzene concentrations in these wells have declined by 50%, when comparing 2006-2009 average results with 2010-2019 average results.
- Chlorinated VOCs tetrachloroethene, trichloroethene, and 1,2-dichloroethene exceeded SGVs and/or MCLs in OW-2, OW-5, and OW-6. In OW-2 and OW-5, total chlorinated VOC concentrations were substantially lower than in March 2018; concentrations were about the same in OW-6. In OW-2, 1,2-dichloroethene and trichloroethene were at the lowest concentrations in June 2019 that have been reported to date.
- Chlorobenzene exceeded the NYSDEC SGV of 5 ug/L but not the MCL of 100 ug/L in groundwater during this sampling round, in OW-18, OW-19, and OW-22. The suspected main source of chlorobenzene in groundwater is the historic closed municipal landfill, based on higher detections within and downgradient of the landfill compared to upgradient monitoring wells.
- Emerging contaminants PFAS and 1,4-dioxane were sampled concurrently with this sampling program, as requested by NYSDEC. The detection of PFAS and 1,4-dioxane in low concentrations in two of the three wells sampled as part of the program is not unexpected. Detected concentrations were close to or below recommended limits developed by NYSDEC and U.S. EPA. The presence of the emerging contaminants at these levels does not change the protective conditions that are in place. Groundwater associated with the Carroll and Dubies Site is not a source of drinking water, institutional controls are in place, and groundwater contaminant concentrations are stable to declining.

Groundwater monitoring results since completion of OU-1 actions in 1999 demonstrate that natural attenuation has degraded VOCs, and the rates of degradation are slow to flat as the concentrations decline. This is the expected result, as the declining contaminant concentrations reduce the driving force for the attenuation processes. As the rate of attenuation continues to slow, it may be years before MCLs and SGVs are met in all monitoring wells throughout the plume, but site conditions will continue to be

stable. With stable to declining groundwater concentrations and institutional controls in place, conditions will continue to be protective of human health and the environment, with no exposure pathways that could result in unacceptable risks.

The OU-2 groundwater remediation ROD, written in 1996, stated that natural attenuation of organic contaminants should achieve treatment of groundwater "to below federal drinking water and state groundwater standards through naturally occurring removal processes" and that "groundwater modeling estimated that contaminants would attenuate to these standards within five years of completion of the remedy selected for the lagoons." The pre-1996 modeling results referenced in the OU-2 ROD have not proven out, however, much more is known about natural attenuation trends and benefits than 20 years ago.

8.0 References

Cardinal Resources, Inc., July 2019, Report – *Emerging Contaminants Sampling Program*, *Carroll and Dubies Superfund Site 336015, Town of Deerpark, Orange County, New York,* Prepared for New York State Department of Environmental Conservation.

Cardinal Resources Inc., July 2018, *March 2018 Sampling Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York,* Prepared for Carroll and Dubies PRP Group.

Cardinal Resources LLC, November 2006, *August 2006 Sampling Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York.*

Cardinal Resources, Inc., August 2005, *Supplemental Sampling Work Plan, Carroll and Dubies Superfund Site,* Prepared for Kolmar Laboratories, Inc. and Wickhen Products, Inc.

Cardinal Resources, Inc., March 2005, *Supporting Documentation for Five-Year Review, Carroll and Dubies Superfund Site,* Prepared for Kolmar Laboratories, Inc. and Wickhen Products, Inc.

United States Environmental Protection Agency, 2015, *Five-Year Review Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York,* Prepared by U.S. EPA Region 2, New York, New York.

Tables

Table 1
Groundwater Field Stabilization Parameters
June 2019
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Well ID	**Date**	**Temperature** (°C)	**Dissolved Oxygen** (mg/L)	**Redox** (mV)	**Conductivity** (uS/cm)	**pH** (standard units)	**Turbidity** (NTU)
OW-2	06/05/19	10.20	4.05	107.7	105	5.53	0.26
OW-5*	06/04/19	10.19	1.76	118.5	236	5.87	0.45
OW-6	06/05/19	10.10	3.14	101.6	83	5.70	0.38
OW-10R*	06/05/19	10.13	0.18	40.2	303	6.00	2.55
OW-13R*	06/05/19	10.45	0.13	-23.5	449	6.59	43.1
OW-18*	06/06/19	9.74	0.13	-10.6	415	6.16	8.98
OW-19*	06/06/19	10.00	0.16	-14.5	471	6.10	13.2
OW-21	06/06/19	12.52	0.20	14.0	372	6.11	1.06
OW-22	06/06/19	12.38	0.25	-22.1	439	6.06	1.27
OW-24*	06/06/19	10.21	2.02	113.5	197	6.97	187

Notes:

mg/L = milligrams per liter

mV = milliVolts

uS/cm = microSiemens per centimeter

* Sampled with bladder pump

Table 2
Groundwater Elevation Data[1]
June 2019
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Well No.	Top of Casing Elevation	Screened Interval	Depth to Groundwater	Groundwater Elevation
MW-4	470.13	35.3 - 50.3	38.02	432.11
OW-2	472.33	30.0 - 47.0	40.20	432.13
OW-3	472.70	30.0 - 46.5	41.02	431.68
OW-4	473.33	26.5 - 37.5	Not Measured	Not Measured
OW-5	459.85	25.5 - 45.5	27.80	432.05
OW-6	464.40	31.4 - 51.4	32.38	432.02
OW-8	464.63	34.6 - 54.6	32.47	432.16
OW-9	472.91	25.3 - 35.3	29.87	443.04
OW-10R	469.27	29.0 - 39.0	30.19	439.08
OW-13R	457.69	25.0 - 35.0	25.92	431.77
OW-15	472.05	22.0 - 32.0	12.08	459.97
OW-16	453.90	18.0 - 28.0	22.51	431.39
OW-17	447.18	11.0 - 21.0	15.85	431.33
OW-18	444.57	11.0 - 21.0	13.28	431.29
OW-19	438.69	5.0 - 15.0	7.81	430.89
OW-21	467.46	37.1 - 47.1	36.00	431.46
OW-22	467.10	38.0 - 48.0	35.63	431.47
OW-23	444.73	29.0 - 39.0	13.50	431.23
OW-24	446.77	14.4 - 24.4	15.61	431.16
OW-25	452.47	20.0 - 30.0	20.98	431.49

[1]Data reported in feet; elevations relative - mean sea level; 1988 National Geodetic Vertical Datum.

[2]Top of casing elevations surveyed by Maser Consulting P.A.

Table 3

Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)

June 2019

Carroll and Dubies Superfund Site

Town of Deerpark, Orange County, New York

Compound	NYSDEC	U.S. EPA	OW-2	OW-5	OW-5-DUP	OW-6	OW-10R	OW-13R
	SGV	MCL	06/05/19	06/04/19	06/04/19	06/05/19	06/05/19	06/05/19
Benzene	1 (S)	5	2.5 U	1.0 U	1.0 U	2.0 U	1.1	2.4
Chlorobenzene	5 (S)*	100	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U
Cis-1,2-Dichloroethene	5 (S)*	70	23	4.5	4.4	14	1.0 U	1.0 U
1,4-Dichlorobenzene	5 (S)*	75	2.5 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U
Tetrachloroethene	5 (S)*	5	64	6.5	6.2	50	1.0 U	1.0 U
Trichloroethene	5 (S)*	5	6.8	1.6	1.8	7.6	1.0 U	1.0 U

Compound	NYSDEC	U.S. EPA	OW-18	OW-19	OW-21	OW-22	OW-24
	SGV	MCL	06/06/19	06/06/19	06/06/19	06/06/19	06/06/19
Benzene	1 (S)	5	1.8	1.6	1.0 U	2.4	1.0 U
Chlorobenzene	5 (S)*	100	12	16	1.0 U	9.0	1.0 U
Cis-1,2-Dichloroethene	5 (S)*	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	5 (S)*	75	1.1	1.4	1.0 U	1.1	1.0 U
Tetrachloroethene	5 (S)*	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5 (S)*	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

TCL = Target Compound List

NYSDEC SGV = New York State Department of Environmental Conservation Standards (S) and Guidance (G) Values (V) for groundwater.

U.S. EPA MCL = United States Environmental Protection Agency Maximum Contaminant Level for drinking/groundwater.

UJ = Nondetectable at the reporting limit, but the reporting limit is approximate.

U = The analyte was analyzed for, but was not detected above the reported quantitation limit.

* = The principal organic contaminant (POC) standard for groundwater of 5 ug/L applies to this substance.

NE = Not established; no criteria specified

Red = Concentrations detected above regulatory limit

Blue = Analyte detected at or below the regulatory limit, or analyte detected but no regulatory criteria specified

Table 4

MCL and SGV Exceedances - 1999, 2004, and 2010 through 2019

Carroll and Dubies Superfund Site

Town of Deerpark, Orange County, New York

Well	Compound	MCL ug/L	SGV ug/L	1999		2004		Jul-10		Oct-11		Feb-13		Jun-14		Sep-15		Nov-16		Mar-18		Jun-19	
				MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV
OW-2	Benzene	5	1				X																
	Tetrachloroethene (PCE)	5	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Trichloroethene (TCE)	5	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	1,2-Dichloroethene (1,2-DCE)	70	5	X	X	X	X		X	X	X	X	X		X		X		X		X		X
OW-5	Tetrachloroethene (PCE)	5	5	X	X	X	X									X	X	X	X	X	X	X	X
	Trichloroethene (TCE)	5	5	X	X													X	X				
	1,2-Dichloroethene (1,2-DCE)	70	5		X		X								X		X		X		X		
OW-6	Acetone	NE[3]	50																		X		
	Tetrachloroethene (PCE)	5	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Trichloroethene (TCE)	5	5			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	1,2-Dichloroethene	70	5		X		X		X		X		X		X		X		X		X		X
OW-10R[1]	Benzene	5	1	X	X	X	X		X		X		X	Dry	Dry		X		X		X		X
	Chlorobenzene	100	5		X						X		X										
	Methylene chloride	5	5	X	X																		
	Toluene	1,000	5		X																		

Table 4

MCL and SGV Exceedances - 1999, 2004, and 2010 through 2019

Carroll and Dubies Superfund Site

Town of Deerpark, Orange County, New York

Well	Compound	MCL ug/L	SGV ug/L	1999		2004		Jul-10		Oct-11		Feb-13		Jun-14		Sep-15		Nov-16		Mar-18		Jun-19	
				MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV
OW-13 / OW-13R[2]	Benzene	5	1	X	X	X	X	X	X			X	X	X	X	X	X		X		X		X
	1,2-Dichloroethene (1,2-DCE)	70	5		X																		
	Methylene chloride	5	5	X	X																		
	Toluene	1,000	5		X																		
	Vinyl chloride	2	2	X	X	X	X																
OW-18	Benzene	5	1		X		X		X		X		X		X		X	X	X		X		X
	Chlorobenzene	100	5				X		X		X		X		X		X		X		X		X
	Xylenes (total)	10	5																				
OW-19	Benzene	5	1	X	X		X		X		X	X	X		X						X		X
	Chlorobenzene	100	5		X		X		X		X		X		X		X		X		X		X
	Chloroethane	NE[3]	5		X																		
	Vinyl chloride	2	2	X	X					X	X	X	X										
OW-21	Benzene	5	1	X	X		X		X		X		X		X		X		X				
OW-22	Benzene	5	1	X	X		X		X	X	X	X	X	X	X		X		X	X	X		X
	Chlorobenzene	100	5		X		X				X		X		X						X		X
	Vinyl chloride	2	2	X	X																		
Total				16	26	9	19	5	14	7	16	9	17	6	15	6	15	6	15	6	17	5	15

Notes:

[1]OW-10 was replaced with OW-10R in 2000. OW-10 was abandoned because it was within the OU1 construction area.

[2]OW-13R was installed in February 2006 to replace OW-13.

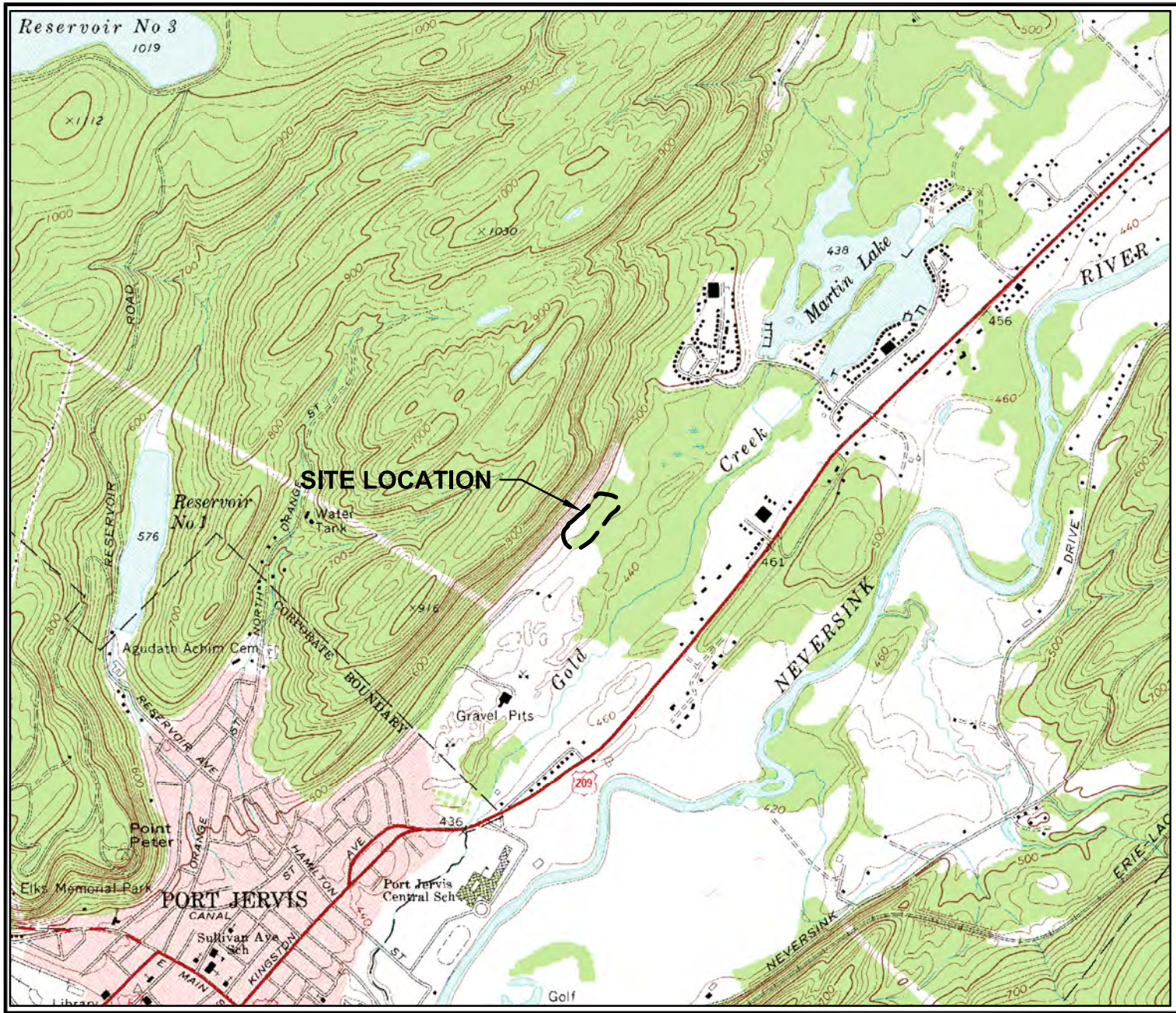
[3] NE = Not established

Table 5
Emerging Contaminants in Groundwater
June 2019 - Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Compound	Units	CAS Number	OW-5	OW-13R	OW-24	OW-24 DUP	Pump Blank	Field Blank
1,4-Dioxane ug/L	ug/L	123-91-1	**3.9**	0.26 U	**2.8 J**	**4.2 J**	0.26 U	0.26 U/0.26 U**
PFBA	ng/L	375-22-4	**2.6**	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFPeA	ng/L	2706-90-3	1.9 U	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFHxA	ng/L	307-24-4	**2.1**	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFHpA	ng/L	375-85-9	**2.2**	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFOA	ng/L	335-67-1	**9.7**	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFNA	ng/L	375-95-1	1.9 U	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFDA	ng/L	335-76-2	19 U (D)	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFUdA	ng/L	2058-94-8	1.9 U	10 U	1.8 U	19 U (D)	2.7 U	2.0 U
PFDoA	ng/L	307-55-1	19 U (D)	10 U	1.8 U	19 U (D)	2.7 U	2.0 U
PFTrDA	ng/L	72629-94-8	19 U (D)	10 U	1.8 U	19 U (D)	2.7 U	2.0 U
PFTeDA	ng/L	376-06-7	19 U (D)	10 U	18 U (D)	19 U (D)	27 U (D)	2.0 U
PFOSA (FOSA)	ng/L	754-91-6	1.9 U	10 U	1.8 U	1.9 U	2.7 U	2.0 U
N-EtFOSAA	ng/L	2991-50-6	19 U (D)	10 U	1.8 U	1.9 U	2.7 U	2.0 U
N-MeFOSAA	ng/L	2355-31-9	19 U (D)	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFBS	ng/L	375-73-5	1.7 U	9.1 U	1.6 U	1.7 U	2.4 U	1.7 U
PFPeS*	ng/L	2706-91-4	1.8 U	9.6 U	1.7 U	1.8 U	2.5 U	1.9 U
PFHxS	ng/L	355-46-4	**2.5**	9 4 U	1.7 U	1.7 U	2.5 U	1.8 U
PFHpS	ng/L	375-92-8	1.8 U	9.7 U	1.8 U	1.8 U	2.6 U	1.9 U
PFOS	ng/L	1763-23-1	**8.4**	9.5 U	1.7 U	1.7 U	2.5 U	1.8 U
PFNS*	ng/L	68259-12-1	1.9 U	10 U	1.8 U	1.9 U	2.7 U	2.0 U
PFDS	ng/L	335-77-3	1.9 U	10 U	1.8 U	1.9 U	2.7 U	2.0 U
4:2FTS*	ng/L	757124-72-4	19 UJ (D)	10 U	1.8 U	1.9 U	2.7 U	2.0 U
6:2FTS	ng/L	27619-97-2	1.9 U	10 U	1.8 U	1.9 U	27 U (D)	2.0 U
8:2FTS	ng/L	39108-34-4	19 U (D)	10 U	1.8 U	1.9 U	27 U (D)	2.0 U

* These compounds are in addition to those on the NYSDEC Full PFAS Target Analyte List
**A field blank and trip blank were analyzed for 1,4-dioxane; both were nondetectable.
J = Estimated value.
UJ = Nondetectable at the reporting limit, but the reporting limit is approximate.
U = The analyte was analyzed for, but was not detected above the reporting limit, which was the Practical Quantitation Limit (PQL) for PFAS and the Method Detection Limit (MDL) for 1,4-diox
(D) = Results for selected analytes were taken from secondary dilutions of the sample extracts to reduce the impact of matrix effects. The PQL (reporting limit) or PQL reflects the dilution.
All PFAS samples were collected on 6/4/2019; 1,4-dioxane samples were collected on 6/4 to 6/6/2019.
Blue = **Analyte detected at or above the reporting limit.**

Figures



2,000' 0 2,000'

SCALE IN FEET

LEGEND:

APPROXIMATE SITE BOUNDARY

SOURCE:

USGS TOPOGRAPHIC QUADRANGLE MAP
PORT JERVIS NORTH, NEW YORK, DATED 1991.

CARDINAL RESOURCES

CARROLL AND DUBIES SUPERFUND SITE
TOWN OF DEERPARK, ORANGE COUNTY, NEW YORK

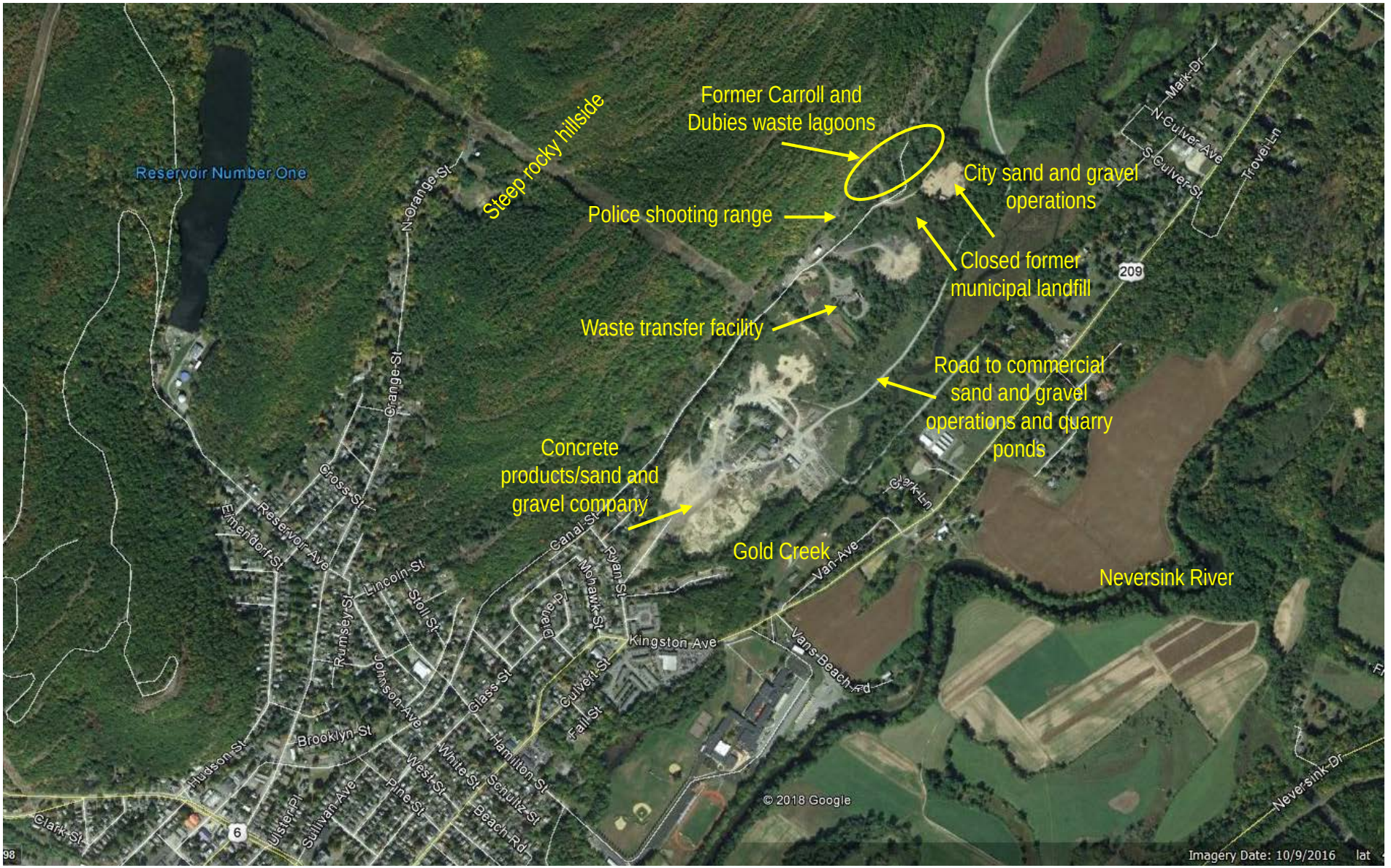
105-0035

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
1							
0	ECM						

FIGURE 1

SITE LOCATION MAP

CADD FILE	9005	SCALE	AS NOTED	CURRENT DATE:	03-07-2005
DRAWING NO.	105-0035-0300-01			REVISION	0



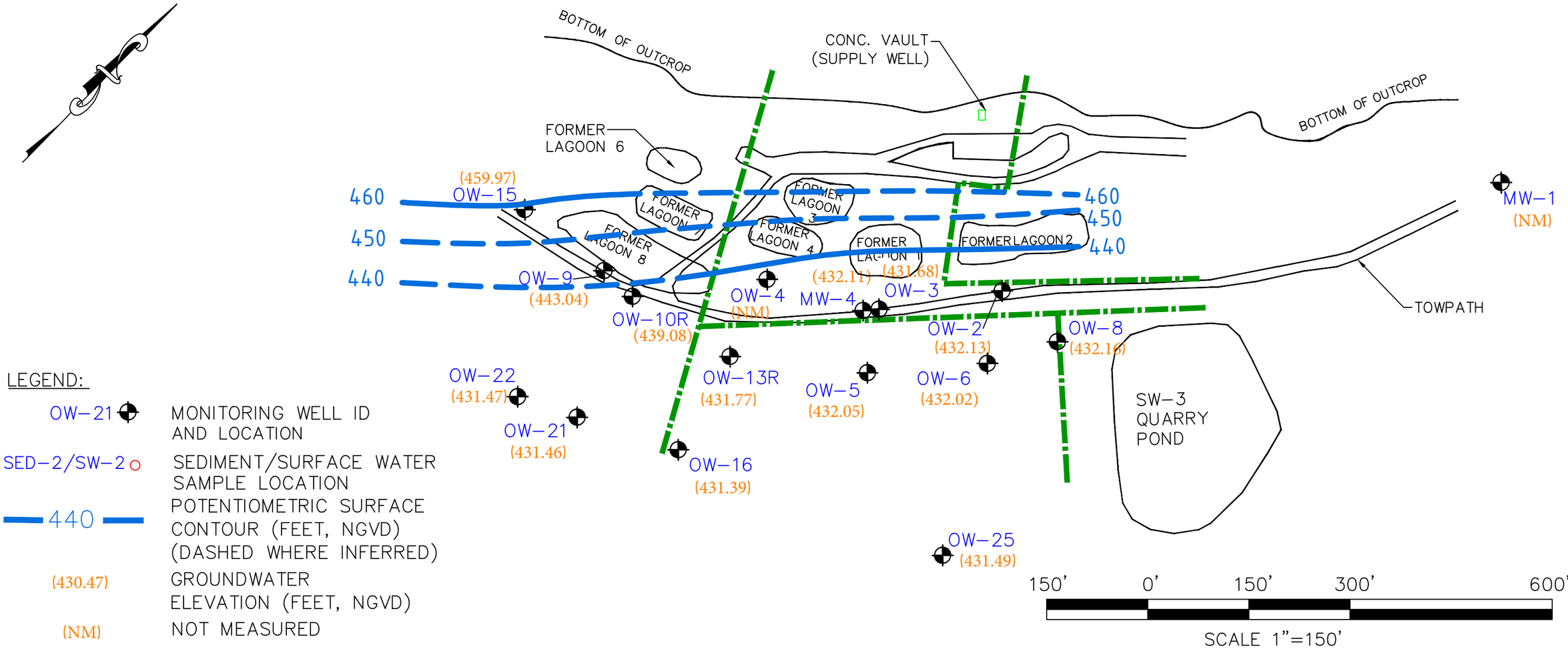
NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
6							
5							
4							
3							
2							
1							
0			INITIAL ISSUE				

Carroll and Dubies Superfund Site
Town of Deerpark,
Orange County, New York

Figure 2
Land and Resource Use

CARDINAL RESOURCES

DATE	July 15, 2019	FILE		DWG NO.		SCALE		REVISION	0



LEGEND:

- OW-21 — MONITORING WELL ID AND LOCATION
- SED-2/SW-2 — SEDIMENT/SURFACE WATER SAMPLE LOCATION
- 440 — POTENTIOMETRIC SURFACE CONTOUR (FEET, NGVD) (DASHED WHERE INFERRED)
- (430.47) — GROUNDWATER ELEVATION (FEET, NGVD)
- (NM) — NOT MEASURED

INFORMATION OF FACT:

1. THE MONITORING/RECOVERY WELLS AND LIMITED SITE LOCATION OF PHYSICAL FEATURES SHOWN HEREON ARE BASED ON A FIELD SURVEY MADE FOR PROPER ORIENTATION WITH A FULL PLAN BEING PREPARED BY SHIELD ENVIRONMENTAL ASSOCIATES, INC.
2. THE HORIZONTAL POSITION OF THE HEREIN SURVEYED "CARROLL AND DUBIES" SUPERFUND SITE IS BASED ON NEW YORK GEODETIC CONTROL MONUMENTS PID # LY2611 (LAUREL) AND PID # AB3870 (DIANNE).

ADJUSTED TO NAD 1983 WITHIN THE NEW YORK STATE PLANE COORDINATE SYSTEM.

THE OUTLINES OF THE FORMER LAGOONS ARE BASED ON THE ACTUAL EXCAVATION.

SOURCES: MASTER CONSULTING P.A. MONITORING WELL LOCATION PLAN. INDEXN). SU0009, MARCH 3, 1999.

NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE
3	BJ	6/20/19	GW CONTOURS AND ELEVATION UPDATE	KJ	6/.21/19		
2	LK	6/23/14	GW CONTOURS AND ELEVATIONS UPDATE	BJ	6/24/14		
1	LK	2/18/13	GW CONTOURS AND ELEVATIONS UPDATE				

CARROLL AND DUBIES SUPERFUND SITE
TOWN OF DEERPARK, ORANGE COUNTY, NEW YORK
104-0012

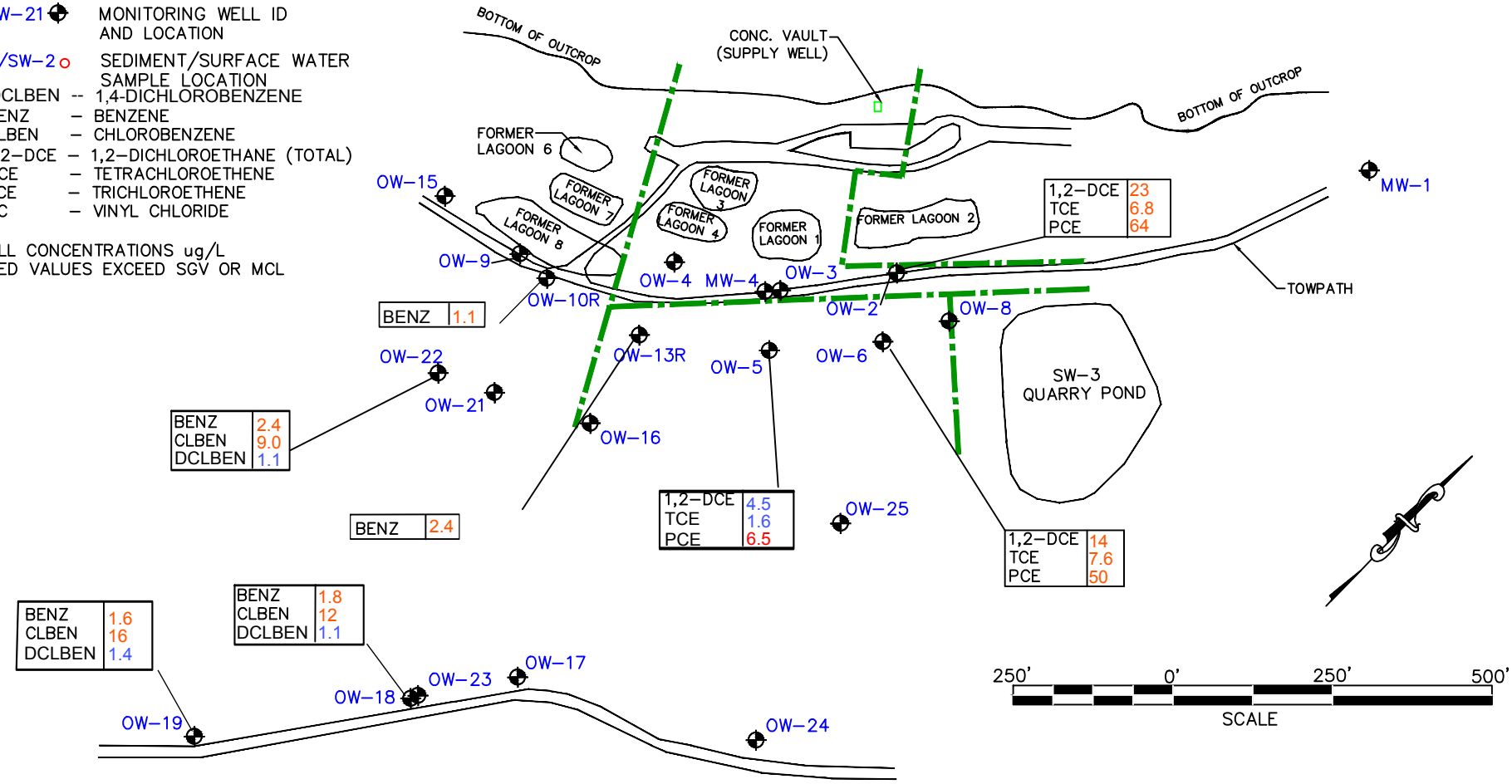
CURRENT DATE 6/21/19

FIGURE 3

GROUNDWATER CONTOUR MAP - JUNE 2019

DRAWING NO. 104-0012 – C&D OU2 | SCALE AS NOTED | REVISION 3

CARDINAL



INFORMATION OF FACT:

1. THE MONITORING/RECOVERY WELLS AND LIMITED SITE LOCATION OF PHYSICAL FEATURES SHOWN HEREON ARE BASED ON A FIELD SURVEY MADE FOR PROPER ORIENTATION WITH A FULL PLAN BEING PREPARED BY SHIELD ENVIRONMENTAL ASSOCIATES, INC.
2. THE HORIZONTAL POSITION OF THE HEREIN SURVEYED "CARROLL AND DUBIES" SUPERFUND SITE IS BASED ON NEW YORK GEODETIC CONTROL MONUMENTS PID # LY2611 (LAUREL) AND PID # AB3870 (DIANNE).

   ADJUSTED TO NAD 1983 WITHIN THE NEW YORK STATE PLANE COORDINATE SYSTEM.

NOTE: THE OUTLINES OF THE FORMER LAGOONS ARE BASED ON THE ACTUAL EXCAVATION.

SOURCES: MASTER CONSULTING P.A. MONITORING WELL LOCATION PLAN. INDEXN). SU0009, MARCH 3, 1999.

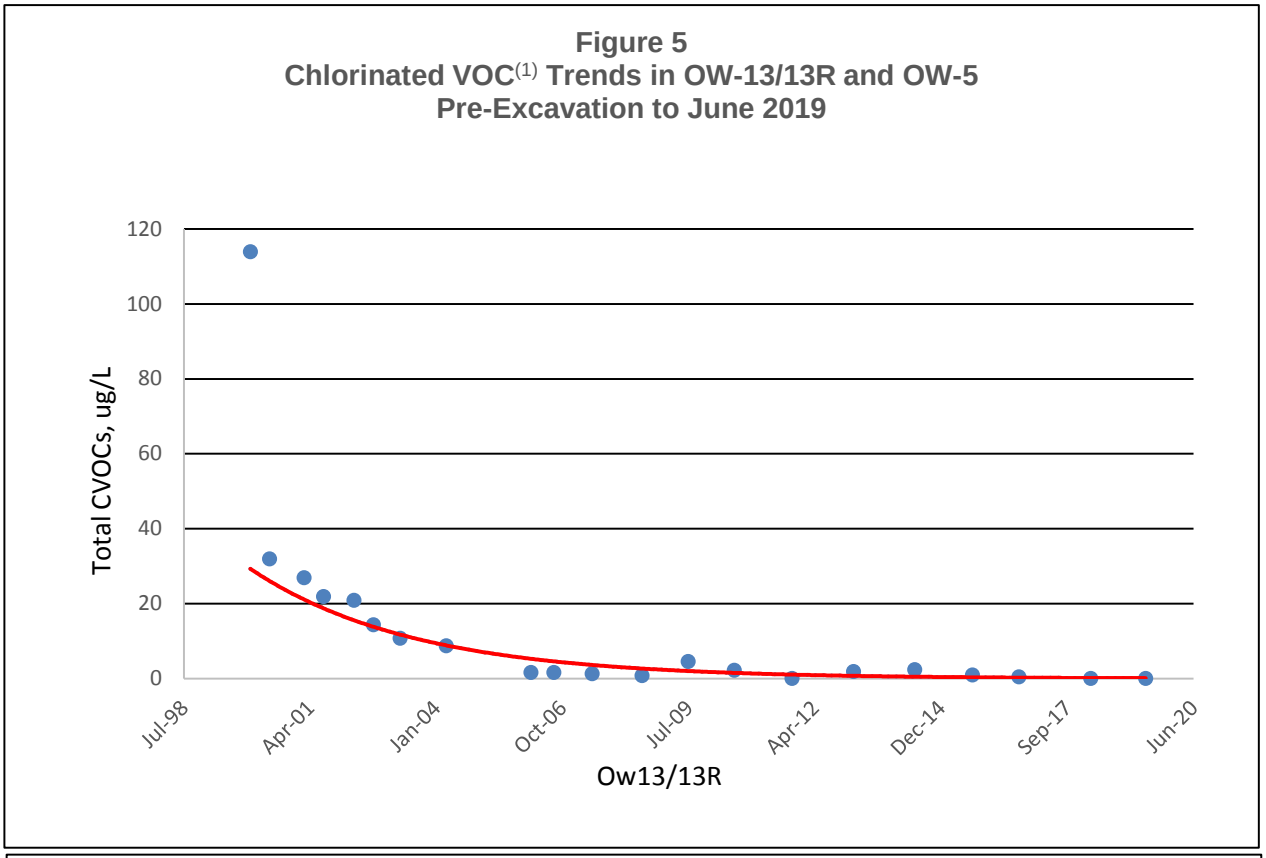
CARROLL AND DUBIES SUPERFUND SITE
TOWN OF DEERPARK, ORANGE COUNTY, NEW YORK
104-0012

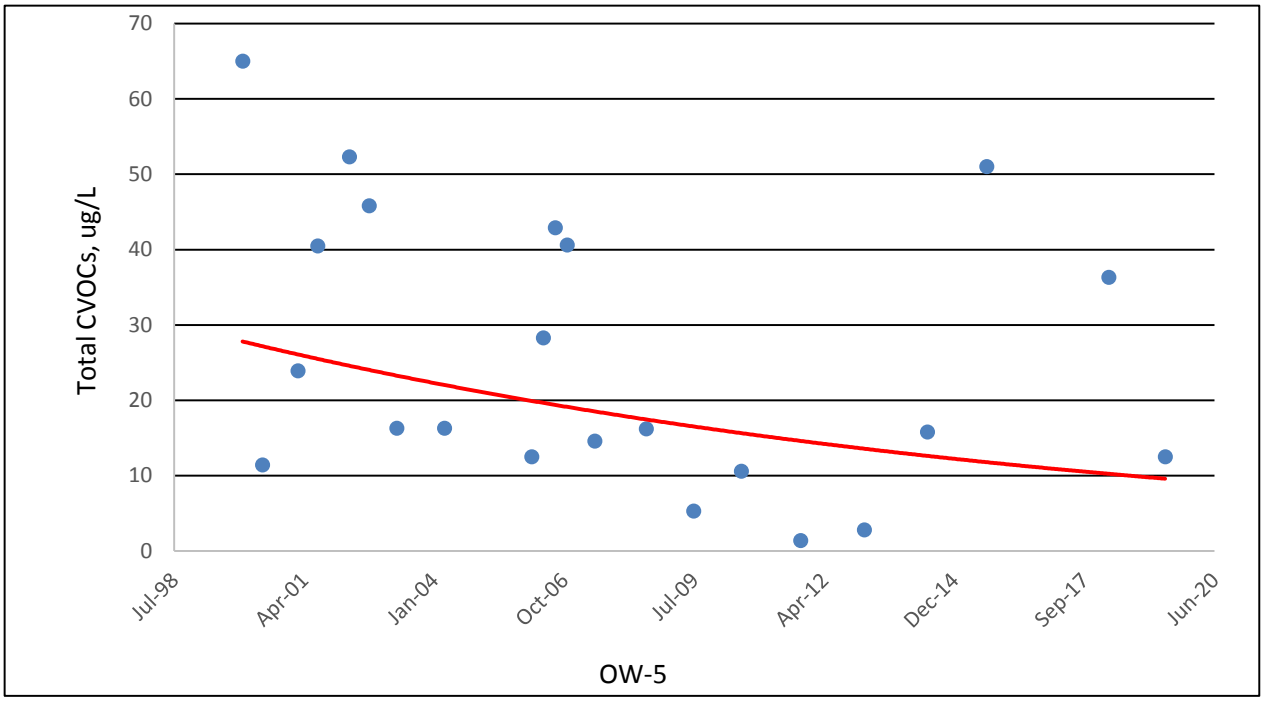
FIGURE 4
VOLATILE ORGANIC COMPOUND DETECTIONS IN GROUNDWATER
JUNE 2019

CARDINAL

CURRENT DATE	06/24/2019	BJ		DRAWING NO.	104-0012-0300	JUNE 2019	SCALE	AS NOTED	REVISION

Figure 5
Chlorinated VOC[1] Trends in OW-13/13R and OW-5
Pre-Excavation to June 2019

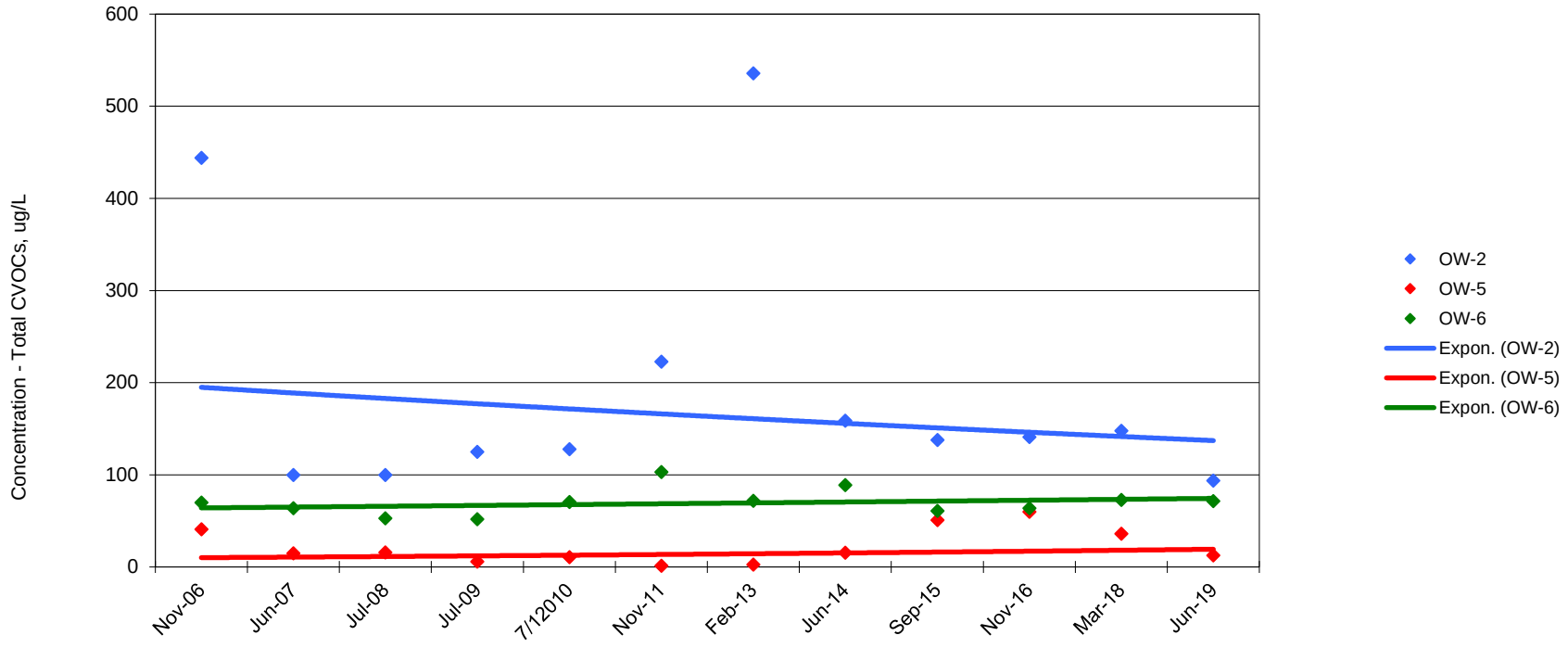




[1]Sum of vinyl chloride, 1,2-dichloroethene, trichloroethene, and tetrachloroethene.

C/Projects/104-0012/June 2019/Figure 5 - CVOC Trends 1

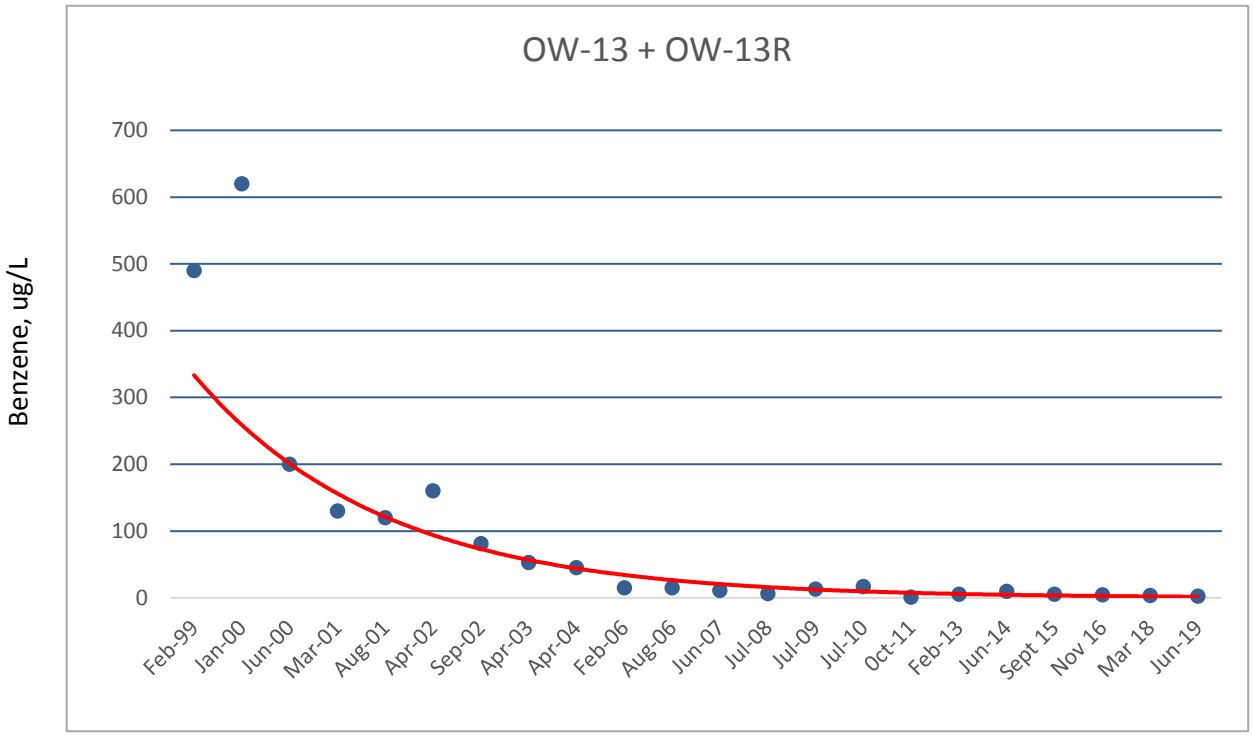
Figure 6
Chlorinated VOC[(1)] Trends in OW-2, OW-5, and OW-6
2006 - 2019

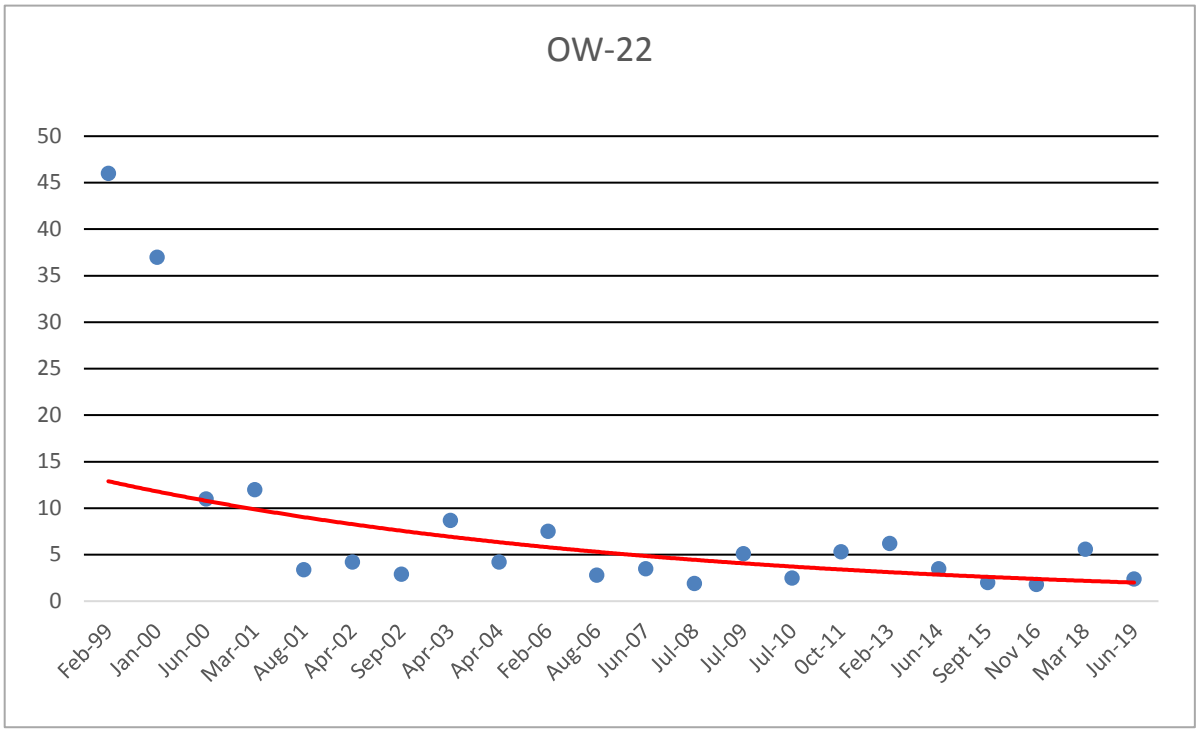


[(1)]Sum of vinyl chloride, 1,2-dichloroethene, trichloroethene, and tetrachloroethene

C: Projects/104-0012/June 19/Figure 6-CVOC Trends 2

Figure 7
Benzene Concentration Trends in OW-13/OW-13R and OW-22
Pre-Excavation to June 2019





C:Projects/104-0012/June 2019/Figure 7 - Benzene Pre-exc to Current

Appendix A

Laboratory Reports with Marked Form Is from Data Review

VOC Laboratory Report

ANALYTICAL REPORT

Job Number: 240-113949-1

Job Description: Carroll & Dubies SF

For:
Cardinal Resources
4410 Broadway Blvd
Monroeville, PA 15146

Attention: Barbara Jones

Approved for release.
Kris M Brooks
Project Manager II
6/28/2019 12:09 PM

Kris M Brooks, Project Manager II
4101 Shuffel Street NW, North Canton, OH, 44720
(330)966-9790
kris.brooks@testamericainc.com
06/28/2019

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Cardinal Resources

Project: Carroll & Dubies SF

Report Number: 240-113949-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 6/7/2019 10:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples OW-5 (240-113949-1), OW-5 DUP (240-113949-2), OW-10R (240-113949-3), OW-13R (240-113949-4), OW-6 (240-113949-5), OW-2 (240-113949-6), OW-24 (240-113949-7), OW-18 (240-113949-8), OW-19 (240-113949-9), PUMP BLANK (240-113949-10), OW-22 (240-113949-11), OW-21 (240-113949-12), FIELD BLANK (240-113949-13) and TRIP BLANK (240-113949-14) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/17/2019, 06/18/2019 and 06/19/2019.

1,1,2-Trichloro-1,2,2-trifluoroethane and Chloroethane exceeded the RPD limit for the MSD of sample OW-6MSD (240-113949-5) in batch 240-386760. Bromomethane exceeded the RPD limit for the MSD of sample OW-18MSD (240-113949-8) in batch 240-386999. Refer to the QC report for details.

Samples OW-6 (240-113949-5)[2X] and OW-2 (240-113949-6)[2.5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Client Sample ID: OW-5 — Lab Sample ID: 240-113949-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.5		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	6.5		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	1.6		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-5 DUP — Lab Sample ID: 240-113949-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.4		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene	6.2		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	1.8		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-10R — Lab Sample ID: 240-113949-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	1.1		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-13R — Lab Sample ID: 240-113949-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Benzene	2.4		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-6 — Lab Sample ID: 240-113949-5

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	14		2.0		ug/L	2		8260B	Total/NA
Tetrachloroethene	50		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	7.6		2.0		ug/L	2		8260B	Total/NA

Client Sample ID: OW-2 — Lab Sample ID: 240-113949-6

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	23		2.5		ug/L	2.5		8260B	Total/NA
Tetrachloroethene	64		2.5		ug/L	2.5		8260B	Total/NA
Trichloroethene	6.8		2.5		ug/L	2.5		8260B	Total/NA

Client Sample ID: OW-24 — Lab Sample ID: 240-113949-7

No Detections.

Client Sample ID: OW-18 — Lab Sample ID: 240-113949-8

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.1		1.0		ug/L	1		8260B	Total/NA
Benzene	1.8		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	12		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-19 — Lab Sample ID: 240-113949-9

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.4		1.0		ug/L	1		8260B	Total/NA
Benzene	1.6		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	16		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: PUMP BLANK — Lab Sample ID: 240-113949-10

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Client Sample ID: OW-22 — Lab Sample ID: 240-113949-11

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.1		1.0		ug/L	1		8260B	Total/NA
Benzene	2.4		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	9.0		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-21 — Lab Sample ID: 240-113949-12

No Detections.

Client Sample ID: FIELD BLANK — Lab Sample ID: 240-113949-13

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Acetone	10		10		ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-113949-14

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: OW-5

Date Collected: 06/04/19 16:19
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/17/19 17:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/17/19 17:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/17/19 17:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/17/19 17:36	1
1,1-Dichloroethane	ND		1.0		ug/L			06/17/19 17:36	1
1,1-Dichloroethene	ND		1.0		ug/L			06/17/19 17:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/17/19 17:36	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/17/19 17:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/17/19 17:36	1
1,2-Dichloroethane	ND		1.0		ug/L			06/17/19 17:36	1
1,2-Dichloropropane	ND		1.0		ug/L			06/17/19 17:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/17/19 17:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/17/19 17:36	1
2-Butanone (MEK)	ND		10		ug/L			06/17/19 17:36	1
2-Hexanone	ND		10		ug/L			06/17/19 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/17/19 17:36	1
Acetone	ND		10		ug/L			06/17/19 17:36	1
Benzene	ND		1.0		ug/L			06/17/19 17:36	1
Bromoform	ND		1.0		ug/L			06/17/19 17:36	1
Bromomethane	ND		1.0		ug/L			06/17/19 17:36	1
Carbon disulfide	ND		1.0		ug/L			06/17/19 17:36	1
Carbon tetrachloride	ND		1.0		ug/L			06/17/19 17:36	1
Chlorobenzene	ND		1.0		ug/L			06/17/19 17:36	1
Chlorodibromomethane	ND		1.0		ug/L			06/17/19 17:36	1
Chloroethane	ND		1.0		ug/L			06/17/19 17:36	1
Chloroform	ND		1.0		ug/L			06/17/19 17:36	1
Chloromethane	ND		1.0		ug/L			06/17/19 17:36	1
cis-1,2-Dichloroethene	**4.5**		1.0		ug/L			06/17/19 17:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/17/19 17:36	1
Cyclohexane	ND		1.0		ug/L			06/17/19 17:36	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/17/19 17:36	1
Dichlorobromomethane	ND		1.0		ug/L			06/17/19 17:36	1
Ethylbenzene	ND		1.0		ug/L			06/17/19 17:36	1
Isopropylbenzene	ND		1.0		ug/L			06/17/19 17:36	1
Methyl acetate	ND		10		ug/L			06/17/19 17:36	1
Methylcyclohexane	ND		1.0		ug/L			06/17/19 17:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/17/19 17:36	1
Methylene Chloride	ND		5.0		ug/L			06/17/19 17:36	1
Styrene	ND		1.0		ug/L			06/17/19 17:36	1
Tetrachloroethene	**6.5**		1.0		ug/L			06/17/19 17:36	1
Toluene	ND		1.0		ug/L			06/17/19 17:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/17/19 17:36	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/17/19 17:36	1
Trichloroethene	**1.6**		1.0		ug/L			06/17/19 17:36	1
Trichlorofluoromethane	ND		1.0		ug/L			06/17/19 17:36	1
Vinyl chloride	ND		1.0		ug/L			06/17/19 17:36	1
Xylenes, Total	ND		2.0		ug/L			06/17/19 17:36	1
Ethylene Dibromide	ND		1.0		ug/L			06/17/19 17:36	1

Client Sample ID: OW-5

Date Collected: 06/04/19 16:19
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*70 - 123*		*06/17/19 17:36*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 128*		*06/17/19 17:36*	*1*
4-Bromofluorobenzene (Surr)	*91*		*59 - 120*		*06/17/19 17:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 121*		*06/17/19 17:36*	*1*

Client Sample ID: OW-5 DUP

Date Collected: 06/04/19 16:20
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			06/17/19 17:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/17/19 17:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			06/17/19 17:58	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/17/19 17:58	1
1,1-Dichloroethane	ND		1.0	ug/L			06/17/19 17:58	1
1,1-Dichloroethene	ND		1.0	ug/L			06/17/19 17:58	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/17/19 17:58	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			06/17/19 17:58	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/17/19 17:58	1
1,2-Dichloroethane	ND		1.0	ug/L			06/17/19 17:58	1
1,2-Dichloropropane	ND		1.0	ug/L			06/17/19 17:58	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/17/19 17:58	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/17/19 17:58	1
2-Butanone (MEK)	ND		10	ug/L			06/17/19 17:58	1
2-Hexanone	ND		10	ug/L			06/17/19 17:58	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/17/19 17:58	1
Acetone	ND		10	ug/L			06/17/19 17:58	1
Benzene	ND		1.0	ug/L			06/17/19 17:58	1
Bromoform	ND		1.0	ug/L			06/17/19 17:58	1
Bromomethane	ND		1.0	ug/L			06/17/19 17:58	1
Carbon disulfide	ND		1.0	ug/L			06/17/19 17:58	1
Carbon tetrachloride	ND		1.0	ug/L			06/17/19 17:58	1
Chlorobenzene	ND		1.0	ug/L			06/17/19 17:58	1
Chlorodibromomethane	ND		1.0	ug/L			06/17/19 17:58	1
Chloroethane	ND		1.0	ug/L			06/17/19 17:58	1
Chloroform	ND		1.0	ug/L			06/17/19 17:58	1
Chloromethane	ND		1.0	ug/L			06/17/19 17:58	1
cis-1,2-Dichloroethene	**4.4**		1.0	ug/L			06/17/19 17:58	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			06/17/19 17:58	1
Cyclohexane	ND		1.0	ug/L			06/17/19 17:58	1
Dichlorodifluoromethane	ND		1.0	ug/L			06/17/19 17:58	1
Dichlorobromomethane	ND		1.0	ug/L			06/17/19 17:58	1
Ethylbenzene	ND		1.0	ug/L			06/17/19 17:58	1
Isopropylbenzene	ND		1.0	ug/L			06/17/19 17:58	1
Methyl acetate	ND		10	ug/L			06/17/19 17:58	1
Methylcyclohexane	ND		1.0	ug/L			06/17/19 17:58	1
Methyl tert-butyl ether	ND		1.0	ug/L			06/17/19 17:58	1
Methylene Chloride	ND		5.0	ug/L			06/17/19 17:58	1
Styrene	ND		1.0	ug/L			06/17/19 17:58	1

Client Sample ID: OW-5 DUP

Lab Sample ID: 240-113949-2

Date Collected: 06/04/19 16:20

Matrix: Water

Date Received: 06/07/19 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**6.2**		1.0		ug/L			06/17/19 17:58	1
Toluene	ND		1.0		ug/L			06/17/19 17:58	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/17/19 17:58	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/17/19 17:58	1
Trichloroethene	**1.8**		1.0		ug/L			06/17/19 17:58	1
Trichlorofluoromethane	ND		1.0		ug/L			06/17/19 17:58	1
Vinyl chloride	ND		1.0		ug/L			06/17/19 17:58	1
Xylenes, Total	ND		2.0		ug/L			06/17/19 17:58	1
Ethylene Dibromide	ND		1.0		ug/L			06/17/19 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 123*		*06/17/19 17:58*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 128*		*06/17/19 17:58*	*1*
4-Bromofluorobenzene (Surr)	*92*		*59 - 120*		*06/17/19 17:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 121*		*06/17/19 17:58*	*1*

Client Sample ID: OW-10R

Lab Sample ID: 240-113949-3

Date Collected: 06/05/19 14:02

Matrix: Water

Date Received: 06/07/19 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/18/19 20:41	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/18/19 20:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/18/19 20:41	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/18/19 20:41	1
1,1-Dichloroethane	ND		1.0		ug/L			06/18/19 20:41	1
1,1-Dichloroethene	ND		1.0		ug/L			06/18/19 20:41	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/18/19 20:41	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/18/19 20:41	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/18/19 20:41	1
1,2-Dichloroethane	ND		1.0		ug/L			06/18/19 20:41	1
1,2-Dichloropropane	ND		1.0		ug/L			06/18/19 20:41	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/18/19 20:41	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/18/19 20:41	1
2-Butanone (MEK)	ND		10		ug/L			06/18/19 20:41	1
2-Hexanone	ND		10		ug/L			06/18/19 20:41	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/18/19 20:41	1
Acetone	ND		10		ug/L			06/18/19 20:41	1
Benzene	**1.1**		1.0		ug/L			06/18/19 20:41	1
Bromoform	ND		1.0		ug/L			06/18/19 20:41	1
Bromomethane	ND		1.0		ug/L			06/18/19 20:41	1
Carbon disulfide	ND		1.0		ug/L			06/18/19 20:41	1
Carbon tetrachloride	ND		1.0		ug/L			06/18/19 20:41	1
Chlorobenzene	ND		1.0		ug/L			06/18/19 20:41	1
Chlorodibromomethane	ND		1.0		ug/L			06/18/19 20:41	1
Chloroethane	ND		1.0		ug/L			06/18/19 20:41	1
Chloroform	ND		1.0		ug/L			06/18/19 20:41	1
Chloromethane	ND		1.0		ug/L			06/18/19 20:41	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/18/19 20:41	1

Client Sample ID: OW-10R

Date Collected: 06/05/19 14:02
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/18/19 20:41	1
Cyclohexane	ND		1.0		ug/L			06/18/19 20:41	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/18/19 20:41	1
Dichlorobromomethane	ND		1.0		ug/L			06/18/19 20:41	1
Ethylbenzene	ND		1.0		ug/L			06/18/19 20:41	1
Isopropylbenzene	ND		1.0		ug/L			06/18/19 20:41	1
Methyl acetate	ND		10		ug/L			06/18/19 20:41	1
Methylcyclohexane	ND		1.0		ug/L			06/18/19 20:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/18/19 20:41	1
Methylene Chloride	ND		5.0		ug/L			06/18/19 20:41	1
Styrene	ND		1.0		ug/L			06/18/19 20:41	1
Tetrachloroethene	ND		1.0		ug/L			06/18/19 20:41	1
Toluene	ND		1.0		ug/L			06/18/19 20:41	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/18/19 20:41	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/18/19 20:41	1
Trichloroethene	ND		1.0		ug/L			06/18/19 20:41	1
Trichlorofluoromethane	ND		1.0		ug/L			06/18/19 20:41	1
Vinyl chloride	ND		1.0		ug/L			06/18/19 20:41	1
Xylenes, Total	ND		2.0		ug/L			06/18/19 20:41	1
Ethylene Dibromide	ND		1.0		ug/L			06/18/19 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*82*		*70 - 123*		*06/18/19 20:41*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 128*		*06/18/19 20:41*	*1*
4-Bromofluorobenzene (Surr)	*85*		*59 - 120*		*06/18/19 20:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 121*		*06/18/19 20:41*	*1*

Client Sample ID: OW-13R

Date Collected: 06/05/19 15:25
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/18/19 21:06	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/18/19 21:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/18/19 21:06	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/18/19 21:06	1
1,1-Dichloroethane	ND		1.0		ug/L			06/18/19 21:06	1
1,1-Dichloroethene	ND		1.0		ug/L			06/18/19 21:06	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/18/19 21:06	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/18/19 21:06	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/18/19 21:06	1
1,2-Dichloroethane	ND		1.0		ug/L			06/18/19 21:06	1
1,2-Dichloropropane	ND		1.0		ug/L			06/18/19 21:06	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/18/19 21:06	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/18/19 21:06	1
2-Butanone (MEK)	ND		10		ug/L			06/18/19 21:06	1
2-Hexanone	ND		10		ug/L			06/18/19 21:06	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/18/19 21:06	1
Acetone	ND		10		ug/L			06/18/19 21:06	1

Client Sample ID: OW-13R
Date Collected: 06/05/19 15:25
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.4**		1.0	ug/L			06/18/19 21:06	1
Bromoform	ND		1.0	ug/L			06/18/19 21:06	1
Bromomethane	ND		1.0	ug/L			06/18/19 21:06	1
Carbon disulfide	ND		1.0	ug/L			06/18/19 21:06	1
Carbon tetrachloride	ND		1.0	ug/L			06/18/19 21:06	1
Chlorobenzene	ND		1.0	ug/L			06/18/19 21:06	1
Chlorodibromomethane	ND		1.0	ug/L			06/18/19 21:06	1
Chloroethane	ND		1.0	ug/L			06/18/19 21:06	1
Chloroform	ND		1.0	ug/L			06/18/19 21:06	1
Chloromethane	ND		1.0	ug/L			06/18/19 21:06	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/18/19 21:06	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			06/18/19 21:06	1
Cyclohexane	ND		1.0	ug/L			06/18/19 21:06	1
Dichlorodifluoromethane	ND		1.0	ug/L			06/18/19 21:06	1
Dichlorobromomethane	ND		1.0	ug/L			06/18/19 21:06	1
Ethylbenzene	ND		1.0	ug/L			06/18/19 21:06	1
Isopropylbenzene	ND		1.0	ug/L			06/18/19 21:06	1
Methyl acetate	ND		10	ug/L			06/18/19 21:06	1
Methylcyclohexane	ND		1.0	ug/L			06/18/19 21:06	1
Methyl tert-butyl ether	ND		1.0	ug/L			06/18/19 21:06	1
Methylene Chloride	ND		5.0	ug/L			06/18/19 21:06	1
Styrene	ND		1.0	ug/L			06/18/19 21:06	1
Tetrachloroethene	ND		1.0	ug/L			06/18/19 21:06	1
Toluene	ND		1.0	ug/L			06/18/19 21:06	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/18/19 21:06	1
trans-1,3-Dichloropropene	ND		1.0	ug/L			06/18/19 21:06	1
Trichloroethene	ND		1.0	ug/L			06/18/19 21:06	1
Trichlorofluoromethane	ND		1.0	ug/L			06/18/19 21:06	1
Vinyl chloride	ND		1.0	ug/L			06/18/19 21:06	1
Xylenes, Total	ND		2.0	ug/L			06/18/19 21:06	1
Ethylene Dibromide	ND		1.0	ug/L			06/18/19 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*70 - 123*		*06/18/19 21:06*	*1*
Dibromofluoromethane (Surr)	*115*		*75 - 128*		*06/18/19 21:06*	*1*
4-Bromofluorobenzene (Surr)	*95*		*59 - 120*		*06/18/19 21:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 121*		*06/18/19 21:06*	*1*

Client Sample ID: OW-6
Date Collected: 06/05/19 16:25
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	J For MS/MSD	2.0	ug/L			06/18/19 16:55	2
1,1,2,2-Tetrachloroethane	ND		2.0	ug/L			06/18/19 16:55	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	2.0	ug/L			06/18/19 16:55	2
1,1,2-Trichloroethane	ND	RPD	2.0	ug/L			06/18/19 16:55	2
1,1-Dichloroethane	ND	outside	2.0	ug/L			06/18/19 16:55	2
1,1-Dichloroethene	ND	of	2.0	ug/L			06/18/19 16:55	2

limit BNQ 7/8/2019

Client Sample ID: OW-6
Date Collected: 06/05/19 16:25
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0	ug/L			06/18/19 16:55	2
1,2-Dibromo-3-Chloropropane	ND		4.0	ug/L			06/18/19 16:55	2
1,2-Dichlorobenzene	ND		2.0	ug/L			06/18/19 16:55	2
1,2-Dichloroethane	ND		2.0	ug/L			06/18/19 16:55	2
1,2-Dichloropropane	ND		2.0	ug/L			06/18/19 16:55	2
1,3-Dichlorobenzene	ND		2.0	ug/L			06/18/19 16:55	2
1,4-Dichlorobenzene	ND		2.0	ug/L			06/18/19 16:55	2
2-Butanone (MEK)	ND		20	ug/L			06/18/19 16:55	2
2-Hexanone	ND		20	ug/L			06/18/19 16:55	2
4-Methyl-2-pentanone (MIBK)	ND		20	ug/L			06/18/19 16:55	2
Acetone	ND		20	ug/L			06/18/19 16:55	2
Benzene	ND		2.0	ug/L			06/18/19 16:55	2
Bromoform	ND		2.0	ug/L			06/18/19 16:55	2
Bromomethane	ND		2.0	ug/L			06/18/19 16:55	2
Carbon disulfide	ND		2.0	ug/L			06/18/19 16:55	2
Carbon tetrachloride	ND	UJ For	2.0	ug/L			06/18/19 16:55	2
Chlorobenzene	ND	MS/MSD	2.0	ug/L			06/18/19 16:55	2
Chlorodibromomethane	ND		2.0	ug/L			06/18/19 16:55	2
Chloroethane	ND	F2	2.0	ug/L			06/18/19 16:55	2
Chloroform	ND	RPD	2.0	ug/L			06/18/19 16:55	2
Chloromethane	ND	outside	2.0	ug/L			06/18/19 16:55	2
cis-1,2-Dichloroethene	**14**	of	2.0	ug/L			06/18/19 16:55	2
cis-1,3-Dichloropropene	ND	limits	2.0	ug/L			06/18/19 16:55	2
Cyclohexane	ND		2.0	ug/L			06/18/19 16:55	2
Dichlorodifluoromethane	ND	BNJ	2.0	ug/L			06/18/19 16:55	2
Dichlorobromomethane	ND		2.0	ug/L			06/18/19 16:55	2
Ethylbenzene	ND	7/8/2019	2.0	ug/L			06/18/19 16:55	2
Isopropylbenzene	ND		2.0	ug/L			06/18/19 16:55	2
Methyl acetate	ND		20	ug/L			06/18/19 16:55	2
Methylcyclohexane	ND		2.0	ug/L			06/18/19 16:55	2
Methyl tert-butyl ether	ND		2.0	ug/L			06/18/19 16:55	2
Methylene Chloride	ND		10	ug/L			06/18/19 16:55	2
Styrene	ND		2.0	ug/L			06/18/19 16:55	2
Tetrachloroethene	**50**		2.0	ug/L			06/18/19 16:55	2
Toluene	ND		2.0	ug/L			06/18/19 16:55	2
trans-1,2-Dichloroethene	ND		2.0	ug/L			06/18/19 16:55	2
trans-1,3-Dichloropropene	ND		2.0	ug/L			06/18/19 16:55	2
Trichloroethene	**7.6**		2.0	ug/L			06/18/19 16:55	2
Trichlorofluoromethane	ND		2.0	ug/L			06/18/19 16:55	2
Vinyl chloride	ND		2.0	ug/L			06/18/19 16:55	2
Xylenes, Total	ND		4.0	ug/L			06/18/19 16:55	2
Ethylene Dibromide	ND		2.0	ug/L			06/18/19 16:55	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*85*		*70 - 123*		*06/18/19 16:55*	*2*
Dibromofluoromethane (Surr)	*108*		*75 - 128*		*06/18/19 16:55*	*2*
4-Bromofluorobenzene (Surr)	*95*		*59 - 120*		*06/18/19 16:55*	*2*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 121*		*06/18/19 16:55*	*2*

Client Sample ID: OW-2

Date Collected: 06/05/19 17:10
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.5		ug/L			06/18/19 22:19	2.5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			06/18/19 22:19	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5		ug/L			06/18/19 22:19	2.5
1,1,2-Trichloroethane	ND		2.5		ug/L			06/18/19 22:19	2.5
1,1-Dichloroethane	ND		2.5		ug/L			06/18/19 22:19	2.5
1,1-Dichloroethene	ND		2.5		ug/L			06/18/19 22:19	2.5
1,2,4-Trichlorobenzene	ND		2.5		ug/L			06/18/19 22:19	2.5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			06/18/19 22:19	2.5
1,2-Dichlorobenzene	ND		2.5		ug/L			06/18/19 22:19	2.5
1,2-Dichloroethane	ND		2.5		ug/L			06/18/19 22:19	2.5
1,2-Dichloropropane	ND		2.5		ug/L			06/18/19 22:19	2.5
1,3-Dichlorobenzene	ND		2.5		ug/L			06/18/19 22:19	2.5
1,4-Dichlorobenzene	ND		2.5		ug/L			06/18/19 22:19	2.5
2-Butanone (MEK)	ND		25		ug/L			06/18/19 22:19	2.5
2-Hexanone	ND		25		ug/L			06/18/19 22:19	2.5
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			06/18/19 22:19	2.5
Acetone	ND		25		ug/L			06/18/19 22:19	2.5
Benzene	ND		2.5		ug/L			06/18/19 22:19	2.5
Bromoform	ND		2.5		ug/L			06/18/19 22:19	2.5
Bromomethane	ND		2.5		ug/L			06/18/19 22:19	2.5
Carbon disulfide	ND		2.5		ug/L			06/18/19 22:19	2.5
Carbon tetrachloride	ND		2.5		ug/L			06/18/19 22:19	2.5
Chlorobenzene	ND		2.5		ug/L			06/18/19 22:19	2.5
Chlorodibromomethane	ND		2.5		ug/L			06/18/19 22:19	2.5
Chloroethane	ND		2.5		ug/L			06/18/19 22:19	2.5
Chloroform	ND		2.5		ug/L			06/18/19 22:19	2.5
Chloromethane	ND		2.5		ug/L			06/18/19 22:19	2.5
cis-1,2-Dichloroethene	**23**		2.5		ug/L			06/18/19 22:19	2.5
cis-1,3-Dichloropropene	ND		2.5		ug/L			06/18/19 22:19	2.5
Cyclohexane	ND		2.5		ug/L			06/18/19 22:19	2.5
Dichlorodifluoromethane	ND		2.5		ug/L			06/18/19 22:19	2.5
Dichlorobromomethane	ND		2.5		ug/L			06/18/19 22:19	2.5
Ethylbenzene	ND		2.5		ug/L			06/18/19 22:19	2.5
Isopropylbenzene	ND		2.5		ug/L			06/18/19 22:19	2.5
Methyl acetate	ND		25		ug/L			06/18/19 22:19	2.5
Methylcyclohexane	ND		2.5		ug/L			06/18/19 22:19	2.5
Methyl tert-butyl ether	ND		2.5		ug/L			06/18/19 22:19	2.5
Methylene Chloride	ND		13		ug/L			06/18/19 22:19	2.5
Styrene	ND		2.5		ug/L			06/18/19 22:19	2.5
Tetrachloroethene	**64**		2.5		ug/L			06/18/19 22:19	2.5
Toluene	ND		2.5		ug/L			06/18/19 22:19	2.5
trans-1,2-Dichloroethene	ND		2.5		ug/L			06/18/19 22:19	2.5
trans-1,3-Dichloropropene	ND		2.5		ug/L			06/18/19 22:19	2.5
Trichloroethene	**6.8**		2.5		ug/L			06/18/19 22:19	2.5
Trichlorofluoromethane	ND		2.5		ug/L			06/18/19 22:19	2.5
Vinyl chloride	ND		2.5		ug/L			06/18/19 22:19	2.5
Xylenes, Total	ND		5.0		ug/L			06/18/19 22:19	2.5
Ethylene Dibromide	ND		2.5		ug/L			06/18/19 22:19	2.5

Client Sample ID: OW-2

Date Collected: 06/05/19 17:10
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*91*		*70 - 123*		*06/18/19 22:19*	*2.5*
Dibromofluoromethane (Surr)	*106*		*75 - 128*		*06/18/19 22:19*	*2.5*
4-Bromofluorobenzene (Surr)	*96*		*59 - 120*		*06/18/19 22:19*	*2.5*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 121*		*06/18/19 22:19*	*2.5*

Client Sample ID: OW-24

Date Collected: 06/06/19 08:50
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			06/18/19 22:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/18/19 22:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			06/18/19 22:44	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/18/19 22:44	1
1,1-Dichloroethane	ND		1.0	ug/L			06/18/19 22:44	1
1,1-Dichloroethene	ND		1.0	ug/L			06/18/19 22:44	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/18/19 22:44	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			06/18/19 22:44	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/18/19 22:44	1
1,2-Dichloroethane	ND		1.0	ug/L			06/18/19 22:44	1
1,2-Dichloropropane	ND		1.0	ug/L			06/18/19 22:44	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/18/19 22:44	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/18/19 22:44	1
2-Butanone (MEK)	ND		10	ug/L			06/18/19 22:44	1
2-Hexanone	ND		10	ug/L			06/18/19 22:44	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/18/19 22:44	1
Acetone	ND		10	ug/L			06/18/19 22:44	1
Benzene	ND		1.0	ug/L			06/18/19 22:44	1
Bromoform	ND		1.0	ug/L			06/18/19 22:44	1
Bromomethane	ND		1.0	ug/L			06/18/19 22:44	1
Carbon disulfide	ND		1.0	ug/L			06/18/19 22:44	1
Carbon tetrachloride	ND		1.0	ug/L			06/18/19 22:44	1
Chlorobenzene	ND		1.0	ug/L			06/18/19 22:44	1
Chlorodibromomethane	ND		1.0	ug/L			06/18/19 22:44	1
Chloroethane	ND		1.0	ug/L			06/18/19 22:44	1
Chloroform	ND		1.0	ug/L			06/18/19 22:44	1
Chloromethane	ND		1.0	ug/L			06/18/19 22:44	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/18/19 22:44	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			06/18/19 22:44	1
Cyclohexane	ND		1.0	ug/L			06/18/19 22:44	1
Dichlorodifluoromethane	ND		1.0	ug/L			06/18/19 22:44	1
Dichlorobromomethane	ND		1.0	ug/L			06/18/19 22:44	1
Ethylbenzene	ND		1.0	ug/L			06/18/19 22:44	1
Isopropylbenzene	ND		1.0	ug/L			06/18/19 22:44	1
Methyl acetate	ND		10	ug/L			06/18/19 22:44	1
Methylcyclohexane	ND		1.0	ug/L			06/18/19 22:44	1
Methyl tert-butyl ether	ND		1.0	ug/L			06/18/19 22:44	1
Methylene Chloride	ND		5.0	ug/L			06/18/19 22:44	1
Styrene	ND		1.0	ug/L			06/18/19 22:44	1

Client Sample ID: OW-24

Date Collected: 06/06/19 08:50
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	ug/L			06/18/19 22:44	1
Toluene	ND		1.0	ug/L			06/18/19 22:44	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			06/18/19 22:44	1
trans-1,3-Dichloropropene	ND		1.0	ug/L			06/18/19 22:44	1
Trichloroethene	ND		1.0	ug/L			06/18/19 22:44	1
Trichlorofluoromethane	ND		1.0	ug/L			06/18/19 22:44	1
Vinyl chloride	ND		1.0	ug/L			06/18/19 22:44	1
Xylenes, Total	ND		2.0	ug/L			06/18/19 22:44	1
Ethylene Dibromide	ND		1.0	ug/L			06/18/19 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*70 - 123*		*06/18/19 22:44*	*1*
Dibromofluoromethane (Surr)	*122*		*75 - 128*		*06/18/19 22:44*	*1*
4-Bromofluorobenzene (Surr)	*95*		*59 - 120*		*06/18/19 22:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 121*		*06/18/19 22:44*	*1*

Client Sample ID: OW-18

Date Collected: 06/06/19 10:15
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			06/19/19 13:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/19/19 13:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			06/19/19 13:57	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/19/19 13:57	1
1,1-Dichloroethane	ND		1.0	ug/L			06/19/19 13:57	1
1,1-Dichloroethene	ND		1.0	ug/L			06/19/19 13:57	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/19/19 13:57	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			06/19/19 13:57	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/19/19 13:57	1
1,2-Dichloroethane	ND		1.0	ug/L			06/19/19 13:57	1
1,2-Dichloropropane	ND		1.0	ug/L			06/19/19 13:57	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/19/19 13:57	1
1,4-Dichlorobenzene	**1.1**		1.0	ug/L			06/19/19 13:57	1
2-Butanone (MEK)	ND		10	ug/L			06/19/19 13:57	1
2-Hexanone	ND		10	ug/L			06/19/19 13:57	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/19/19 13:57	1
Acetone	ND	UJ for MS/MSD	10	ug/L			06/19/19 13:57	1
Benzene	**1.8**		1.0	ug/L			06/19/19 13:57	1
Bromoform	ND		1.0	ug/L			06/19/19 13:57	1
Bromomethane	ND	F2	1.0	ug/L			06/19/19 13:57	1
Carbon disulfide	ND	RPD outside of limits	1.0	ug/L			06/19/19 13:57	1
Carbon tetrachloride	ND		1.0	ug/L			06/19/19 13:57	1
Chlorobenzene	**12**		1.0	ug/L			06/19/19 13:57	1
Chlorodibromomethane	ND		1.0	ug/L			06/19/19 13:57	1
Chloroethane	ND	BNQ	1.0	ug/L			06/19/19 13:57	1
Chloroform	ND		1.0	ug/L			06/19/19 13:57	1
Chloromethane	ND	7/8/2019	1.0	ug/L			06/19/19 13:57	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/19/19 13:57	1

Client Sample ID: OW-18

Date Collected: 06/06/19 10:15
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 13:57	1
Cyclohexane	ND		1.0		ug/L			06/19/19 13:57	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/19/19 13:57	1
Dichlorobromomethane	ND		1.0		ug/L			06/19/19 13:57	1
Ethylbenzene	ND		1.0		ug/L			06/19/19 13:57	1
Isopropylbenzene	ND		1.0		ug/L			06/19/19 13:57	1
Methyl acetate	ND		10		ug/L			06/19/19 13:57	1
Methylcyclohexane	ND		1.0		ug/L			06/19/19 13:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/19/19 13:57	1
Methylene Chloride	ND		5.0		ug/L			06/19/19 13:57	1
Styrene	ND		1.0		ug/L			06/19/19 13:57	1
Tetrachloroethene	ND		1.0		ug/L			06/19/19 13:57	1
Toluene	ND		1.0		ug/L			06/19/19 13:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 13:57	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 13:57	1
Trichloroethene	ND		1.0		ug/L			06/19/19 13:57	1
Trichlorofluoromethane	ND		1.0		ug/L			06/19/19 13:57	1
Vinyl chloride	ND		1.0		ug/L			06/19/19 13:57	1
Xylenes, Total	ND		2.0		ug/L			06/19/19 13:57	1
Ethylene Dibromide	ND		1.0		ug/L			06/19/19 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*74*		*70 - 123*		*06/19/19 13:57*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 128*		*06/19/19 13:57*	*1*
4-Bromofluorobenzene (Surr)	*68*		*59 - 120*		*06/19/19 13:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 121*		*06/19/19 13:57*	*1*

Client Sample ID: OW-19

Date Collected: 06/06/19 11:40
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/19/19 14:21	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/19/19 14:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/19/19 14:21	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/19/19 14:21	1
1,1-Dichloroethane	ND		1.0		ug/L			06/19/19 14:21	1
1,1-Dichloroethene	ND		1.0		ug/L			06/19/19 14:21	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/19/19 14:21	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/19/19 14:21	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/19/19 14:21	1
1,2-Dichloroethane	ND		1.0		ug/L			06/19/19 14:21	1
1,2-Dichloropropane	ND		1.0		ug/L			06/19/19 14:21	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/19/19 14:21	1
1,4-Dichlorobenzene	**1.4**		1.0		ug/L			06/19/19 14:21	1
2-Butanone (MEK)	ND		10		ug/L			06/19/19 14:21	1
2-Hexanone	ND		10		ug/L			06/19/19 14:21	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/19/19 14:21	1
Acetone	ND		10		ug/L			06/19/19 14:21	1

Client Sample ID: OW-19

Date Collected: 06/06/19 11:40
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.6**		1.0		ug/L			06/19/19 14:21	1
Bromoform	ND		1.0		ug/L			06/19/19 14:21	1
Bromomethane	ND		1.0		ug/L			06/19/19 14:21	1
Carbon disulfide	ND		1.0		ug/L			06/19/19 14:21	1
Carbon tetrachloride	ND		1.0		ug/L			06/19/19 14:21	1
Chlorobenzene	**16**		1.0		ug/L			06/19/19 14:21	1
Chlorodibromomethane	ND		1.0		ug/L			06/19/19 14:21	1
Chloroethane	ND		1.0		ug/L			06/19/19 14:21	1
Chloroform	ND		1.0		ug/L			06/19/19 14:21	1
Chloromethane	ND		1.0		ug/L			06/19/19 14:21	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 14:21	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 14:21	1
Cyclohexane	ND		1.0		ug/L			06/19/19 14:21	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/19/19 14:21	1
Dichlorobromomethane	ND		1.0		ug/L			06/19/19 14:21	1
Ethylbenzene	ND		1.0		ug/L			06/19/19 14:21	1
Isopropylbenzene	ND		1.0		ug/L			06/19/19 14:21	1
Methyl acetate	ND		10		ug/L			06/19/19 14:21	1
Methylcyclohexane	ND		1.0		ug/L			06/19/19 14:21	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/19/19 14:21	1
Methylene Chloride	ND		5.0		ug/L			06/19/19 14:21	1
Styrene	ND		1.0		ug/L			06/19/19 14:21	1
Tetrachloroethene	ND		1.0		ug/L			06/19/19 14:21	1
Toluene	ND		1.0		ug/L			06/19/19 14:21	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 14:21	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 14:21	1
Trichloroethene	ND		1.0		ug/L			06/19/19 14:21	1
Trichlorofluoromethane	ND		1.0		ug/L			06/19/19 14:21	1
Vinyl chloride	ND		1.0		ug/L			06/19/19 14:21	1
Xylenes, Total	ND		2.0		ug/L			06/19/19 14:21	1
Ethylene Dibromide	ND		1.0		ug/L			06/19/19 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*73*		*70 - 123*		*06/19/19 14:21*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 128*		*06/19/19 14:21*	*1*
4-Bromofluorobenzene (Surr)	*68*		*59 - 120*		*06/19/19 14:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 121*		*06/19/19 14:21*	*1*

Client Sample ID: PUMP BLANK

Date Collected: 06/06/19 12:00
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/19/19 14:45	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/19/19 14:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/19/19 14:45	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/19/19 14:45	1
1,1-Dichloroethane	ND		1.0		ug/L			06/19/19 14:45	1
1,1-Dichloroethene	ND		1.0		ug/L			06/19/19 14:45	1

Client Sample ID: PUMP BLANK

Date Collected: 06/06/19 12:00
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/19/19 14:45	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/19/19 14:45	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/19/19 14:45	1
1,2-Dichloroethane	ND		1.0		ug/L			06/19/19 14:45	1
1,2-Dichloropropane	ND		1.0		ug/L			06/19/19 14:45	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/19/19 14:45	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/19/19 14:45	1
2-Butanone (MEK)	ND		10		ug/L			06/19/19 14:45	1
2-Hexanone	ND		10		ug/L			06/19/19 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/19/19 14:45	1
Acetone	ND		10		ug/L			06/19/19 14:45	1
Benzene	ND		1.0		ug/L			06/19/19 14:45	1
Bromoform	ND		1.0		ug/L			06/19/19 14:45	1
Bromomethane	ND		1.0		ug/L			06/19/19 14:45	1
Carbon disulfide	ND		1.0		ug/L			06/19/19 14:45	1
Carbon tetrachloride	ND		1.0		ug/L			06/19/19 14:45	1
Chlorobenzene	ND		1.0		ug/L			06/19/19 14:45	1
Chlorodibromomethane	ND		1.0		ug/L			06/19/19 14:45	1
Chloroethane	ND		1.0		ug/L			06/19/19 14:45	1
Chloroform	ND		1.0		ug/L			06/19/19 14:45	1
Chloromethane	ND		1.0		ug/L			06/19/19 14:45	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 14:45	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 14:45	1
Cyclohexane	ND		1.0		ug/L			06/19/19 14:45	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/19/19 14:45	1
Dichlorobromomethane	ND		1.0		ug/L			06/19/19 14:45	1
Ethylbenzene	ND		1.0		ug/L			06/19/19 14:45	1
Isopropylbenzene	ND		1.0		ug/L			06/19/19 14:45	1
Methyl acetate	ND		10		ug/L			06/19/19 14:45	1
Methylcyclohexane	ND		1.0		ug/L			06/19/19 14:45	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/19/19 14:45	1
Methylene Chloride	ND		5.0		ug/L			06/19/19 14:45	1
Styrene	ND		1.0		ug/L			06/19/19 14:45	1
Tetrachloroethene	ND		1.0		ug/L			06/19/19 14:45	1
Toluene	ND		1.0		ug/L			06/19/19 14:45	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 14:45	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 14:45	1
Trichloroethene	ND		1.0		ug/L			06/19/19 14:45	1
Trichlorofluoromethane	ND		1.0		ug/L			06/19/19 14:45	1
Vinyl chloride	ND		1.0		ug/L			06/19/19 14:45	1
Xylenes, Total	ND		2.0		ug/L			06/19/19 14:45	1
Ethylene Dibromide	ND		1.0		ug/L			06/19/19 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*74*		*70 - 123*		*06/19/19 14:45*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 128*		*06/19/19 14:45*	*1*
4-Bromofluorobenzene (Surr)	*65*		*59 - 120*		*06/19/19 14:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 121*		*06/19/19 14:45*	*1*

Client Sample ID: OW-22

Date Collected: 06/06/19 14:05
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/19/19 15:09	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/19/19 15:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/19/19 15:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/19/19 15:09	1
1,1-Dichloroethane	ND		1.0		ug/L			06/19/19 15:09	1
1,1-Dichloroethene	ND		1.0		ug/L			06/19/19 15:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/19/19 15:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/19/19 15:09	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/19/19 15:09	1
1,2-Dichloroethane	ND		1.0		ug/L			06/19/19 15:09	1
1,2-Dichloropropane	ND		1.0		ug/L			06/19/19 15:09	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/19/19 15:09	1
1,4-Dichlorobenzene	**1.1**		1.0		ug/L			06/19/19 15:09	1
2-Butanone (MEK)	ND		10		ug/L			06/19/19 15:09	1
2-Hexanone	ND		10		ug/L			06/19/19 15:09	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/19/19 15:09	1
Acetone	ND		10		ug/L			06/19/19 15:09	1
Benzene	**2.4**		1.0		ug/L			06/19/19 15:09	1
Bromoform	ND		1.0		ug/L			06/19/19 15:09	1
Bromomethane	ND		1.0		ug/L			06/19/19 15:09	1
Carbon disulfide	ND		1.0		ug/L			06/19/19 15:09	1
Carbon tetrachloride	ND		1.0		ug/L			06/19/19 15:09	1
Chlorobenzene	**9.0**		1.0		ug/L			06/19/19 15:09	1
Chlorodibromomethane	ND		1.0		ug/L			06/19/19 15:09	1
Chloroethane	ND		1.0		ug/L			06/19/19 15:09	1
Chloroform	ND		1.0		ug/L			06/19/19 15:09	1
Chloromethane	ND		1.0		ug/L			06/19/19 15:09	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 15:09	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 15:09	1
Cyclohexane	ND		1.0		ug/L			06/19/19 15:09	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/19/19 15:09	1
Dichlorobromomethane	ND		1.0		ug/L			06/19/19 15:09	1
Ethylbenzene	ND		1.0		ug/L			06/19/19 15:09	1
Isopropylbenzene	ND		1.0		ug/L			06/19/19 15:09	1
Methyl acetate	ND		10		ug/L			06/19/19 15:09	1
Methylcyclohexane	ND		1.0		ug/L			06/19/19 15:09	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/19/19 15:09	1
Methylene Chloride	ND		5.0		ug/L			06/19/19 15:09	1
Styrene	ND		1.0		ug/L			06/19/19 15:09	1
Tetrachloroethene	ND		1.0		ug/L			06/19/19 15:09	1
Toluene	ND		1.0		ug/L			06/19/19 15:09	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 15:09	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 15:09	1
Trichloroethene	ND		1.0		ug/L			06/19/19 15:09	1
Trichlorofluoromethane	ND		1.0		ug/L			06/19/19 15:09	1
Vinyl chloride	ND		1.0		ug/L			06/19/19 15:09	1
Xylenes, Total	ND		2.0		ug/L			06/19/19 15:09	1
Ethylene Dibromide	ND		1.0		ug/L			06/19/19 15:09	1

Client Sample ID: OW-22

Date Collected: 06/06/19 14:05
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*74*		*70 - 123*		*06/19/19 15:09*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 128*		*06/19/19 15:09*	*1*
4-Bromofluorobenzene (Surr)	*67*		*59 - 120*		*06/19/19 15:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 121*		*06/19/19 15:09*	*1*

Client Sample ID: OW-21

Date Collected: 06/06/19 14:50
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			06/19/19 15:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/19/19 15:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			06/19/19 15:33	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/19/19 15:33	1
1,1-Dichloroethane	ND		1.0	ug/L			06/19/19 15:33	1
1,1-Dichloroethene	ND		1.0	ug/L			06/19/19 15:33	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/19/19 15:33	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			06/19/19 15:33	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/19/19 15:33	1
1,2-Dichloroethane	ND		1.0	ug/L			06/19/19 15:33	1
1,2-Dichloropropane	ND		1.0	ug/L			06/19/19 15:33	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/19/19 15:33	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/19/19 15:33	1
2-Butanone (MEK)	ND		10	ug/L			06/19/19 15:33	1
2-Hexanone	ND		10	ug/L			06/19/19 15:33	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/19/19 15:33	1
Acetone	ND		10	ug/L			06/19/19 15:33	1
Benzene	ND		1.0	ug/L			06/19/19 15:33	1
Bromoform	ND		1.0	ug/L			06/19/19 15:33	1
Bromomethane	ND		1.0	ug/L			06/19/19 15:33	1
Carbon disulfide	ND		1.0	ug/L			06/19/19 15:33	1
Carbon tetrachloride	ND		1.0	ug/L			06/19/19 15:33	1
Chlorobenzene	ND		1.0	ug/L			06/19/19 15:33	1
Chlorodibromomethane	ND		1.0	ug/L			06/19/19 15:33	1
Chloroethane	ND		1.0	ug/L			06/19/19 15:33	1
Chloroform	ND		1.0	ug/L			06/19/19 15:33	1
Chloromethane	ND		1.0	ug/L			06/19/19 15:33	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			06/19/19 15:33	1
cis-1,3-Dichloropropene	ND		1.0	ug/L			06/19/19 15:33	1
Cyclohexane	ND		1.0	ug/L			06/19/19 15:33	1
Dichlorodifluoromethane	ND		1.0	ug/L			06/19/19 15:33	1
Dichlorobromomethane	ND		1.0	ug/L			06/19/19 15:33	1
Ethylbenzene	ND		1.0	ug/L			06/19/19 15:33	1
Isopropylbenzene	ND		1.0	ug/L			06/19/19 15:33	1
Methyl acetate	ND		10	ug/L			06/19/19 15:33	1
Methylcyclohexane	ND		1.0	ug/L			06/19/19 15:33	1
Methyl tert-butyl ether	ND		1.0	ug/L			06/19/19 15:33	1
Methylene Chloride	ND		5.0	ug/L			06/19/19 15:33	1
Styrene	ND		1.0	ug/L			06/19/19 15:33	1

Client Sample ID: OW-21

Lab Sample ID: 240-113949-12

Date Collected: 06/06/19 14:50

Matrix: Water

Date Received: 06/07/19 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0		ug/L			06/19/19 15:33	1
Toluene	ND		1.0		ug/L			06/19/19 15:33	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 15:33	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 15:33	1
Trichloroethene	ND		1.0		ug/L			06/19/19 15:33	1
Trichlorofluoromethane	ND		1.0		ug/L			06/19/19 15:33	1
Vinyl chloride	ND		1.0		ug/L			06/19/19 15:33	1
Xylenes, Total	ND		2.0		ug/L			06/19/19 15:33	1
Ethylene Dibromide	ND		1.0		ug/L			06/19/19 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*73*		*70 - 123*		*06/19/19 15:33*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 128*		*06/19/19 15:33*	*1*
4-Bromofluorobenzene (Surr)	*65*		*59 - 120*		*06/19/19 15:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 121*		*06/19/19 15:33*	*1*

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-113949-13

Date Collected: 06/06/19 13:15

Matrix: Water

Date Received: 06/07/19 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/19/19 15:57	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/19/19 15:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/19/19 15:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/19/19 15:57	1
1,1-Dichloroethane	ND		1.0		ug/L			06/19/19 15:57	1
1,1-Dichloroethene	ND		1.0		ug/L			06/19/19 15:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/19/19 15:57	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/19/19 15:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/19/19 15:57	1
1,2-Dichloroethane	ND		1.0		ug/L			06/19/19 15:57	1
1,2-Dichloropropane	ND		1.0		ug/L			06/19/19 15:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/19/19 15:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/19/19 15:57	1
2-Butanone (MEK)	ND		10		ug/L			06/19/19 15:57	1
2-Hexanone	ND		10		ug/L			06/19/19 15:57	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/19/19 15:57	1
Acetone	**10**		10		ug/L			06/19/19 15:57	1
Benzene	ND		1.0		ug/L			06/19/19 15:57	1
Bromoform	ND		1.0		ug/L			06/19/19 15:57	1
Bromomethane	ND		1.0		ug/L			06/19/19 15:57	1
Carbon disulfide	ND		1.0		ug/L			06/19/19 15:57	1
Carbon tetrachloride	ND		1.0		ug/L			06/19/19 15:57	1
Chlorobenzene	ND		1.0		ug/L			06/19/19 15:57	1
Chlorodibromomethane	ND		1.0		ug/L			06/19/19 15:57	1
Chloroethane	ND		1.0		ug/L			06/19/19 15:57	1
Chloroform	ND		1.0		ug/L			06/19/19 15:57	1
Chloromethane	ND		1.0		ug/L			06/19/19 15:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 15:57	1

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-113949-13

Date Collected: 06/06/19 13:15
Matrix: Water
Date Received: 06/07/19 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 15:57	1
Cyclohexane	ND		1.0		ug/L			06/19/19 15:57	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/19/19 15:57	1
Dichlorobromomethane	ND		1.0		ug/L			06/19/19 15:57	1
Ethylbenzene	ND		1.0		ug/L			06/19/19 15:57	1
Isopropylbenzene	ND		1.0		ug/L			06/19/19 15:57	1
Methyl acetate	ND		10		ug/L			06/19/19 15:57	1
Methylcyclohexane	ND		1.0		ug/L			06/19/19 15:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/19/19 15:57	1
Methylene Chloride	ND		5.0		ug/L			06/19/19 15:57	1
Styrene	ND		1.0		ug/L			06/19/19 15:57	1
Tetrachloroethene	ND		1.0		ug/L			06/19/19 15:57	1
Toluene	ND		1.0		ug/L			06/19/19 15:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 15:57	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 15:57	1
Trichloroethene	ND		1.0		ug/L			06/19/19 15:57	1
Trichlorofluoromethane	ND		1.0		ug/L			06/19/19 15:57	1
Vinyl chloride	ND		1.0		ug/L			06/19/19 15:57	1
Xylenes, Total	ND		2.0		ug/L			06/19/19 15:57	1
Ethylene Dibromide	ND		1.0		ug/L			06/19/19 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*75*		*70 - 123*		*06/19/19 15:57*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 128*		*06/19/19 15:57*	*1*
4-Bromofluorobenzene (Surr)	*65*		*59 - 120*		*06/19/19 15:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 121*		*06/19/19 15:57*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-113949-14

Date Collected: 06/04/19 00:00
Matrix: Water
Date Received: 06/07/19 10:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/17/19 18:20	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/17/19 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/17/19 18:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/17/19 18:20	1
1,1-Dichloroethane	ND		1.0		ug/L			06/17/19 18:20	1
1,1-Dichloroethene	ND		1.0		ug/L			06/17/19 18:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/17/19 18:20	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/17/19 18:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/17/19 18:20	1
1,2-Dichloroethane	ND		1.0		ug/L			06/17/19 18:20	1
1,2-Dichloropropane	ND		1.0		ug/L			06/17/19 18:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/17/19 18:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/17/19 18:20	1
2-Butanone (MEK)	ND		10		ug/L			06/17/19 18:20	1
2-Hexanone	ND		10		ug/L			06/17/19 18:20	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/17/19 18:20	1
Acetone	ND		10		ug/L			06/17/19 18:20	1

Client Sample ID: TRIP BLANK

Date Collected: 06/04/19 00:00
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-14

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			06/17/19 18:20	1
Bromoform	ND		1.0		ug/L			06/17/19 18:20	1
Bromomethane	ND		1.0		ug/L			06/17/19 18:20	1
Carbon disulfide	ND		1.0		ug/L			06/17/19 18:20	1
Carbon tetrachloride	ND		1.0		ug/L			06/17/19 18:20	1
Chlorobenzene	ND		1.0		ug/L			06/17/19 18:20	1
Chlorodibromomethane	ND		1.0		ug/L			06/17/19 18:20	1
Chloroethane	ND		1.0		ug/L			06/17/19 18:20	1
Chloroform	ND		1.0		ug/L			06/17/19 18:20	1
Chloromethane	ND		1.0		ug/L			06/17/19 18:20	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/17/19 18:20	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/17/19 18:20	1
Cyclohexane	ND		1.0		ug/L			06/17/19 18:20	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/17/19 18:20	1
Dichlorobromomethane	ND		1.0		ug/L			06/17/19 18:20	1
Ethylbenzene	ND		1.0		ug/L			06/17/19 18:20	1
Isopropylbenzene	ND		1.0		ug/L			06/17/19 18:20	1
Methyl acetate	ND		10		ug/L			06/17/19 18:20	1
Methylcyclohexane	ND		1.0		ug/L			06/17/19 18:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/17/19 18:20	1
Methylene Chloride	ND		5.0		ug/L			06/17/19 18:20	1
Styrene	ND		1.0		ug/L			06/17/19 18:20	1
Tetrachloroethene	ND		1.0		ug/L			06/17/19 18:20	1
Toluene	ND		1.0		ug/L			06/17/19 18:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/17/19 18:20	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/17/19 18:20	1
Trichloroethene	ND		1.0		ug/L			06/17/19 18:20	1
Trichlorofluoromethane	ND		1.0		ug/L			06/17/19 18:20	1
Vinyl chloride	ND		1.0		ug/L			06/17/19 18:20	1
Xylenes, Total	ND		2.0		ug/L			06/17/19 18:20	1
Ethylene Dibromide	ND		1.0		ug/L			06/17/19 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*111*		*70 - 123*		*06/17/19 18:20*	*1*
Dibromofluoromethane (Surr)	*115*		*75 - 128*		*06/17/19 18:20*	*1*
4-Bromofluorobenzene (Surr)	*99*		*59 - 120*		*06/17/19 18:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 121*		*06/17/19 18:20*	*1*

Default Detection Limits

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	RL		Units
1,1,1-Trichloroethane	1.0	0.24	ug/L
1,1,2,2-Tetrachloroethane	1.0	0.13	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	0.41	ug/L
1,1,2-Trichloroethane	1.0	0.090	ug/L
1,1-Dichloroethane	1.0	0.17	ug/L
1,1-Dichloroethene	1.0	0.19	ug/L
1,2,4-Trichlorobenzene	1.0	0.26	ug/L
1,2-Dibromo-3-Chloropropane	2.0	0.91	ug/L
1,2-Dichlorobenzene	1.0	0.15	ug/L
1,2-Dichloroethane	1.0	0.21	ug/L
1,2-Dichloropropane	1.0	0.15	ug/L
1,3-Dichlorobenzene	1.0	0.15	ug/L
1,4-Dichlorobenzene	1.0	0.16	ug/L
2-Butanone (MEK)	10	1.2	ug/L
2-Hexanone	10	0.54	ug/L
4-Methyl-2-pentanone (MIBK)	10	0.42	ug/L
Acetone	10	5.4	ug/L
Benzene	1.0	0.13	ug/L
Bromoform	1.0	0.76	ug/L
Bromomethane	1.0	0.42	ug/L
Carbon disulfide	1.0	0.28	ug/L
Carbon tetrachloride	1.0	0.26	ug/L
Chlorobenzene	1.0	0.14	ug/L
Chlorodibromomethane	1.0	0.39	ug/L
Chloroethane	1.0	0.83	ug/L
Chloroform	1.0	0.13	ug/L
Chloromethane	1.0	0.20	ug/L
cis-1,2-Dichloroethene	1.0	0.16	ug/L
cis-1,3-Dichloropropene	1.0	0.61	ug/L
Cyclohexane	1.0	0.24	ug/L
Dichlorobromomethane	1.0	0.17	ug/L
Dichlorodifluoromethane	1.0	0.35	ug/L
Ethylbenzene	1.0	0.11	ug/L
Ethylene Dibromide	1.0	0.12	ug/L
Isopropylbenzene	1.0	0.090	ug/L
Methyl acetate	10	1.7	ug/L
Methyl tert-butyl ether	1.0	0.070	ug/L
Methylcyclohexane	1.0	0.33	ug/L
Methylene Chloride	5.0	2.6	ug/L
Styrene	1.0	0.10	ug/L
Tetrachloroethene	1.0	0.15	ug/L
Toluene	1.0	0.14	ug/L
trans-1,2-Dichloroethene	1.0	0.19	ug/L
trans-1,3-Dichloropropene	1.0	0.67	ug/L
Trichloroethene	1.0	0.10	ug/L
Trichlorofluoromethane	1.0	0.45	ug/L
Vinyl chloride	1.0	0.20	ug/L
Xylenes, Total	2.0	0.15	ug/L

Surrogate Summary

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	DCA
Lab Sample ID	Client Sample ID	(70-123)	(75-128)	(59-120)	(70-121)
240-113949-1	OW-5	103	109	91	94
240-113949-2	OW-5 DUP	103	102	92	97
240-113949-3	OW-10R	82	105	85	105
240-113949-4	OW-13R	93	115	95	103
240-113949-5	OW-6	85	108	95	114
240-113949-5 MS	OW-6	90	127	94	103
240-113949-5 MSD	OW-6	90	105	101	110
240-113949-6	OW-2	91	106	96	110
240-113949-7	OW-24	90	122	95	108
240-113949-8	OW-18	74	96	68	95
240-113949-8 MS	OW-18	84	87	86	86
240-113949-8 MSD	OW-18	81	82	87	84
240-113949-9	OW-19	73	98	68	96
240-113949-10	PUMP BLANK	74	94	65	99
240-113949-11	OW-22	74	95	67	98
240-113949-12	OW-21	73	95	65	100
240-113949-13	FIELD BLANK	75	96	65	98
240-113949-14	TRIP BLANK	111	115	99	99
LCS 240-386483/4	Lab Control Sample	113	106	110	99
LCS 240-386760/4	Lab Control Sample	87	119	98	110
LCS 240-386999/4	Lab Control Sample	83	81	81	78
MB 240-386483/6	Method Blank	111	116	100	103
MB 240-386760/7	Method Blank	84	103	88	110
MB 240-386999/7	Method Blank	74	93	63	94

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-386483/6
Matrix: Water
Analysis Batch: 386483

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/17/19 09:47	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/17/19 09:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/17/19 09:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/17/19 09:47	1
1,1-Dichloroethane	ND		1.0		ug/L			06/17/19 09:47	1
1,1-Dichloroethene	ND		1.0		ug/L			06/17/19 09:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/17/19 09:47	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/17/19 09:47	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/17/19 09:47	1
1,2-Dichloroethane	ND		1.0		ug/L			06/17/19 09:47	1
1,2-Dichloropropane	ND		1.0		ug/L			06/17/19 09:47	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/17/19 09:47	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/17/19 09:47	1
2-Butanone (MEK)	ND		10		ug/L			06/17/19 09:47	1
2-Hexanone	ND		10		ug/L			06/17/19 09:47	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/17/19 09:47	1
Acetone	ND		10		ug/L			06/17/19 09:47	1
Benzene	ND		1.0		ug/L			06/17/19 09:47	1
Bromoform	ND		1.0		ug/L			06/17/19 09:47	1
Bromomethane	ND		1.0		ug/L			06/17/19 09:47	1
Carbon disulfide	ND		1.0		ug/L			06/17/19 09:47	1
Carbon tetrachloride	ND		1.0		ug/L			06/17/19 09:47	1
Chlorobenzene	ND		1.0		ug/L			06/17/19 09:47	1
Chlorodibromomethane	ND		1.0		ug/L			06/17/19 09:47	1
Chloroethane	ND		1.0		ug/L			06/17/19 09:47	1
Chloroform	ND		1.0		ug/L			06/17/19 09:47	1
Chloromethane	ND		1.0		ug/L			06/17/19 09:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/17/19 09:47	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/17/19 09:47	1
Cyclohexane	ND		1.0		ug/L			06/17/19 09:47	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/17/19 09:47	1
Dichlorobromomethane	ND		1.0		ug/L			06/17/19 09:47	1
Ethylbenzene	ND		1.0		ug/L			06/17/19 09:47	1
Isopropylbenzene	ND		1.0		ug/L			06/17/19 09:47	1
Methyl acetate	ND		10		ug/L			06/17/19 09:47	1
Methylcyclohexane	ND		1.0		ug/L			06/17/19 09:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/17/19 09:47	1
Methylene Chloride	ND		5.0		ug/L			06/17/19 09:47	1
Styrene	ND		1.0		ug/L			06/17/19 09:47	1
Tetrachloroethene	ND		1.0		ug/L			06/17/19 09:47	1
Toluene	ND		1.0		ug/L			06/17/19 09:47	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/17/19 09:47	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/17/19 09:47	1
Trichloroethene	ND		1.0		ug/L			06/17/19 09:47	1
Trichlorofluoromethane	ND		1.0		ug/L			06/17/19 09:47	1
Vinyl chloride	ND		1.0		ug/L			06/17/19 09:47	1
Xylenes, Total	ND		2.0		ug/L			06/17/19 09:47	1
Ethylene Dibromide	ND		1.0		ug/L			06/17/19 09:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-386483/6
Matrix: Water
Analysis Batch: 386483

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*111*		*70 - 123*		*06/17/19 09:47*	*1*
Dibromofluoromethane (Surr)	*116*		*75 - 128*		*06/17/19 09:47*	*1*
4-Bromofluorobenzene (Surr)	*100*		*59 - 120*		*06/17/19 09:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 121*		*06/17/19 09:47*	*1*

Lab Sample ID: LCS 240-386483/4
Matrix: Water
Analysis Batch: 386483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.90		ug/L		99	69 - 134
1,1,2,2-Tetrachloroethane	10.0	13.1		ug/L		131	65 - 139
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.62		ug/L		86	50 - 156
1,1,2-Trichloroethane	10.0	11.6		ug/L		116	78 - 133
1,1-Dichloroethane	10.0	10.8		ug/L		108	75 - 133
1,1-Dichloroethene	10.0	11.4		ug/L		114	65 - 139
1,2,4-Trichlorobenzene	10.0	8.14		ug/L		81	42 - 133
1,2-Dibromo-3-Chloropropane	10.0	10.4		ug/L		104	46 - 132
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	78 - 120
1,2-Dichloroethane	10.0	9.35		ug/L		93	71 - 135
1,2-Dichloropropane	10.0	11.6		ug/L		116	78 - 133
1,3-Dichlorobenzene	10.0	10.8		ug/L		108	78 - 120
1,4-Dichlorobenzene	10.0	10.4		ug/L		104	78 - 120
2-Butanone (MEK)	20.0	23.4		ug/L		117	39 - 163
2-Hexanone	20.0	21.3		ug/L		107	43 - 148
4-Methyl-2-pentanone (MIBK)	20.0	20.8		ug/L		104	49 - 143
Acetone	20.0	21.0		ug/L		105	21 - 162
Benzene	10.0	11.2		ug/L		112	80 - 123
Bromoform	10.0	9.54		ug/L		95	49 - 141
Bromomethane	10.0	10.9		ug/L		109	41 - 175
Carbon disulfide	10.0	11.2		ug/L		112	60 - 138
Carbon tetrachloride	10.0	9.32		ug/L		93	63 - 140
Chlorobenzene	10.0	10.2		ug/L		102	80 - 121
Chlorodibromomethane	10.0	10.7		ug/L		107	70 - 132
Chloroethane	10.0	12.1		ug/L		121	33 - 173
Chloroform	10.0	10.9		ug/L		109	79 - 127
Chloromethane	10.0	9.75		ug/L		98	54 - 143
cis-1,2-Dichloroethene	10.0	11.0		ug/L		110	76 - 128
cis-1,3-Dichloropropene	10.0	11.4		ug/L		114	64 - 132
Cyclohexane	10.0	9.90		ug/L		99	58 - 145
Dichlorodifluoromethane	10.0	7.86		ug/L		79	29 - 148
Dichlorobromomethane	10.0	10.5		ug/L		105	77 - 125
Ethylbenzene	10.0	10.7		ug/L		107	80 - 120
Isopropylbenzene	10.0	10.5		ug/L		105	74 - 120
Methyl acetate	20.0	22.7		ug/L		113	52 - 145
Methylcyclohexane	10.0	8.73		ug/L		87	60 - 125
Methyl tert-butyl ether	10.0	10.5		ug/L		105	51 - 133
Methylene Chloride	10.0	11.5		ug/L		115	70 - 134

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-386483/4
Matrix: Water
Analysis Batch: 386483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	10.0	11.0		ug/L		110	80 - 120
o-Xylene	10.0	10.8		ug/L		108	80 - 120
Styrene	10.0	10.7		ug/L		107	79 - 120
Tetrachloroethene	10.0	9.57		ug/L		96	74 - 130
Toluene	10.0	11.4		ug/L		114	78 - 129
trans-1,2-Dichloroethene	10.0	11.2		ug/L		112	78 - 133
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	55 - 128
Trichloroethene	10.0	9.88		ug/L		99	76 - 125
Trichlorofluoromethane	10.0	9.39		ug/L		94	51 - 164
Vinyl chloride	10.0	10.0		ug/L		100	58 - 143
Xylenes, Total	20.0	21.8		ug/L		109	80 - 120
Ethylene Dibromide	10.0	10.8		ug/L		108	77 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*113*		*70 - 123*
Dibromofluoromethane (Surr)	*106*		*75 - 128*
4-Bromofluorobenzene (Surr)	*110*		*59 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 121*

Lab Sample ID: MB 240-386760/7
Matrix: Water
Analysis Batch: 386760

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	ug/L			06/18/19 13:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			06/18/19 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	ug/L			06/18/19 13:34	1
1,1,2-Trichloroethane	ND		1.0	ug/L			06/18/19 13:34	1
1,1-Dichloroethane	ND		1.0	ug/L			06/18/19 13:34	1
1,1-Dichloroethene	ND		1.0	ug/L			06/18/19 13:34	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			06/18/19 13:34	1
1,2-Dibromo-3-Chloropropane	ND		2.0	ug/L			06/18/19 13:34	1
1,2-Dichlorobenzene	ND		1.0	ug/L			06/18/19 13:34	1
1,2-Dichloroethane	ND		1.0	ug/L			06/18/19 13:34	1
1,2-Dichloropropane	ND		1.0	ug/L			06/18/19 13:34	1
1,3-Dichlorobenzene	ND		1.0	ug/L			06/18/19 13:34	1
1,4-Dichlorobenzene	ND		1.0	ug/L			06/18/19 13:34	1
2-Butanone (MEK)	ND		10	ug/L			06/18/19 13:34	1
2-Hexanone	ND		10	ug/L			06/18/19 13:34	1
4-Methyl-2-pentanone (MIBK)	ND		10	ug/L			06/18/19 13:34	1
Acetone	ND		10	ug/L			06/18/19 13:34	1
Benzene	ND		1.0	ug/L			06/18/19 13:34	1
Bromoform	ND		1.0	ug/L			06/18/19 13:34	1
Bromomethane	ND		1.0	ug/L			06/18/19 13:34	1
Carbon disulfide	ND		1.0	ug/L			06/18/19 13:34	1
Carbon tetrachloride	ND		1.0	ug/L			06/18/19 13:34	1
Chlorobenzene	ND		1.0	ug/L			06/18/19 13:34	1
Chlorodibromomethane	ND		1.0	ug/L			06/18/19 13:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-386760/7
Matrix: Water
Analysis Batch: 386760

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0		ug/L			06/18/19 13:34	1
Chloroform	ND		1.0		ug/L			06/18/19 13:34	1
Chloromethane	ND		1.0		ug/L			06/18/19 13:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/18/19 13:34	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/18/19 13:34	1
Cyclohexane	ND		1.0		ug/L			06/18/19 13:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/18/19 13:34	1
Dichlorobromomethane	ND		1.0		ug/L			06/18/19 13:34	1
Ethylbenzene	ND		1.0		ug/L			06/18/19 13:34	1
Isopropylbenzene	ND		1.0		ug/L			06/18/19 13:34	1
Methyl acetate	ND		10		ug/L			06/18/19 13:34	1
Methylcyclohexane	ND		1.0		ug/L			06/18/19 13:34	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/18/19 13:34	1
Methylene Chloride	ND		5.0		ug/L			06/18/19 13:34	1
Styrene	ND		1.0		ug/L			06/18/19 13:34	1
Tetrachloroethene	ND		1.0		ug/L			06/18/19 13:34	1
Toluene	ND		1.0		ug/L			06/18/19 13:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/18/19 13:34	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/18/19 13:34	1
Trichloroethene	ND		1.0		ug/L			06/18/19 13:34	1
Trichlorofluoromethane	ND		1.0		ug/L			06/18/19 13:34	1
Vinyl chloride	ND		1.0		ug/L			06/18/19 13:34	1
Xylenes, Total	ND		2.0		ug/L			06/18/19 13:34	1
Ethylene Dibromide	ND		1.0		ug/L			06/18/19 13:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*84*		*70 - 123*		*06/18/19 13:34*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 128*		*06/18/19 13:34*	*1*
4-Bromofluorobenzene (Surr)	*88*		*59 - 120*		*06/18/19 13:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 121*		*06/18/19 13:34*	*1*

Lab Sample ID: LCS 240-386760/4
Matrix: Water
Analysis Batch: 386760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	12.5		ug/L		125	69 - 134
1,1,2,2-Tetrachloroethane	10.0	7.67		ug/L		77	65 - 139
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	7.92		ug/L		79	50 - 156
1,1,2-Trichloroethane	10.0	9.33		ug/L		93	78 - 133
1,1-Dichloroethane	10.0	9.48		ug/L		95	75 - 133
1,1-Dichloroethene	10.0	11.1		ug/L		111	65 - 139
1,2,4-Trichlorobenzene	10.0	7.85		ug/L		78	42 - 133
1,2-Dibromo-3-Chloropropane	10.0	7.97		ug/L		80	46 - 132
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	78 - 120
1,2-Dichloroethane	10.0	11.0		ug/L		110	71 - 135
1,2-Dichloropropane	10.0	9.85		ug/L		98	78 - 133
1,3-Dichlorobenzene	10.0	9.75		ug/L		98	78 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-386760/4
Matrix: Water
Analysis Batch: 386760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	78 - 120
2-Butanone (MEK)	20.0	19.2		ug/L		96	39 - 163
2-Hexanone	20.0	16.1		ug/L		80	43 - 148
4-Methyl-2-pentanone (MIBK)	20.0	18.2		ug/L		91	49 - 143
Acetone	20.0	19.3		ug/L		97	21 - 162
Benzene	10.0	8.91		ug/L		89	80 - 123
Bromoform	10.0	11.2		ug/L		112	49 - 141
Bromomethane	10.0	10.6		ug/L		106	41 - 175
Carbon disulfide	10.0	8.90		ug/L		89	60 - 138
Carbon tetrachloride	10.0	12.0		ug/L		120	63 - 140
Chlorobenzene	10.0	10.0		ug/L		100	80 - 121
Chlorodibromomethane	10.0	10.2		ug/L		102	70 - 132
Chloroethane	10.0	3.69		ug/L		37	33 - 173
Chloroform	10.0	11.1		ug/L		111	79 - 127
Chloromethane	10.0	12.5		ug/L		125	54 - 143
cis-1,2-Dichloroethene	10.0	9.29		ug/L		93	76 - 128
cis-1,3-Dichloropropene	10.0	9.17		ug/L		92	64 - 132
Cyclohexane	10.0	8.87		ug/L		89	58 - 145
Dichlorodifluoromethane	10.0	9.29		ug/L		93	29 - 148
Dichlorobromomethane	10.0	11.8		ug/L		118	77 - 125
Ethylbenzene	10.0	9.02		ug/L		90	80 - 120
Isopropylbenzene	10.0	9.17		ug/L		92	74 - 120
Methyl acetate	20.0	20.7		ug/L		104	52 - 145
Methylcyclohexane	10.0	7.72		ug/L		77	60 - 125
Methyl tert-butyl ether	10.0	9.55		ug/L		96	51 - 133
Methylene Chloride	10.0	8.30		ug/L		83	70 - 134
m-Xylene & p-Xylene	10.0	9.60		ug/L		96	80 - 120
o-Xylene	10.0	8.92		ug/L		89	80 - 120
Styrene	10.0	9.33		ug/L		93	79 - 120
Tetrachloroethene	10.0	11.1		ug/L		111	74 - 130
Toluene	10.0	8.21		ug/L		82	78 - 129
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	78 - 133
trans-1,3-Dichloropropene	10.0	8.22		ug/L		82	55 - 128
Trichloroethene	10.0	12.5		ug/L		125	76 - 125
Trichlorofluoromethane	10.0	11.9		ug/L		119	51 - 164
Vinyl chloride	10.0	10.0		ug/L		100	58 - 143
Xylenes, Total	20.0	18.5		ug/L		93	80 - 120
Ethylene Dibromide	10.0	8.52		ug/L		85	77 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*87*		*70 - 123*
Dibromofluoromethane (Surr)	*119*		*75 - 128*
4-Bromofluorobenzene (Surr)	*98*		*59 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 121*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-113949-5 MS
Matrix: Water
Analysis Batch: 386760

Client Sample ID: OW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		20.0	25.5		ug/L		128	51 - 138
1,1,2,2-Tetrachloroethane	ND		20.0	13.2		ug/L		66	60 - 137
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	20.0	12.0		ug/L		60	31 - 156
1,1,2-Trichloroethane	ND		20.0	18.3		ug/L		92	76 - 132
1,1-Dichloroethane	ND		20.0	18.8		ug/L		94	63 - 136
1,1-Dichloroethene	ND		20.0	18.2		ug/L		91	53 - 140
1,2,4-Trichlorobenzene	ND		20.0	14.8		ug/L		74	30 - 126
1,2-Dibromo-3-Chloropropane	ND		20.0	16.2		ug/L		81	38 - 124
1,2-Dichlorobenzene	ND		20.0	19.0		ug/L		95	64 - 120
1,2-Dichloroethane	ND		20.0	24.2		ug/L		121	65 - 135
1,2-Dichloropropane	ND		20.0	18.8		ug/L		94	70 - 132
1,3-Dichlorobenzene	ND		20.0	18.9		ug/L		94	62 - 120
1,4-Dichlorobenzene	ND		20.0	18.4		ug/L		92	63 - 120
2-Butanone (MEK)	ND		40.0	38.4		ug/L		96	37 - 156
2-Hexanone	ND		40.0	31.3		ug/L		78	42 - 150
4-Methyl-2-pentanone (MIBK)	ND		40.0	37.9		ug/L		95	44 - 143
Acetone	ND		40.0	38.0		ug/L		95	10 - 168
Benzene	ND		20.0	18.6		ug/L		93	71 - 122
Bromoform	ND		20.0	20.8		ug/L		104	44 - 129
Bromomethane	ND		20.0	18.8		ug/L		94	19 - 187
Carbon disulfide	ND		20.0	16.4		ug/L		82	43 - 144
Carbon tetrachloride	ND		20.0	27.2		ug/L		136	41 - 143
Chlorobenzene	ND		20.0	20.4		ug/L		102	70 - 123
Chlorodibromomethane	ND		20.0	21.5		ug/L		107	60 - 129
Chloroethane	ND	F2	20.0	6.96		ug/L		35	11 - 189
Chloroform	ND		20.0	20.8		ug/L		104	68 - 130
Chloromethane	ND		20.0	26.0		ug/L		130	31 - 154
cis-1,2-Dichloroethene	14		20.0	33.1		ug/L		94	64 - 130
cis-1,3-Dichloropropene	ND		20.0	19.6		ug/L		98	48 - 127
Cyclohexane	ND		20.0	19.7		ug/L		99	42 - 135
Dichlorodifluoromethane	ND		20.0	18.6		ug/L		93	28 - 136
Dichlorobromomethane	ND		20.0	21.7		ug/L		109	64 - 125
Ethylbenzene	ND		20.0	19.7		ug/L		99	66 - 120
Isopropylbenzene	ND		20.0	18.4		ug/L		92	59 - 120
Methyl acetate	ND		40.0	41.5		ug/L		104	41 - 142
Methylcyclohexane	ND		20.0	16.9		ug/L		85	37 - 123
Methyl tert-butyl ether	ND		20.0	19.3		ug/L		97	41 - 136
Methylene Chloride	ND		20.0	18.0		ug/L		90	61 - 130
m-Xylene & p-Xylene	ND		20.0	18.4		ug/L		92	63 - 121
o-Xylene	ND		20.0	18.9		ug/L		95	69 - 120
Styrene	ND		20.0	18.9		ug/L		94	68 - 120
Tetrachloroethene	50		20.0	71.8		ug/L		108	51 - 136
Toluene	ND		20.0	16.8		ug/L		84	62 - 132
trans-1,2-Dichloroethene	ND		20.0	19.7		ug/L		99	68 - 133
trans-1,3-Dichloropropene	ND		20.0	16.6		ug/L		83	40 - 125
Trichloroethene	7.6		20.0	32.3		ug/L		124	55 - 131
Trichlorofluoromethane	ND		20.0	24.4		ug/L		122	37 - 174
Vinyl chloride	ND		20.0	21.3		ug/L		106	43 - 154

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-113949-5 MS
Matrix: Water
Analysis Batch: 386760

Client Sample ID: OW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total	ND		40.0	37.3		ug/L		93	67 - 120		
Ethylene Dibromide	ND		20.0	18.7		ug/L		94	71 - 123		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*70 - 123*
Dibromofluoromethane (Surr)	*127*		*75 - 128*
4-Bromofluorobenzene (Surr)	*94*		*59 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 121*

Lab Sample ID: 240-113949-5 MSD
Matrix: Water
Analysis Batch: 386760

Client Sample ID: OW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		20.0	24.8		ug/L		124	51 - 138	3	27
1,1,2,2-Tetrachloroethane	ND		20.0	13.9		ug/L		69	60 - 137	5	31
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	20.0	18.0	F2	ug/L		90	31 - 156	40	35
1,1,2-Trichloroethane	ND		20.0	18.8		ug/L		94	76 - 132	2	25
1,1-Dichloroethane	ND		20.0	18.5		ug/L		92	63 - 136	2	23
1,1-Dichloroethene	ND		20.0	19.1		ug/L		95	53 - 140	4	35
1,2,4-Trichlorobenzene	ND		20.0	17.1		ug/L		86	30 - 126	15	35
1,2-Dibromo-3-Chloropropane	ND		20.0	16.5		ug/L		82	38 - 124	2	35
1,2-Dichlorobenzene	ND		20.0	19.2		ug/L		96	64 - 120	1	30
1,2-Dichloroethane	ND		20.0	23.7		ug/L		119	65 - 135	2	24
1,2-Dichloropropane	ND		20.0	20.7		ug/L		104	70 - 132	10	26
1,3-Dichlorobenzene	ND		20.0	19.8		ug/L		99	62 - 120	5	31
1,4-Dichlorobenzene	ND		20.0	20.1		ug/L		100	63 - 120	9	28
2-Butanone (MEK)	ND		40.0	36.1		ug/L		90	37 - 156	6	35
2-Hexanone	ND		40.0	31.4		ug/L		78	42 - 150	0	35
4-Methyl-2-pentanone (MIBK)	ND		40.0	36.9		ug/L		92	44 - 143	2	35
Acetone	ND		40.0	42.2		ug/L		105	10 - 168	10	35
Benzene	ND		20.0	17.4		ug/L		87	71 - 122	7	22
Bromoform	ND		20.0	21.9		ug/L		110	44 - 129	5	28
Bromomethane	ND		20.0	21.1		ug/L		106	19 - 187	11	35
Carbon disulfide	ND		20.0	17.3		ug/L		87	43 - 144	5	33
Carbon tetrachloride	ND		20.0	23.0		ug/L		115	41 - 143	16	30
Chlorobenzene	ND		20.0	20.4		ug/L		102	70 - 123	0	23
Chlorodibromomethane	ND		20.0	21.6		ug/L		108	60 - 129	1	26
Chloroethane	ND	F2	20.0	15.6	F2	ug/L		78	11 - 189	77	35
Chloroform	ND		20.0	20.2		ug/L		101	68 - 130	3	23
Chloromethane	ND		20.0	27.2		ug/L		136	31 - 154	4	35
cis-1,2-Dichloroethene	14		20.0	33.6		ug/L		97	64 - 130	2	21
cis-1,3-Dichloropropene	ND		20.0	19.2		ug/L		96	48 - 127	2	30
Cyclohexane	ND		20.0	20.4		ug/L		102	42 - 135	3	35
Dichlorodifluoromethane	ND		20.0	18.8		ug/L		94	28 - 136	1	35
Dichlorobromomethane	ND		20.0	21.8		ug/L		109	64 - 125	0	27
Ethylbenzene	ND		20.0	18.9		ug/L		95	66 - 120	4	24
Isopropylbenzene	ND		20.0	17.9		ug/L		90	59 - 120	3	31

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-113949-5 MSD
Matrix: Water
Analysis Batch: 386760

Client Sample ID: OW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	ND		40.0	38.7		ug/L		97	41 - 142	7	35
Methylcyclohexane	ND		20.0	17.6		ug/L		88	37 - 123	4	35
Methyl tert-butyl ether	ND		20.0	19.7		ug/L		98	41 - 136	2	29
Methylene Chloride	ND		20.0	18.7		ug/L		94	61 - 130	4	29
m-Xylene & p-Xylene	ND		20.0	18.8		ug/L		94	63 - 121	2	25
o-Xylene	ND		20.0	18.8		ug/L		94	69 - 120	1	25
Styrene	ND		20.0	18.2		ug/L		91	68 - 120	3	26
Tetrachloroethene	50		20.0	66.4		ug/L		80	51 - 136	8	23
Toluene	ND		20.0	17.4		ug/L		87	62 - 132	4	23
trans-1,2-Dichloroethene	ND		20.0	21.2		ug/L		106	68 - 133	7	24
trans-1,3-Dichloropropene	ND		20.0	15.8		ug/L		79	40 - 125	5	27
Trichloroethene	7.6		20.0	29.5		ug/L		110	55 - 131	9	23
Trichlorofluoromethane	ND		20.0	24.7		ug/L		124	37 - 174	1	35
Vinyl chloride	ND		20.0	22.0		ug/L		110	43 - 154	4	29
Xylenes, Total	ND		40.0	37.6		ug/L		94	67 - 120	1	25
Ethylene Dibromide	ND		20.0	18.7		ug/L		94	71 - 123	0	27

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*70 - 123*
Dibromofluoromethane (Surr)	*105*		*75 - 128*
4-Bromofluorobenzene (Surr)	*101*		*59 - 120*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 121*

Lab Sample ID: MB 240-386999/7
Matrix: Water
Analysis Batch: 386999

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0		ug/L			06/19/19 12:45	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			06/19/19 12:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			06/19/19 12:45	1
1,1,2-Trichloroethane	ND		1.0		ug/L			06/19/19 12:45	1
1,1-Dichloroethane	ND		1.0		ug/L			06/19/19 12:45	1
1,1-Dichloroethene	ND		1.0		ug/L			06/19/19 12:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			06/19/19 12:45	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			06/19/19 12:45	1
1,2-Dichlorobenzene	ND		1.0		ug/L			06/19/19 12:45	1
1,2-Dichloroethane	ND		1.0		ug/L			06/19/19 12:45	1
1,2-Dichloropropane	ND		1.0		ug/L			06/19/19 12:45	1
1,3-Dichlorobenzene	ND		1.0		ug/L			06/19/19 12:45	1
1,4-Dichlorobenzene	ND		1.0		ug/L			06/19/19 12:45	1
2-Butanone (MEK)	ND		10		ug/L			06/19/19 12:45	1
2-Hexanone	ND		10		ug/L			06/19/19 12:45	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			06/19/19 12:45	1
Acetone	ND		10		ug/L			06/19/19 12:45	1
Benzene	ND		1.0		ug/L			06/19/19 12:45	1
Bromoform	ND		1.0		ug/L			06/19/19 12:45	1
Bromomethane	ND		1.0		ug/L			06/19/19 12:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-386999/7
Matrix: Water
Analysis Batch: 386999

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		1.0		ug/L			06/19/19 12:45	1
Carbon tetrachloride	ND		1.0		ug/L			06/19/19 12:45	1
Chlorobenzene	ND		1.0		ug/L			06/19/19 12:45	1
Chlorodibromomethane	ND		1.0		ug/L			06/19/19 12:45	1
Chloroethane	ND		1.0		ug/L			06/19/19 12:45	1
Chloroform	ND		1.0		ug/L			06/19/19 12:45	1
Chloromethane	ND		1.0		ug/L			06/19/19 12:45	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 12:45	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 12:45	1
Cyclohexane	ND		1.0		ug/L			06/19/19 12:45	1
Dichlorodifluoromethane	ND		1.0		ug/L			06/19/19 12:45	1
Dichlorobromomethane	ND		1.0		ug/L			06/19/19 12:45	1
Ethylbenzene	ND		1.0		ug/L			06/19/19 12:45	1
Isopropylbenzene	ND		1.0		ug/L			06/19/19 12:45	1
Methyl acetate	ND		10		ug/L			06/19/19 12:45	1
Methylcyclohexane	ND		1.0		ug/L			06/19/19 12:45	1
Methyl tert-butyl ether	ND		1.0		ug/L			06/19/19 12:45	1
Methylene Chloride	ND		5.0		ug/L			06/19/19 12:45	1
Styrene	ND		1.0		ug/L			06/19/19 12:45	1
Tetrachloroethene	ND		1.0		ug/L			06/19/19 12:45	1
Toluene	ND		1.0		ug/L			06/19/19 12:45	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			06/19/19 12:45	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			06/19/19 12:45	1
Trichloroethene	ND		1.0		ug/L			06/19/19 12:45	1
Trichlorofluoromethane	ND		1.0		ug/L			06/19/19 12:45	1
Vinyl chloride	ND		1.0		ug/L			06/19/19 12:45	1
Xylenes, Total	ND		2.0		ug/L			06/19/19 12:45	1
Ethylene Dibromide	ND		1.0		ug/L			06/19/19 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*74*		*70 - 123*		*06/19/19 12:45*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 128*		*06/19/19 12:45*	*1*
4-Bromofluorobenzene (Surr)	*63*		*59 - 120*		*06/19/19 12:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 121*		*06/19/19 12:45*	*1*

Lab Sample ID: LCS 240-386999/4
Matrix: Water
Analysis Batch: 386999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			10.0	11.2		ug/L		112	69 - 134		
1,1,2,2-Tetrachloroethane			10.0	10.3		ug/L		103	65 - 139		
1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	11.0		ug/L		110	50 - 156		
1,1,2-Trichloroethane			10.0	10.2		ug/L		102	78 - 133		
1,1-Dichloroethane			10.0	9.73		ug/L		97	75 - 133		
1,1-Dichloroethene			10.0	10.3		ug/L		103	65 - 139		
1,2,4-Trichlorobenzene			10.0	9.72		ug/L		97	42 - 133		
1,2-Dibromo-3-Chloropropane			10.0	9.88		ug/L		99	46 - 132		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-386999/4
Matrix: Water
Analysis Batch: 386999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	78 - 120
1,2-Dichloroethane	10.0	10.2		ug/L		102	71 - 135
1,2-Dichloropropane	10.0	10.6		ug/L		106	78 - 133
1,3-Dichlorobenzene	10.0	9.98		ug/L		100	78 - 120
1,4-Dichlorobenzene	10.0	9.69		ug/L		97	78 - 120
2-Butanone (MEK)	20.0	20.8		ug/L		104	39 - 163
2-Hexanone	20.0	21.1		ug/L		106	43 - 148
4-Methyl-2-pentanone (MIBK)	20.0	21.3		ug/L		107	49 - 143
Acetone	20.0	18.1		ug/L		91	21 - 162
Benzene	10.0	9.73		ug/L		97	80 - 123
Bromoform	10.0	11.7		ug/L		117	49 - 141
Bromomethane	10.0	8.26		ug/L		83	41 - 175
Carbon disulfide	10.0	10.1		ug/L		101	60 - 138
Carbon tetrachloride	10.0	11.5		ug/L		115	63 - 140
Chlorobenzene	10.0	9.84		ug/L		98	80 - 121
Chlorodibromomethane	10.0	11.3		ug/L		113	70 - 132
Chloroethane	10.0	7.48		ug/L		75	33 - 173
Chloroform	10.0	10.1		ug/L		101	79 - 127
Chloromethane	10.0	9.99		ug/L		100	54 - 143
cis-1,2-Dichloroethene	10.0	9.88		ug/L		99	76 - 128
cis-1,3-Dichloropropene	10.0	11.0		ug/L		110	64 - 132
Cyclohexane	10.0	10.8		ug/L		108	58 - 145
Dichlorodifluoromethane	10.0	8.22		ug/L		82	29 - 148
Dichlorobromomethane	10.0	10.4		ug/L		104	77 - 125
Ethylbenzene	10.0	10.6		ug/L		106	80 - 120
Isopropylbenzene	10.0	10.8		ug/L		108	74 - 120
Methyl acetate	20.0	19.4		ug/L		97	52 - 145
Methylcyclohexane	10.0	10.3		ug/L		103	60 - 125
Methyl tert-butyl ether	10.0	10.4		ug/L		104	51 - 133
Methylene Chloride	10.0	10.5		ug/L		105	70 - 134
m-Xylene & p-Xylene	10.0	10.7		ug/L		107	80 - 120
o-Xylene	10.0	10.8		ug/L		108	80 - 120
Styrene	10.0	10.5		ug/L		105	79 - 120
Tetrachloroethene	10.0	10.1		ug/L		101	74 - 130
Toluene	10.0	10.5		ug/L		105	78 - 129
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	78 - 133
trans-1,3-Dichloropropene	10.0	10.5		ug/L		105	55 - 128
Trichloroethene	10.0	9.99		ug/L		100	76 - 125
Trichlorofluoromethane	10.0	9.84		ug/L		98	51 - 164
Vinyl chloride	10.0	9.97		ug/L		100	58 - 143
Xylenes, Total	20.0	21.5		ug/L		108	80 - 120
Ethylene Dibromide	10.0	10.4		ug/L		104	77 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*83*		*70 - 123*
Dibromofluoromethane (Surr)	*81*		*75 - 128*
4-Bromofluorobenzene (Surr)	*81*		*59 - 120*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 121*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-113949-8 MS
Matrix: Water
Analysis Batch: 386999

Client Sample ID: OW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		10.0	10.6		ug/L		106	51 - 138
1,1,2,2-Tetrachloroethane	ND		10.0	9.65		ug/L		96	60 - 137
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10.0	9.94		ug/L		99	31 - 156
1,1,2-Trichloroethane	ND		10.0	9.80		ug/L		98	76 - 132
1,1-Dichloroethane	ND		10.0	10.2		ug/L		100	63 - 136
1,1-Dichloroethene	ND		10.0	9.87		ug/L		99	53 - 140
1,2,4-Trichlorobenzene	ND		10.0	9.02		ug/L		90	30 - 126
1,2-Dibromo-3-Chloropropane	ND		10.0	8.92		ug/L		89	38 - 124
1,2-Dichlorobenzene	ND		10.0	9.48		ug/L		93	64 - 120
1,2-Dichloroethane	ND		10.0	9.89		ug/L		99	65 - 135
1,2-Dichloropropane	ND		10.0	9.78		ug/L		98	70 - 132
1,3-Dichlorobenzene	ND		10.0	9.02		ug/L		90	62 - 120
1,4-Dichlorobenzene	1.1		10.0	9.58		ug/L		85	63 - 120
2-Butanone (MEK)	ND		20.0	17.1		ug/L		85	37 - 156
2-Hexanone	ND		20.0	19.4		ug/L		97	42 - 150
4-Methyl-2-pentanone (MIBK)	ND		20.0	19.5		ug/L		98	44 - 143
Acetone	ND		20.0	20.2		ug/L		101	10 - 168
Benzene	1.8		10.0	11.4		ug/L		95	71 - 122
Bromoform	ND		10.0	9.42		ug/L		94	44 - 129
Bromomethane	ND	F2	10.0	4.45		ug/L		45	19 - 187
Carbon disulfide	ND		10.0	9.76		ug/L		98	43 - 144
Carbon tetrachloride	ND		10.0	10.6		ug/L		106	41 - 143
Chlorobenzene	12		10.0	20.8		ug/L		90	70 - 123
Chlorodibromomethane	ND		10.0	10.1		ug/L		101	60 - 129
Chloroethane	ND		10.0	7.71		ug/L		77	11 - 189
Chloroform	ND		10.0	9.60		ug/L		96	68 - 130
Chloromethane	ND		10.0	9.84		ug/L		98	31 - 154
cis-1,2-Dichloroethene	ND		10.0	9.26		ug/L		90	64 - 130
cis-1,3-Dichloropropene	ND		10.0	8.86		ug/L		89	48 - 127
Cyclohexane	ND		10.0	9.73		ug/L		97	42 - 135
Dichlorodifluoromethane	ND		10.0	7.63		ug/L		76	28 - 136
Dichlorobromomethane	ND		10.0	9.96		ug/L		100	64 - 125
Ethylbenzene	ND		10.0	10.5		ug/L		105	66 - 120
Isopropylbenzene	ND		10.0	9.83		ug/L		98	59 - 120
Methyl acetate	ND		20.0	17.6		ug/L		88	41 - 142
Methylcyclohexane	ND		10.0	8.90		ug/L		89	37 - 123
Methyl tert-butyl ether	ND		10.0	9.37		ug/L		94	41 - 136
Methylene Chloride	ND		10.0	10.0		ug/L		100	61 - 130
m-Xylene & p-Xylene	ND		10.0	10.4		ug/L		101	63 - 121
o-Xylene	ND		10.0	10.1		ug/L		101	69 - 120
Styrene	ND		10.0	9.67		ug/L		97	68 - 120
Tetrachloroethene	ND		10.0	9.34		ug/L		93	51 - 136
Toluene	ND		10.0	9.82		ug/L		98	62 - 132
trans-1,2-Dichloroethene	ND		10.0	10.1		ug/L		101	68 - 133
trans-1,3-Dichloropropene	ND		10.0	9.27		ug/L		93	40 - 125
Trichloroethene	ND		10.0	9.55		ug/L		96	55 - 131
Trichlorofluoromethane	ND		10.0	9.34		ug/L		93	37 - 174
Vinyl chloride	ND		10.0	9.27		ug/L		93	43 - 154

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-113949-8 MS
Matrix: Water
Analysis Batch: 386999

Client Sample ID: OW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total	ND		20.0	20.5		ug/L		103	67 - 120		
Ethylene Dibromide	ND		10.0	9.86		ug/L		99	71 - 123		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*84*		*70 - 123*
Dibromofluoromethane (Surr)	*87*		*75 - 128*
4-Bromofluorobenzene (Surr)	*86*		*59 - 120*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 121*

Lab Sample ID: 240-113949-8 MSD
Matrix: Water
Analysis Batch: 386999

Client Sample ID: OW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		10.0	10.7		ug/L		107	51 - 138	1	27
1,1,2,2-Tetrachloroethane	ND		10.0	9.51		ug/L		95	60 - 137	1	31
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10.0	9.84		ug/L		98	31 - 156	1	35
1,1,2-Trichloroethane	ND		10.0	9.61		ug/L		96	76 - 132	2	25
1,1-Dichloroethane	ND		10.0	9.86		ug/L		96	63 - 136	3	23
1,1-Dichloroethene	ND		10.0	9.38		ug/L		94	53 - 140	5	35
1,2,4-Trichlorobenzene	ND		10.0	9.40		ug/L		94	30 - 126	4	35
1,2-Dibromo-3-Chloropropane	ND		10.0	9.47		ug/L		95	38 - 124	6	35
1,2-Dichlorobenzene	ND		10.0	9.52		ug/L		93	64 - 120	0	30
1,2-Dichloroethane	ND		10.0	10.0		ug/L		100	65 - 135	1	24
1,2-Dichloropropane	ND		10.0	9.72		ug/L		97	70 - 132	1	26
1,3-Dichlorobenzene	ND		10.0	9.06		ug/L		91	62 - 120	0	31
1,4-Dichlorobenzene	1.1		10.0	9.74		ug/L		87	63 - 120	2	28
2-Butanone (MEK)	ND		20.0	17.4		ug/L		87	37 - 156	2	35
2-Hexanone	ND		20.0	20.1		ug/L		101	42 - 150	4	35
4-Methyl-2-pentanone (MIBK)	ND		20.0	19.7		ug/L		99	44 - 143	1	35
Acetone	ND		20.0	21.1		ug/L		105	10 - 168	4	35
Benzene	1.8		10.0	11.3		ug/L		95	71 - 122	1	22
Bromoform	ND		10.0	9.77		ug/L		98	44 - 129	4	28
Bromomethane	ND	F2	10.0	6.46	F2	ug/L		65	19 - 187	37	35
Carbon disulfide	ND		10.0	9.42		ug/L		94	43 - 144	3	33
Carbon tetrachloride	ND		10.0	10.9		ug/L		109	41 - 143	3	30
Chlorobenzene	12		10.0	21.0		ug/L		93	70 - 123	1	23
Chlorodibromomethane	ND		10.0	10.2		ug/L		102	60 - 129	1	26
Chloroethane	ND		10.0	8.16		ug/L		82	11 - 189	6	35
Chloroform	ND		10.0	9.91		ug/L		99	68 - 130	3	23
Chloromethane	ND		10.0	10.7		ug/L		107	31 - 154	9	35
cis-1,2-Dichloroethene	ND		10.0	9.34		ug/L		91	64 - 130	1	21
cis-1,3-Dichloropropene	ND		10.0	8.95		ug/L		89	48 - 127	1	30
Cyclohexane	ND		10.0	9.32		ug/L		93	42 - 135	4	35
Dichlorodifluoromethane	ND		10.0	7.86		ug/L		79	28 - 136	3	35
Dichlorobromomethane	ND		10.0	10.2		ug/L		102	64 - 125	2	27
Ethylbenzene	ND		10.0	10.4		ug/L		104	66 - 120	0	24
Isopropylbenzene	ND		10.0	9.95		ug/L		100	59 - 120	1	31

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-113949-8 MSD
Matrix: Water
Analysis Batch: 386999

Client Sample ID: OW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	ND		20.0	16.7		ug/L		84	41 - 142	5	35
Methylcyclohexane	ND		10.0	8.86		ug/L		89	37 - 123	0	35
Methyl tert-butyl ether	ND		10.0	9.53		ug/L		95	41 - 136	2	29
Methylene Chloride	ND		10.0	9.76		ug/L		98	61 - 130	3	29
m-Xylene & p-Xylene	ND		10.0	10.8		ug/L		105	63 - 121	4	25
o-Xylene	ND		10.0	10.4		ug/L		104	69 - 120	3	25
Styrene	ND		10.0	10.0		ug/L		100	68 - 120	4	26
Tetrachloroethene	ND		10.0	8.80		ug/L		88	51 - 136	6	23
Toluene	ND		10.0	9.46		ug/L		95	62 - 132	4	23
trans-1,2-Dichloroethene	ND		10.0	10.2		ug/L		102	68 - 133	1	24
trans-1,3-Dichloropropene	ND		10.0	9.01		ug/L		90	40 - 125	3	27
Trichloroethene	ND		10.0	9.37		ug/L		94	55 - 131	2	23
Trichlorofluoromethane	ND		10.0	8.78		ug/L		88	37 - 174	6	35
Vinyl chloride	ND		10.0	9.73		ug/L		97	43 - 154	5	29
Xylenes, Total	ND		20.0	21.2		ug/L		106	67 - 120	3	25
Ethylene Dibromide	ND		10.0	9.45		ug/L		94	71 - 123	4	27

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*81*		*70 - 123*
Dibromofluoromethane (Surr)	*82*		*75 - 128*
4-Bromofluorobenzene (Surr)	*87*		*59 - 120*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 121*

QC Association Summary

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

GC/MS VOA

Analysis Batch: 386483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-113949-1	OW-5	Total/NA	Water	8260B	
240-113949-2	OW-5 DUP	Total/NA	Water	8260B	
240-113949-14	TRIP BLANK	Total/NA	Water	8260B	
MB 240-386483/6	Method Blank	Total/NA	Water	8260B	
LCS 240-386483/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 386760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-113949-3	OW-10R	Total/NA	Water	8260B	
240-113949-4	OW-13R	Total/NA	Water	8260B	
240-113949-5	OW-6	Total/NA	Water	8260B	
240-113949-6	OW-2	Total/NA	Water	8260B	
240-113949-7	OW-24	Total/NA	Water	8260B	
MB 240-386760/7	Method Blank	Total/NA	Water	8260B	
LCS 240-386760/4	Lab Control Sample	Total/NA	Water	8260B	
240-113949-5 MS	OW-6	Total/NA	Water	8260B	
240-113949-5 MSD	OW-6	Total/NA	Water	8260B	

Analysis Batch: 386999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-113949-8	OW-18	Total/NA	Water	8260B	
240-113949-9	OW-19	Total/NA	Water	8260B	
240-113949-10	PUMP BLANK	Total/NA	Water	8260B	
240-113949-11	OW-22	Total/NA	Water	8260B	
240-113949-12	OW-21	Total/NA	Water	8260B	
240-113949-13	FIELD BLANK	Total/NA	Water	8260B	
MB 240-386999/7	Method Blank	Total/NA	Water	8260B	
LCS 240-386999/4	Lab Control Sample	Total/NA	Water	8260B	
240-113949-8 MS	OW-18	Total/NA	Water	8260B	
240-113949-8 MSD	OW-18	Total/NA	Water	8260B	

Lab Chronicle

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Client Sample ID: OW-5
Lab Sample ID: 240-113949-1
Date Collected: 06/04/19 16:19
Matrix: Water
Date Received: 06/07/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386483	06/17/19 17:36	LEE	TAL CAN

Client Sample ID: OW-5 DUP
Lab Sample ID: 240-113949-2
Date Collected: 06/04/19 16:20
Matrix: Water
Date Received: 06/07/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386483	06/17/19 17:58	LEE	TAL CAN

Client Sample ID: OW-10R
Lab Sample ID: 240-113949-3
Date Collected: 06/05/19 14:02
Matrix: Water
Date Received: 06/07/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386760	06/18/19 20:41	LRW	TAL CAN

Client Sample ID: OW-13R
Lab Sample ID: 240-113949-4
Date Collected: 06/05/19 15:25
Matrix: Water
Date Received: 06/07/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386760	06/18/19 21:06	LRW	TAL CAN

Client Sample ID: OW-6
Lab Sample ID: 240-113949-5
Date Collected: 06/05/19 16:25
Matrix: Water
Date Received: 06/07/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	386760	06/18/19 16:55	LRW	TAL CAN

Client Sample ID: OW-2
Lab Sample ID: 240-113949-6
Date Collected: 06/05/19 17:10
Matrix: Water
Date Received: 06/07/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	386760	06/18/19 22:19	LRW	TAL CAN

Client Sample ID: OW-24
Lab Sample ID: 240-113949-7
Date Collected: 06/06/19 08:50
Matrix: Water
Date Received: 06/07/19 10:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386760	06/18/19 22:44	LRW	TAL CAN

Lab Chronicle

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Client Sample ID: OW-18
Date Collected: 06/06/19 10:15
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386999	06/19/19 13:57	LRW	TAL CAN

Client Sample ID: OW-19
Date Collected: 06/06/19 11:40
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386999	06/19/19 14:21	LRW	TAL CAN

Client Sample ID: PUMP BLANK
Date Collected: 06/06/19 12:00
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386999	06/19/19 14:45	LRW	TAL CAN

Client Sample ID: OW-22
Date Collected: 06/06/19 14:05
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386999	06/19/19 15:09	LRW	TAL CAN

Client Sample ID: OW-21
Date Collected: 06/06/19 14:50
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386999	06/19/19 15:33	LRW	TAL CAN

Client Sample ID: FIELD BLANK
Date Collected: 06/06/19 13:15
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386999	06/19/19 15:57	LRW	TAL CAN

Client Sample ID: TRIP BLANK
Date Collected: 06/04/19 00:00
Date Received: 06/07/19 10:45

Lab Sample ID: 240-113949-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	386483	06/17/19 18:20	LEE	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: Cardinal Resources
Job ID: 240-113949-1
Project/Site: Carroll & Dubies SF

Laboratory: Eurofins TestAmerica, Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State		2927	02-23-20
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19 *
Florida	NELAP		E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19 *
Illinois	NELAP		004498	07-31-19
Iowa	State Program	7	421	06-01-21
Kansas	NELAP	7	E-10336	04-30-20
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19 *
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-20
New Jersey	NELAP		OH001	06-30-19
New York	NELAP	2	10975	03-31-20
New York	NELAP		10975	03-31-20
Ohio VAP	State Program	5	CL0024	06-05-21
Oregon	NELAP	10	4062	02-23-20
Oregon	NELAP		4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Pennsylvania	NELAP		68-00340	08-31-19
Texas	NELAP	6	T104704517-18-10	08-31-19 *
Texas	NELAP		T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19 *
Virginia	NELAP		010101	09-14-19
Washington	State		C971	01-12-20
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Cardinal Resources
Project/Site: Carroll & Dubies SF

Job ID: 240-113949-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-113949-1	OW-5	Water	06/04/19 16:19	06/07/19 10:45	
240-113949-2	OW-5 DUP	Water	06/04/19 16:20	06/07/19 10:45	
240-113949-3	OW-10R	Water	06/05/19 14:02	06/07/19 10:45	
240-113949-4	OW-13R	Water	06/05/19 15:25	06/07/19 10:45	
240-113949-5	OW-6	Water	06/05/19 16:25	06/07/19 10:45	
240-113949-6	OW-2	Water	06/05/19 17:10	06/07/19 10:45	
240-113949-7	OW-24	Water	06/06/19 08:50	06/07/19 10:45	
240-113949-8	OW-18	Water	06/06/19 10:15	06/07/19 10:45	
240-113949-9	OW-19	Water	06/06/19 11:40	06/07/19 10:45	
240-113949-10	PUMP BLANK	Water	06/06/19 12:00	06/07/19 10:45	
240-113949-11	OW-22	Water	06/06/19 14:05	06/07/19 10:45	
240-113949-12	OW-21	Water	06/06/19 14:50	06/07/19 10:45	
240-113949-13	FIELD BLANK	Water	06/06/19 13:15	06/07/19 10:45	
240-113949-14	TRIP BLANK	Water	06/04/19 00:00	06/07/19 10:45	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX10 Analysis Batch Number: 375006

Lab Sample ID: STD8260 240-375006/9 IC Client Sample ID:

Date Analyzed: 04/05/19 20:30 Lab File ID: 240-0085857-009.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dibromofluoromethane (Surr)	4.41	Peak assignment corrected	macenczaks	04/08/19 09:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX10 Analysis Batch Number: 386760

Lab Sample ID: 240-113949-4 Client Sample ID: OW-13R

Date Analyzed: 06/18/19 21:06 Lab File ID: UXX2022.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	williamsla	06/19/19 10:23

Lab Sample ID: 240-113949-6 Client Sample ID: OW-2

Date Analyzed: 06/18/19 22:19 Lab File ID: UXX2025.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	williamsla	06/19/19 10:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX11 Analysis Batch Number: 367104

Lab Sample ID: STD8260 240-367104/4 IC Client Sample ID:

Date Analyzed: 02/07/19 13:53 Lab File ID: UXJ8023.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
tert-Butylbenzene	9.16	Peak assignment corrected	evansle	02/08/19 08:24

Lab Sample ID: STD8260 240-367104/7 IC Client Sample ID:

Date Analyzed: 02/07/19 15:00 Lab File ID: UXJ8026.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	1.32	Peak assignment corrected	evansle	02/08/19 08:08
Ethylene Dibromide	6.87	Peak assignment corrected	evansle	02/08/19 08:23

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX11 Analysis Batch Number: 386483

Lab Sample ID: 240-113949-1 Client Sample ID: OW-5

Date Analyzed: 06/17/19 17:36 Lab File ID: UXJ1430.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	evansle	06/18/19 09:15

Lab Sample ID: 240-113949-2 Client Sample ID: OW-5 DUP

Date Analyzed: 06/17/19 17:58 Lab File ID: UXJ1431.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	evansle	06/18/19 09:16

Lab Sample ID: 240-113949-14 Client Sample ID: TRIP BLANK

Date Analyzed: 06/17/19 18:20 Lab File ID: UXJ1432.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	evansle	06/18/19 09:16

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX17 Analysis Batch Number: 385628

Lab Sample ID: STD8260 240-385628/2 IC Client Sample ID:

Date Analyzed: 06/11/19 17:37 Lab File ID: UXR8410.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane		Invalid Compound ID	williamsl a	06/12/19 12:18

Lab Sample ID: ICV 240-385628/9 Client Sample ID:

Date Analyzed: 06/11/19 20:24 Lab File ID: UXR8417.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	3.90	Peak assignment corrected	williamsl a	06/12/19 12:27

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX17 Analysis Batch Number: 386999

Lab Sample ID: MB 240-386999/7 Client Sample ID:

Date Analyzed: 06/19/19 12:45 Lab File ID: UXR8599.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	williamsl a	06/19/19 13:11

Lab Sample ID: 240-113949-8 Client Sample ID: OW-18

Date Analyzed: 06/19/19 13:57 Lab File ID: UXR8602.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	williamsl a	06/19/19 14:31

Lab Sample ID: 240-113949-9 Client Sample ID: OW-19

Date Analyzed: 06/19/19 14:21 Lab File ID: UXR8603.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	williamsl a	06/19/19 14:58
Bromomethane		Invalid Compound ID	williamsl a	06/19/19 14:58
Dichlorodifluoromethane		Invalid Compound ID	williamsl a	06/19/19 14:58

Lab Sample ID: 240-113949-10 Client Sample ID: PUMP BLANK

Date Analyzed: 06/19/19 14:45 Lab File ID: UXR8604.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	williamsl a	06/19/19 15:06

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX17 Analysis Batch Number: 386999

Lab Sample ID: 240-113949-11 Client Sample ID: OW-22

Date Analyzed: 06/19/19 15:09 Lab File ID: UXR8605.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	williamsla	06/20/19 11:19
2-Butanone (MEK)		Invalid Compound ID	williamsla	06/20/19 11:19
Dichlorodifluoromethane		Invalid Compound ID	williamsla	06/20/19 11:19

Lab Sample ID: 240-113949-12 Client Sample ID: OW-21

Date Analyzed: 06/19/19 15:33 Lab File ID: UXR8606.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Butanone (MEK)		Invalid Compound ID	williamsla	06/20/19 11:20

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VM50IS_00075	08/20/19	02/20/19	MEOH, Lot 177891	50 mL	VM568718_00013	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00013	12/31/22		restek, Lot A0133525		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM50IS_00076	10/24/19	04/24/19	MEOH, Lot 177891	50 mL	VM568718_00015	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00015	07/31/23		restek, Lot A0139459		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50is_stk_A_00002	05/15/19	11/15/18	MEOH, Lot 191720	50 mL	vm30241_00007	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00007	01/31/23		restek, Lot A0134242		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50is_stk_A_00004	11/20/19	05/20/19	MEOH, Lot 198123	50 mL	vm30241_00007	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00007	01/31/23		restek, Lot A0134242		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50ss_00359	04/12/19	04/05/19	MEOH, Lot na	4 mL	vm50ss_stk_00080	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00080	08/20/19	02/20/19	MEOH, Lot 0000196628	200 mL	VM567650_00030	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00030	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_00366	06/18/19	06/11/19	MEOH, Lot na	4 mL	vm50ss_stk_00081	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00081	12/20/19	06/05/19	MEOH, Lot 0000198123	200 mL	VM567650_00030	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00030	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00079	05/07/19	11/07/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00080	08/20/19	02/20/19	MEOH, Lot 0000196628	200 mL	VM567650_00030	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00030	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00081	12/20/19	06/05/19	MEOH, Lot 0000198123	200 mL	VM567650_00030	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00030	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00283	02/08/19	02/01/19	MEOH, Lot na	4 mL	VMACROLSTD_00068	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00068	03/01/19	02/01/19	MEOH, Lot 0000196628	20 mL	VM568720_00031	0.25 mL	Acrolein	250 ug/mL
..VM568720_00031	03/31/19		restek, Lot A0141320		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00291	04/08/19	04/01/19	MEOH, Lot na	5 mL	VMACROLSTD_00070	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00070	04/30/19	03/31/19	MEOH, Lot 0000196628	20 mL	VM568720_00032	0.25 mL	Acrolein	250 ug/mL
..VM568720_00032	05/31/19		restek, Lot A0143013		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00300	06/16/19	06/09/19	MEOH, Lot na	5 mL	VMACROLSTD_00072	5 mL	Acrolein	250 ug/mL
.VMACROLSTD_00072	07/01/19	06/01/19	MEOH, Lot 0000198123	20 mL	VM568720_00033	0.25 mL	Acrolein	250 ug/mL
..VM568720_00033	09/30/19		restek, Lot A0146613		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00021							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00002	1.25 mL	BFB	50 ug/mL
.vm30026_00002	07/31/21		restek, Lot A0120567		(Purchased Reagent)		BFB	2000 ug/mL
vmbfb_00023							1,2-Dichloroethene, Total	

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	
					vm30026_00002	1.25 mL	BFB	50 ug/mL
.vm30026_00002	07/31/21	restek, Lot A0120567			(Purchased Reagent)		BFB	2000 ug/mL
VMFASGW_00295	02/11/19	02/04/19	MEOH, Lot NA	4 mL	VMFASG_00079	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00079	02/18/19	01/18/19	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20	Restek, Lot A0124116			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00303	04/12/19	04/05/19	MEOH, Lot NA	4 mL	VMFASG_00081	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00081	04/20/19	03/20/19	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20	Restek, Lot A0124116			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00312	06/14/19	06/07/19	MEOH, Lot NA	5 mL	VMFASG_00083	5 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00083	06/22/19	05/22/19	MEOH, Lot 0000198123	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00313	06/22/19	06/15/19	MEOH, Lot NA	5 mL	VMFASG_00083	5 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00083	06/22/19	05/22/19	MEOH, Lot 0000198123	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASPW_00287	02/11/19	02/04/19	MEOH, Lot n/a	4 mL	VMRFASP_00053	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00053	02/28/19	12/31/18	MEOH, Lot 0000196628	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00004	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00004	06/30/19		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00294	04/08/19	04/01/19	MEOH, Lot n/a	5 mL	VMRFASP_00055	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00055	06/30/19	03/31/19	MEOH, Lot 0000196628	100 mL	VM569721S_00005	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00004	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00005	12/31/20		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00004	06/30/19		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00303	06/18/19	06/11/19	MEOH, Lot n/a	5 mL	VMRFASP_00056	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00056	06/30/19	05/15/19	MEOH, Lot 0000198123	100 mL	VM569721S_00005	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00004	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00005	12/31/20		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00004	06/30/19		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMFASPW_00304	06/26/19	06/19/19	MEOH, Lot n/a	5 mL	VMRFASP_00056	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00056	06/30/19	05/15/19	MEOH, Lot 0000198123	100 mL	VM569721S_00005	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992S_00004	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Xylenes, Total	100 ug/mL
..VM569721S_00005	12/31/20		Restek, Lot A0133078		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992S_00004	06/30/19		Restek, Lot A0123775		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VMRGAS_00281	02/14/19	02/07/19	MEOH, Lot +200920000196628JJ	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00287	04/05/19	03/29/19	MEOH, Lot 0000196628	10 mL	vm569722_00012	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00012	11/30/21		Restek, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00296	06/16/19	06/09/19	MEOH, Lot 0000198123	10 mL	vm569722_00012	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00012	11/30/21		Restek, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMRGAS_00297	06/24/19	06/17/19	MEOH, Lot 0000198123	10 mL	vm569722_00012	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00012	11/30/21		Restek, Lot A0143158		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRPRIMW_00320	02/11/19	02/04/19	MEOH, Lot NA	4 mL	VMRPRIM_00032	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00032	02/28/19	12/01/18	MEOH, Lot 0000196628	50 mL	VM569721_00005	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00006	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00017	0.5 mL	Vinyl acetate	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					VM571992_00002	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00005	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00006	12/31/20		restek, Lot A0133302		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00017	02/28/19		Restek, Lot A0140258		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00328	04/10/19	04/03/19	MEOH, Lot NA	4 mL	VMRPRIM_00035	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00035	06/30/19	03/01/19	MEOH, Lot 0000196628	50 mL	VM569721_00005	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00007	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00018	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00002	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00005	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00007	12/31/20		restek, Lot A0133302		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00018	07/31/19		Restek, Lot A0144661		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMRPRIMW_00338	06/13/19	06/06/19	MEOH, Lot NA	5 mL	VMRPRIM_00036	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00036	06/30/19	05/09/19	MEOH, Lot 0000198123	50 mL	VM569721_00005	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00007	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00018	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00002	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00005	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00007	12/31/20		restek, Lot A0133302		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00018	07/31/19		Restek, Lot A0144661		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMRPRIMW_00341	06/21/19	06/14/19	MEOH, Lot NA	5 mL	VMRPRIM_00036	5 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00036	06/30/19	05/09/19	MEOH, Lot 0000198123	50 mL	VM569721_00005	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM571992_00002	1 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721_00005	04/30/21		Restek, Lot A0137509		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM571992_00002	06/30/19		Restek, Lot A0123711		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL

Reagent

vm30026_00002

Rec: 4/11/17 (5)

VM30026-00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30026 **Lot No.:** A0120567

Description : 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-4-fluorobenzene (BFB)	2,019.3 µg/mL	+/- 11.8506	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 113.2335	µg/mL	Unstressed
	Purity 99%		+/- 115.8825	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

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vm30241_00007

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0134242

Description : 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	2,503.6 µg/mL	+/- 14.5561 µg/mL +/- 140.3744 µg/mL +/- 143.6590 µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-22736) **Purity** 99%	2,506.4 µg/mL	+/- 14.5724 µg/mL +/- 140.5314 µg/mL +/- 143.8196 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	2,513.4 µg/mL	+/- 14.6131 µg/mL +/- 140.9238 µg/mL +/- 144.2213 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

VM30241-00007

REC'D 5-4-18

Reagent

VM567650_00029

Rec: 8/22/17
VM567650-00029

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0124069

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012016) **Purity** 99%	2,521.2 µg/mL	+/- 14.6582 µg/mL +/- 141.3584 µg/mL +/- 144.6660 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-25433) **Purity** 98%	2,513.8 µg/mL	+/- 14.6157 µg/mL +/- 140.9489 µg/mL +/- 144.2469 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-27311) **Purity** 99%	2,519.4 µg/mL	+/- 14.6480 µg/mL +/- 141.2603 µg/mL +/- 144.5656 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KOV) **Purity** 99%	2,520.8 µg/mL	+/- 14.6559 µg/mL +/- 141.3360 µg/mL +/- 144.6430 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00030

Rec: 11/8/19
VM567650-00050

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0124069

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,521.2 µg/mL	+/- 14.6582	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 0012016)		+/- 141.3584	µg/mL	Unstressed
	Purity 99%			+/- 144.6660	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,513.8 µg/mL	+/- 14.6157	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot PR-25433)		+/- 140.9489	µg/mL	Unstressed
	Purity 98%			+/- 144.2469	µg/mL	Stressed
3	Toluene-d8		2,519.4 µg/mL	+/- 14.6480	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-27311)		+/- 141.2603	µg/mL	Unstressed
	Purity 99%			+/- 144.5656	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,520.8 µg/mL	+/- 14.6559	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KOV)		+/- 141.3360	µg/mL	Unstressed
	Purity 99%			+/- 144.6430	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568718_00013

Rec: 4/17/18
VM568718_00013

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0133525

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 **Purity** 98%	(Lot CD-107)	5,043.8 µg/mL	+/- 29.3235 +/- 107.9879 +/- 111.1273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 **Purity** 99%	(Lot M-276)	1,258.0 µg/mL	+/- 7.3141 +/- 26.9339 +/- 27.7169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 **Purity** 99%	(Lot BCBK8171V)	251.8 µg/mL	+/- 1.4674 +/- 5.3920 +/- 5.5487	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 **Purity** 99%	(Lot I-19942)	5,037.4 µg/mL	+/- 29.2862 +/- 107.8502 +/- 110.9856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 **Purity** 99%	(Lot PR-22736)	251.6 µg/mL	+/- 1.4660 +/- 5.3870 +/- 5.5435	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 **Purity** 99%	(Lot PR-18488)	251.4 µg/mL	+/- 1.4652 +/- 5.3841 +/- 5.5406	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568718_00015

Rec: 10/26/18
VM568718_00015

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 **Lot No.:** A0139459

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000µg/mL, P&T Methanol/Water (90:10), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	tert-Butyl-d9-alcohol **CAS #** 25725-11-5 (Lot CD-107) **Purity** 98%	5,018.0 µg/mL	+/- 29.1735 µg/mL +/- 107.4354 µg/mL +/- 110.5588 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone-d5 **CAS #** 24313-50-6 (Lot M-276) **Purity** 99%	1,253.8 µg/mL	+/- 7.2897 µg/mL +/- 26.8440 µg/mL +/- 27.6244 µg/mL	Gravimetric Unstressed Stressed
3	Fluorobenzene **CAS #** 462-06-6 (Lot BCBK8171V) **Purity** 99%	250.1 µg/mL	+/- 1.4575 µg/mL +/- 5.3556 µg/mL +/- 5.5112 µg/mL	Gravimetric Unstressed Stressed
4	1,4-Dioxane-d8 **CAS #** 17647-74-4 (Lot I-19942) **Purity** 99%	5,004.8 µg/mL	+/- 29.0965 µg/mL +/- 107.1519 µg/mL +/- 110.2670 µg/mL	Gravimetric Unstressed Stressed
5	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-23926) **Purity** 99%	250.4 µg/mL	+/- 1.4589 µg/mL +/- 5.3609 µg/mL +/- 5.5167 µg/mL	Gravimetric Unstressed Stressed
6	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-18488) **Purity** 99%	250.6 µg/mL	+/- 1.4604 µg/mL +/- 5.3663 µg/mL +/- 5.5222 µg/mL	Gravimetric Unstressed Stressed

Reagent

VM568720_00031

Rec: 1/10/19

VMS 68720-00031

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0141320

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,767.3 µg/mL	+/- 115.7421 µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 180823JACG)		+/- 633.8029 µg/mL	Unstressed
	Purity 99%		+/- 736.7265 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00032

Rec: 3/13/19

VM568720_00032

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0143013

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein		19,750.0	µg/mL	+/- 115.6406	µg/mL	Gravimetric
	CAS # 107-02-8	(Lot 180823JACG)			+/- 633.2471	µg/mL	Unstressed
	Purity 99%				+/- 736.0805	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM568720_00033

Rec: 5/3/19

VM568720-00033

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 **Lot No.:** A0146613

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein **CAS #** 107-02-8 (Lot 0012014-D0218) **Purity** 99%	19,933.0 µg/mL	+/- 116.7121 µg/mL +/- 639.1146 µg/mL +/- 742.9009 µg/mL	Gravimetric Unstressed Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569721_00005

VM569721_00005 Rec: 11/30/18

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0137509

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,619.0 µg/mL	+/- 73.8870	µg/mL	Gravimetric
	CAS # 67-64-1	(Lot SHBH6933)		+/- 761.4104	µg/mL	Unstressed
	Purity 99%			+/- 763.2179	µg/mL	Stressed
2	2-Butanone (MEK)		12,602.0 µg/mL	+/- 73.7875	µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBF2461V)		+/- 760.3846	µg/mL	Unstressed
	Purity 99%			+/- 762.1897	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)		12,531.0 µg/mL	+/- 73.3718	µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBH7006)		+/- 756.1006	µg/mL	Unstressed
	Purity 99%			+/- 757.8955	µg/mL	Stressed
4	2-Hexanone		12,606.0 µg/mL	+/- 73.8109	µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKBW0198V)		+/- 760.6260	µg/mL	Unstressed
	Purity 99%			+/- 762.4316	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00003

Rec: 7/12/16 (20)
VM569721S-00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.sec **Lot No.:** A0118013

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot P14A572) **Purity** 99%	12,550.0 µg/mL	+/- 73.4830 µg/mL +/- 757.2470 µg/mL +/- 759.0446 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,603.0 µg/mL	+/- 73.7933 µg/mL +/- 760.4450 µg/mL +/- 762.2502 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,591.5 µg/mL	+/- 73.7260 µg/mL +/- 759.7511 µg/mL +/- 761.5546 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,588.0 µg/mL	+/- 73.7055 µg/mL +/- 759.5399 µg/mL +/- 761.3429 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00005

Rec: 6/15/18 20 vials

VM569721S-00005

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.SEC **Lot No.:** A0133078

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot P14A572) **Purity** 99%	12,504.8 µg/mL	+/- 73.2184 µg/mL +/- 754.5197 µg/mL +/- 756.3109 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RA58J) **Purity** 99%	12,504.0 µg/mL	+/- 73.2137 µg/mL +/- 754.4715 µg/mL +/- 756.2625 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,500.8 µg/mL	+/- 73.1949 µg/mL +/- 754.2784 µg/mL +/- 756.0689 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,503.6 µg/mL	+/- 73.2113 µg/mL +/- 754.4473 µg/mL +/- 756.2383 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

vm569722_00011

Rec: 4/17/18

VM569722_00011

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0131502

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot Q167-08) **Purity** 99%	2,501.3 µg/mL	+/- 20.2137 µg/mL +/- 140.9452 µg/mL +/- 144.2108 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBG9707V) **Purity** 99%	2,504.9 µg/mL	+/- 24.8531 µg/mL +/- 141.8827 µg/mL +/- 145.1364 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 1026101231B1) **Purity** 99%	2,498.3 µg/mL	+/- 21.7258 µg/mL +/- 141.0069 µg/mL +/- 144.2635 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBH7966) **Purity** 99%	2,499.9 µg/mL	+/- 19.8572 µg/mL +/- 140.8167 µg/mL +/- 144.0816 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.4 µg/mL	+/- 24.9675 µg/mL +/- 141.6590 µg/mL +/- 144.9064 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 23593) **Purity** 99%	2,500.1 µg/mL	+/- 25.2649 µg/mL +/- 141.6931 µg/mL +/- 144.9388 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 4938100) **Purity** 99%	2,500.0 µg/mL	+/- 16.7114 µg/mL +/- 140.4149 µg/mL +/- 143.6892 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11) **CAS #** 75-69-4 **Purity** 99%	(Lot SHBH4155V)	2,499.5	µg/mL	+/- 20.7085 +/- 140.9189 +/- 144.1805	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

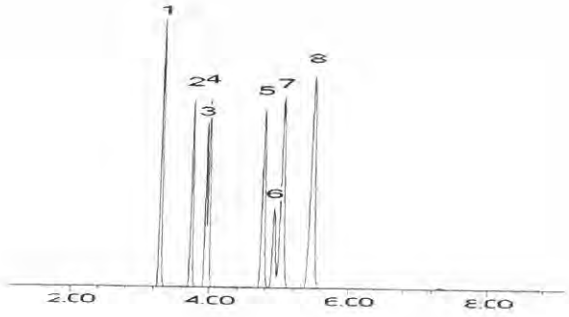
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 10-Oct-2017 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 12-Oct-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

vm569722_00012

Acc: 1/23/19

VM569722_00012

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 **Lot No.:** A0143158

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8 (Lot 00012554) **Purity** 99%	2,500.9 µg/mL	+/- 17.2023 +/- 140.5234 +/- 143.7976	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBJ6334) **Purity** 99%	2,500.4 µg/mL	+/- 17.0791 +/- 140.4796 +/- 143.7534	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00012557) **Purity** 99%	2,500.4 µg/mL	+/- 16.5693 +/- 140.4224 +/- 143.6977	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot SHBK2299) **Purity** 99%	2,500.1 µg/mL	+/- 17.0785 +/- 140.4623 +/- 143.7357	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.9 µg/mL	+/- 16.5511 +/- 140.4457 +/- 143.7217	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,502.0 µg/mL	+/- 16.0409 +/- 140.4480 +/- 143.7268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 7766400) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 +/- 140.1725 +/- 143.4524	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,500.8	µg/mL	+/-	17.8012	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot SHBH4155V)			+/-	140.5946	µg/mL	Unstressed
	Purity 99%				+/-	143.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Raw material may contain trace amounts of tert-Butanol.

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

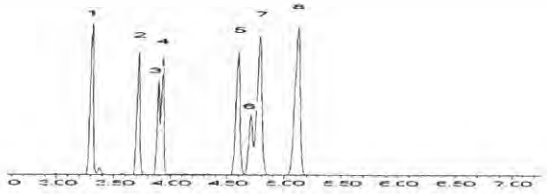
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Joseph Jaglowski - Mix Technician **Date Mixed:** 12-Nov-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 11-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

vm569722S_00005

VM569722S-0005 Rec: 7/17/17

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.SEC **Lot No.:** A0124116

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 23586) **Purity** 99%	2,503.4 µg/mL	+/- 19.5506 µg/mL +/- 140.9699 µg/mL +/- 144.2404 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,508.1 µg/mL	+/- 21.1963 µg/mL +/- 141.4639 µg/mL +/- 144.7353 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,518.6 µg/mL	+/- 19.4186 µg/mL +/- 141.7924 µg/mL +/- 145.0836 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,504.0 µg/mL	+/- 20.5722 µg/mL +/- 141.1450 µg/mL +/- 144.4130 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,498.5 µg/mL	+/- 19.9806 µg/mL +/- 140.7602 µg/mL +/- 144.0229 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,494.9 µg/mL	+/- 17.8868 µg/mL +/- 140.2786 µg/mL +/- 143.5429 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,503.4 µg/mL	+/- 20.0421 µg/mL +/- 141.0350 µg/mL +/- 144.3039 µg/mL	Gravimetric Unstressed Stressed

8	Trichlorofluoromethane (CFC-11)		2,503.2 µg/mL	+/-	18.7037	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot Q12B-59)		+/-	140.8450	µg/mL	Unstressed
	Purity 99%			+/-	144.1179	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

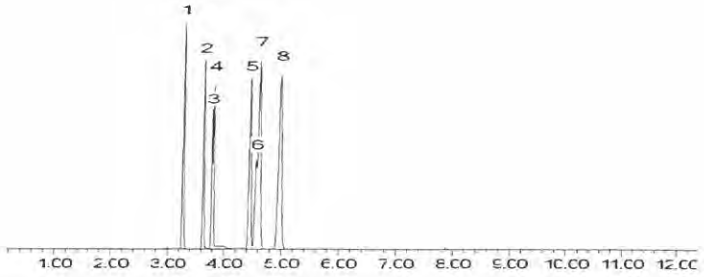
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 12-Jan-2017 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jan-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

VM569723_00006

VM569723_00006 Rec: 11/30/18

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0133302

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,511.5 µg/mL	+/- 14.7391	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBS6526V)		+/- 53.8098	µg/mL	Unstressed
	Purity 98%		+/- 55.3720	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569723_00007

vm569723_00007

Rec: 12/4/18

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0133302

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,511.5 µg/mL	+/- 14.7391	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBS6526V)		+/- 53.8098	µg/mL	Unstressed
	Purity 98%		+/- 55.3720	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00017

VM569724_00017 Rec: 10/5/18

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0140258

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,017.0 µg/mL	+/- 29.4426	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 302.7243	µg/mL	Unstressed
	Purity 99%		+/- 303.4429	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00018

Rec: 2/15/19

(10)

VM569724_00018

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724 **Lot No.:** A0144661

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,050.0 µg/mL	+/- 29.6362	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 304.7155	µg/mL	Unstressed
	Purity 99%		+/- 305.4388	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM571992_00002

Rec: 6/15/18 20 vials

VM571992_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992 **Lot No.:** A0123711

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBG1462V) **Purity** 99%	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00009482) **Purity** 99%	2,505.1 µg/mL	+/- 14.5650 +/- 151.1453 +/- 151.5041	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBG8609V) **Purity** 99%	2,511.5 µg/mL	+/- 14.6021 +/- 151.5299 +/- 151.8897	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBF0688V) **Purity** 99%	25,001.8 µg/mL	+/- 145.3547 +/- 1,508.4656 +/- 1,512.0470	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBG4345V) **Purity** 99%	5,000.5 µg/mL	+/- 29.0733 +/- 301.7023 +/- 302.4186	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot SHBF2149V) **Purity** 99%	2,502.9 µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot SHBF8133V) **Purity** 99%	2,517.1 µg/mL	+/- 14.6348 +/- 151.8693 +/- 152.2299	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2 **Purity** 99%	(Lot SHBH2578V)	2,502.1	µg/mL	+/- 14.5476 +/- 150.9643 +/- 151.3227	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0 **Purity** 99%	(Lot S20A856)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1 **Purity** 99%	(Lot T07B2030)	25,001.3	µg/mL	+/- 145.3518 +/- 1,508.4355 +/- 1,512.0167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4 **Purity** 99%	(Lot SHBG2655V)	2,505.3	µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2 **Purity** 98%	(Lot MKBV2831V)	2,500.5	µg/mL	+/- 14.5379 +/- 150.8644 +/- 151.2226	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3 **Purity** 99%	(Lot SHBG2674V)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3 **Purity** 99%	(Lot 00008621)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7 **Purity** 98%	(Lot BCBR0622V)	2,501.0	µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5 **Purity** 99%	(Lot 09431AEV)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1 **Purity** 99%	(Lot SHBG8201V)	62,512.5	µg/mL	+/- 363.4341 +/- 3,771.6543 +/- 3,780.6088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	chloroform **CAS #** 67-66-3 **Purity** 99%	(Lot MKBV2089V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5 **Purity** 99%	(Lot 00004559)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9 **Purity** 99%	(Lot SHBG2910V)	5,001.3	µg/mL	+/- 29.0777 +/- 301.7476 +/- 302.4640	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-trichloroethane **CAS #** 71-55-6 **Purity** 99%	(Lot B15W12061)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7 **Purity** 99%	(Lot MKBX4768V)	2,502.0	µg/mL	+/- 14.5468 +/- 150.9567 +/- 151.3151	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6 **Purity** 99%	(Lot 160727JLM)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	carbon tetrachloride **CAS #** 56-23-5 **Purity** 99%	(Lot SHBG1763V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5 **Purity** 99%	(Lot SHBG6171V)	2,505.5	µg/mL	+/- 14.5672 +/- 151.1679 +/- 151.5268	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2 **Purity** 99%	(Lot SHBF9313V)	2,504.8	µg/mL	+/- 14.5628 +/- 151.1227 +/- 151.4815	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2 **Purity** 99%	(Lot SHBH2056V)	2,506.9	µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6 **Purity** 99%	(Lot SHBH1955V)	2,502.4	µg/mL	+/- 14.5490 +/- 150.9794 +/- 151.3378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2 **Purity** 98%	(Lot SHBG0634V)	2,500.3	µg/mL	+/- 14.5372 +/- 150.8570 +/- 151.2152	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5 **Purity** 99%	(Lot 01113D0V)	2,503.0	µg/mL	+/- 14.5527 +/- 151.0171 +/- 151.3756	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1 **Purity** 99%	(Lot SHBH2584V)	50,011.4	µg/mL	+/- 290.7552 +/- 3,017.4064 +/- 3,024.5702	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3 **Purity** 98%	(Lot 10183283)	2,501.9	µg/mL	+/- 14.5465 +/- 150.9531 +/- 151.3115	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5 **Purity** 99%	(Lot 22622)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3 **Purity** 99%	(Lot SHBH1932V)	2,504.3	µg/mL	+/- 14.5599 +/- 151.0925 +/- 151.4512	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2 **Purity** 99%	(Lot SHBD9190V)	2,506.9	µg/mL	+/- 14.5752 +/- 151.2509 +/- 151.6100	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6 **Purity** 99%	(Lot C584177)	2,503.6	µg/mL	+/- 14.5563 +/- 151.0548 +/- 151.4134	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5 **Purity** 99%	(Lot FGB01)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9 **Purity** 99%	(Lot BCBG2162V)	2,503.5	µg/mL	+/- 14.5556 +/- 151.0472 +/- 151.4059	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4 **Purity** 99%	(Lot SHBD9374V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane **CAS #** 124-48-1 **Purity** 98%	(Lot MKBW3597V)	2,500.2	µg/mL	+/- 14.5365 +/- 150.8497 +/- 151.2078	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBH3877V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBF0505V)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBG4347V)	1,250.3	µg/mL	+/- 7.2691 +/- 75.4331 +/- 75.6122	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBG3928V)	1,251.3	µg/mL	+/- 7.2749 +/- 75.4935 +/- 75.6727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBG5920V)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	2,504.9	µg/mL	+/- 14.5636 +/- 151.1302 +/- 151.4890	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBS7097V)	2,506.3	µg/mL	+/- 14.5716 +/- 151.2132 +/- 151.5722	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBD8459V)	2,502.9	µg/mL	+/- 14.5519 +/- 151.0095 +/- 151.3681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	bromodichloromethane **CAS #** 75-27-4 **Purity** 97%	(Lot MKBW5506V)	2,506.8	µg/mL	+/- 14.5750 +/- 151.2490 +/- 151.6081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	2,508.5	µg/mL	+/- 14.5846 +/- 151.3489 +/- 151.7082	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene **CAS #** 110-57-6 **Purity** 95%	(Lot MKBP6041V)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8817 +/- 151.2399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	2,501.9	µg/mL	+/- 14.5461 +/- 150.9492 +/- 151.3076	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot MKBD4032V)	2,507.0	µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBQ2165V)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	2,500.6	µg/mL	+/- 14.5388 +/- 150.8738 +/- 151.2320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot S52237V)	2,507.0	µg/mL	+/- 14.5759 +/- 151.2584 +/- 151.6175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ6229V)	2,500.8	µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	2,505.4	µg/mL	+/- 14.5665 +/- 151.1604 +/- 151.5193	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBS2604V)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	2,503.9	µg/mL	+/- 14.5577 +/- 151.0699 +/- 151.4285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS1350V)	2,509.9	µg/mL	+/- 14.5926 +/- 151.4319 +/- 151.7914	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09418JJV)	2,503.3	µg/mL	+/- 14.5541 +/- 151.0322 +/- 151.3907	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	2,503.8	µg/mL	+/- 14.5570 +/- 151.0623 +/- 151.4210	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	2,505.0	µg/mL	+/- 14.5643 +/- 151.1378 +/- 151.4966	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBC5541V)	2,505.3	µg/mL	+/- 14.5657 +/- 151.1528 +/- 151.5117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	2,506.5	µg/mL	+/- 14.5728 +/- 151.2266 +/- 151.5856	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,511.1 µg/mL	+/-	14.5999	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)		+/-	151.5073	µg/mL	Unstressed
	Purity 99%			+/-	151.8670	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

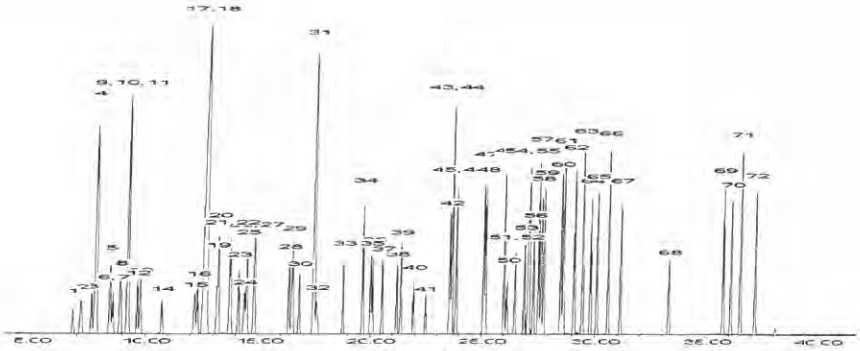
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Reagent

VM571992S_00004

Rec: 12/4/18

VM571992S-00004

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571992.sec **Lot No.:** A0123775

Description : 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 150.9088 µg/mL +/- 151.2671 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.5 µg/mL	+/- 14.5381 µg/mL +/- 150.8662 µg/mL +/- 151.2244 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,003.1 µg/mL	+/- 145.3626 µg/mL +/- 1,508.5475 µg/mL +/- 1,512.1291 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot YDGVD) **Purity** 99%	5,000.4 µg/mL	+/- 29.0726 µg/mL +/- 301.6948 µg/mL +/- 302.4111 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,500.4 µg/mL	+/- 14.5374 µg/mL +/- 150.8587 µg/mL +/- 151.2169 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,500.1 µg/mL	+/- 14.5358 µg/mL +/- 150.8423 µg/mL +/- 151.2004 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC (Lot FGM02) **Purity** 99%		2,500.8 µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide **CAS #** 75-15-0.SEC (Lot MKBL1376V) **Purity** 99%		2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile **CAS #** 107-13-1.SEC (Lot UERIL) **Purity** 99%		25,000.9 µg/mL	+/- 145.3496 +/- 1,508.4128 +/- 1,511.9941	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	Methyl-tert-butyl ether (MTBE) **CAS #** 1634-04-4.SEC (Lot ZAQTA-MS) **Purity** 99%		2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	cis-1,2-Dichloroethene **CAS #** 156-59-2.SEC (Lot HGC01-BLKT) **Purity** 98%		2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexane (C6) **CAS #** 110-54-3.SEC (Lot 10188491) **Purity** 99%		2,501.5 µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	1,1-Dichloroethane **CAS #** 75-34-3.SEC (Lot 5379000) **Purity** 99%		2,500.3 µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	2,2-Dichloropropane **CAS #** 594-20-7.SEC (Lot I7E8E) **Purity** 98%		2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	trans-1,2-Dichloroethene **CAS #** 156-60-5.SEC (Lot TS5UB) **Purity** 97%		2,500.2 µg/mL	+/- 14.5362 +/- 150.8466 +/- 151.2048	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) **CAS #** 78-83-1.SEC (Lot 83NHH) **Purity** 99%		62,506.9 µg/mL	+/- 363.4014 +/- 3,771.3149 +/- 3,780.2687	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Chloroform **CAS #** 67-66-3.SEC (Lot 1297547) **Purity** 99%		2,500.1 µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Bromochloromethane **CAS #** 74-97-5.SEC (Lot 5670200) **Purity** 99%		2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Tetrahydrofuran **CAS #** 109-99-9.SEC (Lot K3V7J-SJ) **Purity** 99%		5,002.3 µg/mL	+/- 29.0835 +/- 301.8079 +/- 302.5245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	1,1,1-Trichloroethane **CAS #** 71-55-6.SEC (Lot CS160712) **Purity** 98%		2,500.7 µg/mL	+/- 14.5394 +/- 150.8792 +/- 151.2374	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	Cyclohexane **CAS #** 110-82-7.SEC (Lot YADRA) **Purity** 99%		2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,1-Dichloropropene **CAS #** 563-58-6.SEC (Lot 5221100) **Purity** 96%		2,501.3 µg/mL	+/- 14.5427 +/- 150.9133 +/- 151.2716	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Carbon tetrachloride **CAS #** 56-23-5.SEC **Purity** 99%	(Lot 11466)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	n-Heptane (C7) **CAS #** 142-82-5.SEC **Purity** 99%	(Lot OGM01)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2-Dichloroethane **CAS #** 107-06-2.SEC **Purity** 99%	(Lot FO6PK)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Benzene **CAS #** 71-43-2.SEC **Purity** 99%	(Lot B28Y008)	2,501.5	µg/mL	+/- 14.5439 +/- 150.9266 +/- 151.2849	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Trichloroethene **CAS #** 79-01-6.SEC **Purity** 99%	(Lot H04X050)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	(Lot 24MSD-CD)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	(Lot OGG01)	2,501.1	µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	(Lot MUFZH)	50,007.1	µg/mL	+/- 290.7305 +/- 3,017.1500 +/- 3,024.3132	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	(Lot FGI01-OICH)	2,501.6	µg/mL	+/- 14.5447 +/- 150.9341 +/- 151.2925	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	(Lot 487OA)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	(Lot YND2B-BD)	2,500.0	µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	(Lot MLWYK-LS)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 99%	(Lot ZDMSL)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 98%	(Lot 5034600)	2,500.8	µg/mL	+/- 14.5401 +/- 150.8866 +/- 151.2448	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	(Lot AGN01-EFPC)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	(Lot F09W014)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	(Lot 10181507)	2,500.4 µg/mL	+/- 14.5376 +/- 150.8613 +/- 151.2194	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	(Lot 3505900)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	(Lot 1161936)	2,501.0 µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	(Lot OUKMG-GB)	1,250.9 µg/mL	+/- 7.2727 +/- 75.4708 +/- 75.6500	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	(Lot GM01)	1,250.5 µg/mL	+/- 7.2705 +/- 75.4482 +/- 75.6273	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Ethylbenzene **CAS #** 100-41-4.SEC **Purity** 99%	(Lot PI4SE)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	(Lot GC01)	2,501.1 µg/mL	+/- 14.5418 +/- 150.9040 +/- 151.2622	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	(Lot FGL01-KTPK)	2,500.9 µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene **CAS #** 100-42-5.SEC **Purity** 99%	(Lot OFIOL-IA)	2,500.4 µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) **CAS #** 98-82-8.SEC **Purity** 99%	(Lot 2PHXG-IH)	2,500.5 µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	Bromoform **CAS #** 75-25-2.SEC **Purity** 99%	(Lot 5139000)	2,502.3 µg/mL	+/- 14.5483 +/- 150.9718 +/- 151.3303	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 98%	(Lot 13780)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5.SEC **Purity** 99%	(Lot CFA4D-AQ)	2,501.3 µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane **CAS #** 96-18-4.SEC **Purity** 98%	(Lot OGI01)	2,500.1 µg/mL	+/- 14.5358 +/- 150.8423 +/- 151.2004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-Dichloro-2-butene **CAS #** 110-57-6.SEC **Purity** 98%	(Lot 100700-3)	2,501.0 µg/mL	+/- 14.5408 +/- 150.8940 +/- 151.2522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene **CAS #** 103-65-1.SEC **Purity** 99%	(Lot T2HFC-IT)	2,500.0 µg/mL	+/- 14.5352 +/- 150.8361 +/- 151.1942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene **CAS #** 108-86-1.SEC **Purity** 99%	(Lot 2FUHG-EM)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,3,5-Trimethylbenzene **CAS #** 108-67-8.SEC **Purity** 99%	(Lot TOOOF)	2,500.3	µg/mL	+/- 14.5367 +/- 150.8512 +/- 151.2093	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene **CAS #** 95-49-8.SEC **Purity** 99%	(Lot SW8QG-AO)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene **CAS #** 106-43-4.SEC **Purity** 99%	(Lot P4XHJ-AO)	2,500.5	µg/mL	+/- 14.5381 +/- 150.8662 +/- 151.2244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene **CAS #** 98-06-6.SEC **Purity** 99%	(Lot OGN01-CAI)	2,500.1	µg/mL	+/- 14.5359 +/- 150.8436 +/- 151.2017	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,2,4-Trimethylbenzene **CAS #** 95-63-6.SEC **Purity** 99%	(Lot SC7LO-QA)	2,500.4	µg/mL	+/- 14.5374 +/- 150.8587 +/- 151.2169	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene **CAS #** 135-98-8.SEC **Purity** 99%	(Lot OGN01-IMA)	2,501.4	µg/mL	+/- 14.5432 +/- 150.9190 +/- 151.2773	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) **CAS #** 99-87-6.SEC **Purity** 99%	(Lot 5221800)	2,501.3	µg/mL	+/- 14.5425 +/- 150.9115 +/- 151.2698	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	(Lot FMDFD)	2,500.9	µg/mL	+/- 14.5403 +/- 150.8889 +/- 151.2471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	(Lot 4Y5DC)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene **CAS #** 104-51-8.SEC **Purity** 99%	(Lot OGN01-PNP)	2,500.8	µg/mL	+/- 14.5396 +/- 150.8813 +/- 151.2395	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene **CAS #** 95-50-1.SEC **Purity** 99%	(Lot R6QDM)	2,501.0	µg/mL	+/- 14.5410 +/- 150.8964 +/- 151.2547	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8.SEC **Purity** 98%	(Lot LC00408V)	2,501.5	µg/mL	+/- 14.5436 +/- 150.9236 +/- 151.2819	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene **CAS #** 120-82-1.SEC **Purity** 99%	(Lot 3LYYC)	2,502.5	µg/mL	+/- 14.5498 +/- 150.9869 +/- 151.3454	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene **CAS #** 87-68-3.SEC **Purity** 97%	(Lot 5526800)	2,501.4	µg/mL	+/- 14.5433 +/- 150.9198 +/- 151.2781	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene **CAS #** 91-20-3.SEC **Purity** 99%	(Lot SKZ5N)	2,501.8	µg/mL	+/- 14.5454 +/- 150.9417 +/- 151.3000	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene		2,500.7 µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.8792	µg/mL	Unstressed
	Purity 98%			+/-	151.2374	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

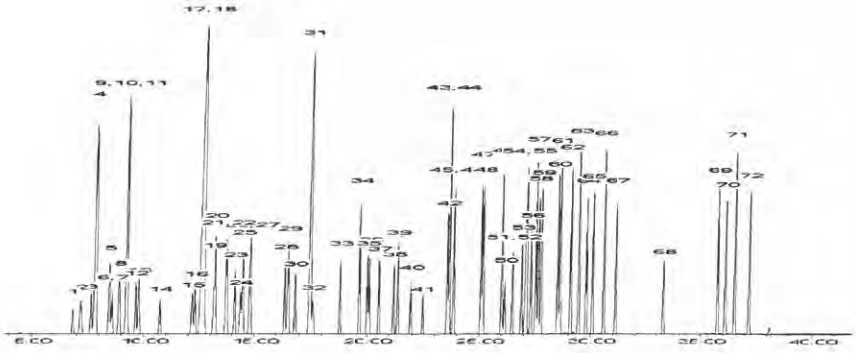
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Mayer

Date Mixed: 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
OW-5	240-113949-1	109	94	103	91
OW-5 DUP	240-113949-2	102	97	103	92
OW-10R	240-113949-3	105	105	82	85
OW-13R	240-113949-4	115	103	93	95
OW-6	240-113949-5	108	114	85	95
OW-2	240-113949-6	106	110	91	96
OW-24	240-113949-7	122	108	90	95
OW-18	240-113949-8	96	95	74	68
OW-19	240-113949-9	98	96	73	68
PUMP BLANK	240-113949-10	94	99	74	65
OW-22	240-113949-11	95	98	74	67
OW-21	240-113949-12	95	100	73	65
FIELD BLANK	240-113949-13	96	98	75	65
TRIP BLANK	240-113949-14	115	99	111	99
	MB 240-386483/6	116	103	111	100
	MB 240-386760/7	103	110	84	88
	MB 240-386999/7	93	94	74	63
	LCS 240-386483/4	106	99	113	110
	LCS 240-386760/4	119	110	87	98
	LCS 240-386999/4	81	78	83	81
OW-6 MS	240-113949-5 MS	127	103	90	94
OW-18 MS	240-113949-8 MS	87	86	84	86
OW-6 MSD	240-113949-5 MSD	105	110	90	101
OW-18 MSD	240-113949-8 MSD	82	84	81	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-128
DCA = 1,2-Dichloroethane-d4 (Surr)	70-121
TOL = Toluene-d8 (Surr)	70-123
BFB = 4-Bromofluorobenzene (Surr)	59-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1405.D

Lab ID: LCS 240-386483/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.90	99	69-134	
1,1,2,2-Tetrachloroethane	10.0	13.1	131	65-139	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.62	86	50-156	
1,1,2-Trichloroethane	10.0	11.6	116	78-133	
1,1-Dichloroethane	10.0	10.8	108	75-133	
1,1-Dichloroethene	10.0	11.4	114	65-139	
1,2,4-Trichlorobenzene	10.0	8.14	81	42-133	
1,2-Dibromo-3-Chloropropane	10.0	10.4	104	46-132	
1,2-Dichlorobenzene	10.0	10.4	104	78-120	
1,2-Dichloroethane	10.0	9.35	93	71-135	
1,2-Dichloropropane	10.0	11.6	116	78-133	
1,3-Dichlorobenzene	10.0	10.8	108	78-120	
1,4-Dichlorobenzene	10.0	10.4	104	78-120	
2-Butanone (MEK)	20.0	23.4	117	39-163	
2-Hexanone	20.0	21.3	107	43-148	
4-Methyl-2-pentanone (MIBK)	20.0	20.8	104	49-143	
Acetone	20.0	21.0	105	21-162	
Benzene	10.0	11.2	112	80-123	
Bromoform	10.0	9.54	95	49-141	
Bromomethane	10.0	10.9	109	41-175	
Carbon disulfide	10.0	11.2	112	60-138	
Carbon tetrachloride	10.0	9.32	93	63-140	
Chlorobenzene	10.0	10.2	102	80-121	
Chlorodibromomethane	10.0	10.7	107	70-132	
Chloroethane	10.0	12.1	121	33-173	
Chloroform	10.0	10.9	109	79-127	
Chloromethane	10.0	9.75	98	54-143	
cis-1,2-Dichloroethene	10.0	11.0	110	76-128	
cis-1,3-Dichloropropene	10.0	11.4	114	64-132	
Cyclohexane	10.0	9.90	99	58-145	
Dichlorodifluoromethane	10.0	7.86	79	29-148	
Dichlorobromomethane	10.0	10.5	105	77-125	
Ethylbenzene	10.0	10.7	107	80-120	
Isopropylbenzene	10.0	10.5	105	74-120	
Methyl acetate	20.0	22.7	113	52-145	
Methylcyclohexane	10.0	8.73	87	60-125	
Methyl tert-butyl ether	10.0	10.5	105	51-133	
Methylene Chloride	10.0	11.5	115	70-134	
m-Xylene & p-Xylene	10.0	11.0	110	80-120	
o-Xylene	10.0	10.8	108	80-120	
Styrene	10.0	10.7	107	79-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ1405.D

Lab ID: LCS 240-386483/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	9.57	96	74-130	
Toluene	10.0	11.4	114	78-129	
trans-1,2-Dichloroethene	10.0	11.2	112	78-133	
trans-1,3-Dichloropropene	10.0	10.3	103	55-128	
Trichloroethene	10.0	9.88	99	76-125	
Trichlorofluoromethane	10.0	9.39	94	51-164	
Vinyl chloride	10.0	10.0	100	58-143	
Xylenes, Total	20.0	21.8	109	80-120	
Ethylene Dibromide	10.0	10.8	108	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX2001.D

Lab ID: LCS 240-386760/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	12.5	125	69-134	
1,1,2,2-Tetrachloroethane	10.0	7.67	77	65-139	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	7.92	79	50-156	
1,1,2-Trichloroethane	10.0	9.33	93	78-133	
1,1-Dichloroethane	10.0	9.48	95	75-133	
1,1-Dichloroethene	10.0	11.1	111	65-139	
1,2,4-Trichlorobenzene	10.0	7.85	78	42-133	
1,2-Dibromo-3-Chloropropane	10.0	7.97	80	46-132	
1,2-Dichlorobenzene	10.0	10.0	100	78-120	
1,2-Dichloroethane	10.0	11.0	110	71-135	
1,2-Dichloropropane	10.0	9.85	98	78-133	
1,3-Dichlorobenzene	10.0	9.75	98	78-120	
1,4-Dichlorobenzene	10.0	10.3	103	78-120	
2-Butanone (MEK)	20.0	19.2	96	39-163	
2-Hexanone	20.0	16.1	80	43-148	
4-Methyl-2-pentanone (MIBK)	20.0	18.2	91	49-143	
Acetone	20.0	19.3	97	21-162	
Benzene	10.0	8.91	89	80-123	
Bromoform	10.0	11.2	112	49-141	
Bromomethane	10.0	10.6	106	41-175	
Carbon disulfide	10.0	8.90	89	60-138	
Carbon tetrachloride	10.0	12.0	120	63-140	
Chlorobenzene	10.0	10.0	100	80-121	
Chlorodibromomethane	10.0	10.2	102	70-132	
Chloroethane	10.0	3.69	37	33-173	
Chloroform	10.0	11.1	111	79-127	
Chloromethane	10.0	12.5	125	54-143	
cis-1,2-Dichloroethene	10.0	9.29	93	76-128	
cis-1,3-Dichloropropene	10.0	9.17	92	64-132	
Cyclohexane	10.0	8.87	89	58-145	
Dichlorodifluoromethane	10.0	9.29	93	29-148	
Dichlorobromomethane	10.0	11.8	118	77-125	
Ethylbenzene	10.0	9.02	90	80-120	
Isopropylbenzene	10.0	9.17	92	74-120	
Methyl acetate	20.0	20.7	104	52-145	
Methylcyclohexane	10.0	7.72	77	60-125	
Methyl tert-butyl ether	10.0	9.55	96	51-133	
Methylene Chloride	10.0	8.30	83	70-134	
m-Xylene & p-Xylene	10.0	9.60	96	80-120	
o-Xylene	10.0	8.92	89	80-120	
Styrene	10.0	9.33	93	79-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX2001.D

Lab ID: LCS 240-386760/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	11.1	111	74-130	
Toluene	10.0	8.21	82	78-129	
trans-1,2-Dichloroethene	10.0	10.1	101	78-133	
trans-1,3-Dichloropropene	10.0	8.22	82	55-128	
Trichloroethene	10.0	12.5	125	76-125	
Trichlorofluoromethane	10.0	11.9	119	51-164	
Vinyl chloride	10.0	10.0	100	58-143	
Xylenes, Total	20.0	18.5	93	80-120	
Ethylene Dibromide	10.0	8.52	85	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR8596.D

Lab ID: LCS 240-386999/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	11.2	112	69-134	
1,1,2,2-Tetrachloroethane	10.0	10.3	103	65-139	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.0	110	50-156	
1,1,2-Trichloroethane	10.0	10.2	102	78-133	
1,1-Dichloroethane	10.0	9.73	97	75-133	
1,1-Dichloroethene	10.0	10.3	103	65-139	
1,2,4-Trichlorobenzene	10.0	9.72	97	42-133	
1,2-Dibromo-3-Chloropropane	10.0	9.88	99	46-132	
1,2-Dichlorobenzene	10.0	10.0	100	78-120	
1,2-Dichloroethane	10.0	10.2	102	71-135	
1,2-Dichloropropane	10.0	10.6	106	78-133	
1,3-Dichlorobenzene	10.0	9.98	100	78-120	
1,4-Dichlorobenzene	10.0	9.69	97	78-120	
2-Butanone (MEK)	20.0	20.8	104	39-163	
2-Hexanone	20.0	21.1	106	43-148	
4-Methyl-2-pentanone (MIBK)	20.0	21.3	107	49-143	
Acetone	20.0	18.1	91	21-162	
Benzene	10.0	9.73	97	80-123	
Bromoform	10.0	11.7	117	49-141	
Bromomethane	10.0	8.26	83	41-175	
Carbon disulfide	10.0	10.1	101	60-138	
Carbon tetrachloride	10.0	11.5	115	63-140	
Chlorobenzene	10.0	9.84	98	80-121	
Chlorodibromomethane	10.0	11.3	113	70-132	
Chloroethane	10.0	7.48	75	33-173	
Chloroform	10.0	10.1	101	79-127	
Chloromethane	10.0	9.99	100	54-143	
cis-1,2-Dichloroethene	10.0	9.88	99	76-128	
cis-1,3-Dichloropropene	10.0	11.0	110	64-132	
Cyclohexane	10.0	10.8	108	58-145	
Dichlorodifluoromethane	10.0	8.22	82	29-148	
Dichlorobromomethane	10.0	10.4	104	77-125	
Ethylbenzene	10.0	10.6	106	80-120	
Isopropylbenzene	10.0	10.8	108	74-120	
Methyl acetate	20.0	19.4	97	52-145	
Methylcyclohexane	10.0	10.3	103	60-125	
Methyl tert-butyl ether	10.0	10.4	104	51-133	
Methylene Chloride	10.0	10.5	105	70-134	
m-Xylene & p-Xylene	10.0	10.7	107	80-120	
o-Xylene	10.0	10.8	108	80-120	
Styrene	10.0	10.5	105	79-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR8596.D

Lab ID: LCS 240-386999/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	10.1	101	74-130	
Toluene	10.0	10.5	105	78-129	
trans-1,2-Dichloroethene	10.0	10.8	108	78-133	
trans-1,3-Dichloropropene	10.0	10.5	105	55-128	
Trichloroethene	10.0	9.99	100	76-125	
Trichlorofluoromethane	10.0	9.84	98	51-164	
Vinyl chloride	10.0	9.97	100	58-143	
Xylenes, Total	20.0	21.5	108	80-120	
Ethylene Dibromide	10.0	10.4	104	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX2023.D

Lab ID: 240-113949-5 MS Client ID: OW-6 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	ND	25.5	128	51-138	
1,1,2,2-Tetrachloroethane	20.0	ND	13.2	66	60-137	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	ND	12.0	60	31-156	
1,1,2-Trichloroethane	20.0	ND	18.3	92	76-132	
1,1-Dichloroethane	20.0	ND	18.8	94	63-136	
1,1-Dichloroethene	20.0	ND	18.2	91	53-140	
1,2,4-Trichlorobenzene	20.0	ND	14.8	74	30-126	
1,2-Dibromo-3-Chloropropane	20.0	ND	16.2	81	38-124	
1,2-Dichlorobenzene	20.0	ND	19.0	95	64-120	
1,2-Dichloroethane	20.0	ND	24.2	121	65-135	
1,2-Dichloropropane	20.0	ND	18.8	94	70-132	
1,3-Dichlorobenzene	20.0	ND	18.9	94	62-120	
1,4-Dichlorobenzene	20.0	ND	18.4	92	63-120	
2-Butanone (MEK)	40.0	ND	38.4	96	37-156	
2-Hexanone	40.0	ND	31.3	78	42-150	
4-Methyl-2-pentanone (MIBK)	40.0	ND	37.9	95	44-143	
Acetone	40.0	ND	38.0	95	10-168	
Benzene	20.0	ND	18.6	93	71-122	
Bromoform	20.0	ND	20.8	104	44-129	
Bromomethane	20.0	ND	18.8	94	19-187	
Carbon disulfide	20.0	ND	16.4	82	43-144	
Carbon tetrachloride	20.0	ND	27.2	136	41-143	
Chlorobenzene	20.0	ND	20.4	102	70-123	
Chlorodibromomethane	20.0	ND	21.5	107	60-129	
Chloroethane	20.0	ND	6.96	35	11-189	
Chloroform	20.0	ND	20.8	104	68-130	
Chloromethane	20.0	ND	26.0	130	31-154	
cis-1,2-Dichloroethene	20.0	14	33.1	94	64-130	
cis-1,3-Dichloropropene	20.0	ND	19.6	98	48-127	
Cyclohexane	20.0	ND	19.7	99	42-135	
Dichlorodifluoromethane	20.0	ND	18.6	93	28-136	
Dichlorobromomethane	20.0	ND	21.7	109	64-125	
Ethylbenzene	20.0	ND	19.7	99	66-120	
Isopropylbenzene	20.0	ND	18.4	92	59-120	
Methyl acetate	40.0	ND	41.5	104	41-142	
Methylcyclohexane	20.0	ND	16.9	85	37-123	
Methyl tert-butyl ether	20.0	ND	19.3	97	41-136	
Methylene Chloride	20.0	ND	18.0	90	61-130	
m-Xylene & p-Xylene	20.0	ND	18.4	92	63-121	
o-Xylene	20.0	ND	18.9	95	69-120	
Styrene	20.0	ND	18.9	94	68-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX2023.D

Lab ID: 240-113949-5 MS Client ID: OW-6 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Tetrachloroethene	20.0	50	71.8	108	51-136	
Toluene	20.0	ND	16.8	84	62-132	
trans-1,2-Dichloroethene	20.0	ND	19.7	99	68-133	
trans-1,3-Dichloropropene	20.0	ND	16.6	83	40-125	
Trichloroethene	20.0	7.6	32.3	124	55-131	
Trichlorofluoromethane	20.0	ND	24.4	122	37-174	
Vinyl chloride	20.0	ND	21.3	106	43-154	
Xylenes, Total	40.0	ND	37.3	93	67-120	
Ethylene Dibromide	20.0	ND	18.7	94	71-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR8620.D

Lab ID: 240-113949-8 MS Client ID: OW-18 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	ND	10.6	106	51-138	
1,1,2,2-Tetrachloroethane	10.0	ND	9.65	96	60-137	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	ND	9.94	99	31-156	
1,1,2-Trichloroethane	10.0	ND	9.80	98	76-132	
1,1-Dichloroethane	10.0	ND	10.2	100	63-136	
1,1-Dichloroethene	10.0	ND	9.87	99	53-140	
1,2,4-Trichlorobenzene	10.0	ND	9.02	90	30-126	
1,2-Dibromo-3-Chloropropane	10.0	ND	8.92	89	38-124	
1,2-Dichlorobenzene	10.0	ND	9.48	93	64-120	
1,2-Dichloroethane	10.0	ND	9.89	99	65-135	
1,2-Dichloropropane	10.0	ND	9.78	98	70-132	
1,3-Dichlorobenzene	10.0	ND	9.02	90	62-120	
1,4-Dichlorobenzene	10.0	1.1	9.58	85	63-120	
2-Butanone (MEK)	20.0	ND	17.1	85	37-156	
2-Hexanone	20.0	ND	19.4	97	42-150	
4-Methyl-2-pentanone (MIBK)	20.0	ND	19.5	98	44-143	
Acetone	20.0	ND	20.2	101	10-168	
Benzene	10.0	1.8	11.4	95	71-122	
Bromoform	10.0	ND	9.42	94	44-129	
Bromomethane	10.0	ND	4.45	45	19-187	
Carbon disulfide	10.0	ND	9.76	98	43-144	
Carbon tetrachloride	10.0	ND	10.6	106	41-143	
Chlorobenzene	10.0	12	20.8	90	70-123	
Chlorodibromomethane	10.0	ND	10.1	101	60-129	
Chloroethane	10.0	ND	7.71	77	11-189	
Chloroform	10.0	ND	9.60	96	68-130	
Chloromethane	10.0	ND	9.84	98	31-154	
cis-1,2-Dichloroethene	10.0	ND	9.26	90	64-130	
cis-1,3-Dichloropropene	10.0	ND	8.86	89	48-127	
Cyclohexane	10.0	ND	9.73	97	42-135	
Dichlorodifluoromethane	10.0	ND	7.63	76	28-136	
Dichlorobromomethane	10.0	ND	9.96	100	64-125	
Ethylbenzene	10.0	ND	10.5	105	66-120	
Isopropylbenzene	10.0	ND	9.83	98	59-120	
Methyl acetate	20.0	ND	17.6	88	41-142	
Methylcyclohexane	10.0	ND	8.90	89	37-123	
Methyl tert-butyl ether	10.0	ND	9.37	94	41-136	
Methylene Chloride	10.0	ND	10.0	100	61-130	
m-Xylene & p-Xylene	10.0	ND	10.4	101	63-121	
o-Xylene	10.0	ND	10.1	101	69-120	
Styrene	10.0	ND	9.67	97	68-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR8620.D

Lab ID: 240-113949-8 MS Client ID: OW-18 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	ND	9.34	93	51-136	
Toluene	10.0	ND	9.82	98	62-132	
trans-1,2-Dichloroethene	10.0	ND	10.1	101	68-133	
trans-1,3-Dichloropropene	10.0	ND	9.27	93	40-125	
Trichloroethene	10.0	ND	9.55	96	55-131	
Trichlorofluoromethane	10.0	ND	9.34	93	37-174	
Vinyl chloride	10.0	ND	9.27	93	43-154	
Xylenes, Total	20.0	ND	20.5	103	67-120	
Ethylene Dibromide	10.0	ND	9.86	99	71-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX2024.D

Lab ID: 240-113949-5 MSD Client ID: OW-6 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	24.8	124	3	27	51-138	
1,1,2,2-Tetrachloroethane	20.0	13.9	69	5	31	60-137	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.0	90	40	35	31-156	F2
1,1,2-Trichloroethane	20.0	18.8	94	2	25	76-132	
1,1-Dichloroethane	20.0	18.5	92	2	23	63-136	
1,1-Dichloroethene	20.0	19.1	95	4	35	53-140	
1,2,4-Trichlorobenzene	20.0	17.1	86	15	35	30-126	
1,2-Dibromo-3-Chloropropane	20.0	16.5	82	2	35	38-124	
1,2-Dichlorobenzene	20.0	19.2	96	1	30	64-120	
1,2-Dichloroethane	20.0	23.7	119	2	24	65-135	
1,2-Dichloropropane	20.0	20.7	104	10	26	70-132	
1,3-Dichlorobenzene	20.0	19.8	99	5	31	62-120	
1,4-Dichlorobenzene	20.0	20.1	100	9	28	63-120	
2-Butanone (MEK)	40.0	36.1	90	6	35	37-156	
2-Hexanone	40.0	31.4	78	0	35	42-150	
4-Methyl-2-pentanone (MIBK)	40.0	36.9	92	2	35	44-143	
Acetone	40.0	42.2	105	10	35	10-168	
Benzene	20.0	17.4	87	7	22	71-122	
Bromoform	20.0	21.9	110	5	28	44-129	
Bromomethane	20.0	21.1	106	11	35	19-187	
Carbon disulfide	20.0	17.3	87	5	33	43-144	
Carbon tetrachloride	20.0	23.0	115	16	30	41-143	
Chlorobenzene	20.0	20.4	102	0	23	70-123	
Chlorodibromomethane	20.0	21.6	108	1	26	60-129	
Chloroethane	20.0	15.6	78	77	35	11-189	F2
Chloroform	20.0	20.2	101	3	23	68-130	
Chloromethane	20.0	27.2	136	4	35	31-154	
cis-1,2-Dichloroethene	20.0	33.6	97	2	21	64-130	
cis-1,3-Dichloropropene	20.0	19.2	96	2	30	48-127	
Cyclohexane	20.0	20.4	102	3	35	42-135	
Dichlorodifluoromethane	20.0	18.8	94	1	35	28-136	
Dichlorobromomethane	20.0	21.8	109	0	27	64-125	
Ethylbenzene	20.0	18.9	95	4	24	66-120	
Isopropylbenzene	20.0	17.9	90	3	31	59-120	
Methyl acetate	40.0	38.7	97	7	35	41-142	
Methylcyclohexane	20.0	17.6	88	4	35	37-123	
Methyl tert-butyl ether	20.0	19.7	98	2	29	41-136	
Methylene Chloride	20.0	18.7	94	4	29	61-130	
m-Xylene & p-Xylene	20.0	18.8	94	2	25	63-121	
o-Xylene	20.0	18.8	94	1	25	69-120	
Styrene	20.0	18.2	91	3	26	68-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX2024.D

Lab ID: 240-113949-5 MSD Client ID: OW-6 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	20.0	66.4	80	8	23	51-136	
Toluene	20.0	17.4	87	4	23	62-132	
trans-1,2-Dichloroethene	20.0	21.2	106	7	24	68-133	
trans-1,3-Dichloropropene	20.0	15.8	79	5	27	40-125	
Trichloroethene	20.0	29.5	110	9	23	55-131	
Trichlorofluoromethane	20.0	24.7	124	1	35	37-174	
Vinyl chloride	20.0	22.0	110	4	29	43-154	
Xylenes, Total	40.0	37.6	94	1	25	67-120	
Ethylene Dibromide	20.0	18.7	94	0	27	71-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR8621.D

Lab ID: 240-113949-8 MSD Client ID: OW-18 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	10.7	107	1	27	51-138	
1,1,2,2-Tetrachloroethane	10.0	9.51	95	1	31	60-137	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.84	98	1	35	31-156	
1,1,2-Trichloroethane	10.0	9.61	96	2	25	76-132	
1,1-Dichloroethane	10.0	9.86	96	3	23	63-136	
1,1-Dichloroethene	10.0	9.38	94	5	35	53-140	
1,2,4-Trichlorobenzene	10.0	9.40	94	4	35	30-126	
1,2-Dibromo-3-Chloropropane	10.0	9.47	95	6	35	38-124	
1,2-Dichlorobenzene	10.0	9.52	93	0	30	64-120	
1,2-Dichloroethane	10.0	10.0	100	1	24	65-135	
1,2-Dichloropropane	10.0	9.72	97	1	26	70-132	
1,3-Dichlorobenzene	10.0	9.06	91	0	31	62-120	
1,4-Dichlorobenzene	10.0	9.74	87	2	28	63-120	
2-Butanone (MEK)	20.0	17.4	87	2	35	37-156	
2-Hexanone	20.0	20.1	101	4	35	42-150	
4-Methyl-2-pentanone (MIBK)	20.0	19.7	99	1	35	44-143	
Acetone	20.0	21.1	105	4	35	10-168	
Benzene	10.0	11.3	95	1	22	71-122	
Bromoform	10.0	9.77	98	4	28	44-129	
Bromomethane	10.0	6.46	65	37	35	19-187	F2
Carbon disulfide	10.0	9.42	94	3	33	43-144	
Carbon tetrachloride	10.0	10.9	109	3	30	41-143	
Chlorobenzene	10.0	21.0	93	1	23	70-123	
Chlorodibromomethane	10.0	10.2	102	1	26	60-129	
Chloroethane	10.0	8.16	82	6	35	11-189	
Chloroform	10.0	9.91	99	3	23	68-130	
Chloromethane	10.0	10.7	107	9	35	31-154	
cis-1,2-Dichloroethene	10.0	9.34	91	1	21	64-130	
cis-1,3-Dichloropropene	10.0	8.95	89	1	30	48-127	
Cyclohexane	10.0	9.32	93	4	35	42-135	
Dichlorodifluoromethane	10.0	7.86	79	3	35	28-136	
Dichlorobromomethane	10.0	10.2	102	2	27	64-125	
Ethylbenzene	10.0	10.4	104	0	24	66-120	
Isopropylbenzene	10.0	9.95	100	1	31	59-120	
Methyl acetate	20.0	16.7	84	5	35	41-142	
Methylcyclohexane	10.0	8.86	89	0	35	37-123	
Methyl tert-butyl ether	10.0	9.53	95	2	29	41-136	
Methylene Chloride	10.0	9.76	98	3	29	61-130	
m-Xylene & p-Xylene	10.0	10.8	105	4	25	63-121	
o-Xylene	10.0	10.4	104	3	25	69-120	
Styrene	10.0	10.0	100	4	26	68-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXR8621.D

Lab ID: 240-113949-8 MSD Client ID: OW-18 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	10.0	8.80	88	6	23	51-136	
Toluene	10.0	9.46	95	4	23	62-132	
trans-1,2-Dichloroethene	10.0	10.2	102	1	24	68-133	
trans-1,3-Dichloropropene	10.0	9.01	90	3	27	40-125	
Trichloroethene	10.0	9.37	94	2	23	55-131	
Trichlorofluoromethane	10.0	8.78	88	6	35	37-174	
Vinyl chloride	10.0	9.73	97	5	29	43-154	
Xylenes, Total	20.0	21.2	106	3	25	67-120	
Ethylene Dibromide	10.0	9.45	94	4	27	71-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: UXJ1409.D Lab Sample ID: MB 240-386483/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 06/17/2019 09:47

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-386483/4	UXJ1405.D	06/17/2019 08:19
OW-5	240-113949-1	UXJ1430.D	06/17/2019 17:36
OW-5 DUP	240-113949-2	UXJ1431.D	06/17/2019 17:58
TRIP BLANK	240-113949-14	UXJ1432.D	06/17/2019 18:20

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: UXX2004.D Lab Sample ID: MB 240-386760/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX10 Date Analyzed: 06/18/2019 13:34

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-386760/4	UXX2001.D	06/18/2019 12:19
OW-6	240-113949-5	UXX2012.D	06/18/2019 16:55
OW-10R	240-113949-3	UXX2021.D	06/18/2019 20:41
OW-13R	240-113949-4	UXX2022.D	06/18/2019 21:06
OW-6 MS	240-113949-5 MS	UXX2023.D	06/18/2019 21:30
OW-6 MSD	240-113949-5 MSD	UXX2024.D	06/18/2019 21:55
OW-2	240-113949-6	UXX2025.D	06/18/2019 22:19
OW-24	240-113949-7	UXX2026.D	06/18/2019 22:44

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: UXR8599.D Lab Sample ID: MB 240-386999/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX17 Date Analyzed: 06/19/2019 12:45

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-386999/4	UXR8596.D	06/19/2019 11:34
OW-18	240-113949-8	UXR8602.D	06/19/2019 13:57
OW-19	240-113949-9	UXR8603.D	06/19/2019 14:21
PUMP BLANK	240-113949-10	UXR8604.D	06/19/2019 14:45
OW-22	240-113949-11	UXR8605.D	06/19/2019 15:09
OW-21	240-113949-12	UXR8606.D	06/19/2019 15:33
FIELD BLANK	240-113949-13	UXR8607.D	06/19/2019 15:57
OW-18 MS	240-113949-8 MS	UXR8620.D	06/19/2019 21:07
OW-18 MSD	240-113949-8 MSD	UXR8621.D	06/19/2019 21:31

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: BFB1278.D BFB Injection Date: 04/05/2019

Instrument ID: A3UX10 BFB Injection Time: 17:14

Analysis Batch No.: 375006

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	31.7	
75	30.0 - 60.0 % of mass 95	50.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.7	(0.9) 1
174	50.0 - 120.00 % of mass 95	73.6	
175	5.0 - 9.0 % of mass 174	5.0	(6.7) 1
176	95.0 - 101.0 % of mass 174	72.3	(98.3) 1
177	5.0 - 9.0 % of mass 176	5.5	(7.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-375006/3	240-0085857-003.D	04/05/2019	18:02
	STD8260 240-375006/4	240-0085857-004.D	04/05/2019	18:27
	STD8260 240-375006/5	240-0085857-005.D	04/05/2019	18:51
	STD8260 240-375006/6	240-0085857-006.D	04/05/2019	19:16
	STD8260 240-375006/7	240-0085857-007.D	04/05/2019	19:41
	STD8260 240-375006/8	240-0085857-008.D	04/05/2019	20:06
	STD8260 240-375006/9	240-0085857-009.D	04/05/2019	20:30
	ICV 240-375006/10	240-0085857-010.D	04/05/2019	20:55

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: BFB1279.D BFB Injection Date: 04/08/2019

Instrument ID: A3UX10 BFB Injection Time: 10:16

Analysis Batch No.: 375255

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	30.4	
75	30.0 - 60.0 % of mass 95	50.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.2	(0.2) 1
174	50.0 - 120.00 % of mass 95	78.5	
175	5.0 - 9.0 % of mass 174	5.5	(6.9) 1
176	95.0 - 101.0 % of mass 174	78.0	(99.4) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 240-375255/5	240-0085913-005.D	04/08/2019	11:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: BFB1362.D BFB Injection Date: 06/18/2019

Instrument ID: A3UX10 BFB Injection Time: 11:04

Analysis Batch No.: 386760

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	31.5	
75	30.0 - 60.0 % of mass 95	54.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.5	
173	Less than 2.0 % of mass 174	0.5	(0.5) 1
174	50.0 - 120.00 % of mass 95	90.5	
175	5.0 - 9.0 % of mass 174	5.2	(5.8) 1
176	95.0 - 101.0 % of mass 174	86.3	(95.4) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-386760/2	UXX1999.D	06/18/2019	11:29
	CCV 240-386760/3	UXX2000.D	06/18/2019	11:54
	LCS 240-386760/4	UXX2001.D	06/18/2019	12:19
	MB 240-386760/7	UXX2004.D	06/18/2019	13:34
OW-6	240-113949-5	UXX2012.D	06/18/2019	16:55
OW-10R	240-113949-3	UXX2021.D	06/18/2019	20:41
OW-13R	240-113949-4	UXX2022.D	06/18/2019	21:06
OW-6 MS	240-113949-5 MS	UXX2023.D	06/18/2019	21:30
OW-6 MSD	240-113949-5 MSD	UXX2024.D	06/18/2019	21:55
OW-2	240-113949-6	UXX2025.D	06/18/2019	22:19
OW-24	240-113949-7	UXX2026.D	06/18/2019	22:44

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: BFB0207A.D BFB Injection Date: 02/07/2019

Instrument ID: A3UX11 BFB Injection Time: 12:42

Analysis Batch No.: 367104

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	95.2	
175	5.0 - 9.0 % of mass 174	7.4	(7.8) 1
176	95.0 - 101.0 % of mass 174	91.0	(95.5) 1
177	5.0 - 9.0 % of mass 176	5.6	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-367104/2	UXJ8021.D	02/07/2019	13:09
	STD8260 240-367104/3	UXJ8022.D	02/07/2019	13:31
	STD8260 240-367104/4	UXJ8023.D	02/07/2019	13:53
	STD8260 240-367104/5	UXJ8024.D	02/07/2019	14:15
	STD8260 240-367104/6	UXJ8025.D	02/07/2019	14:38
	STD8260 240-367104/7	UXJ8026.D	02/07/2019	15:00
	ICV 240-367104/14	UXJ8027.D	02/07/2019	15:22
	ICV 240-367104/15	UXJ8034.D	02/07/2019	17:58

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: BFB0617B.D BFB Injection Date: 06/17/2019

Instrument ID: A3UX11 BFB Injection Time: 07:28

Analysis Batch No.: 386483

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.9	
75	30.0 - 60.0 % of mass 95	47.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.3	(0.4) 1
174	50.0 - 120.00 % of mass 95	85.9	
175	5.0 - 9.0 % of mass 174	7.1	(8.2) 1
176	95.0 - 101.0 % of mass 174	82.1	(95.6) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-386483/2	UXJ1404.D	06/17/2019	07:57
	LCS 240-386483/4	UXJ1405.D	06/17/2019	08:19
	CCV 240-386483/3	UXJ1406.D	06/17/2019	08:41
	MB 240-386483/6	UXJ1409.D	06/17/2019	09:47
OW-5	240-113949-1	UXJ1430.D	06/17/2019	17:36
OW-5 DUP	240-113949-2	UXJ1431.D	06/17/2019	17:58
TRIP BLANK	240-113949-14	UXJ1432.D	06/17/2019	18:20

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: BFB2536.D BFB Injection Date: 06/11/2019

Instrument ID: A3UX17 BFB Injection Time: 17:04

Analysis Batch No.: 385628

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.0	
75	30.0 - 60.0 % of mass 95	50.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	50.0 - 120.00 % of mass 95	85.3	
175	5.0 - 9.0 % of mass 174	6.5	(7.6) 1
176	95.0 - 101.0 % of mass 174	81.1	(95.1) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-385628/2	UXR8410.D	06/11/2019	17:37
	STD8260 240-385628/3	UXR8411.D	06/11/2019	18:01
	STD8260 240-385628/4	UXR8412.D	06/11/2019	18:25
	STD8260 240-385628/5	UXR8413.D	06/11/2019	18:49
	STD8260 240-385628/6	UXR8414.D	06/11/2019	19:12
	STD8260 240-385628/7	UXR8415.D	06/11/2019	19:36
	STD8260 240-385628/8	UXR8416.D	06/11/2019	20:00
	ICV 240-385628/9	UXR8417.D	06/11/2019	20:24
	ICV 240-385628/17	UXR8425.D	06/11/2019	23:34

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab File ID: BFB2546.D BFB Injection Date: 06/19/2019

Instrument ID: A3UX17 BFB Injection Time: 10:22

Analysis Batch No.: 386999

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.3	
75	30.0 - 60.0 % of mass 95	48.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.7	(0.9) 1
174	50.0 - 120.00 % of mass 95	78.5	
175	5.0 - 9.0 % of mass 174	5.9	(7.5) 1
176	95.0 - 101.0 % of mass 174	76.2	(97.0) 1
177	5.0 - 9.0 % of mass 176	4.5	(5.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-386999/2	UXR8594.D	06/19/2019	10:46
	CCV 240-386999/3	UXR8595.D	06/19/2019	11:10
	LCS 240-386999/4	UXR8596.D	06/19/2019	11:34
	MB 240-386999/7	UXR8599.D	06/19/2019	12:45
OW-18	240-113949-8	UXR8602.D	06/19/2019	13:57
OW-19	240-113949-9	UXR8603.D	06/19/2019	14:21
PUMP BLANK	240-113949-10	UXR8604.D	06/19/2019	14:45
OW-22	240-113949-11	UXR8605.D	06/19/2019	15:09
OW-21	240-113949-12	UXR8606.D	06/19/2019	15:33
FIELD BLANK	240-113949-13	UXR8607.D	06/19/2019	15:57
OW-18 MS	240-113949-8 MS	UXR8620.D	06/19/2019	21:07
OW-18 MSD	240-113949-8 MSD	UXR8621.D	06/19/2019	21:31

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Sample No.: STD8260 240-375006/5 Date Analyzed: 04/05/2019 18:51

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 240-0085857-005.D Heated Purge: (Y/N) N

Calibration ID: 50434

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		520297	4.97	385359	7.64	222732	9.86
UPPER LIMIT		1040594	5.47	770718	8.14	445464	10.36
LOWER LIMIT		260149	4.47	192680	7.14	111366	9.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-375006/10		524868	4.98	372354	7.64	206834	9.86
CCVIS 240-386760/2		364512	4.97	311031	7.64	211894	9.86

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Sample No.: CCVIS 240-386760/2 Date Analyzed: 06/18/2019 11:29

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX1999.D Heated Purge: (Y/N) N

Calibration ID: 50436

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		364512	4.97	311031	7.64	211894	9.86
UPPER LIMIT		729024	5.47	622062	8.14	423788	10.36
LOWER LIMIT		182256	4.47	155516	7.14	105947	9.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-386760/3		354138	4.97	303806	7.64	192997	9.86
LCS 240-386760/4		346643	4.98	313155	7.64	191863	9.86
MB 240-386760/7		350747	4.98	311233	7.64	175228	9.86
240-113949-5	OW-6	331238	4.98	292950	7.64	184608	9.86
240-113949-3	OW-10R	348780	4.98	306724	7.64	185771	9.86
240-113949-4	OW-13R	324070	4.98	287090	7.64	168843	9.86
240-113949-5 MS	OW-6 MS	326921	4.98	292531	7.64	192938	9.87
240-113949-5 MSD	OW-6 MSD	336641	4.98	296654	7.64	186109	9.86
240-113949-6	OW-2	339176	4.98	280325	7.64	172700	9.86
240-113949-7	OW-24	337784	4.98	290065	7.64	172824	9.86

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Sample No.: STD8260 240-367104/4 Date Analyzed: 02/07/2019 13:53

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ8023.D Heated Purge: (Y/N) N

Calibration ID: 49373

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1172070	4.66	751566	7.31	416048	9.52
UPPER LIMIT		2344140	5.16	1503132	7.81	832096	10.02
LOWER LIMIT		586035	4.16	375783	6.81	208024	9.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-367104/14		1136874	4.66	742699	7.31	406319	9.52
ICV 240-367104/15		1095747	4.66	685491	7.31	350426	9.52
CCVIS 240-386483/2		952995	4.66	635700	7.31	304755	9.52

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Sample No.: CCVIS 240-386483/2 Date Analyzed: 06/17/2019 07:57

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ1404.D Heated Purge: (Y/N) N

Calibration ID: 49379

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		952995	4.66	635700	7.31	304755	9.52
UPPER LIMIT		1905990	5.16	1271400	7.81	609510	10.02
LOWER LIMIT		476498	4.16	317850	6.81	152378	9.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-386483/4		826569	4.66	545595	7.31	257052	9.52
CCV 240-386483/3		772394	4.66	530991	7.31	213886	9.52
MB 240-386483/6		684337	4.66	464769	7.31	193051	9.52
240-113949-1	OW-5	720690	4.66	460254	7.31	196227	9.52
240-113949-2	OW-5 DUP	717899	4.66	479415	7.31	209316	9.52
240-113949-14	TRIP BLANK	655811	4.66	413095	7.31	184597	9.52

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Sample No.: STD8260 240-385628/4 Date Analyzed: 06/11/2019 18:25

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR8412.D Heated Purge: (Y/N) N

Calibration ID: 51508

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1832420	5.78	1276440	8.47	667379	10.72
UPPER LIMIT		3664840	6.28	2552880	8.97	1334758	11.22
LOWER LIMIT		916210	5.28	638220	7.97	333690	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-385628/9		1780030	5.78	1242464	8.47	669972	10.72
ICV 240-385628/17		1718303	5.78	1341962	8.47	516289	10.72
CCVIS 240-386999/2		1574515	5.78	1125550	8.47	646610	10.72

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Sample No.: CCVIS 240-386999/2 Date Analyzed: 06/19/2019 10:46

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR8594.D Heated Purge: (Y/N) N

Calibration ID: 51510

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1574515	5.78	1125550	8.47	646610	10.72
UPPER LIMIT		3149030	6.28	2251100	8.97	1293220	11.22
LOWER LIMIT		787258	5.28	562775	7.97	323305	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-386999/3		1535786	5.78	1220462	8.47	505701	10.72
LCS 240-386999/4		1636599	5.78	1154703	8.47	649356	10.72
MB 240-386999/7		1298283	5.78	1005117	8.47	449853	10.72
240-113949-8	OW-18	1258269	5.78	951230	8.47	476520	10.72
240-113949-9	OW-19	1272248	5.78	953313	8.47	445744	10.72
240-113949-10	PUMP BLANK	1248476	5.78	948825	8.47	413163	10.72
240-113949-11	OW-22	1267433	5.78	933654	8.48	437385	10.72
240-113949-12	OW-21	1240263	5.78	951680	8.47	417909	10.72
240-113949-13	FIELD BLANK	1231549	5.78	938575	8.48	407527	10.72
240-113949-8 MS	OW-18 MS	1453089	5.78	1028224	8.47	605986	10.72
240-113949-8 MSD	OW-18 MSD	1428301	5.78	1045781	8.47	620891	10.72

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-5 Lab Sample ID: 240-113949-1

Matrix: Water Lab File ID: UXJ1430.D

Analysis Method: 8260B Date Collected: 06/04/2019 16:19

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	4.5		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-5 Lab Sample ID: 240-113949-1

Matrix: Water Lab File ID: UXJ1430.D

Analysis Method: 8260B Date Collected: 06/04/2019 16:19

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 17:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	6.5		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	1.6		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		70-123
1868-53-7	Dibromofluoromethane (Surr)	109		75-128
460-00-4	4-Bromofluorobenzene (Surr)	91		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1430.D
Lims ID: 240-113949-B-1
Client ID: OW-5
Sample Type: Client
Inject. Date: 17-Jun-2019 17:36:30 ALS Bottle#: 27 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-058
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:09 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: evansle Date: 18-Jun-2019 09:15:47

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.659	4.659	0.000	99	720690	20.0	
*	2 Chlorobenzene-d5	117	7.309	7.309	0.000	83	460254	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	94	196227	20.0	
$	4 Dibromofluoromethane (Surr	113	4.091	4.091	0.000	96	184102	21.9	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	98	192006	18.9	
$	6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	563788	20.6	
$	7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	93	158689	18.2	
	9 Dichlorodifluoromethane	85		1.156				ND	
	10 Chloromethane	50		1.310				ND	
	12 Vinyl chloride	62		1.381				ND	
	15 Bromomethane	94		1.594				ND	
	16 Chloroethane	64		1.665				ND	
	18 Trichlorofluoromethane	101		1.831				ND	
	21 1,1-Dichloroethene	96		2.245				ND	
	22 1,1,2-Trichloro-1,2,2-trif	151		2.280				ND	
	23 Acetone	43	2.280	2.292	-0.012	100	17169	4.44	
	26 Carbon disulfide	76		2.410				ND	
	29 Methyl acetate	43		2.564				ND	
	30 Methylene Chloride	84		2.647				ND	
	34 trans-1,2-Dichloroethene	96		2.872				ND	
	33 Methyl tert-butyl ether	73		2.884				ND	
	36 1,1-Dichloroethane	63		3.215				ND	
	41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	76	46203	4.51	
	42 2-Butanone (MEK)	43		3.712				ND	U
	49 Chloroform	83		3.961				ND	
	50 1,1,1-Trichloroethane	97		4.114				ND	
	51 Cyclohexane	56		4.162				ND	
	53 Carbon tetrachloride	117		4.256				ND	
	55 Benzene	78		4.422				ND	
	56 1,2-Dichloroethane	62		4.434				ND	
	60 Trichloroethene	130	4.966	4.966	0.000	96	16735	1.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
62 Methylcyclohexane	83		5.132				ND	
63 1,2-Dichloropropane	63		5.156				ND	
67 Dichlorobromomethane	83		5.392				ND	
70 cis-1,3-Dichloropropene	75		5.771				ND	
71 4-Methyl-2-pentanone (MIBK	43		5.913				ND	
72 Toluene	91		6.067				ND	
73 trans-1,3-Dichloropropene	75		6.268				ND	
75 1,1,2-Trichloroethane	97		6.422				ND	
76 Tetrachloroethene	164	6.552	6.552	0.000	96	48061	6.47	
78 2-Hexanone	43		6.658				ND	
80 Chlorodibromomethane	129		6.777				ND	
82 Ethylene Dibromide	107		6.871				ND	
84 Chlorobenzene	112		7.333				ND	
86 Ethylbenzene	106		7.439				ND	
87 m-Xylene & p-Xylene	106		7.546				ND	
88 o-Xylene	106		7.913				ND	
89 Styrene	104		7.925				ND	
90 Bromoform	173		8.090				ND	
91 Isopropylbenzene	105		8.268				ND	
94 1,1,2,2-Tetrachloroethane	83		8.552				ND	
106 1,3-Dichlorobenzene	146		9.451				ND	
108 1,4-Dichlorobenzene	146		9.546				ND	
112 1,2-Dichlorobenzene	146		9.901				ND	
114 1,2-Dibromo-3-Chloropropan	157		10.670				ND	
116 1,2,4-Trichlorobenzene	180		11.486				ND	
S 132 Xylenes, Total	106		16.030				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00080	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00076	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent

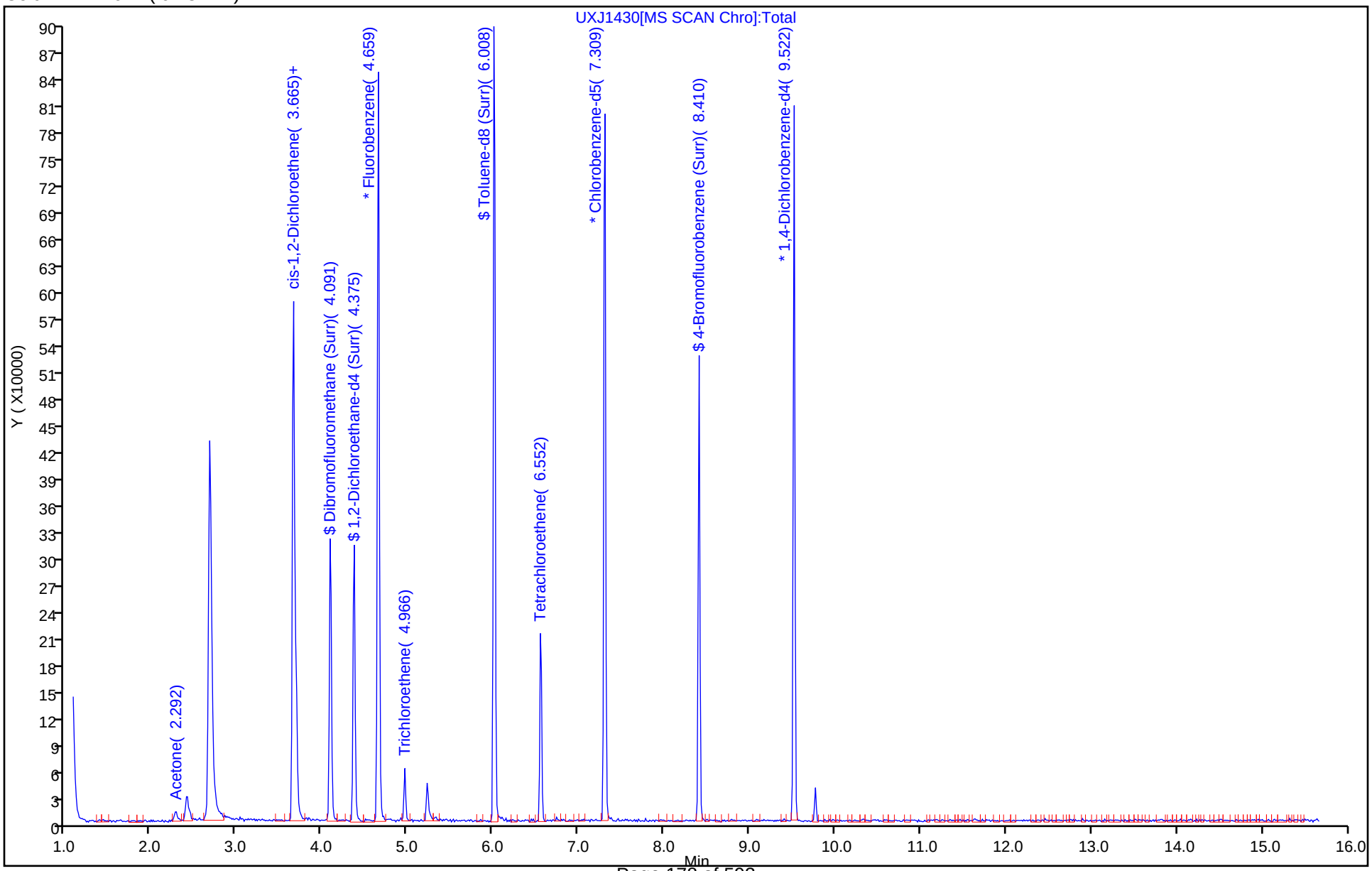
Report Date: 18-Jun-2019 09:18:20 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1430.D

Injection Date:	17-Jun-2019 17:36:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-113949-B-1	Lab Sample ID:	240-113949-1	Worklist Smp#:	58
Client ID:	OW-5				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1430.D
Lims ID: 240-113949-B-1
Client ID: OW-5
Sample Type: Client
Inject. Date: 17-Jun-2019 17:36:30 ALS Bottle#: 27 Worklist Smp#: 58
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-058
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:09 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: evansle Date: 18-Jun-2019 09:15:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.9	109.48
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.9	94.35
$ 6 Toluene-d8 (Surr)	20.0	20.6	103.22
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.2	90.84

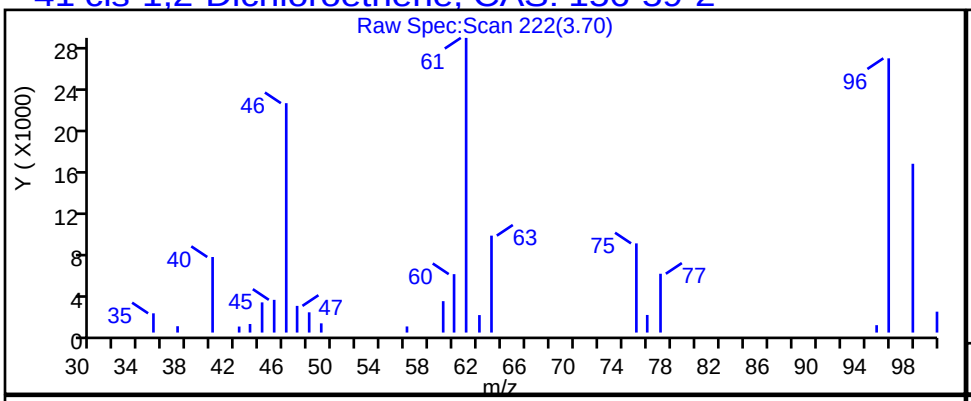
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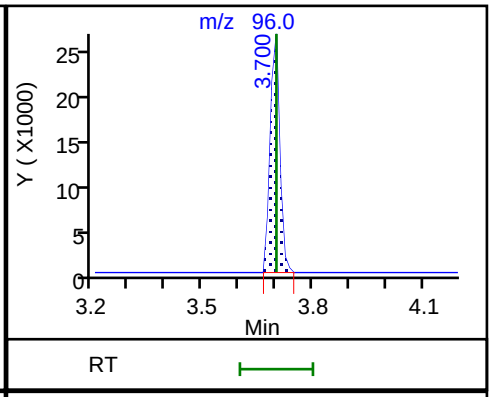
Eurofins TestAmerica, Canton

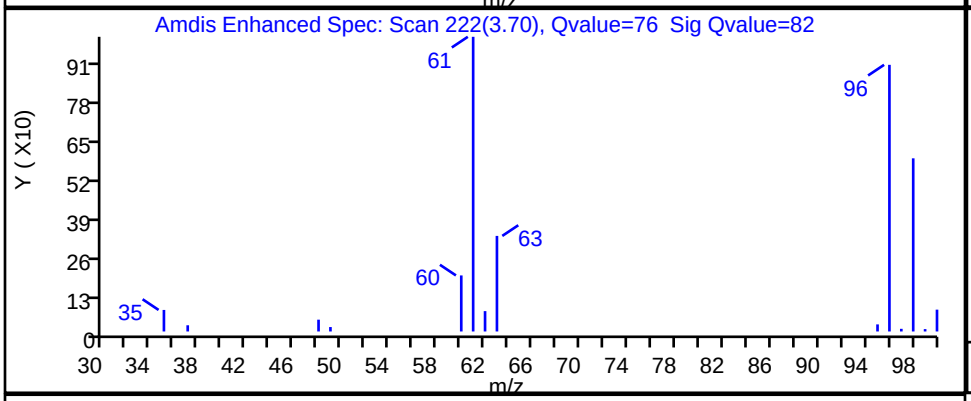
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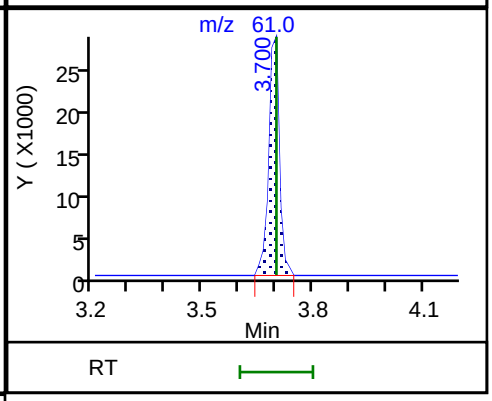
Injection Date:	17-Jun-2019 17:36:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-1	Lab Sample ID:	240-113949-1		
Client ID:	OW-5				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

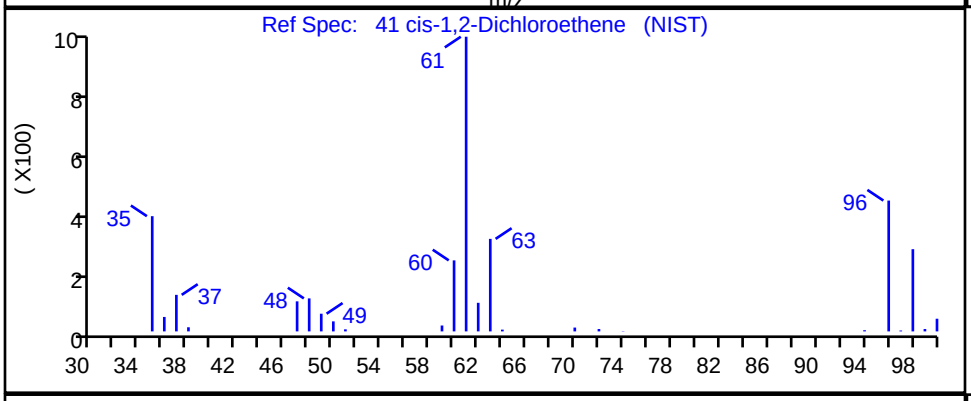
41 cis-1,2-Dichloroethene, CAS: 156-59-2

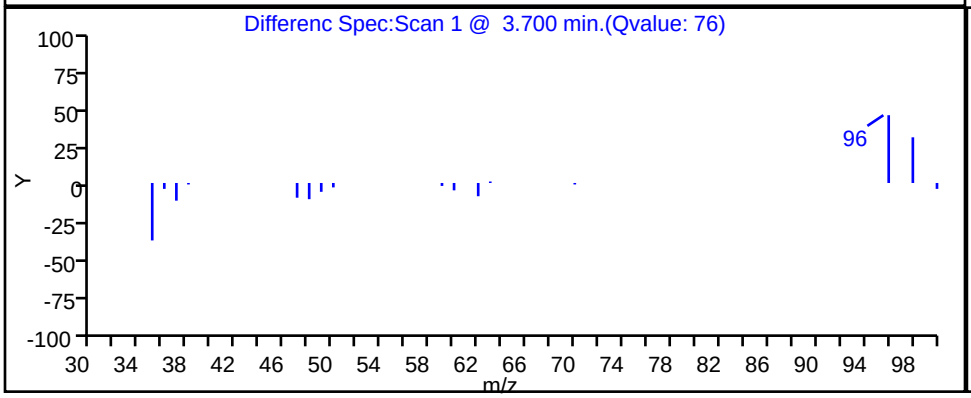


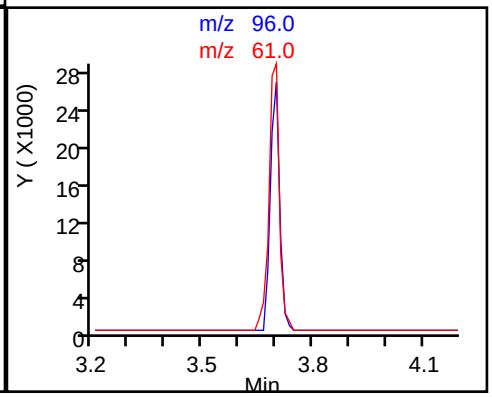












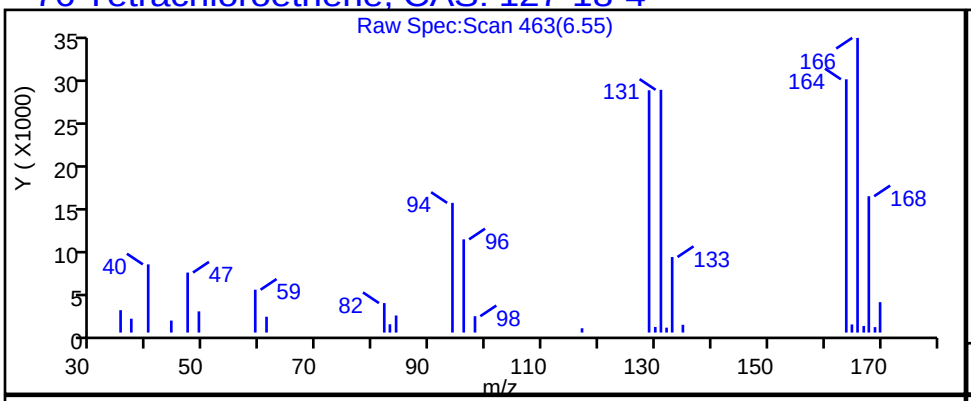
Report Date: 18-Jun-2019 09:18:21 Chrom Revision: 2.3 02-Jun-2019 10:27:32

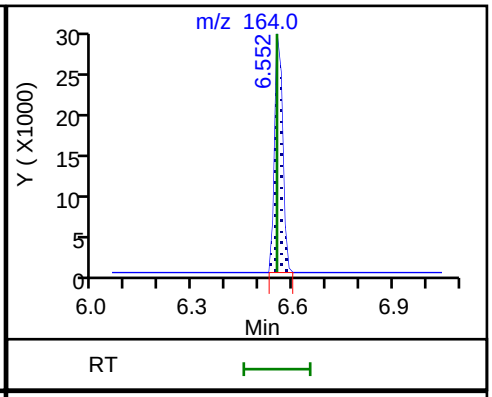
Eurofins TestAmerica, Canton

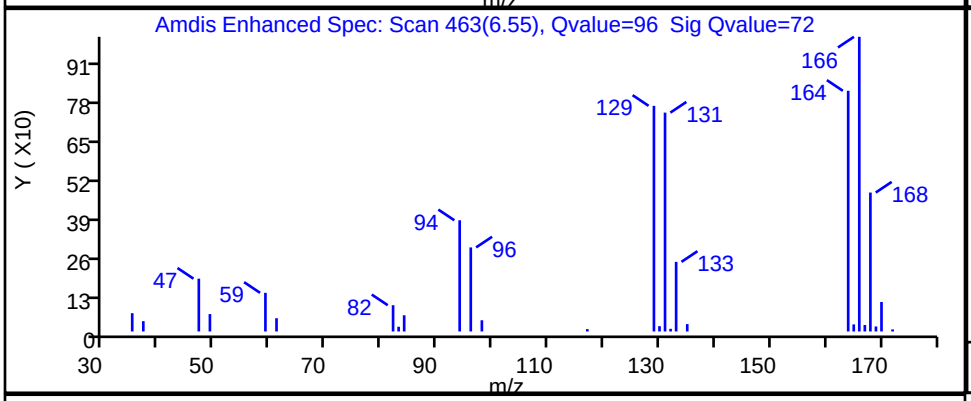
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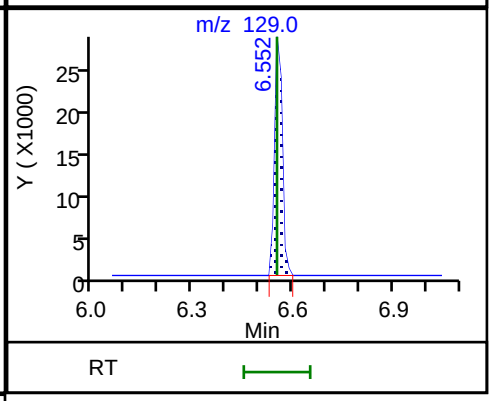
Injection Date:	17-Jun-2019 17:36:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-1	Lab Sample ID:	240-113949-1		
Client ID:	OW-5				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

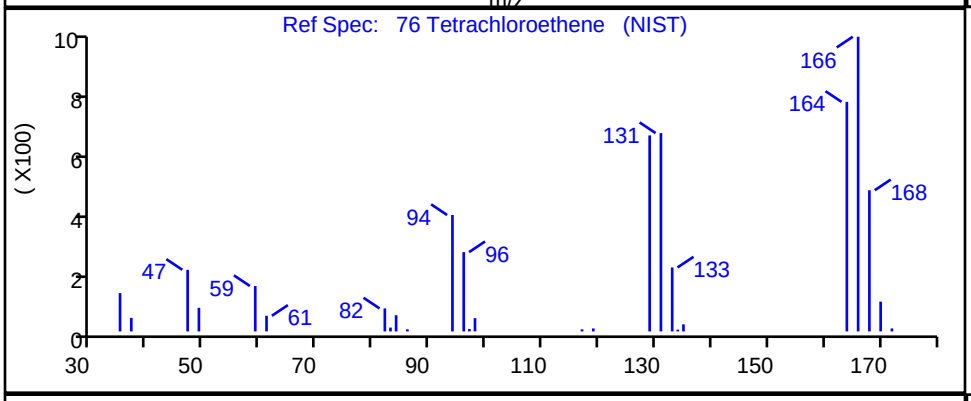
76 Tetrachloroethene, CAS: 127-18-4

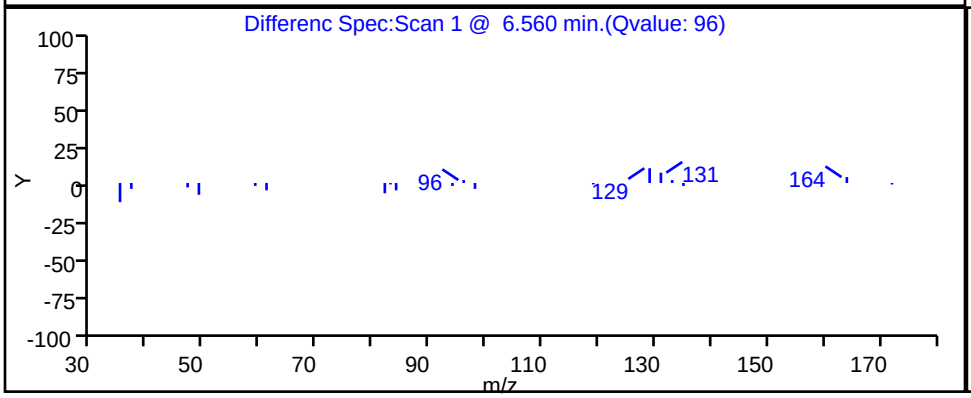


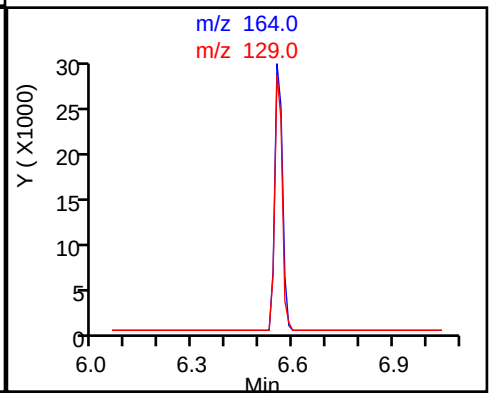












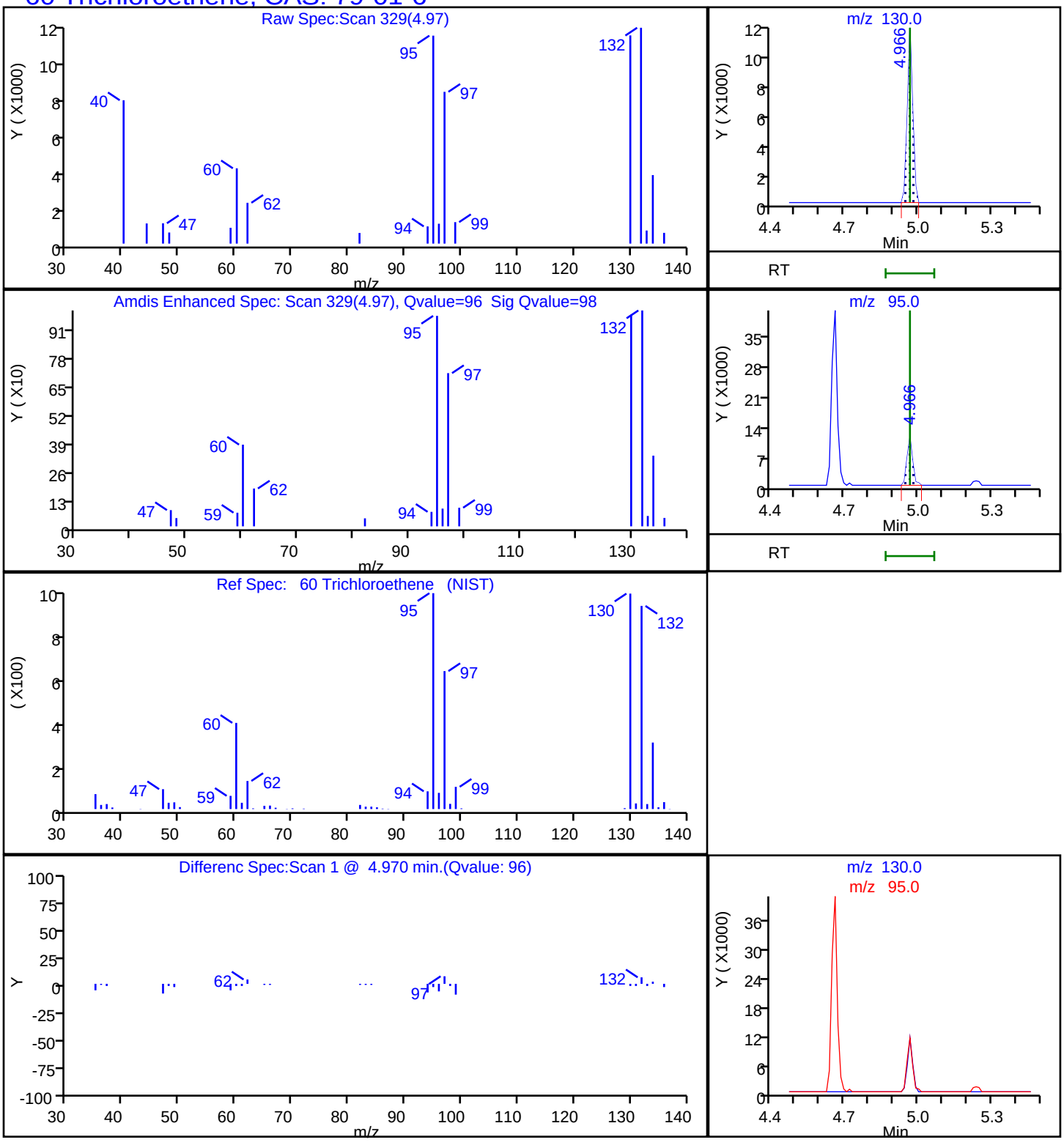
Report Date: 18-Jun-2019 09:18:21 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1430.D

Injection Date:	17-Jun-2019 17:36:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-1	Lab Sample ID:	240-113949-1		
Client ID:	OW-5				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



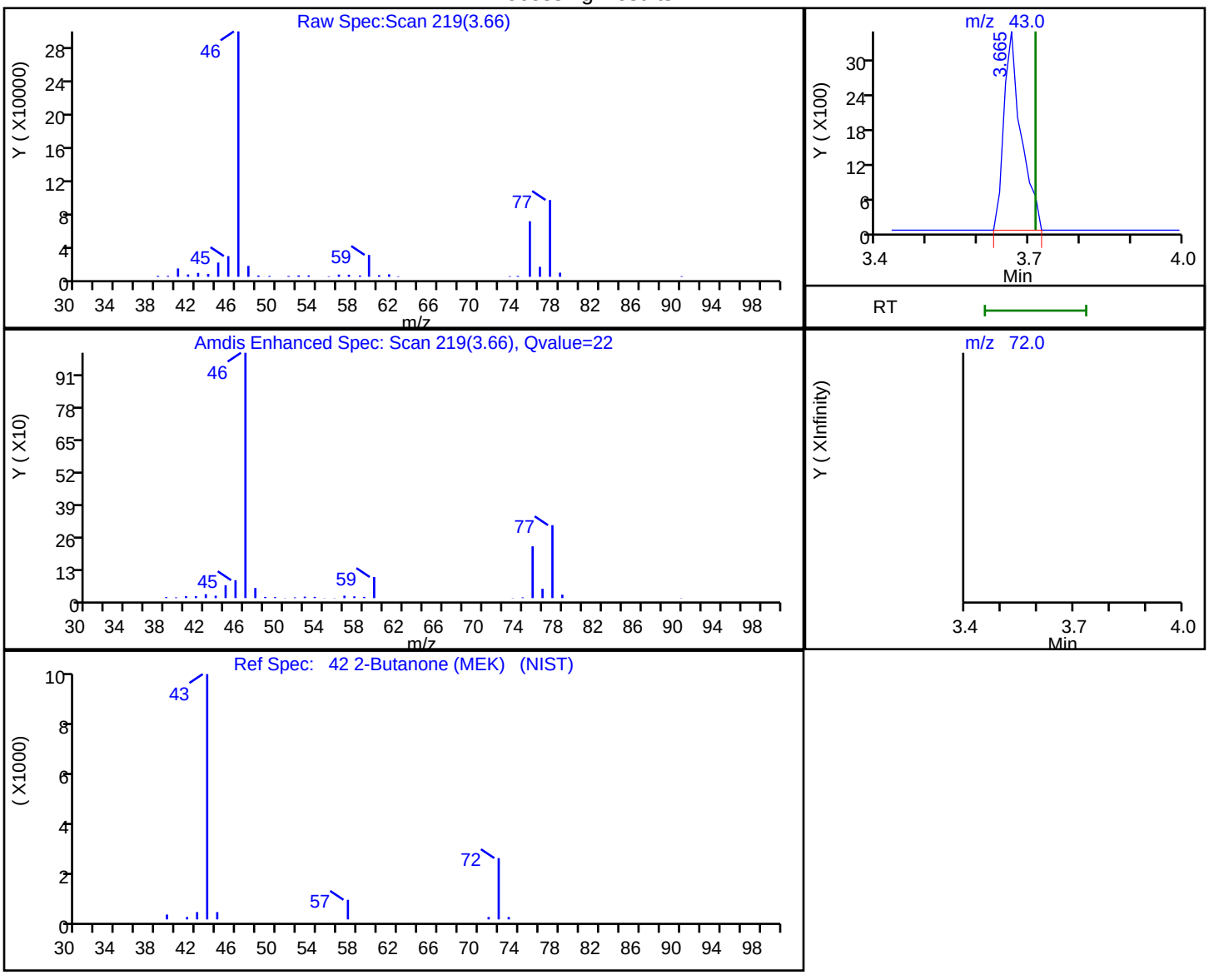
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1430.D				
Injection Date:	17-Jun-2019 17:36:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-1	Lab Sample ID:	240-113949-1		
Client ID:	OW-5				
Operator ID:	043582	ALS Bottle#:	27	Worklist Smp#:	58
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.66	43.00	8069	1.657834
3.71	72.00	0	

Reviewer: evansle, 18-Jun-2019 09:15:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-5 DUP Lab Sample ID: 240-113949-2

Matrix: Water Lab File ID: UXJ1431.D

Analysis Method: 8260B Date Collected: 06/04/2019 16:20

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 17:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	4.4		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-5 DUP Lab Sample ID: 240-113949-2

Matrix: Water Lab File ID: UXJ1431.D

Analysis Method: 8260B Date Collected: 06/04/2019 16:20

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 17:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	6.2		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	1.8		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		70-123
1868-53-7	Dibromofluoromethane (Surr)	102		75-128
460-00-4	4-Bromofluorobenzene (Surr)	92		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1431.D
Lims ID: 240-113949-B-2
Client ID: OW-5 DUP
Sample Type: Client
Inject. Date: 17-Jun-2019 17:58:30 ALS Bottle#: 28 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-059
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 10:53:03 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.659	4.659	0.000	100	717899	20.0	
*	2 Chlorobenzene-d5	117	7.309	7.309	0.000	84	479415	20.0	
*	3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	93	209316	20.0	
$	4 Dibromofluoromethane (Surr	113	4.091	4.091	0.000	98	171148	20.4	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	98	195674	19.3	
$	6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	93	584155	20.5	
$	7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	94	168255	18.5	
	9 Dichlorodifluoromethane	85		1.156				ND	
	10 Chloromethane	50		1.310				ND	
	12 Vinyl chloride	62		1.381				ND	
	15 Bromomethane	94		1.594				ND	
	16 Chloroethane	64		1.665				ND	
	18 Trichlorofluoromethane	101		1.831				ND	
	21 1,1-Dichloroethene	96		2.245				ND	
	22 1,1,2-Trichloro-1,2,2-trif	151		2.280				ND	
	23 Acetone	43	2.280	2.292	-0.012	98	12566	3.26	
	26 Carbon disulfide	76		2.410				ND	
	29 Methyl acetate	43		2.564				ND	
	30 Methylene Chloride	84		2.647				ND	
	34 trans-1,2-Dichloroethene	96		2.872				ND	
	33 Methyl tert-butyl ether	73		2.884				ND	
	36 1,1-Dichloroethane	63		3.215				ND	
	41 cis-1,2-Dichloroethene	96	3.688	3.700	-0.012	75	45039	4.41	
	42 2-Butanone (MEK)	43		3.712				ND	U
	49 Chloroform	83		3.961				ND	
	50 1,1,1-Trichloroethane	97		4.114				ND	
	51 Cyclohexane	56		4.162				ND	
	53 Carbon tetrachloride	117		4.256				ND	
	55 Benzene	78		4.422				ND	
	56 1,2-Dichloroethane	62		4.434				ND	
	60 Trichloroethene	130	4.966	4.966	0.000	92	18976	1.78	
	62 Methylcyclohexane	83		5.132				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
63 1,2-Dichloropropane	63		5.156				ND	
67 Dichlorobromomethane	83		5.392				ND	
70 cis-1,3-Dichloropropene	75		5.771				ND	
71 4-Methyl-2-pentanone (MIBK	43		5.913				ND	
72 Toluene	91		6.067				ND	
73 trans-1,3-Dichloropropene	75		6.268				ND	
75 1,1,2-Trichloroethane	97		6.422				ND	
76 Tetrachloroethene	164	6.552	6.552	0.000	97	48248	6.23	
78 2-Hexanone	43		6.658				ND	
80 Chlorodibromomethane	129		6.777				ND	
82 Ethylene Dibromide	107		6.871				ND	
84 Chlorobenzene	112		7.333				ND	
86 Ethylbenzene	106		7.439				ND	
87 m-Xylene & p-Xylene	106		7.546				ND	
88 o-Xylene	106		7.913				ND	
89 Styrene	104		7.925				ND	
90 Bromoform	173		8.090				ND	
91 Isopropylbenzene	105		8.268				ND	
94 1,1,2,2-Tetrachloroethane	83		8.552				ND	
106 1,3-Dichlorobenzene	146		9.451				ND	
108 1,4-Dichlorobenzene	146		9.546				ND	
112 1,2-Dichlorobenzene	146		9.901				ND	
114 1,2-Dibromo-3-Chloropropan	157		10.670				ND	
116 1,2,4-Trichlorobenzene	180		11.486				ND	
S 132 Xylenes, Total	106		16.030				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00080	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00076	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent

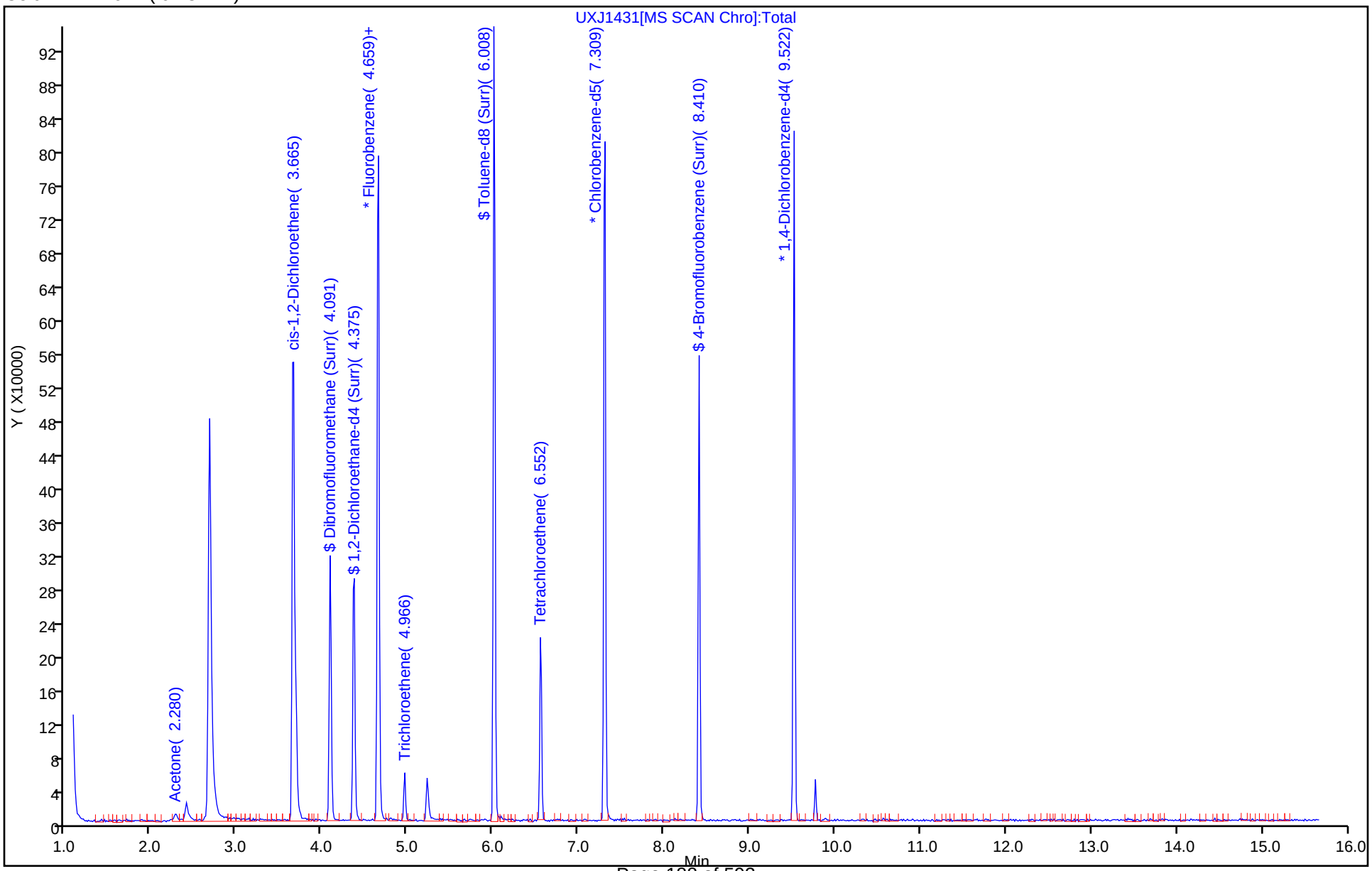
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1431.D

Injection Date:	17-Jun-2019 17:58:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-113949-B-2	Lab Sample ID:	240-113949-2	Worklist Smp#:	59
Client ID:	OW-5 DUP				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1431.D
Lims ID: 240-113949-B-2
Client ID: OW-5 DUP
Sample Type: Client
Inject. Date: 17-Jun-2019 17:58:30 ALS Bottle#: 28 Worklist Smp#: 59
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-059
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 10:53:03 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	20.4	102.17
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.3	96.53
$ 6 Toluene-d8 (Surr)	20.0	20.5	102.68
$ 7 4-Bromofluorobenzene (Surr)	20.0	18.5	92.47

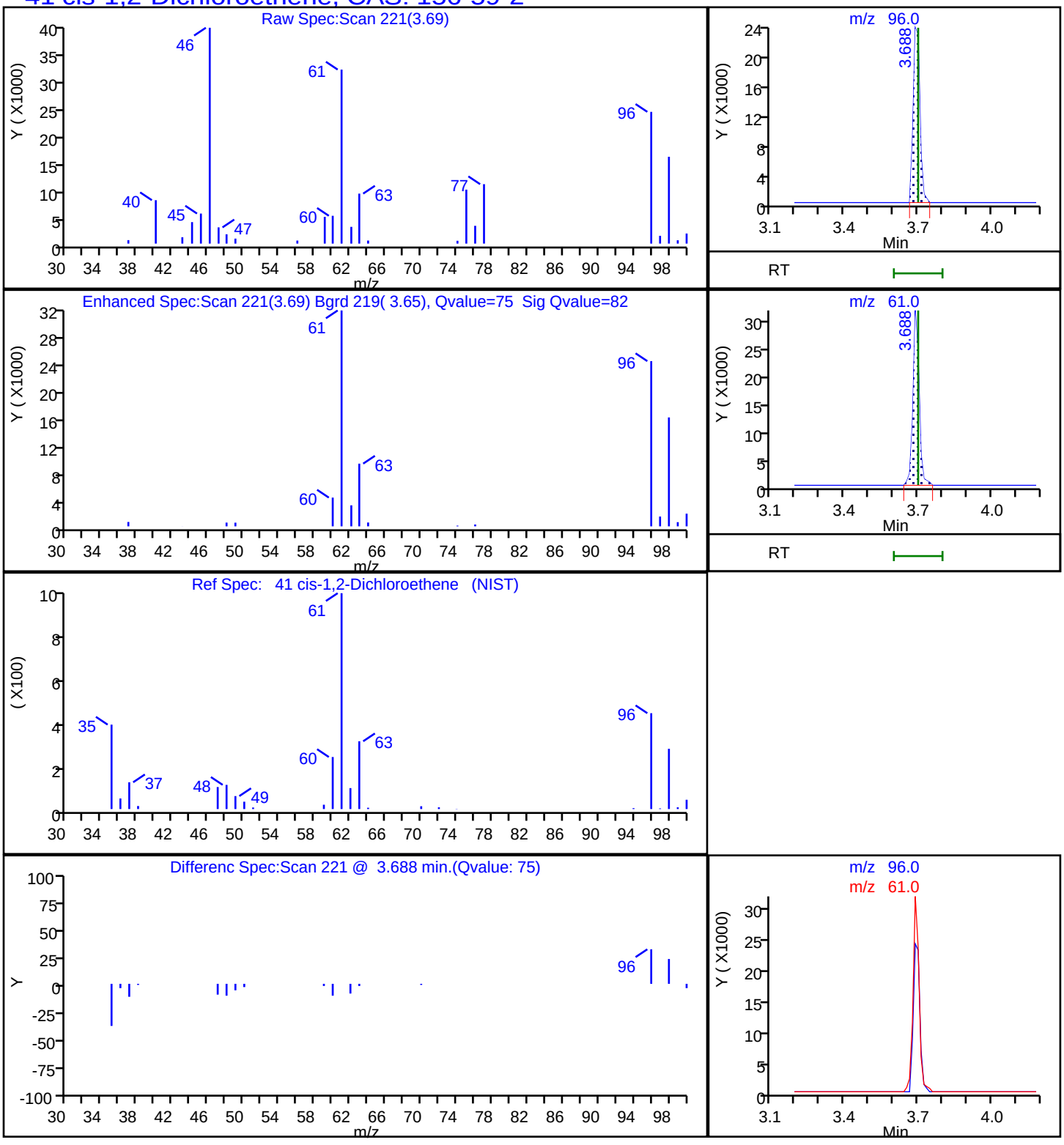
Report Date: 18-Jun-2019 10:53:04 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1431.D

Injection Date:	17-Jun-2019 17:58:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-2	Lab Sample ID:	240-113949-2		
Client ID:	OW-5 DUP				
Operator ID:	043582	ALS Bottle#:	28	Worklist Smp#:	59
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

41 cis-1,2-Dichloroethene, CAS: 156-59-2



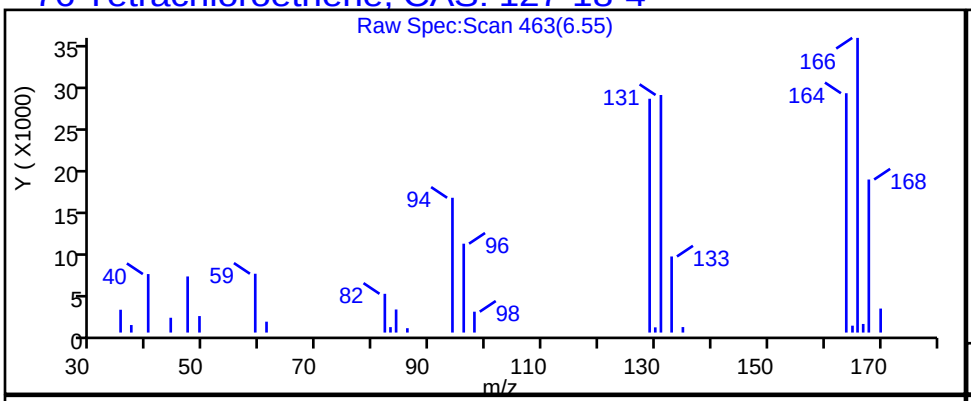
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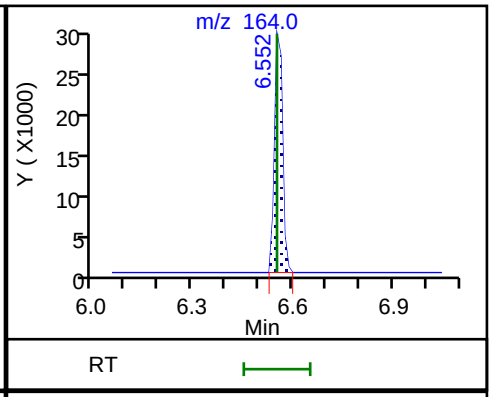
Eurofins TestAmerica, Canton

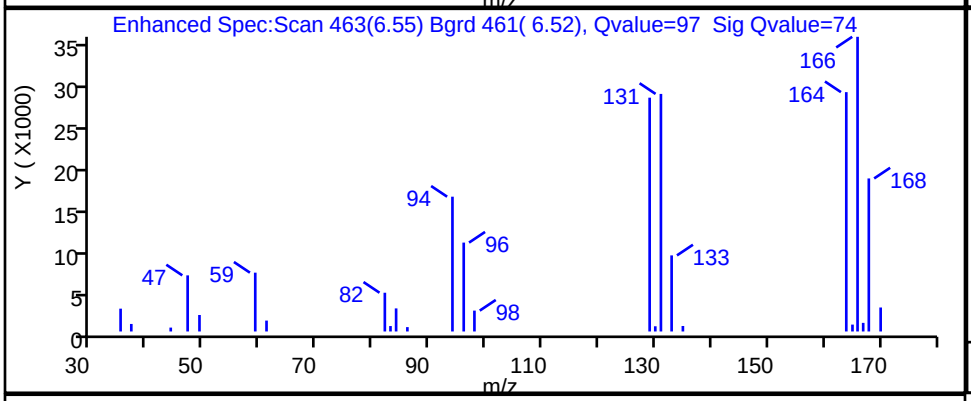
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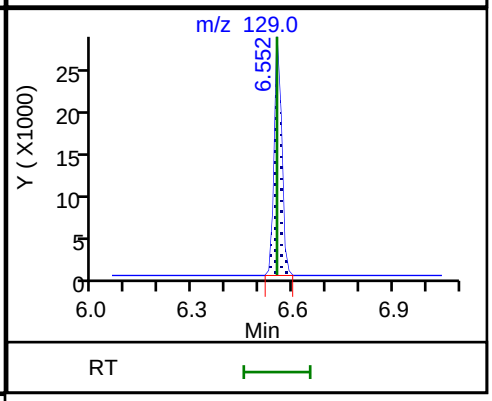
Injection Date:	17-Jun-2019 17:58:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-2	Lab Sample ID:	240-113949-2		
Client ID:	OW-5 DUP				
Operator ID:	043582	ALS Bottle#:	28	Worklist Smp#:	59
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

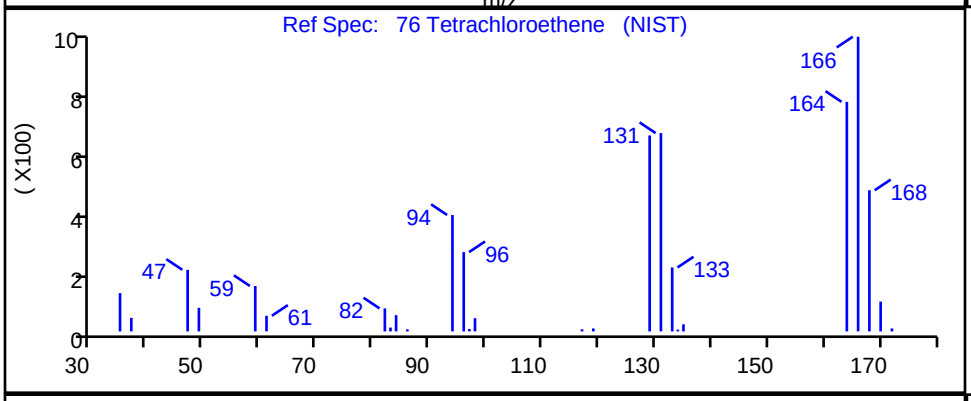
76 Tetrachloroethene, CAS: 127-18-4

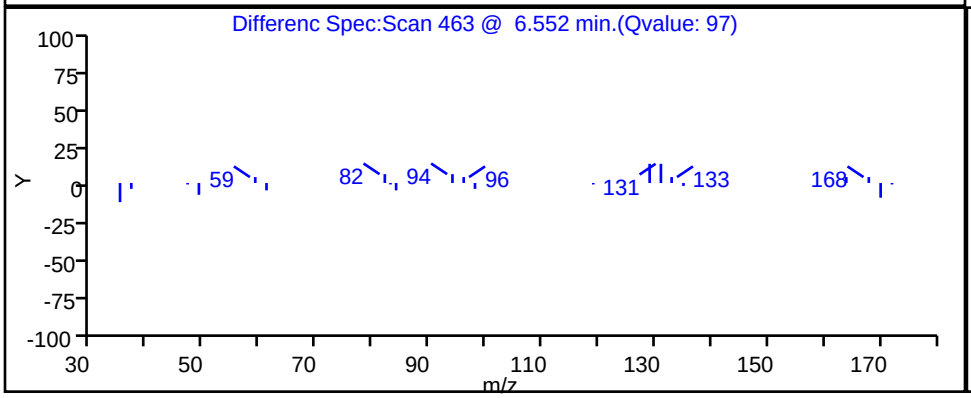


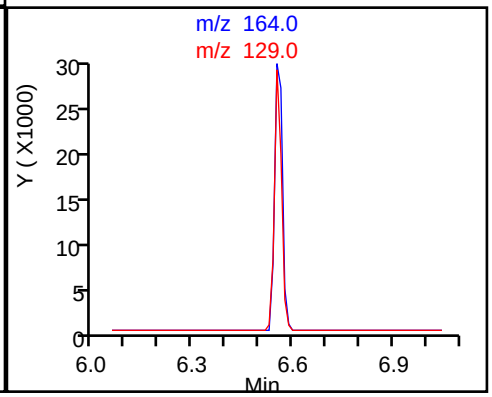












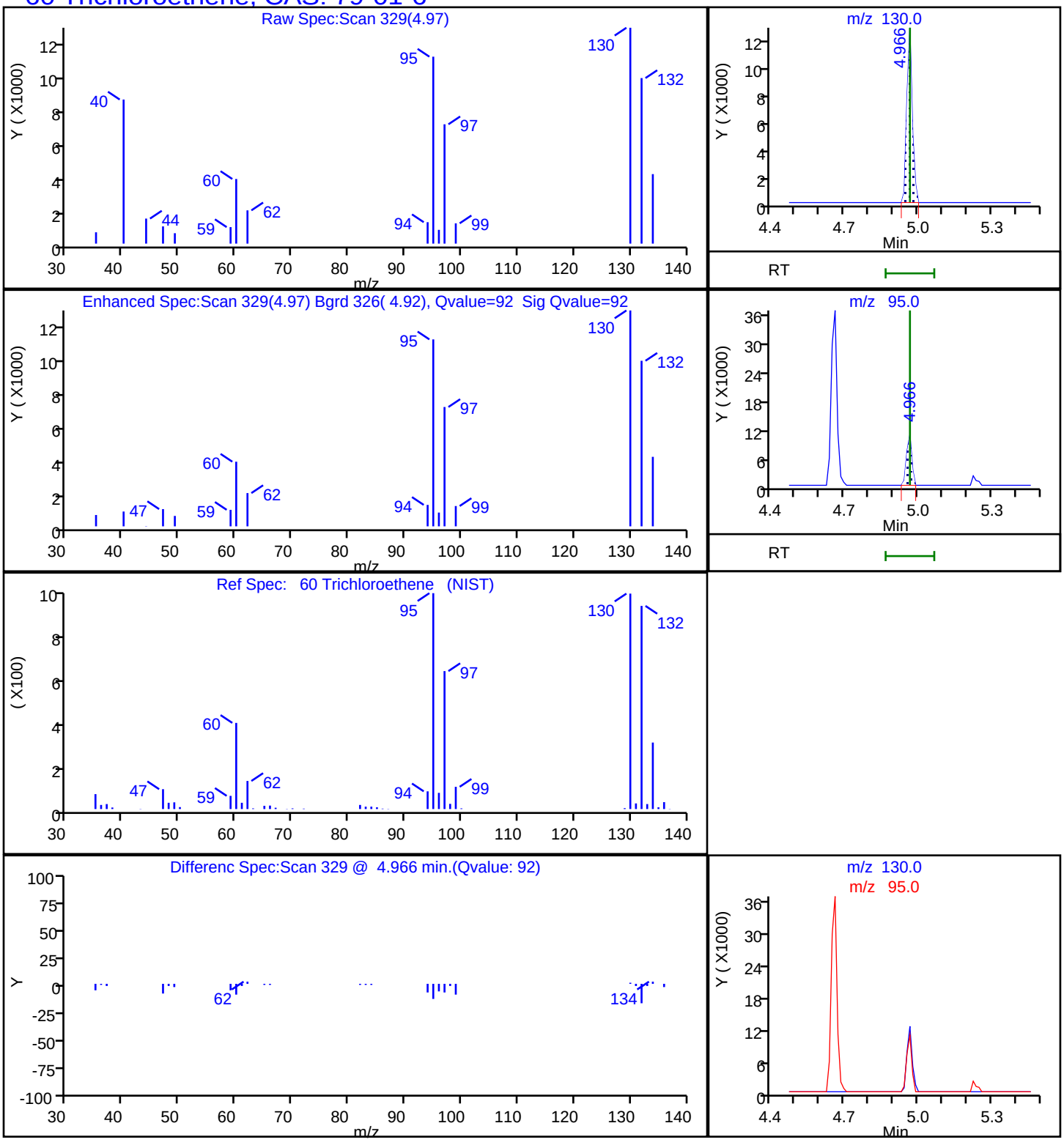
Report Date: 18-Jun-2019 10:53:04 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1431.D

Injection Date:	17-Jun-2019 17:58:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-2	Lab Sample ID:	240-113949-2		
Client ID:	OW-5 DUP				
Operator ID:	043582	ALS Bottle#:	28	Worklist Smp#:	59
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

60 Trichloroethene, CAS: 79-01-6



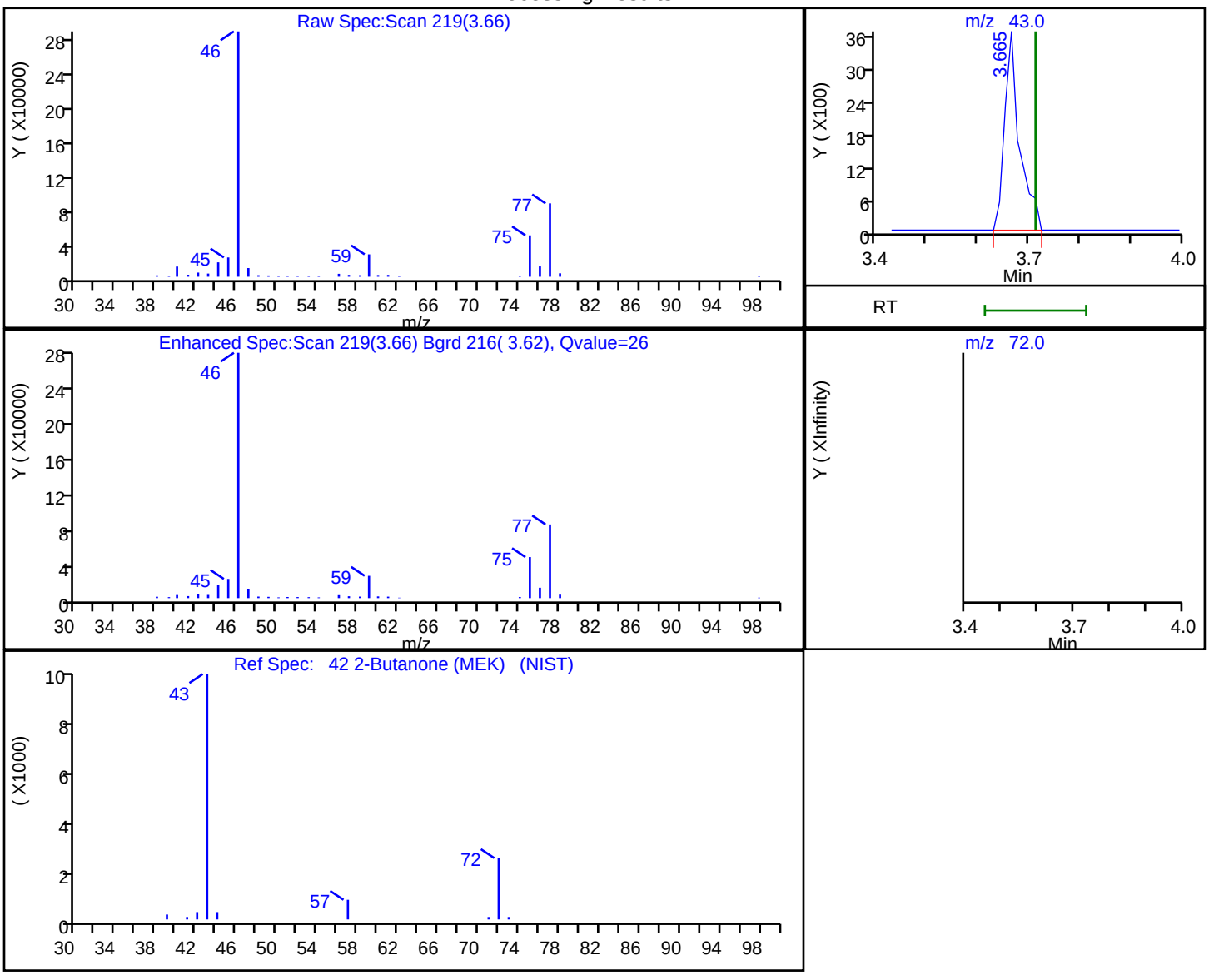
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1431.D				
Injection Date:	17-Jun-2019 17:58:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-B-2	Lab Sample ID:	240-113949-2		
Client ID:	OW-5 DUP				
Operator ID:	043582	ALS Bottle#:	28	Worklist Smp#:	59
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.66	43.00	7453	1.537226
3.71	72.00	0	

Reviewer: evansle, 18-Jun-2019 09:16:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-10R Lab Sample ID: 240-113949-3

Matrix: Water Lab File ID: UXX2021.D

Analysis Method: 8260B Date Collected: 06/05/2019 14:02

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 20:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	1.1		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-10R Lab Sample ID: 240-113949-3

Matrix: Water Lab File ID: UXX2021.D

Analysis Method: 8260B Date Collected: 06/05/2019 14:02

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 20:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	82		70-123
1868-53-7	Dibromofluoromethane (Surr)	105		75-128
460-00-4	4-Bromofluorobenzene (Surr)	85		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2021.D
Lims ID: 240-113949-B-3
Client ID: OW-10R
Sample Type: Client
Inject. Date: 18-Jun-2019 20:41:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-024
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:23:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.977	4.974	0.003	96	348780	10.0	
* 2 Chlorobenzene-d5	117	7.639	7.637	0.002	90	306724	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.864	9.861	0.003	94	185771	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.409	4.406	0.003	91	91887	10.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.693	4.690	0.003	93	143071	10.5	
$ 6 Toluene-d8 (Surr)	98	6.338	6.335	0.003	94	320243	8.22	
$ 7 4-Bromofluorobenzene (Surr	95	8.751	8.749	0.002	92	135932	8.51	
9 Dichlorodifluoromethane	85		1.259				ND	
10 Chloromethane	50		1.401				ND	
11 Vinyl chloride	62		1.495				ND	
13 Bromomethane	94		1.779				ND	
14 Chloroethane	64		1.862				ND	
16 Trichlorofluoromethane	101		2.063				ND	
19 1,1-Dichloroethene	96		2.501				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.513				ND	
21 Acetone	43		2.549				ND	
24 Carbon disulfide	76		2.679				ND	
27 Methyl acetate	43		2.833				ND	
28 Methylene Chloride	84		2.915				ND	
30 trans-1,2-Dichloroethene	96		3.152				ND	
32 Methyl tert-butyl ether	73		3.152				ND	
34 1,1-Dichloroethane	63		3.519				ND	
40 cis-1,2-Dichloroethene	96		4.004				ND	
41 2-Butanone (MEK)	43		4.016				ND	
47 Chloroform	83		4.276				ND	
48 1,1,1-Trichloroethane	97		4.430				ND	
49 Cyclohexane	56		4.477				ND	
51 Carbon tetrachloride	117		4.572				ND	
53 Benzene	78	4.740	4.738	0.002	91	47273	1.13	
54 1,2-Dichloroethane	62		4.761				ND	
58 Trichloroethene	130		5.282				ND	
60 Methylcyclohexane	83		5.448				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63		5.483				ND	
65 Dichlorobromomethane	83		5.708				ND	
68 cis-1,3-Dichloropropene	75		6.098				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.240				ND	
70 Toluene	91		6.394				ND	
71 trans-1,3-Dichloropropene	75		6.595				ND	
73 1,1,2-Trichloroethane	97		6.749				ND	
74 Tetrachloroethene	164		6.891				ND	
76 2-Hexanone	43		6.986				ND	
78 Chlorodibromomethane	129		7.116				ND	
80 Ethylene Dibromide	107		7.223				ND	
82 Chlorobenzene	112	7.675	7.672	0.003	81	25545	0.8442	
84 Ethylbenzene	106		7.767				ND	
85 m-Xylene & p-Xylene	106		7.873				ND	
86 o-Xylene	106		8.252				ND	
87 Styrene	104		8.264				ND	
88 Bromoform	173		8.441				ND	
89 Isopropylbenzene	105		8.595				ND	
92 1,1,2,2-Tetrachloroethane	83		8.891				ND	
104 1,3-Dichlorobenzene	146		9.802				ND	
106 1,4-Dichlorobenzene	146	9.887	9.885	0.002	34	4234	0.1558	
110 1,2-Dichlorobenzene	146		10.252				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.021				ND	
113 1,2,4-Trichlorobenzene	180		11.837				ND	
S 130 Xylenes, Total	106		16.530				ND	

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

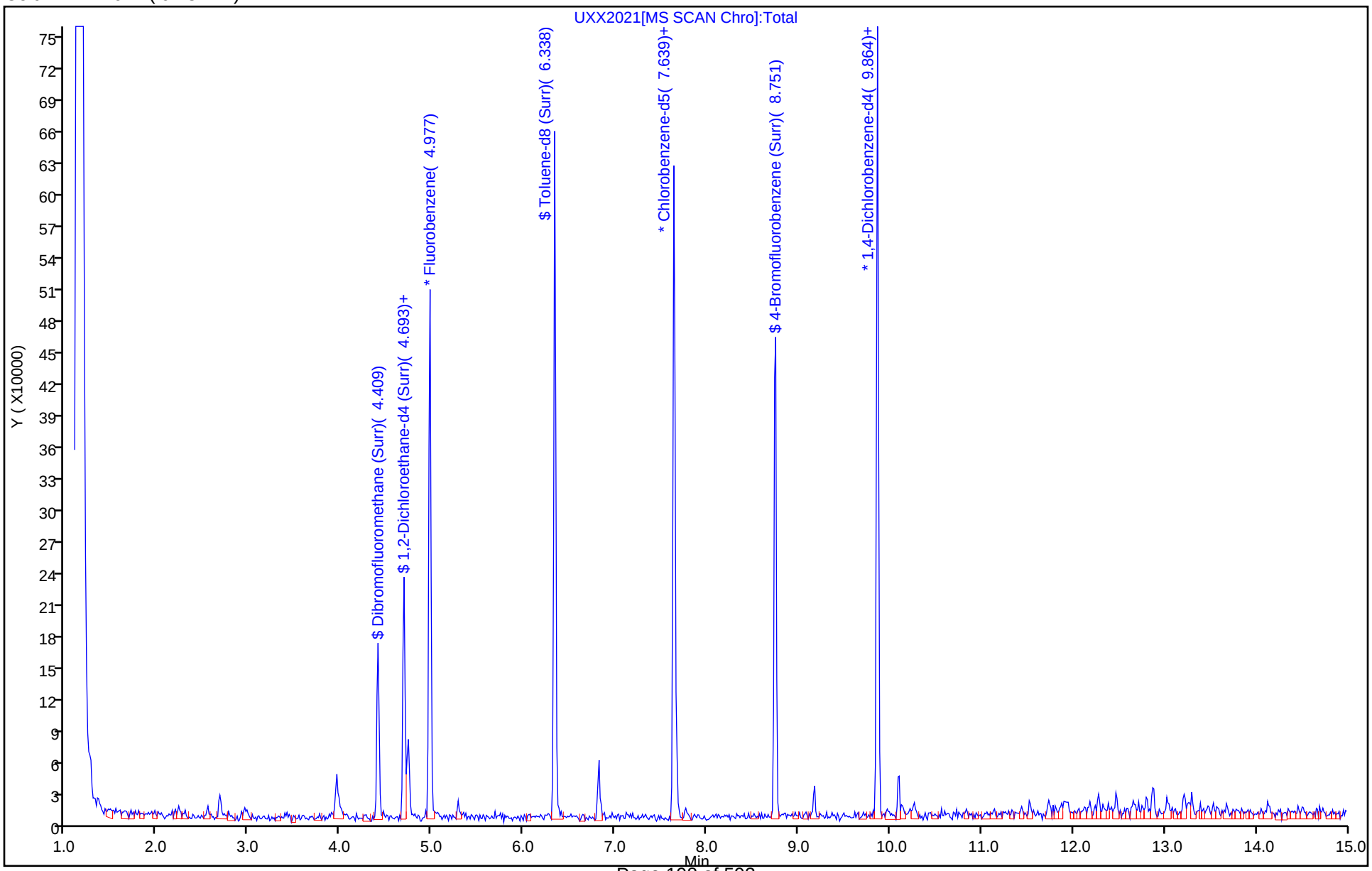
Report Date: 19-Jun-2019 10:25:50 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2021.D

Injection Date:	18-Jun-2019 20:41:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-113949-B-3	Lab Sample ID:	240-113949-3	Worklist Smp#:	24
Client ID:	OW-10R				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2021.D
Lims ID: 240-113949-B-3
Client ID: OW-10R
Sample Type: Client
Inject. Date: 18-Jun-2019 20:41:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-024
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:23:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.5	105.46
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.51
$ 6 Toluene-d8 (Surr)	10.0	8.22	82.16
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.51	85.14

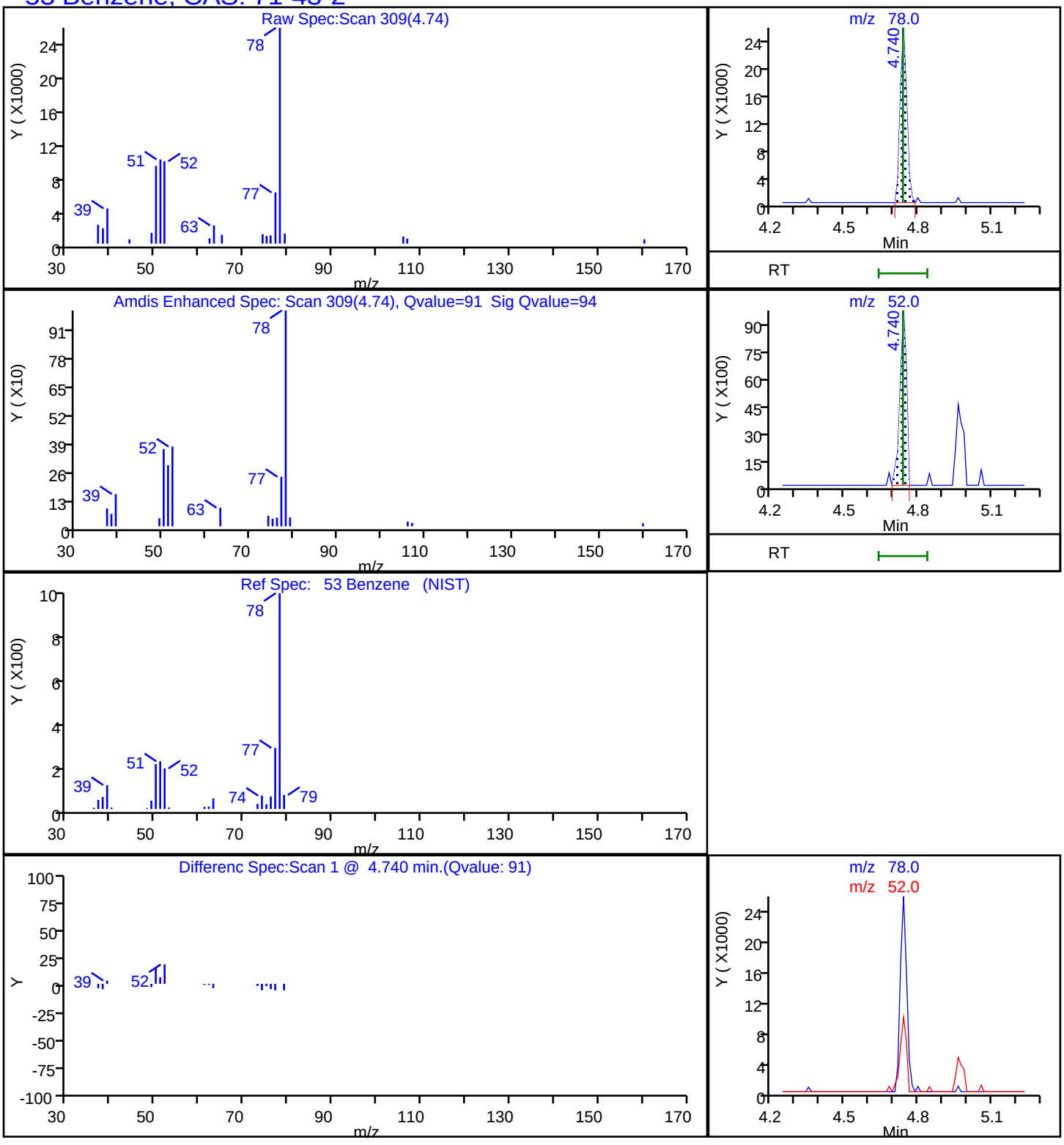
Report Date: 19-Jun-2019 10:25:50 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2021.D

Injection Date:	18-Jun-2019 20:41:30	Instrument ID:	A3UX10
Lims ID:	240-113949-B-3	Lab Sample ID:	240-113949-3
Client ID:	OW-10R		
Operator ID:	001644	ALS Bottle#:	23 Worklist Smp#: 24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_10	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

53 Benzene, CAS: 71-43-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-13R Lab Sample ID: 240-113949-4

Matrix: Water Lab File ID: UXX2022.D

Analysis Method: 8260B Date Collected: 06/05/2019 15:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 21:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	2.4		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-13R Lab Sample ID: 240-113949-4

Matrix: Water Lab File ID: UXX2022.D

Analysis Method: 8260B Date Collected: 06/05/2019 15:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 21:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	93		70-123
1868-53-7	Dibromofluoromethane (Surr)	115		75-128
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2022.D
Lims ID: 240-113949-B-4
Client ID: OW-13R
Sample Type: Client
Inject. Date: 18-Jun-2019 21:06:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-025
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:23:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.975	4.974	0.001	97	324070	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.637	0.000	92	287090	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.862	9.861	0.001	95	168843	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.406	0.001	92	93487	11.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.690	0.001	94	130419	10.3	
$ 6 Toluene-d8 (Surr)	98	6.335	6.335	0.000	95	337516	9.25	
$ 7 4-Bromofluorobenzene (Surr	95	8.749	8.749	0.000	94	141547	9.47	
9 Dichlorodifluoromethane	85		1.259				ND	
10 Chloromethane	50		1.401				ND	
11 Vinyl chloride	62		1.495				ND	
13 Bromomethane	94		1.779				ND	
14 Chloroethane	64		1.862				ND	
16 Trichlorofluoromethane	101		2.063				ND	
19 1,1-Dichloroethene	96		2.501				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.513				ND	
21 Acetone	43	2.549	2.549	0.000	86	17345	0.9496	
24 Carbon disulfide	76		2.679				ND	
27 Methyl acetate	43		2.833				ND	
28 Methylene Chloride	84		2.915				ND	
30 trans-1,2-Dichloroethene	96		3.152				ND	
32 Methyl tert-butyl ether	73		3.152				ND	
34 1,1-Dichloroethane	63		3.519				ND	
40 cis-1,2-Dichloroethene	96		4.004				ND	
41 2-Butanone (MEK)	43		4.016				ND	
47 Chloroform	83		4.276				ND	
48 1,1,1-Trichloroethane	97		4.430				ND	
49 Cyclohexane	56		4.477				ND	
51 Carbon tetrachloride	117		4.572				ND	
53 Benzene	78	4.738	4.738	0.000	88	93022	2.39	
54 1,2-Dichloroethane	62		4.761				ND	U
58 Trichloroethene	130		5.282				ND	
60 Methylcyclohexane	83		5.448				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63		5.483				ND	
65 Dichlorobromomethane	83		5.708				ND	
68 cis-1,3-Dichloropropene	75		6.098				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.240				ND	
70 Toluene	91		6.394				ND	
71 trans-1,3-Dichloropropene	75		6.595				ND	
73 1,1,2-Trichloroethane	97		6.749				ND	
74 Tetrachloroethene	164		6.891				ND	
76 2-Hexanone	43		6.986				ND	
78 Chlorodibromomethane	129		7.116				ND	
80 Ethylene Dibromide	107		7.223				ND	
82 Chlorobenzene	112		7.672				ND	
84 Ethylbenzene	106		7.767				ND	
85 m-Xylene & p-Xylene	106		7.873				ND	
86 o-Xylene	106		8.252				ND	
87 Styrene	104		8.264				ND	
88 Bromoform	173		8.441				ND	
89 Isopropylbenzene	105		8.595				ND	
92 1,1,2,2-Tetrachloroethane	83		8.891				ND	
104 1,3-Dichlorobenzene	146		9.802				ND	
106 1,4-Dichlorobenzene	146		9.885				ND	
110 1,2-Dichlorobenzene	146		10.252				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.021				ND	
113 1,2,4-Trichlorobenzene	180		11.837				ND	
S 130 Xylenes, Total	106		16.530				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

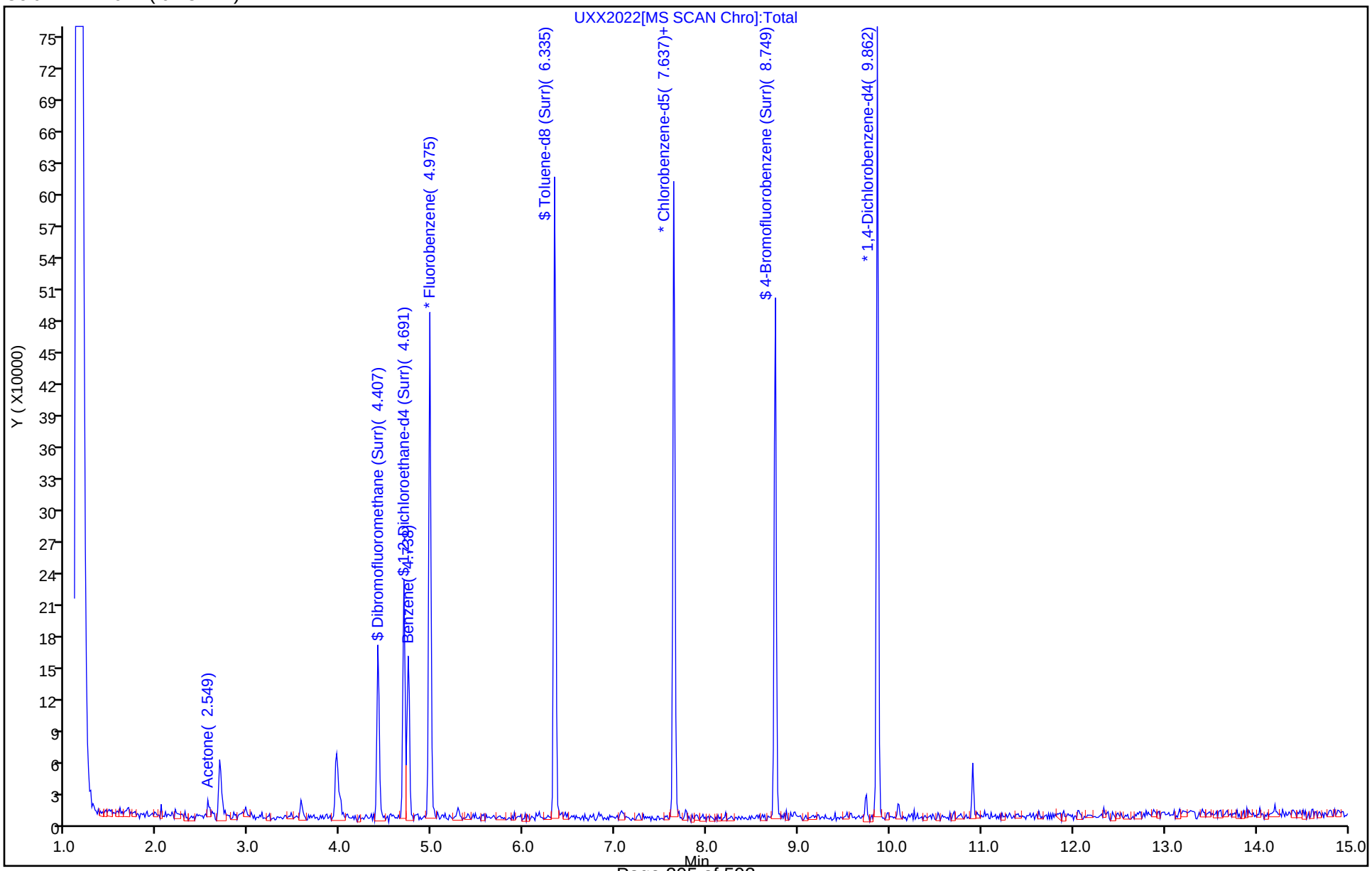
Report Date: 19-Jun-2019 10:25:51 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2022.D

Injection Date:	18-Jun-2019 21:06:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-113949-B-4	Lab Sample ID:	240-113949-4	Worklist Smp#:	25
Client ID:	OW-13R				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2022.D
Lims ID: 240-113949-B-4
Client ID: OW-13R
Sample Type: Client
Inject. Date: 18-Jun-2019 21:06:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-025
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:23:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.5	115.48
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.53
$ 6 Toluene-d8 (Surr)	10.0	9.25	92.52
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.47	94.72

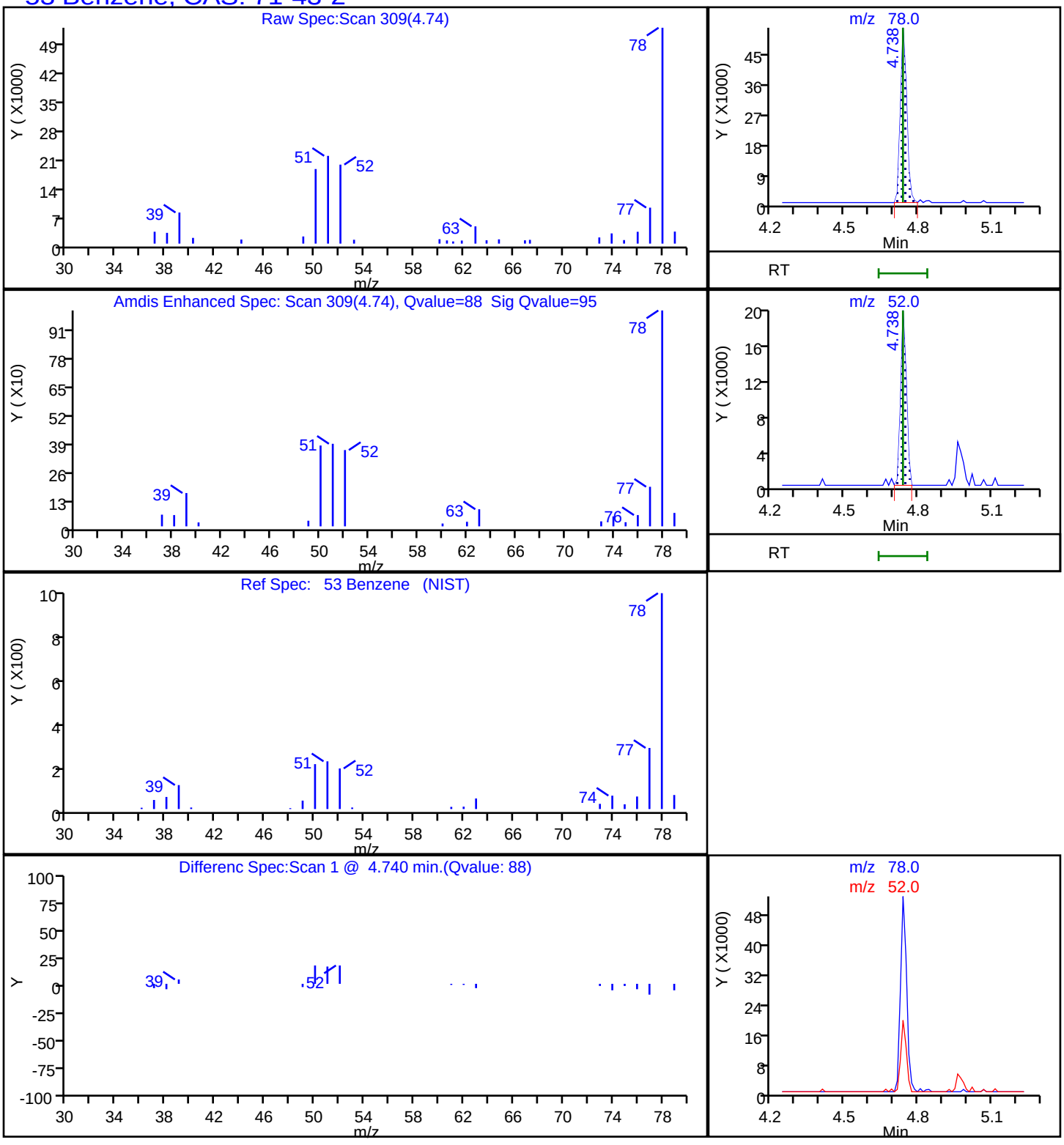
Report Date: 19-Jun-2019 10:25:51 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2022.D

Injection Date:	18-Jun-2019 21:06:30	Instrument ID:	A3UX10
Lims ID:	240-113949-B-4	Lab Sample ID:	240-113949-4
Client ID:	OW-13R		
Operator ID:	001644	ALS Bottle#:	24 Worklist Smp#: 25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_10	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

53 Benzene, CAS: 71-43-2



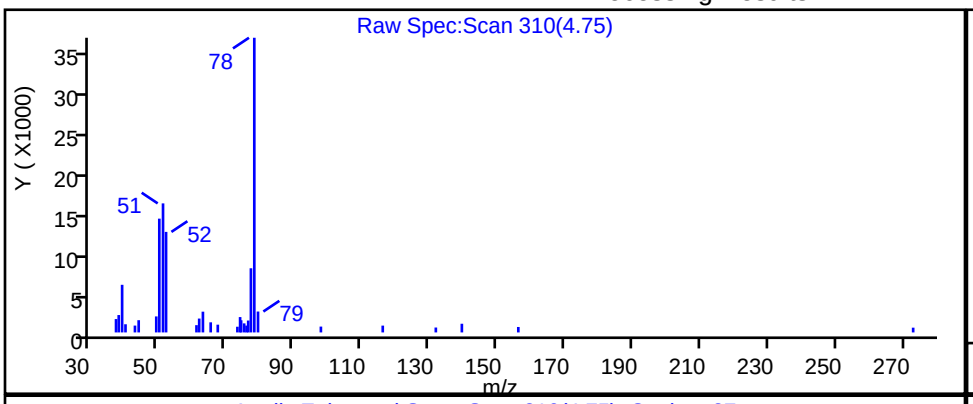
User Disabled Compound Report

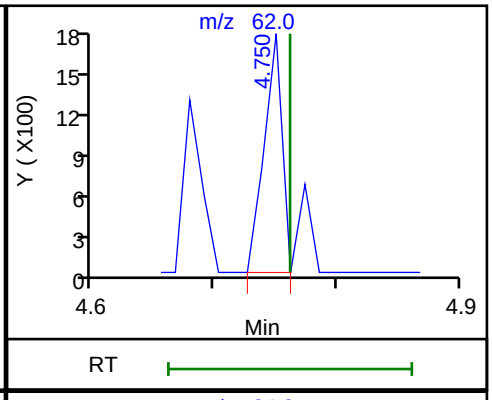
Eurofins TestAmerica, Canton

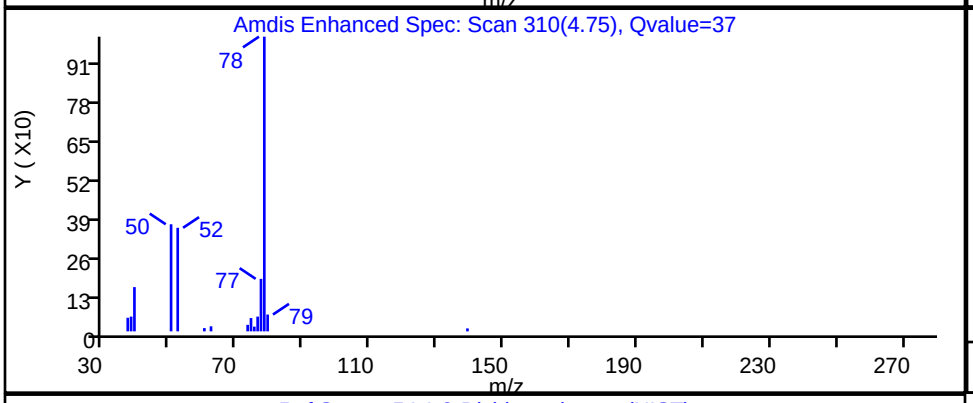
Data File:	\\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2022.D				
Injection Date:	18-Jun-2019 21:06:30	Instrument ID:	A3UX10		
Lims ID:	240-113949-B-4	Lab Sample ID:	240-113949-4		
Client ID:	OW-13R				
Operator ID:	001644	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_10	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

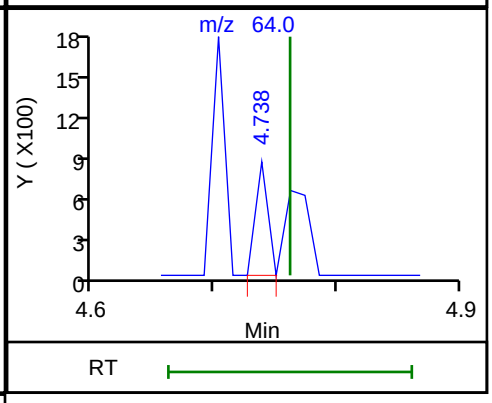
54 1,2-Dichloroethane, CAS: 107-06-2

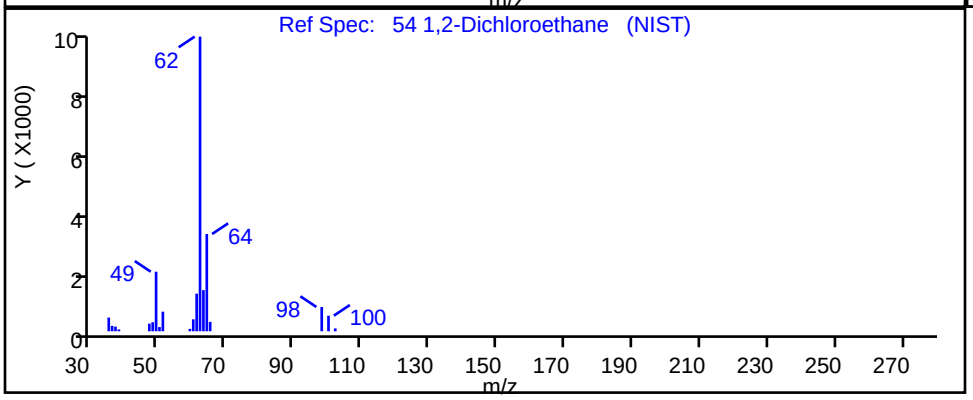
Processing Results











RT	Mass	Response	Amount
4.75	62.00	1752	0.102438
4.74	64.00	579	

Reviewer: williamsla, 19-Jun-2019 10:23:38

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-6 Lab Sample ID: 240-113949-5

Matrix: Water Lab File ID: UXX2012.D

Analysis Method: 8260B Date Collected: 06/05/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 16:55

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		2.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	2.0
79-00-5	1,1,2-Trichloroethane	ND		2.0
75-34-3	1,1-Dichloroethane	ND		2.0
75-35-4	1,1-Dichloroethene	ND		2.0
120-82-1	1,2,4-Trichlorobenzene	ND		2.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.0
95-50-1	1,2-Dichlorobenzene	ND		2.0
107-06-2	1,2-Dichloroethane	ND		2.0
78-87-5	1,2-Dichloropropane	ND		2.0
541-73-1	1,3-Dichlorobenzene	ND		2.0
106-46-7	1,4-Dichlorobenzene	ND		2.0
78-93-3	2-Butanone (MEK)	ND		20
591-78-6	2-Hexanone	ND		20
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20
67-64-1	Acetone	ND		20
71-43-2	Benzene	ND		2.0
75-25-2	Bromoform	ND		2.0
74-83-9	Bromomethane	ND		2.0
75-15-0	Carbon disulfide	ND		2.0
56-23-5	Carbon tetrachloride	ND		2.0
108-90-7	Chlorobenzene	ND		2.0
124-48-1	Chlorodibromomethane	ND		2.0
75-00-3	Chloroethane	ND	F2	2.0
67-66-3	Chloroform	ND		2.0
74-87-3	Chloromethane	ND		2.0
156-59-2	cis-1,2-Dichloroethene	14		2.0
10061-01-5	cis-1,3-Dichloropropene	ND		2.0
110-82-7	Cyclohexane	ND		2.0
75-71-8	Dichlorodifluoromethane	ND		2.0
75-27-4	Dichlorobromomethane	ND		2.0
100-41-4	Ethylbenzene	ND		2.0
98-82-8	Isopropylbenzene	ND		2.0
79-20-9	Methyl acetate	ND		20
108-87-2	Methylcyclohexane	ND		2.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-6 Lab Sample ID: 240-113949-5

Matrix: Water Lab File ID: UXX2012.D

Analysis Method: 8260B Date Collected: 06/05/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 16:55

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		2.0
75-09-2	Methylene Chloride	ND		10
100-42-5	Styrene	ND		2.0
127-18-4	Tetrachloroethene	50		2.0
108-88-3	Toluene	ND		2.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0
10061-02-6	trans-1,3-Dichloropropene	ND		2.0
79-01-6	Trichloroethene	7.6		2.0
75-69-4	Trichlorofluoromethane	ND		2.0
75-01-4	Vinyl chloride	ND		2.0
1330-20-7	Xylenes, Total	ND		4.0
106-93-4	Ethylene Dibromide	ND		2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	85		70-123
1868-53-7	Dibromofluoromethane (Surr)	108		75-128
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2012.D
Lims ID: 240-113949-B-5
Client ID: OW-6
Sample Type: Client
Inject. Date: 18-Jun-2019 16:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0088238-015
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 18-Jun-2019 17:20:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.975	4.974	0.001	96	331238	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.637	0.000	91	292950	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.862	9.861	0.001	96	184608	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.406	0.001	91	89430	10.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.690	0.001	91	148248	11.4	
$ 6 Toluene-d8 (Surr)	98	6.336	6.335	0.001	96	316065	8.49	
$ 7 4-Bromofluorobenzene (Surr	95	8.750	8.749	0.001	93	144571	9.48	
9 Dichlorodifluoromethane	85		1.259				ND	
10 Chloromethane	50		1.401				ND	
11 Vinyl chloride	62		1.495				ND	
13 Bromomethane	94		1.779				ND	
14 Chloroethane	64		1.862				ND	
16 Trichlorofluoromethane	101		2.063				ND	
19 1,1-Dichloroethene	96		2.501				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.513				ND	
21 Acetone	43		2.549				ND	
24 Carbon disulfide	76		2.679				ND	
27 Methyl acetate	43		2.833				ND	
28 Methylene Chloride	84		2.915				ND	
30 trans-1,2-Dichloroethene	96		3.152				ND	
32 Methyl tert-butyl ether	73		3.152				ND	
34 1,1-Dichloroethane	63		3.519				ND	
40 cis-1,2-Dichloroethene	96	4.005	4.004	0.001	86	71104	7.14	
41 2-Butanone (MEK)	43		4.016				ND	
47 Chloroform	83		4.276				ND	
48 1,1,1-Trichloroethane	97		4.430				ND	
49 Cyclohexane	56		4.477				ND	
51 Carbon tetrachloride	117		4.572				ND	
53 Benzene	78		4.738				ND	
54 1,2-Dichloroethane	62		4.761				ND	
58 Trichloroethene	130	5.283	5.282	0.001	89	33160	3.80	
60 Methylcyclohexane	83		5.448				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63		5.483				ND	
65 Dichlorobromomethane	83		5.708				ND	
68 cis-1,3-Dichloropropene	75		6.098				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.240				ND	
70 Toluene	91		6.394				ND	
71 trans-1,3-Dichloropropene	75		6.595				ND	
73 1,1,2-Trichloroethane	97		6.749				ND	
74 Tetrachloroethene	164	6.892	6.891	0.001	92	193598	25.1	
76 2-Hexanone	43		6.986				ND	
78 Chlorodibromomethane	129		7.116				ND	
80 Ethylene Dibromide	107		7.223				ND	
82 Chlorobenzene	112		7.672				ND	
84 Ethylbenzene	106		7.767				ND	
85 m-Xylene & p-Xylene	106		7.873				ND	
86 o-Xylene	106		8.252				ND	
87 Styrene	104		8.264				ND	
88 Bromoform	173		8.441				ND	
89 Isopropylbenzene	105		8.595				ND	
92 1,1,2,2-Tetrachloroethane	83		8.891				ND	
104 1,3-Dichlorobenzene	146		9.802				ND	
106 1,4-Dichlorobenzene	146		9.885				ND	
110 1,2-Dichlorobenzene	146		10.252				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.021				ND	
113 1,2,4-Trichlorobenzene	180		11.837				ND	
S 130 Xylenes, Total	106		16.530				ND	

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

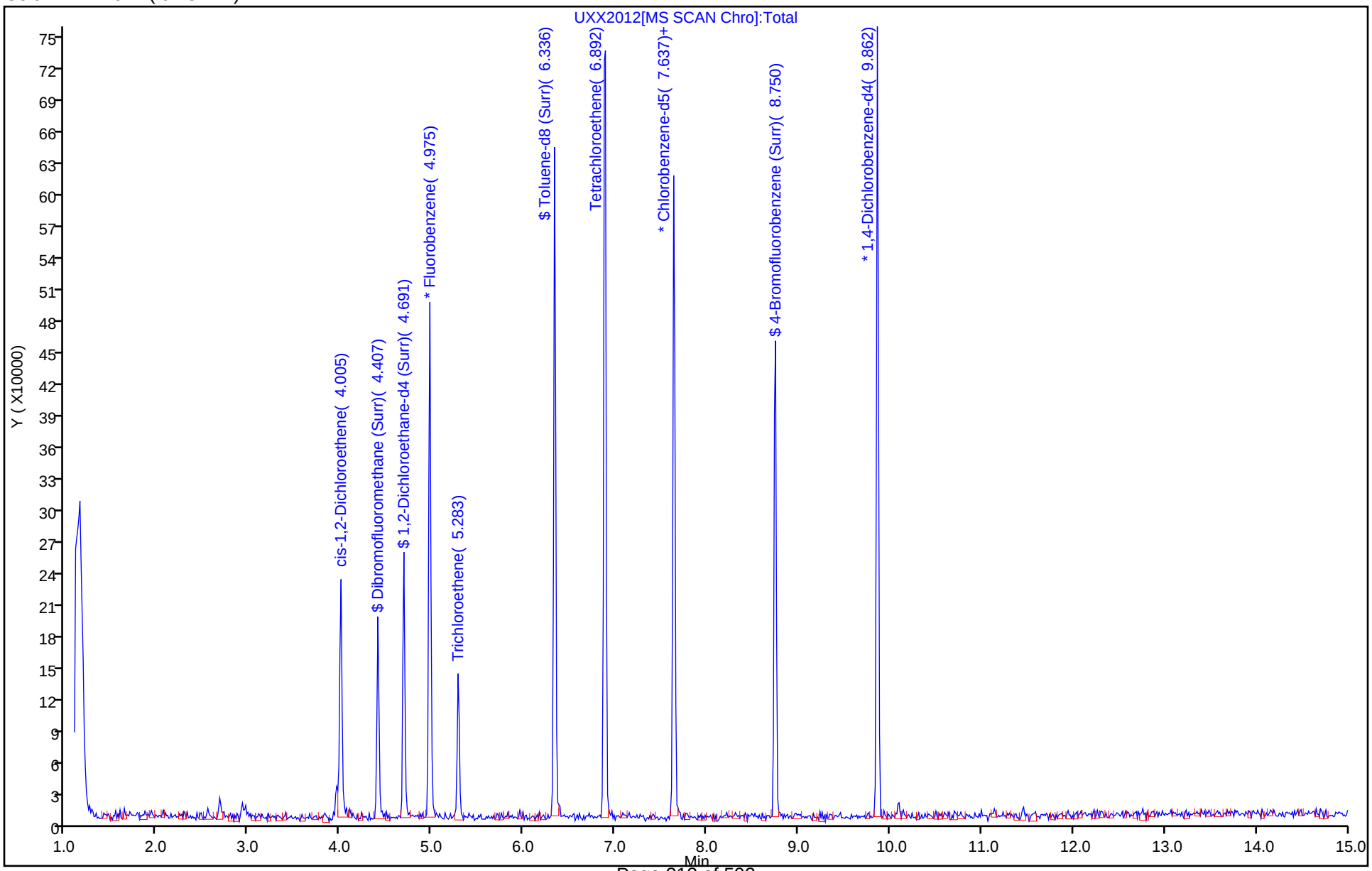
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2012.D

Injection Date:	18-Jun-2019 16:55:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-113949-B-5	Lab Sample ID:	240-113949-5	Worklist Smp#:	15
Client ID:	OW-6				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	14
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2012.D
Lims ID: 240-113949-B-5
Client ID: OW-6
Sample Type: Client
Inject. Date: 18-Jun-2019 16:55:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0088238-015
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 18-Jun-2019 17:20:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.8	108.07
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.4	114.02
$ 6 Toluene-d8 (Surr)	10.0	8.49	84.90
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.48	94.81

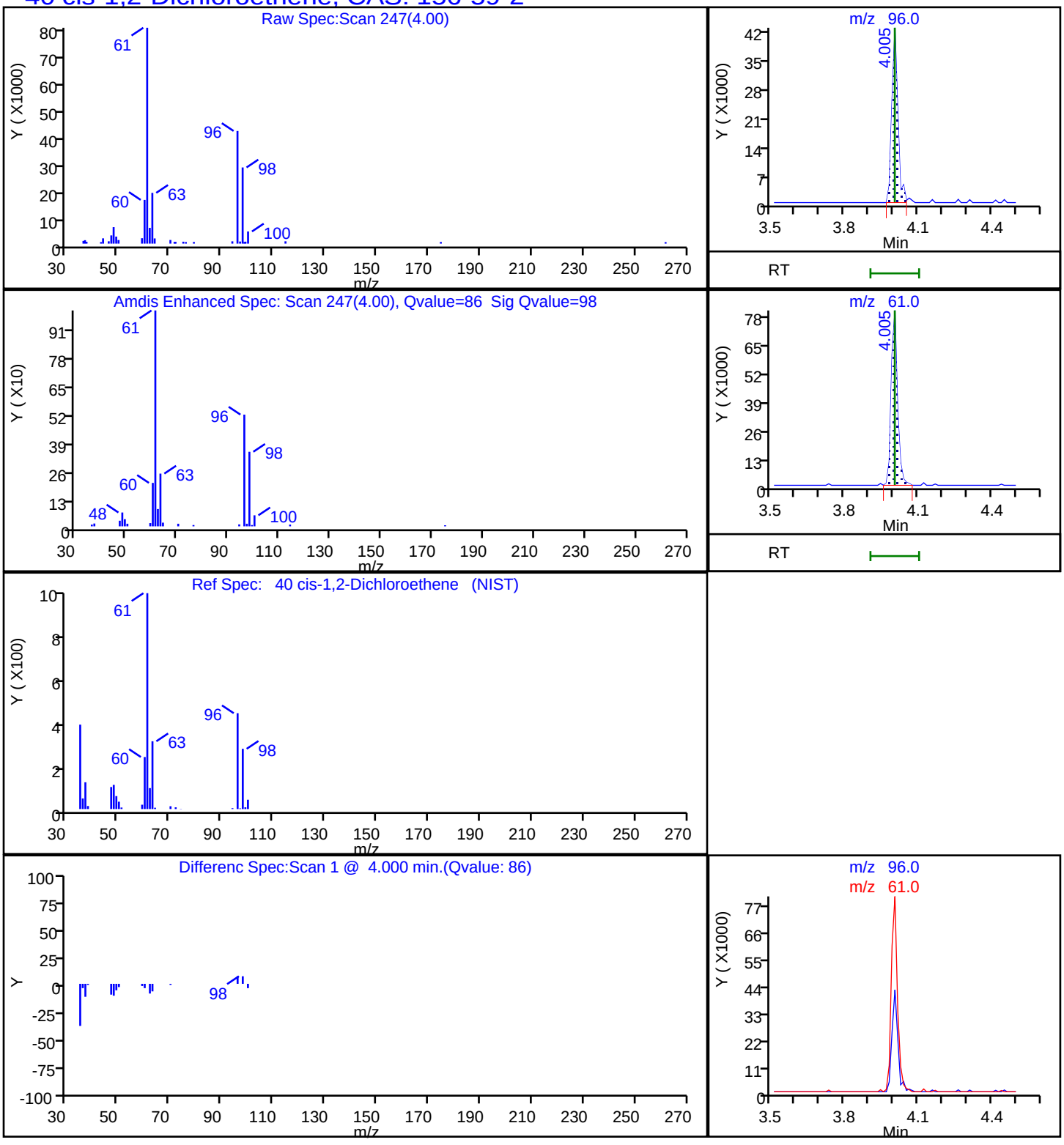
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2012.D

Injection Date:	18-Jun-2019 16:55:30	Instrument ID:	A3UX10		
Lims ID:	240-113949-B-5	Lab Sample ID:	240-113949-5		
Client ID:	OW-6				
Operator ID:	001644	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_10	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

40 cis-1,2-Dichloroethene, CAS: 156-59-2



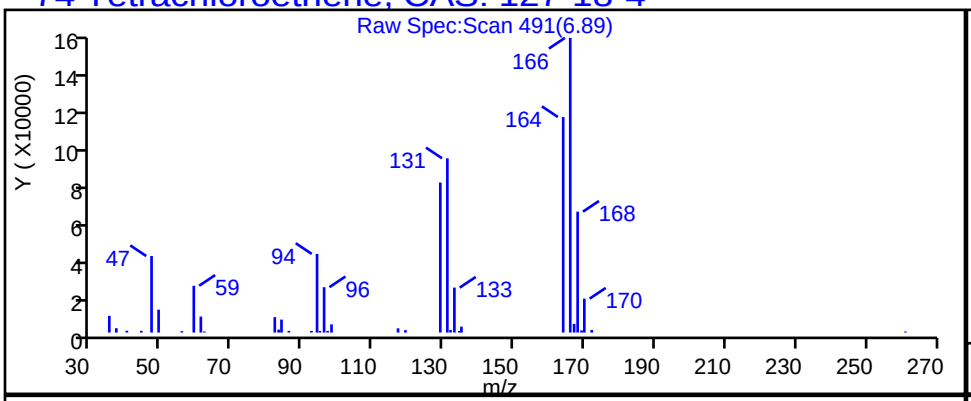
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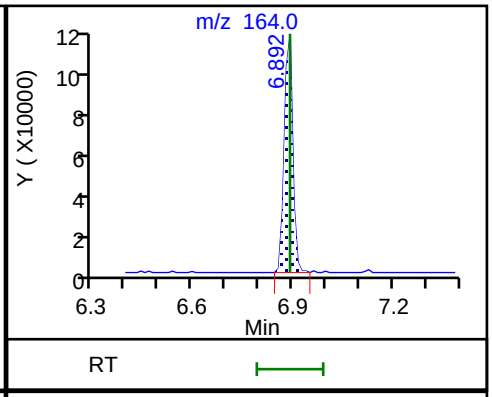
Eurofins TestAmerica, Canton

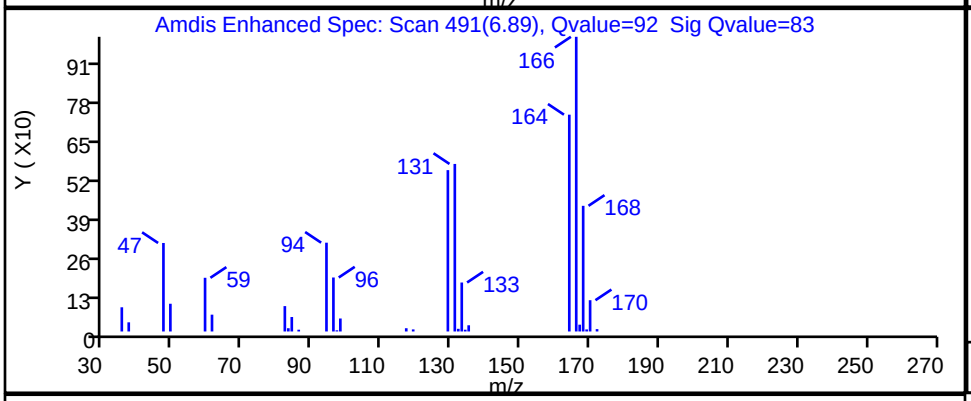
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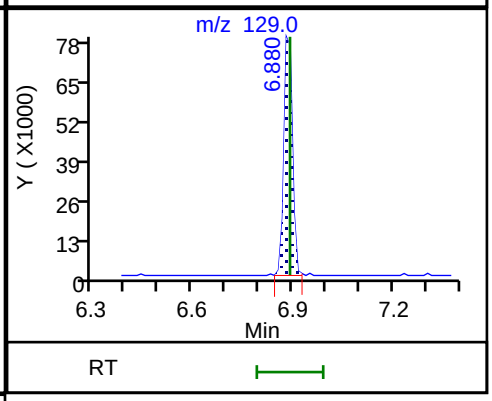
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Lims ID:	240-113949-B-5	Lab Sample ID:	240-113949-5
Client ID:	OW-6		
Operator ID:	001644	ALS Bottle#:	14 Worklist Smp#: 15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000
Method:	8260_10	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

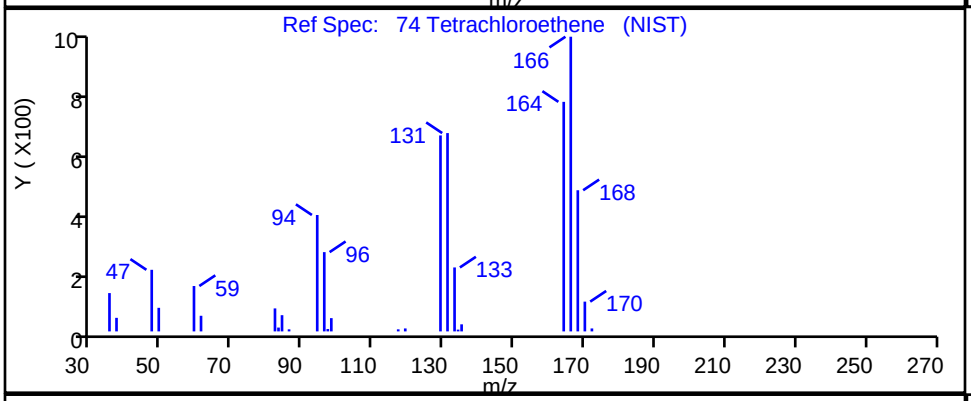
74 Tetrachloroethene, CAS: 127-18-4

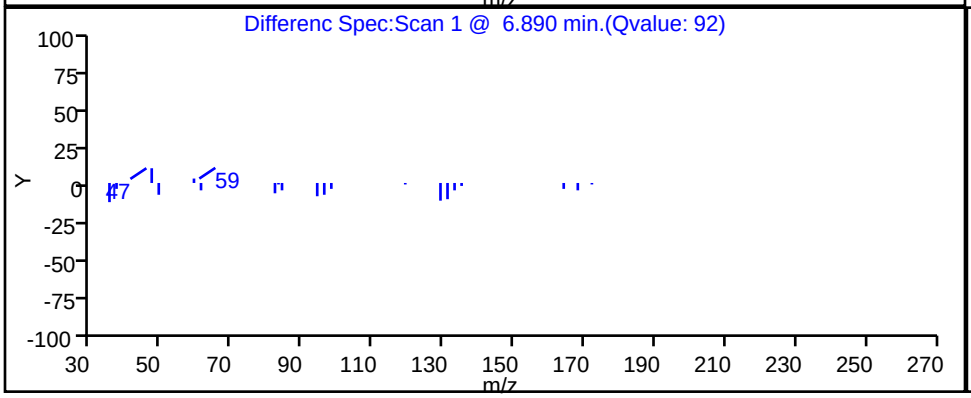


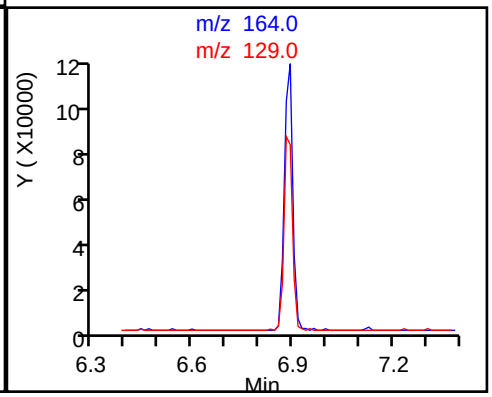












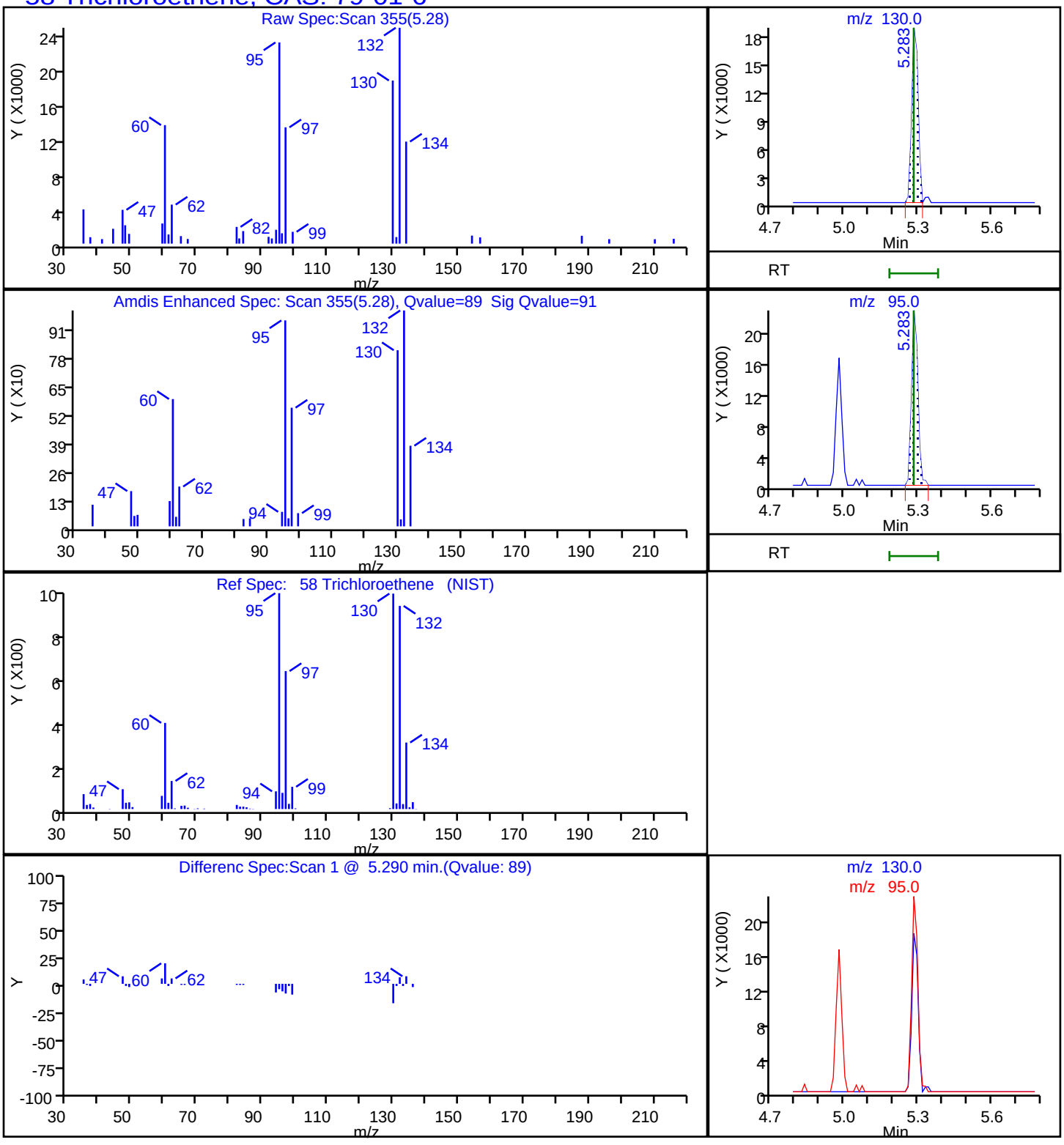
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2012.D

Injection Date:	18-Jun-2019 16:55:30	Instrument ID:	A3UX10		
Lims ID:	240-113949-B-5	Lab Sample ID:	240-113949-5		
Client ID:	OW-6				
Operator ID:	001644	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	2.0000		
Method:	8260_10	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

58 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-2 Lab Sample ID: 240-113949-6

Matrix: Water Lab File ID: UXX2025.D

Analysis Method: 8260B Date Collected: 06/05/2019 17:10

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 22:19

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		2.5
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.5
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5
79-00-5	1,1,2-Trichloroethane	ND		2.5
75-34-3	1,1-Dichloroethane	ND		2.5
75-35-4	1,1-Dichloroethene	ND		2.5
120-82-1	1,2,4-Trichlorobenzene	ND		2.5
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0
95-50-1	1,2-Dichlorobenzene	ND		2.5
107-06-2	1,2-Dichloroethane	ND		2.5
78-87-5	1,2-Dichloropropane	ND		2.5
541-73-1	1,3-Dichlorobenzene	ND		2.5
106-46-7	1,4-Dichlorobenzene	ND		2.5
78-93-3	2-Butanone (MEK)	ND		25
591-78-6	2-Hexanone	ND		25
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25
67-64-1	Acetone	ND		25
71-43-2	Benzene	ND		2.5
75-25-2	Bromoform	ND		2.5
74-83-9	Bromomethane	ND		2.5
75-15-0	Carbon disulfide	ND		2.5
56-23-5	Carbon tetrachloride	ND		2.5
108-90-7	Chlorobenzene	ND		2.5
124-48-1	Chlorodibromomethane	ND		2.5
75-00-3	Chloroethane	ND		2.5
67-66-3	Chloroform	ND		2.5
74-87-3	Chloromethane	ND		2.5
156-59-2	cis-1,2-Dichloroethene	23		2.5
10061-01-5	cis-1,3-Dichloropropene	ND		2.5
110-82-7	Cyclohexane	ND		2.5
75-71-8	Dichlorodifluoromethane	ND		2.5
75-27-4	Dichlorobromomethane	ND		2.5
100-41-4	Ethylbenzene	ND		2.5
98-82-8	Isopropylbenzene	ND		2.5
79-20-9	Methyl acetate	ND		25
108-87-2	Methylcyclohexane	ND		2.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-2 Lab Sample ID: 240-113949-6

Matrix: Water Lab File ID: UXX2025.D

Analysis Method: 8260B Date Collected: 06/05/2019 17:10

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 22:19

Soil Aliquot Vol: Dilution Factor: 2.5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		2.5
75-09-2	Methylene Chloride	ND		13
100-42-5	Styrene	ND		2.5
127-18-4	Tetrachloroethene	64		2.5
108-88-3	Toluene	ND		2.5
156-60-5	trans-1,2-Dichloroethene	ND		2.5
10061-02-6	trans-1,3-Dichloropropene	ND		2.5
79-01-6	Trichloroethene	6.8		2.5
75-69-4	Trichlorofluoromethane	ND		2.5
75-01-4	Vinyl chloride	ND		2.5
1330-20-7	Xylenes, Total	ND		5.0
106-93-4	Ethylene Dibromide	ND		2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		70-123
1868-53-7	Dibromofluoromethane (Surr)	106		75-128
460-00-4	4-Bromofluorobenzene (Surr)	96		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2025.D
Lims ID: 240-113949-B-6
Client ID: OW-2
Sample Type: Client
Inject. Date: 18-Jun-2019 22:19:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 2.5000
Sample Info: 240-0088238-028
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:24:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.976	4.974	0.002	97	339176	10.0	
* 2 Chlorobenzene-d5	117	7.638	7.637	0.001	91	280325	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.863	9.861	0.002	97	172700	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.408	4.406	0.002	91	90179	10.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.692	4.690	0.002	90	146063	11.0	
$ 6 Toluene-d8 (Surr)	98	6.337	6.335	0.002	94	322555	9.06	
$ 7 4-Bromofluorobenzene (Surr	95	8.751	8.749	0.002	93	139617	9.57	
9 Dichlorodifluoromethane	85		1.259				ND	
10 Chloromethane	50		1.401				ND	
11 Vinyl chloride	62		1.495				ND	
13 Bromomethane	94		1.779				ND	
14 Chloroethane	64		1.862				ND	
16 Trichlorofluoromethane	101		2.063				ND	
19 1,1-Dichloroethene	96		2.501				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.513				ND	
21 Acetone	43		2.549				ND	
24 Carbon disulfide	76		2.679				ND	
27 Methyl acetate	43		2.833				ND	
28 Methylene Chloride	84	2.929	2.915	0.014	51	3244	0.3012	
30 trans-1,2-Dichloroethene	96		3.152				ND	
32 Methyl tert-butyl ether	73		3.152				ND	
34 1,1-Dichloroethane	63		3.519				ND	
40 cis-1,2-Dichloroethene	96	4.006	4.004	0.002	90	93809	9.21	
41 2-Butanone (MEK)	43		4.016				ND	U
47 Chloroform	83		4.276				ND	
48 1,1,1-Trichloroethane	97		4.430				ND	
49 Cyclohexane	56		4.477				ND	
51 Carbon tetrachloride	117		4.572				ND	
53 Benzene	78		4.738				ND	
54 1,2-Dichloroethane	62		4.761				ND	
58 Trichloroethene	130	5.284	5.282	0.002	86	24415	2.74	
60 Methylcyclohexane	83		5.448				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63		5.483				ND	
65 Dichlorobromomethane	83		5.708				ND	
68 cis-1,3-Dichloropropene	75		6.098				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.240				ND	
70 Toluene	91		6.394				ND	
71 trans-1,3-Dichloropropene	75		6.595				ND	
73 1,1,2-Trichloroethane	97		6.749				ND	
74 Tetrachloroethene	164	6.893	6.891	0.002	93	188806	25.6	
76 2-Hexanone	43		6.986				ND	
78 Chlorodibromomethane	129		7.116				ND	
80 Ethylene Dibromide	107		7.223				ND	
82 Chlorobenzene	112		7.672				ND	
84 Ethylbenzene	106		7.767				ND	
85 m-Xylene & p-Xylene	106		7.873				ND	
86 o-Xylene	106		8.252				ND	
87 Styrene	104		8.264				ND	
88 Bromoform	173		8.441				ND	
89 Isopropylbenzene	105		8.595				ND	
92 1,1,2,2-Tetrachloroethane	83		8.891				ND	
104 1,3-Dichlorobenzene	146		9.802				ND	
106 1,4-Dichlorobenzene	146		9.885				ND	
110 1,2-Dichlorobenzene	146		10.252				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.021				ND	
113 1,2,4-Trichlorobenzene	180		11.837				ND	
S 130 Xylenes, Total	106		16.530				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

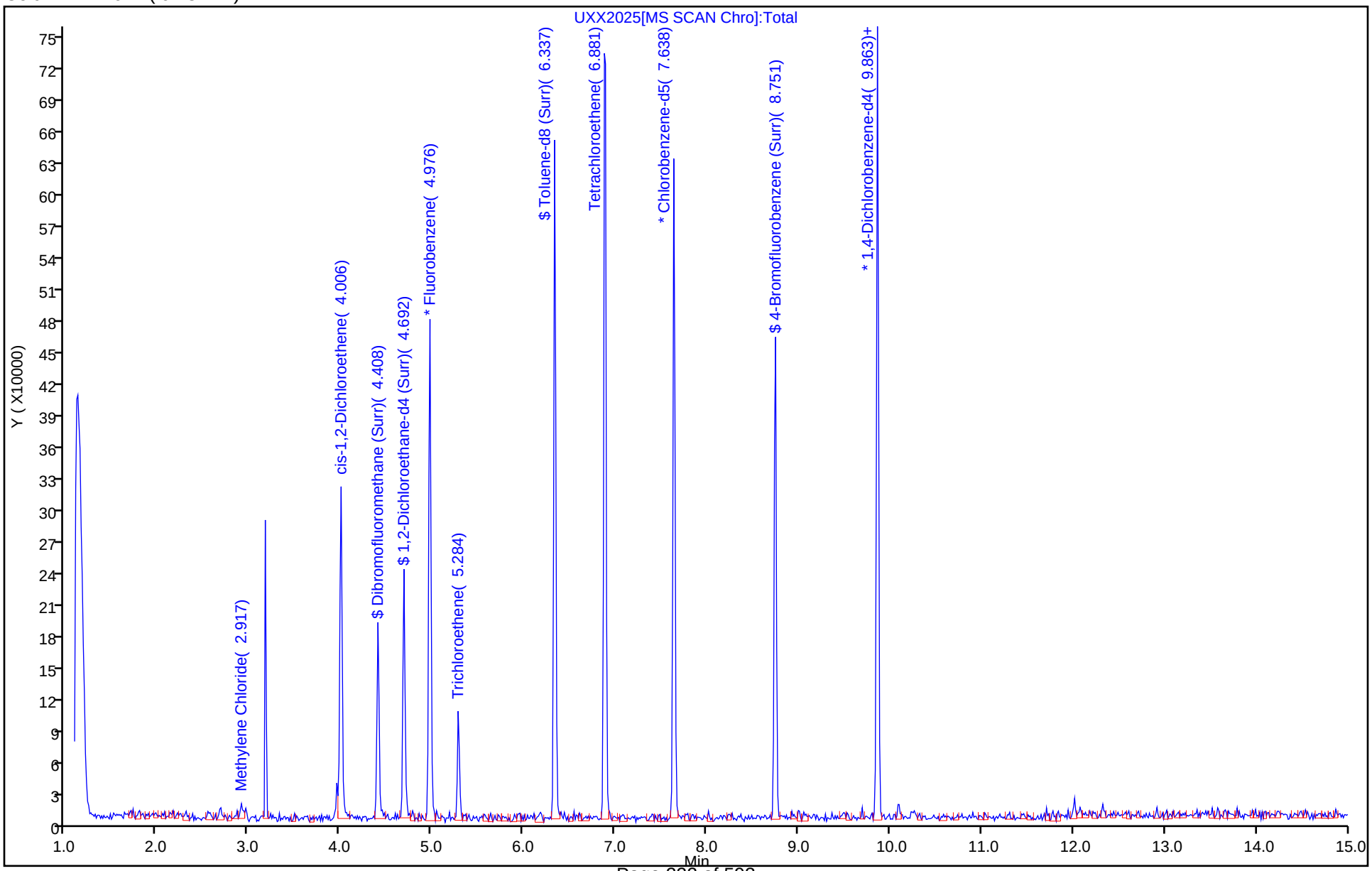
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2025.D

Injection Date:	18-Jun-2019 22:19:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-113949-B-6	Lab Sample ID:	240-113949-6	Worklist Smp#:	28
Client ID:	OW-2				
Purge Vol:	5.000 mL	Dil. Factor:	2.5000	ALS Bottle#:	27
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2025.D
Lims ID: 240-113949-B-6
Client ID: OW-2
Sample Type: Client
Inject. Date: 18-Jun-2019 22:19:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 2.5000
Sample Info: 240-0088238-028
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:24:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.6	106.43
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.71
$ 6 Toluene-d8 (Surr)	10.0	9.06	90.55
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.57	95.69

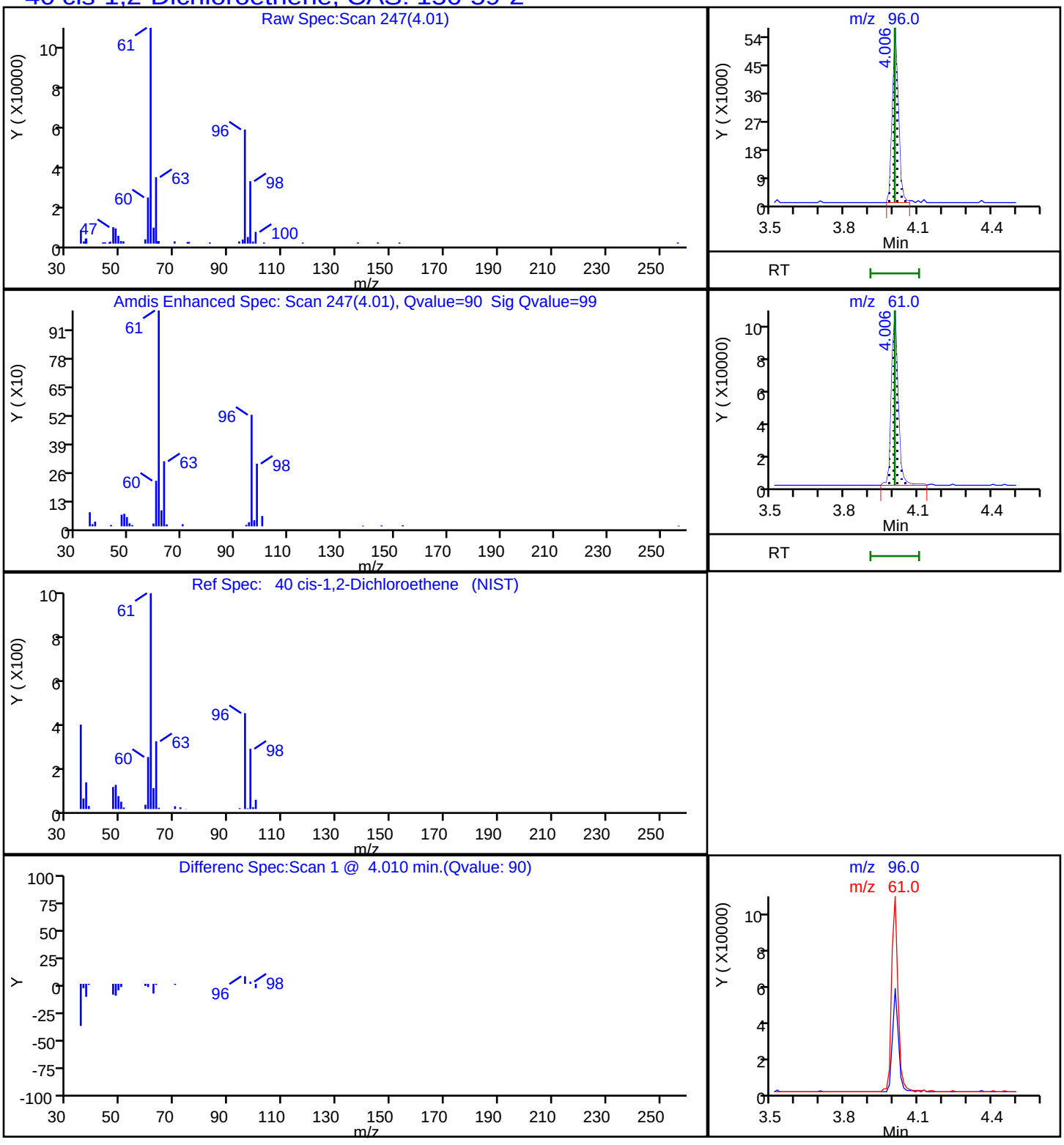
Report Date: 19-Jun-2019 10:25:54 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2025.D

Injection Date:	18-Jun-2019 22:19:30	Instrument ID:	A3UX10		
Lims ID:	240-113949-B-6	Lab Sample ID:	240-113949-6		
Client ID:	OW-2				
Operator ID:	001644	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_10	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

40 cis-1,2-Dichloroethene, CAS: 156-59-2



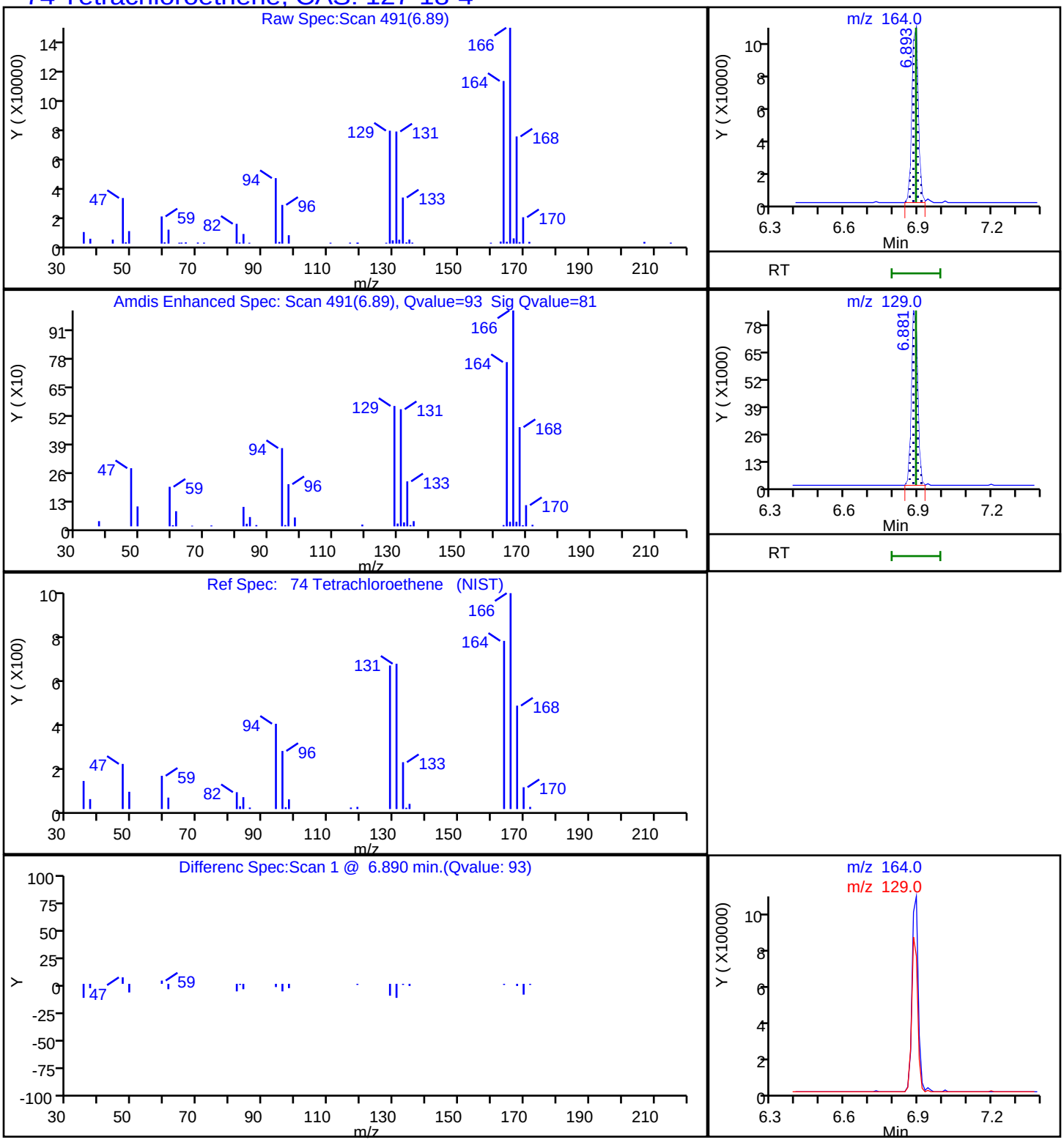
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2025.D

Injection Date:	18-Jun-2019 22:19:30	Instrument ID:	A3UX10		
Lims ID:	240-113949-B-6	Lab Sample ID:	240-113949-6		
Client ID:	OW-2				
Operator ID:	001644	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_10	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

74 Tetrachloroethene, CAS: 127-18-4



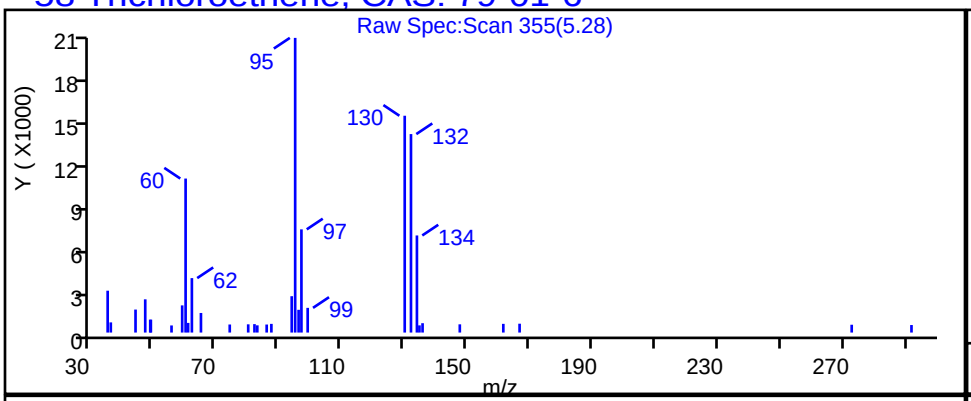
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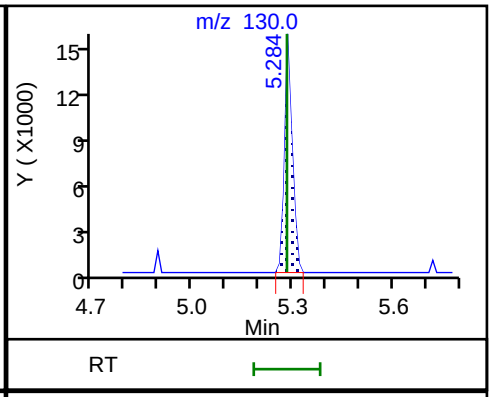
Eurofins TestAmerica, Canton

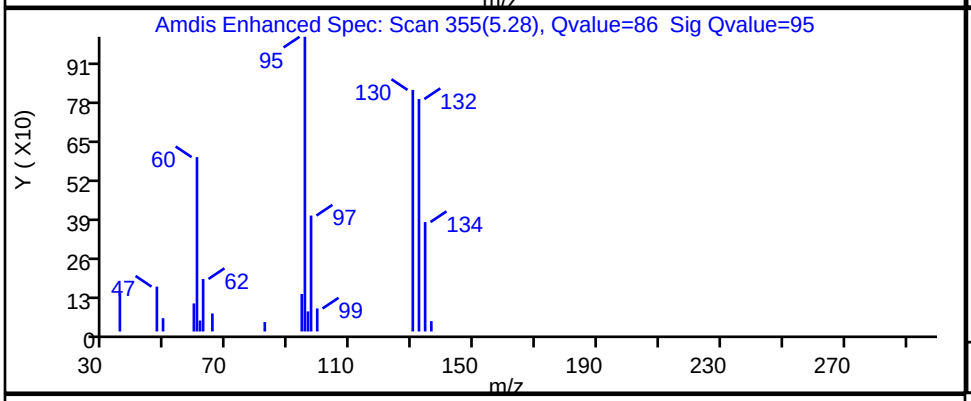
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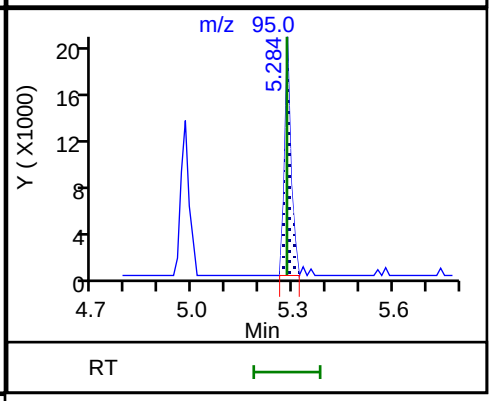
Injection Date:	18-Jun-2019 22:19:30	Instrument ID:	A3UX10
Lims ID:	240-113949-B-6	Lab Sample ID:	240-113949-6
Client ID:	OW-2		
Operator ID:	001644	ALS Bottle#:	27 Worklist Smp#: 28
Purge Vol:	5.000 mL	Dil. Factor:	2.5000
Method:	8260_10	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

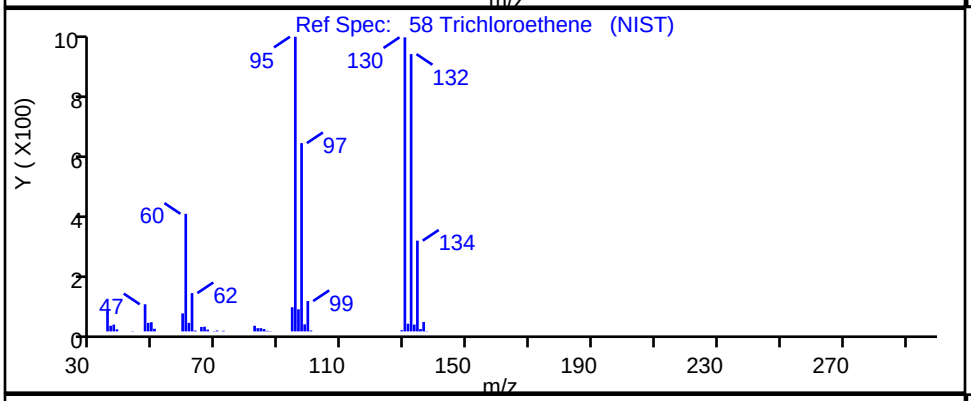
58 Trichloroethene, CAS: 79-01-6

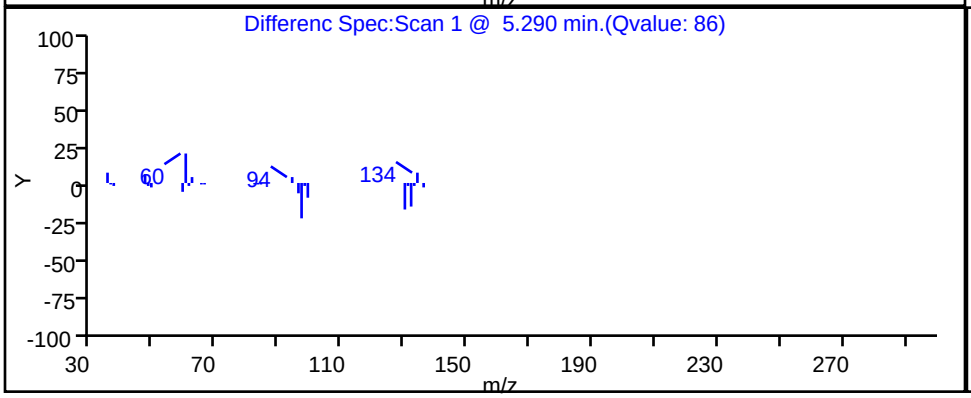


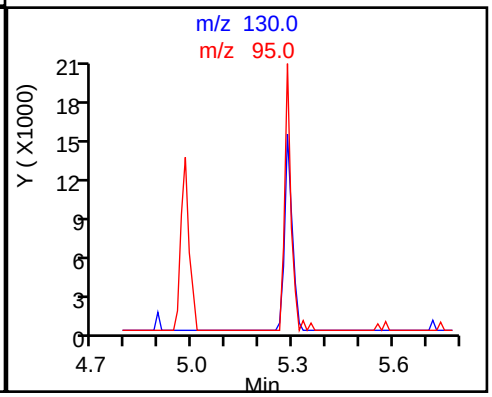












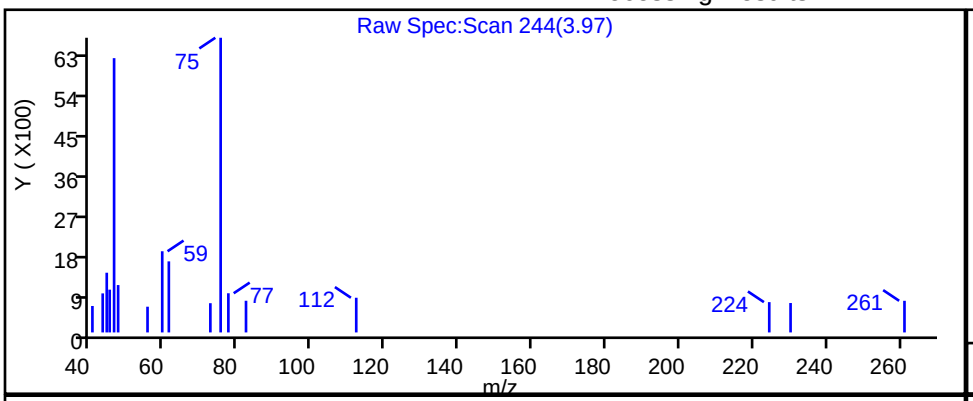
User Disabled Compound Report

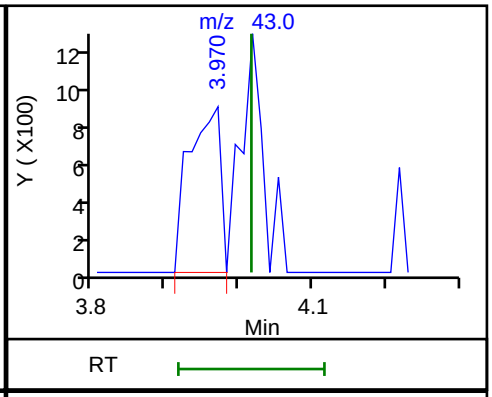
Eurofins TestAmerica, Canton

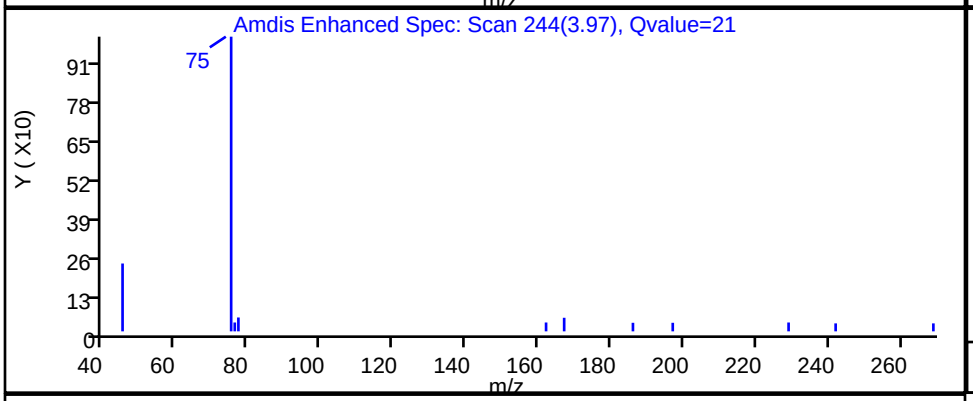
Data File:	\\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2025.D				
Injection Date:	18-Jun-2019 22:19:30	Instrument ID:	A3UX10		
Lims ID:	240-113949-B-6	Lab Sample ID:	240-113949-6		
Client ID:	OW-2				
Operator ID:	001644	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	2.5000		
Method:	8260_10	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

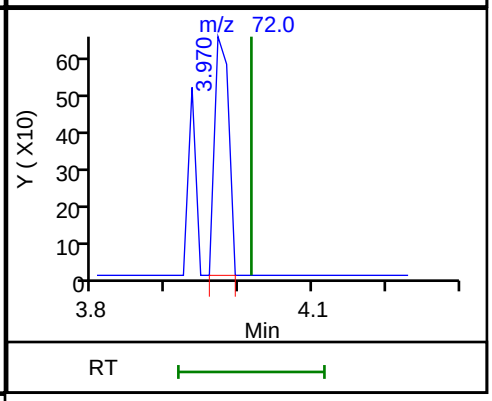
41 2-Butanone (MEK), CAS: 78-93-3

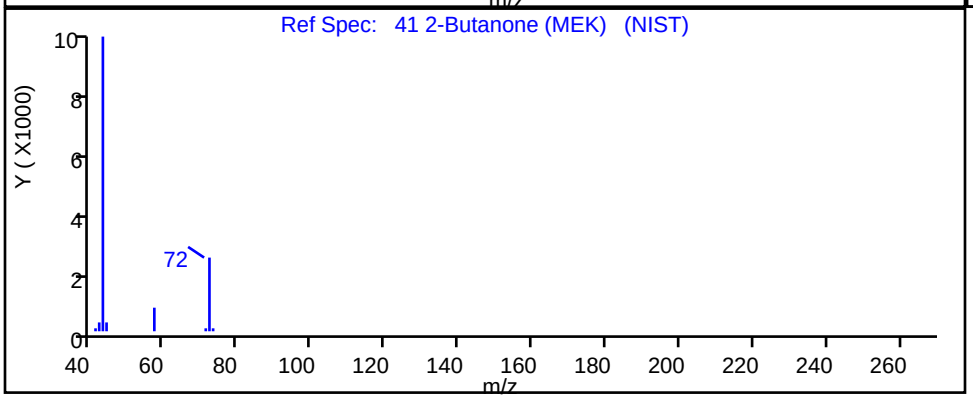
Processing Results











RT	Mass	Response	Amount
3.97	43.00	2630	0.321891
3.97	72.00	882	

Reviewer: williamsla, 19-Jun-2019 10:24:07

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-24 Lab Sample ID: 240-113949-7

Matrix: Water Lab File ID: UXX2026.D

Analysis Method: 8260B Date Collected: 06/06/2019 08:50

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 22:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-24 Lab Sample ID: 240-113949-7

Matrix: Water Lab File ID: UXX2026.D

Analysis Method: 8260B Date Collected: 06/06/2019 08:50

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 22:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		70-123
1868-53-7	Dibromofluoromethane (Surr)	122		75-128
460-00-4	4-Bromofluorobenzene (Surr)	95		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2026.D
Lims ID: 240-113949-B-7
Client ID: OW-24
Sample Type: Client
Inject. Date: 18-Jun-2019 22:44:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-029
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:24:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.975	4.974	0.001	97	337784	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.637	0.000	91	290065	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.862	9.861	0.001	96	172824	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.406	0.001	88	102777	12.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.690	0.001	93	143683	10.8	
$ 6 Toluene-d8 (Surr)	98	6.336	6.335	0.001	96	330264	8.96	
$ 7 4-Bromofluorobenzene (Surr	95	8.750	8.749	0.001	92	142921	9.47	
9 Dichlorodifluoromethane	85		1.259				ND	
10 Chloromethane	50		1.401				ND	
11 Vinyl chloride	62		1.495				ND	
13 Bromomethane	94		1.779				ND	
14 Chloroethane	64		1.862				ND	
16 Trichlorofluoromethane	101		2.063				ND	
19 1,1-Dichloroethene	96		2.501				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.513				ND	
21 Acetone	43	2.549	2.549	0.000	82	17308	0.7816	
24 Carbon disulfide	76		2.679				ND	
27 Methyl acetate	43		2.833				ND	
28 Methylene Chloride	84		2.915				ND	
30 trans-1,2-Dichloroethene	96		3.152				ND	
32 Methyl tert-butyl ether	73		3.152				ND	
34 1,1-Dichloroethane	63		3.519				ND	
40 cis-1,2-Dichloroethene	96		4.004				ND	
41 2-Butanone (MEK)	43		4.016				ND	
47 Chloroform	83		4.276				ND	
48 1,1,1-Trichloroethane	97		4.430				ND	
49 Cyclohexane	56		4.477				ND	
51 Carbon tetrachloride	117		4.572				ND	
53 Benzene	78		4.738				ND	
54 1,2-Dichloroethane	62		4.761				ND	
58 Trichloroethene	130		5.282				ND	
60 Methylcyclohexane	83		5.448				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63		5.483				ND	
65 Dichlorobromomethane	83		5.708				ND	
68 cis-1,3-Dichloropropene	75		6.098				ND	
69 4-Methyl-2-pentanone (MIBK	43		6.240				ND	
70 Toluene	91		6.394				ND	
71 trans-1,3-Dichloropropene	75		6.595				ND	
73 1,1,2-Trichloroethane	97		6.749				ND	
74 Tetrachloroethene	164		6.891				ND	
76 2-Hexanone	43		6.986				ND	
78 Chlorodibromomethane	129		7.116				ND	
80 Ethylene Dibromide	107		7.223				ND	
82 Chlorobenzene	112		7.672				ND	
84 Ethylbenzene	106		7.767				ND	
85 m-Xylene & p-Xylene	106		7.873				ND	
86 o-Xylene	106		8.252				ND	
87 Styrene	104		8.264				ND	
88 Bromoform	173		8.441				ND	
89 Isopropylbenzene	105		8.595				ND	
92 1,1,2,2-Tetrachloroethane	83		8.891				ND	
104 1,3-Dichlorobenzene	146		9.802				ND	
106 1,4-Dichlorobenzene	146		9.885				ND	
110 1,2-Dichlorobenzene	146		10.252				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.021				ND	
113 1,2,4-Trichlorobenzene	180		11.837				ND	
S 130 Xylenes, Total	106		16.530				ND	

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

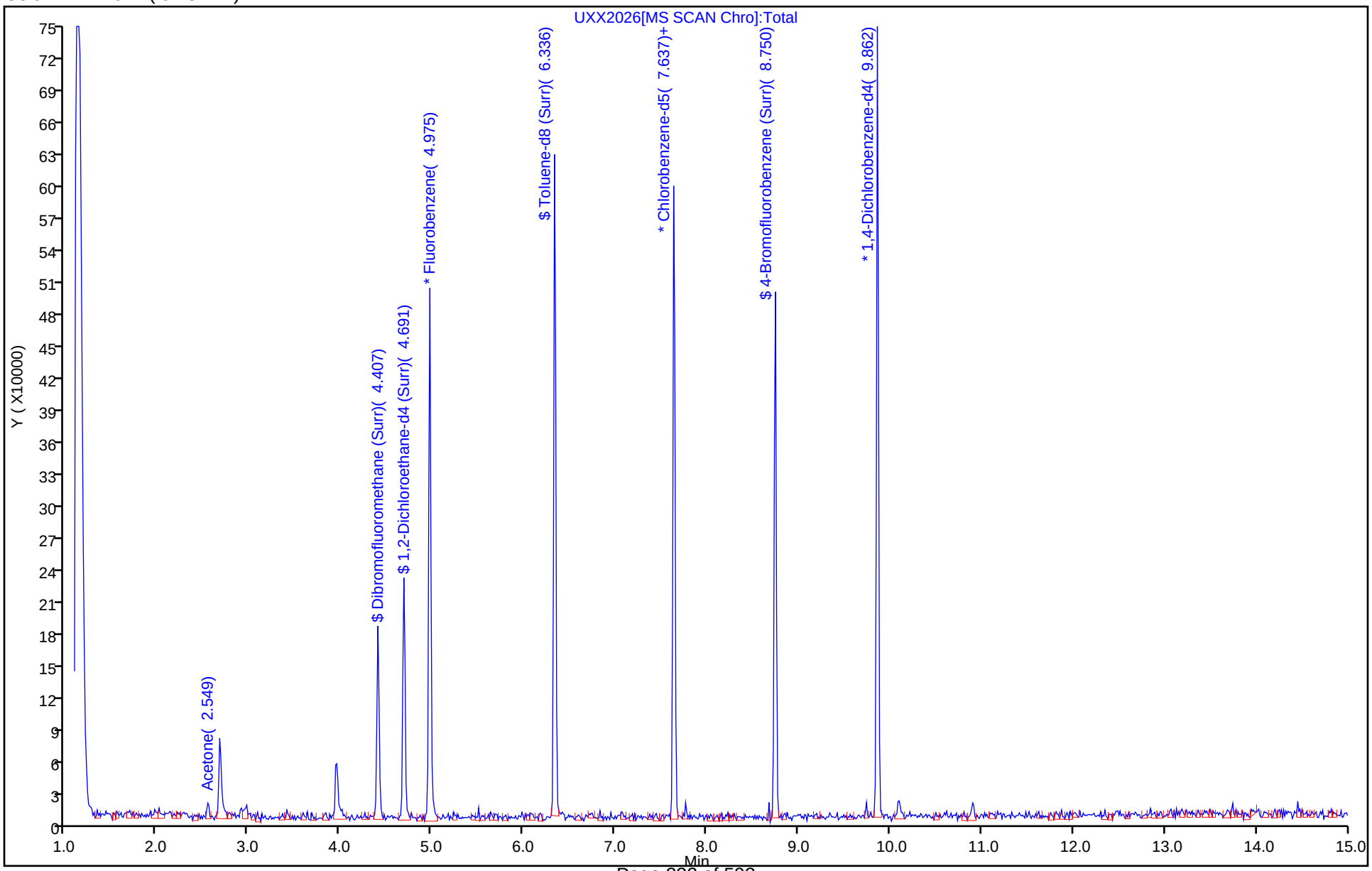
Report Date: 19-Jun-2019 10:25:55 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2026.D

Injection Date:	18-Jun-2019 22:44:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-113949-B-7	Lab Sample ID:	240-113949-7	Worklist Smp#:	29
Client ID:	OW-24				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2026.D
Lims ID: 240-113949-B-7
Client ID: OW-24
Sample Type: Client
Inject. Date: 18-Jun-2019 22:44:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-029
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 19-Jun-2019 10:24:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	12.2	121.80
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	108.37
$ 6 Toluene-d8 (Surr)	10.0	8.96	89.60
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.47	94.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-18 Lab Sample ID: 240-113949-8

Matrix: Water Lab File ID: UXR8602.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 13:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	1.1		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	1.8		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND	F2	1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	12		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-18 Lab Sample ID: 240-113949-8

Matrix: Water Lab File ID: UXR8602.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 13:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	74		70-123
1868-53-7	Dibromofluoromethane (Surr)	96		75-128
460-00-4	4-Bromofluorobenzene (Surr)	68		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8602.D
Lims ID: 240-113949-B-8
Client ID: OW-18
Sample Type: Client
Inject. Date: 19-Jun-2019 13:57:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-010
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 14:32:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1258269	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	951230	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	476520	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	93	281848	9.57	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.490	0.000	97	402355	9.53	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	95	912863	7.41	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	89	310683	6.81	
9 Dichlorodifluoromethane	85		1.696				ND	
10 Chloromethane	50		1.885				ND	
11 Vinyl chloride	62		2.004				ND	
12 Bromomethane	94		2.360				ND	
13 Chloroethane	64	2.467	2.467	0.001	47	6509	0.2630	
15 Trichlorofluoromethane	101		2.716				ND	
19 1,1-Dichloroethene	96		3.214				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.237				ND	
21 Acetone	43	3.273	3.273	0.000	97	33673	2.91	
23 Carbon disulfide	76		3.427				ND	
26 Methyl acetate	43		3.569				ND	
27 Methylene Chloride	84		3.664				ND	
30 Methyl tert-butyl ether	73		3.901				ND	
31 trans-1,2-Dichloroethene	96		3.913				ND	
33 1,1-Dichloroethane	63	4.293	4.281	0.012	96	12973	0.2137	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	80	8149	0.2291	
40 2-Butanone (MEK)	43		4.803				ND	U
46 Chloroform	83		5.064				ND	
47 1,1,1-Trichloroethane	97		5.218				ND	
48 Cyclohexane	56		5.265				ND	
50 Carbon tetrachloride	117		5.360				ND	
52 Benzene	78	5.550	5.538	0.012	98	250234	1.82	
53 1,2-Dichloroethane	62		5.562				ND	
57 Trichloroethene	130		6.083				ND	
59 Methylcyclohexane	83		6.249				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 1,2-Dichloropropane	63		6.285				ND	
64 Dichlorobromomethane	83		6.522				ND	
67 cis-1,3-Dichloropropene	75		6.913				ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032				ND	
69 Toluene	91		7.210				ND	
70 trans-1,3-Dichloropropene	75		7.400				ND	
72 1,1,2-Trichloroethane	97		7.566				ND	
73 Tetrachloroethene	164		7.708				ND	
76 2-Hexanone	43		7.779				ND	
78 Chlorodibromomethane	129		7.933				ND	
79 Ethylene Dibromide	107		8.052				ND	
81 Chlorobenzene	112	8.503	8.502	0.001	93	1139389	11.8	
83 Ethylbenzene	106		8.585				ND	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	96	19702	0.3250	
85 o-Xylene	106		9.072				ND	
86 Styrene	104		9.084				ND	
87 Bromoform	173		9.285				ND	
89 Isopropylbenzene	105		9.416				ND	
91 1,1,2,2-Tetrachloroethane	83		9.712				ND	
103 1,3-Dichlorobenzene	146		10.649				ND	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	93	80519	1.06	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	90	13568	0.2001	
111 1,2-Dibromo-3-Chloropropan	157		11.894				ND	
113 1,2,4-Trichlorobenzene	180		12.724				ND	
S 130 Xylenes, Total	106				0		0.3250	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

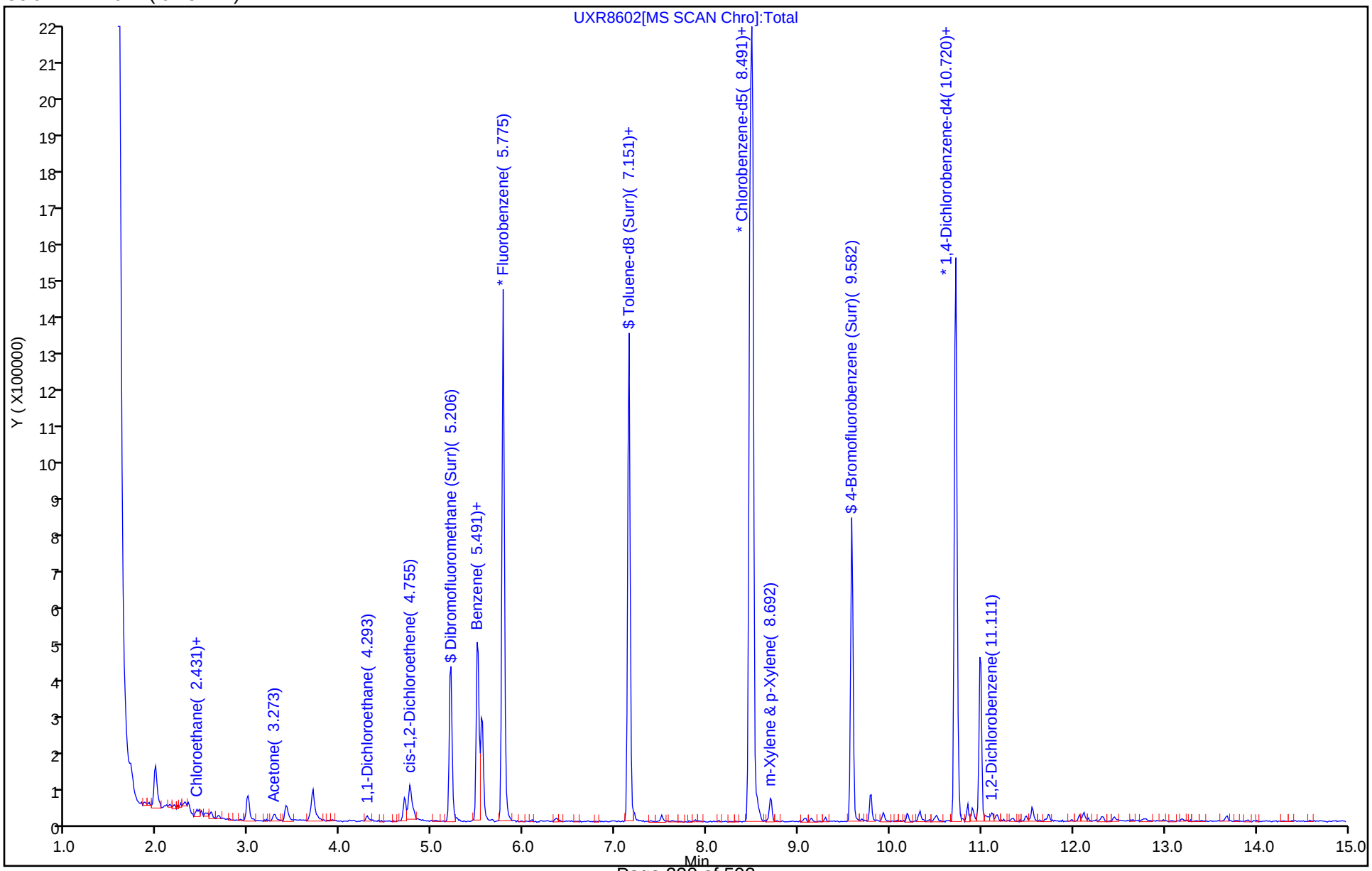
Report Date: 20-Jun-2019 11:33:24 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8602.D

Injection Date:	19-Jun-2019 13:57:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-B-8	Lab Sample ID:	240-113949-8	Worklist Smp#:	10
Client ID:	OW-18				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8602.D
Lims ID: 240-113949-B-8
Client ID: OW-18
Sample Type: Client
Inject. Date: 19-Jun-2019 13:57:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-010
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 14:32:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.57	95.65
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.53	95.32
$ 6 Toluene-d8 (Surr)	10.0	7.41	74.05
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.81	68.05

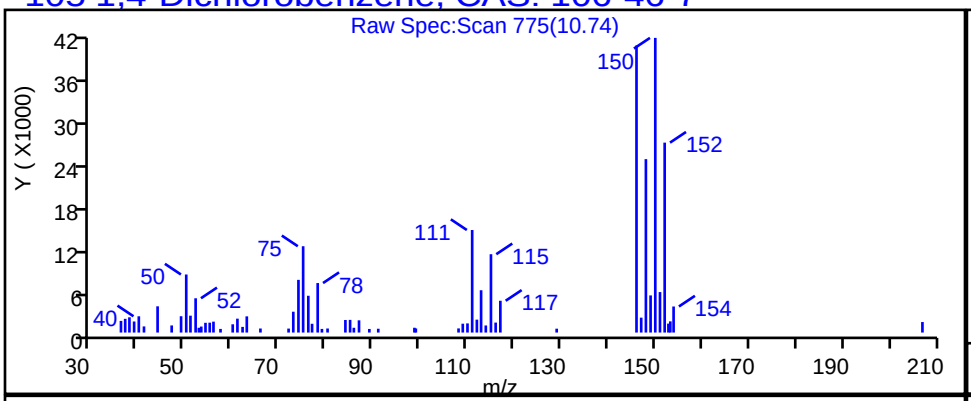
Report Date: 20-Jun-2019 11:33:24 Chrom Revision: 2.3 18-Jun-2019 21:44:00

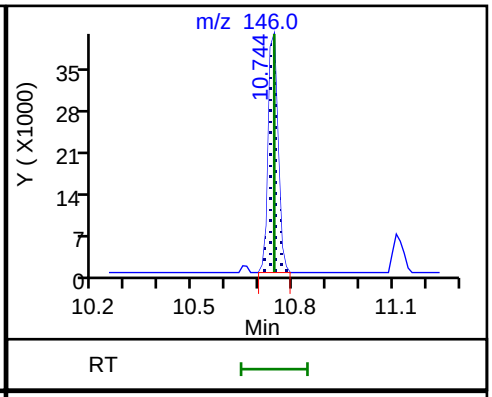
Eurofins TestAmerica, Canton

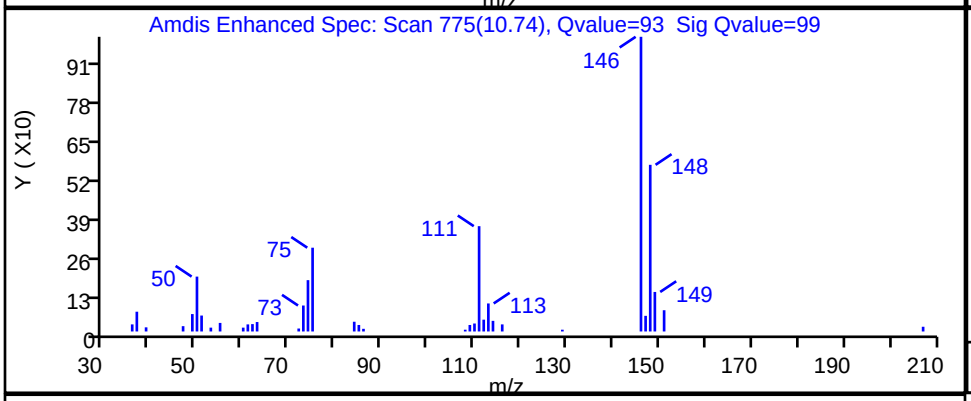
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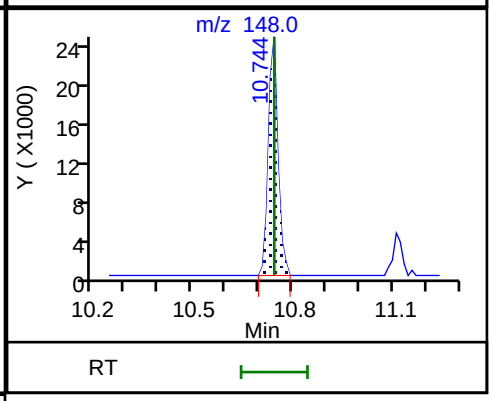
Injection Date:	19-Jun-2019 13:57:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-8	Lab Sample ID:	240-113949-8		
Client ID:	OW-18				
Operator ID:	001644	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

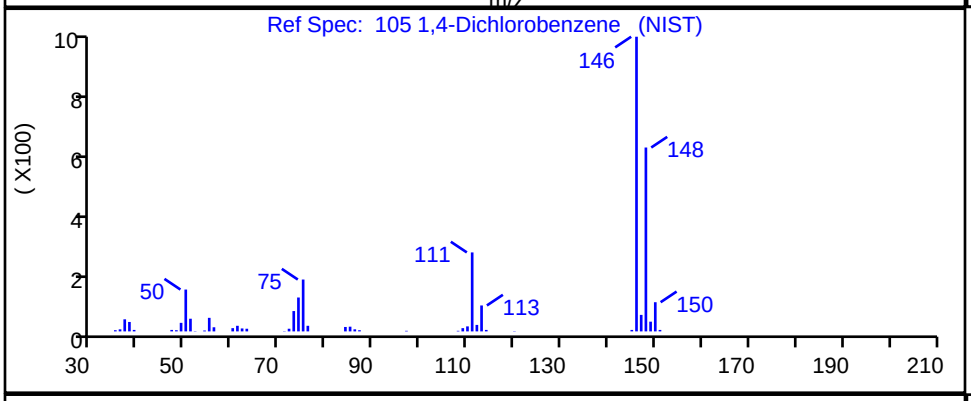
105 1,4-Dichlorobenzene, CAS: 106-46-7

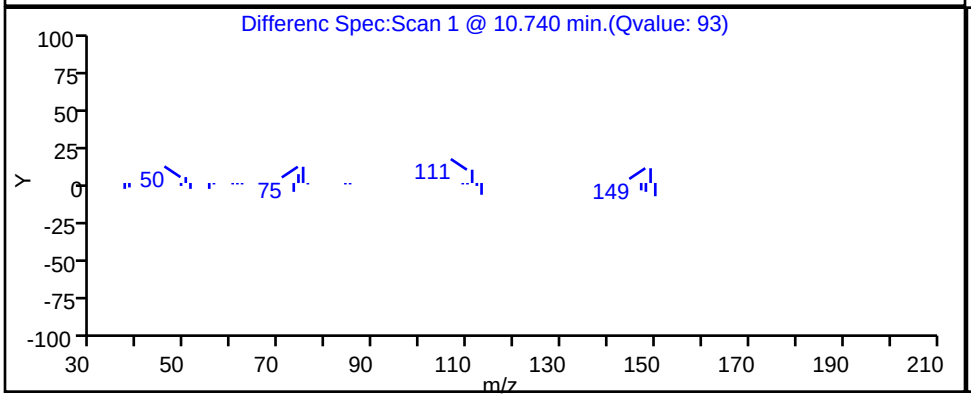


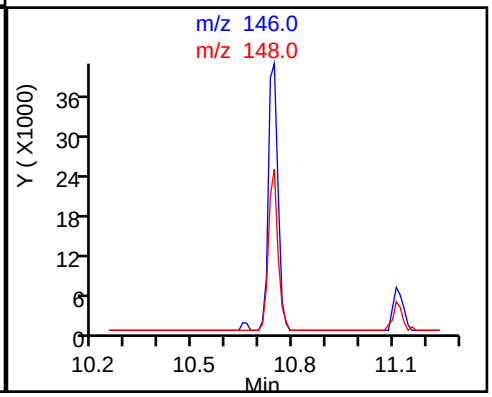












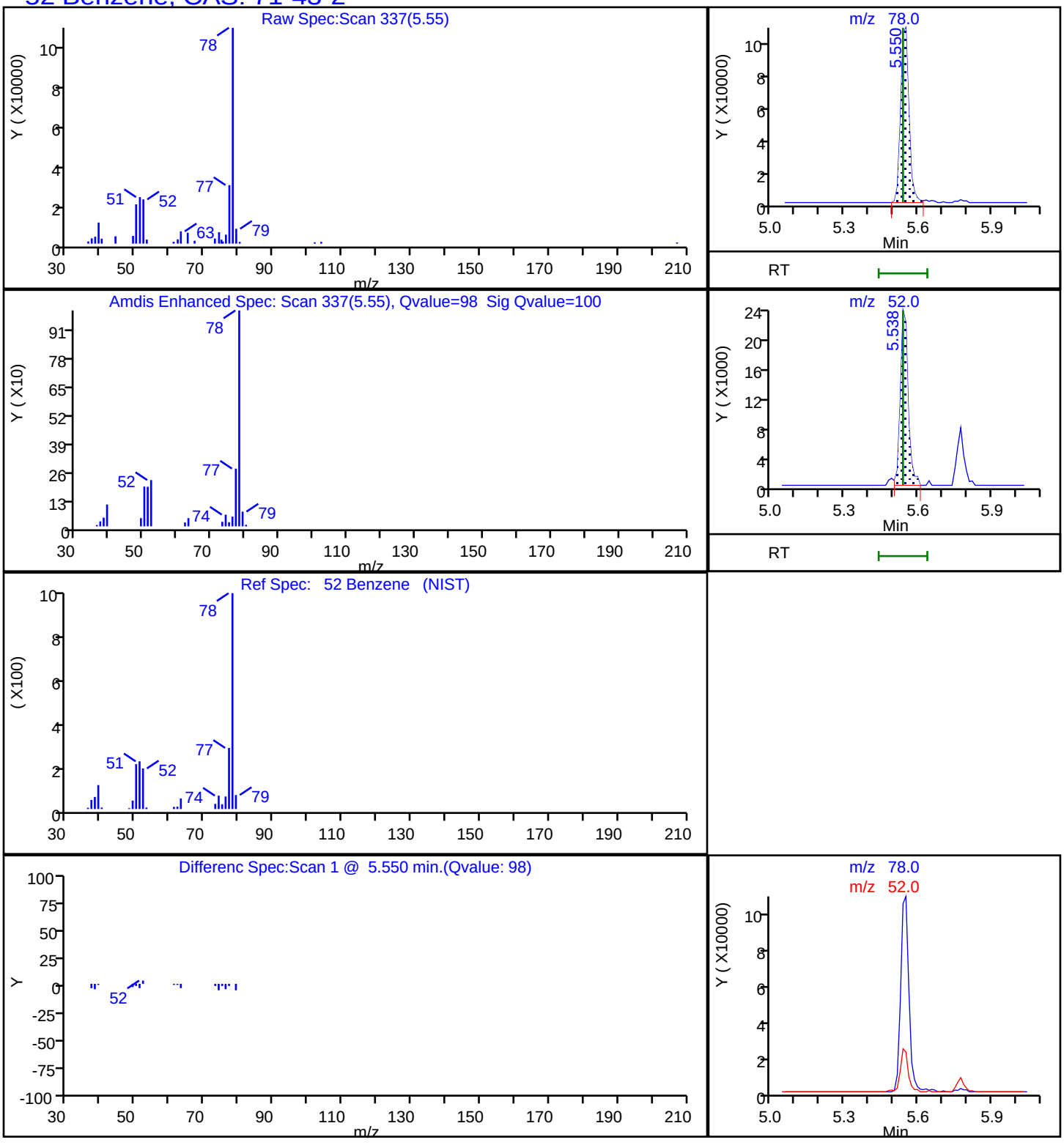
Report Date: 20-Jun-2019 11:33:24 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8602.D

Injection Date:	19-Jun-2019 13:57:30	Instrument ID:	A3UX17
Lims ID:	240-113949-B-8	Lab Sample ID:	240-113949-8
Client ID:	OW-18		
Operator ID:	001644	ALS Bottle#:	9 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

52 Benzene, CAS: 71-43-2



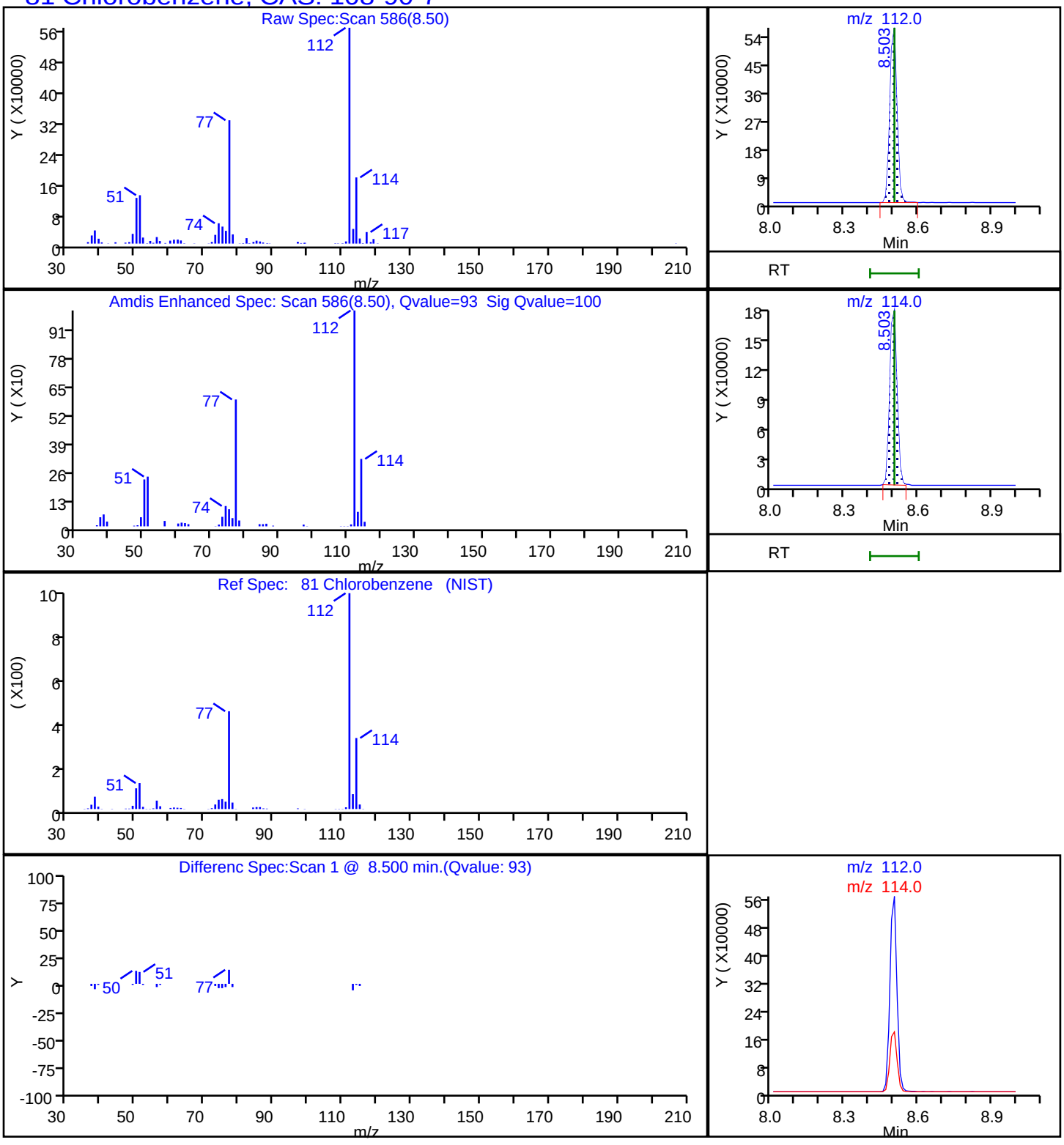
Report Date: 20-Jun-2019 11:33:24 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8602.D

Injection Date:	19-Jun-2019 13:57:30	Instrument ID:	A3UX17
Lims ID:	240-113949-B-8	Lab Sample ID:	240-113949-8
Client ID:	OW-18		
Operator ID:	001644	ALS Bottle#:	9 Worklist Smp#: 10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	8260_17	Limit Group:	MSV 8260B ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

81 Chlorobenzene, CAS: 108-90-7



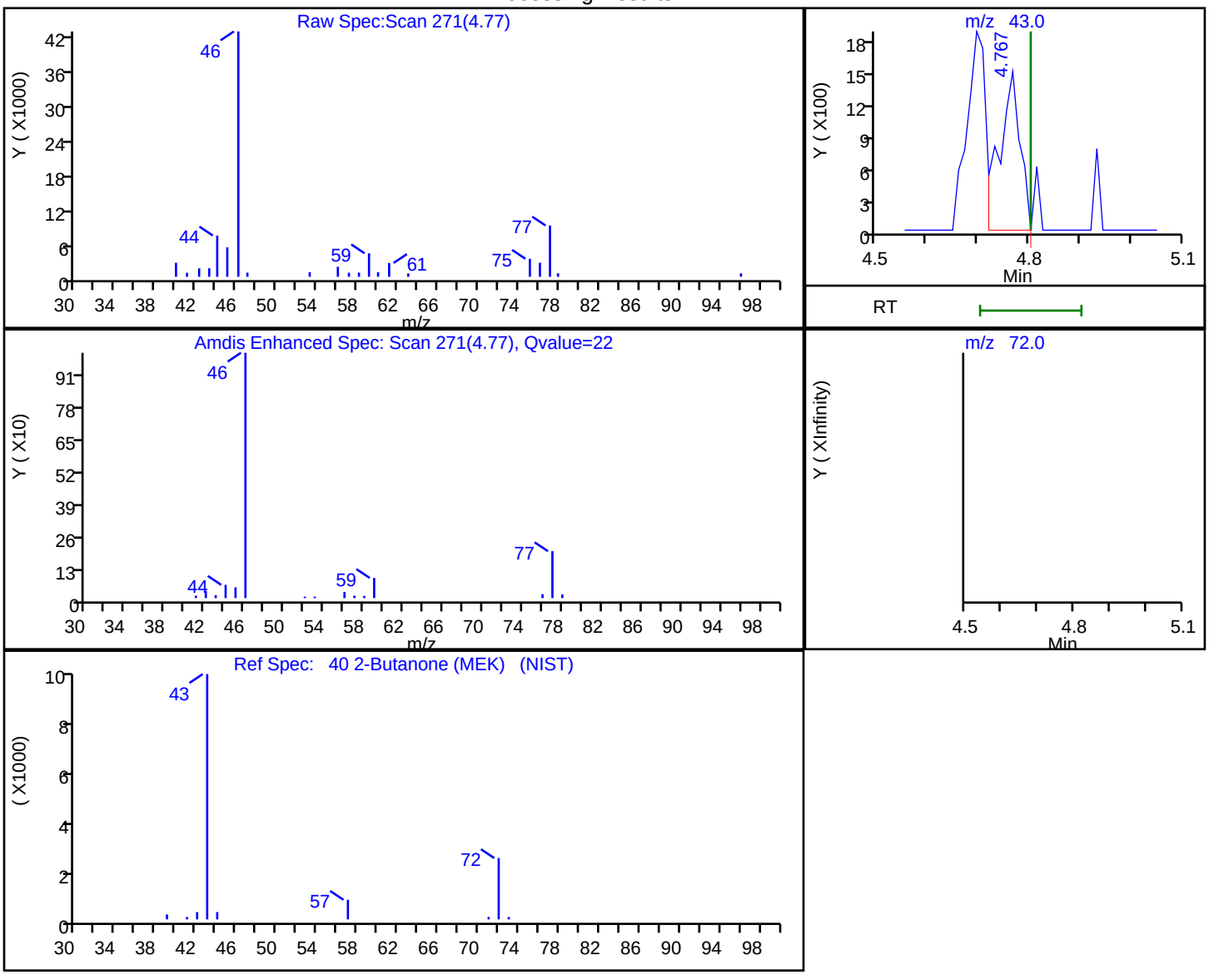
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8602.D				
Injection Date:	19-Jun-2019 13:57:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-8	Lab Sample ID:	240-113949-8		
Client ID:	OW-18				
Operator ID:	001644	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

40 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
4.77	43.00	4227	0.386664
4.80	72.00	0	

Reviewer: williamsla, 19-Jun-2019 14:31:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-19 Lab Sample ID: 240-113949-9

Matrix: Water Lab File ID: UXR8603.D

Analysis Method: 8260B Date Collected: 06/06/2019 11:40

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 14:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	1.4		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	1.6		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	16		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-19 Lab Sample ID: 240-113949-9

Matrix: Water Lab File ID: UXR8603.D

Analysis Method: 8260B Date Collected: 06/06/2019 11:40

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 14:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	73		70-123
1868-53-7	Dibromofluoromethane (Surr)	98		75-128
460-00-4	4-Bromofluorobenzene (Surr)	68		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D
Lims ID: 240-113949-B-9
Client ID: OW-19
Sample Type: Client
Inject. Date: 19-Jun-2019 14:21:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-011
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 14:58:59

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.775	5.775	0.000	98	1272248	10.0	
*	2 Chlorobenzene-d5	117	8.467	8.467	0.000	89	953313	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	97	445744	10.0	
$	4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	91	291025	9.77	
$	5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.490	0.001	96	408015	9.56	
$	6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	900117	7.29	
$	7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	313257	6.85	
	9 Dichlorodifluoromethane	85		1.696				ND	U
	10 Chloromethane	50	1.886	1.885	0.001	53	7170	0.1398	
	11 Vinyl chloride	62	2.004	2.004	0.000	95	40192	0.9239	
	12 Bromomethane	94		2.360				ND	U
	13 Chloroethane	64	2.479	2.467	0.013	95	16045	0.6412	
	15 Trichlorofluoromethane	101		2.716				ND	
	19 1,1-Dichloroethene	96		3.214				ND	
	20 1,1,2-Trichloro-1,2,2-trif	151		3.237				ND	
	21 Acetone	43	3.285	3.273	0.012	100	21497	1.03	
	23 Carbon disulfide	76		3.427				ND	
	26 Methyl acetate	43		3.569				ND	
	27 Methylene Chloride	84		3.664				ND	
	30 Methyl tert-butyl ether	73		3.901				ND	
	31 trans-1,2-Dichloroethene	96		3.913				ND	
	33 1,1-Dichloroethane	63	4.281	4.281	0.000	95	16271	0.2651	
	39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	85	27431	0.7629	
	40 2-Butanone (MEK)	43		4.803				ND	
	46 Chloroform	83		5.064				ND	
	47 1,1,1-Trichloroethane	97		5.218				ND	
	48 Cyclohexane	56		5.265				ND	
	50 Carbon tetrachloride	117		5.360				ND	
	52 Benzene	78	5.550	5.538	0.012	98	216169	1.56	
	53 1,2-Dichloroethane	62		5.562				ND	U
	57 Trichloroethene	130		6.083				ND	
	59 Methylcyclohexane	83		6.249				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 1,2-Dichloropropane	63		6.285				ND	
64 Dichlorobromomethane	83		6.522				ND	
67 cis-1,3-Dichloropropene	75		6.913				ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032				ND	
69 Toluene	91		7.210				ND	
70 trans-1,3-Dichloropropene	75		7.400				ND	
72 1,1,2-Trichloroethane	97		7.566				ND	
73 Tetrachloroethene	164		7.708				ND	
76 2-Hexanone	43		7.779				ND	
78 Chlorodibromomethane	129		7.933				ND	
79 Ethylene Dibromide	107		8.052				ND	
81 Chlorobenzene	112	8.503	8.502	0.001	93	1547760	16.0	
83 Ethylbenzene	106		8.585				ND	
84 m-Xylene & p-Xylene	106		8.692				ND	
85 o-Xylene	106		9.072				ND	
86 Styrene	104		9.084				ND	
87 Bromoform	173		9.285				ND	
89 Isopropylbenzene	105		9.416				ND	
91 1,1,2,2-Tetrachloroethane	83		9.712				ND	
103 1,3-Dichlorobenzene	146		10.649				ND	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	89	96797	1.37	
109 1,2-Dichlorobenzene	146	11.112	11.111	0.001	86	17901	0.2822	
111 1,2-Dibromo-3-Chloropropan	157		11.894				ND	
113 1,2,4-Trichlorobenzene	180		12.724				ND	
S 130 Xylenes, Total	106		16.530				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

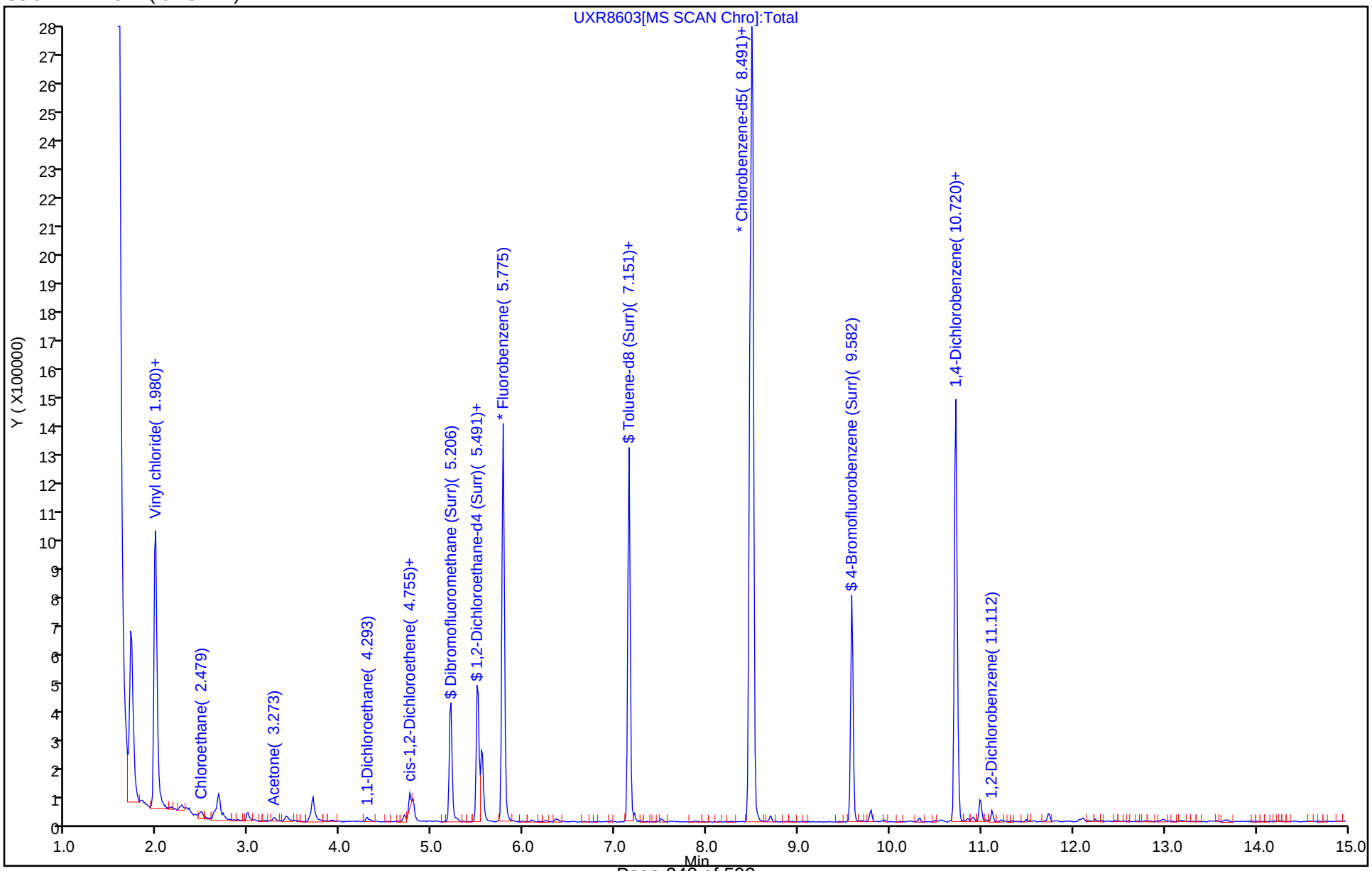
Report Date: 20-Jun-2019 11:33:28 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D

Injection Date:	19-Jun-2019 14:21:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-B-9	Lab Sample ID:	240-113949-9	Worklist Smp#:	11
Client ID:	OW-19				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D
Lims ID: 240-113949-B-9
Client ID: OW-19
Sample Type: Client
Inject. Date: 19-Jun-2019 14:21:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-011
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 14:58:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.77	97.68
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.56	95.60
$ 6 Toluene-d8 (Surr)	10.0	7.29	72.86
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.85	68.47

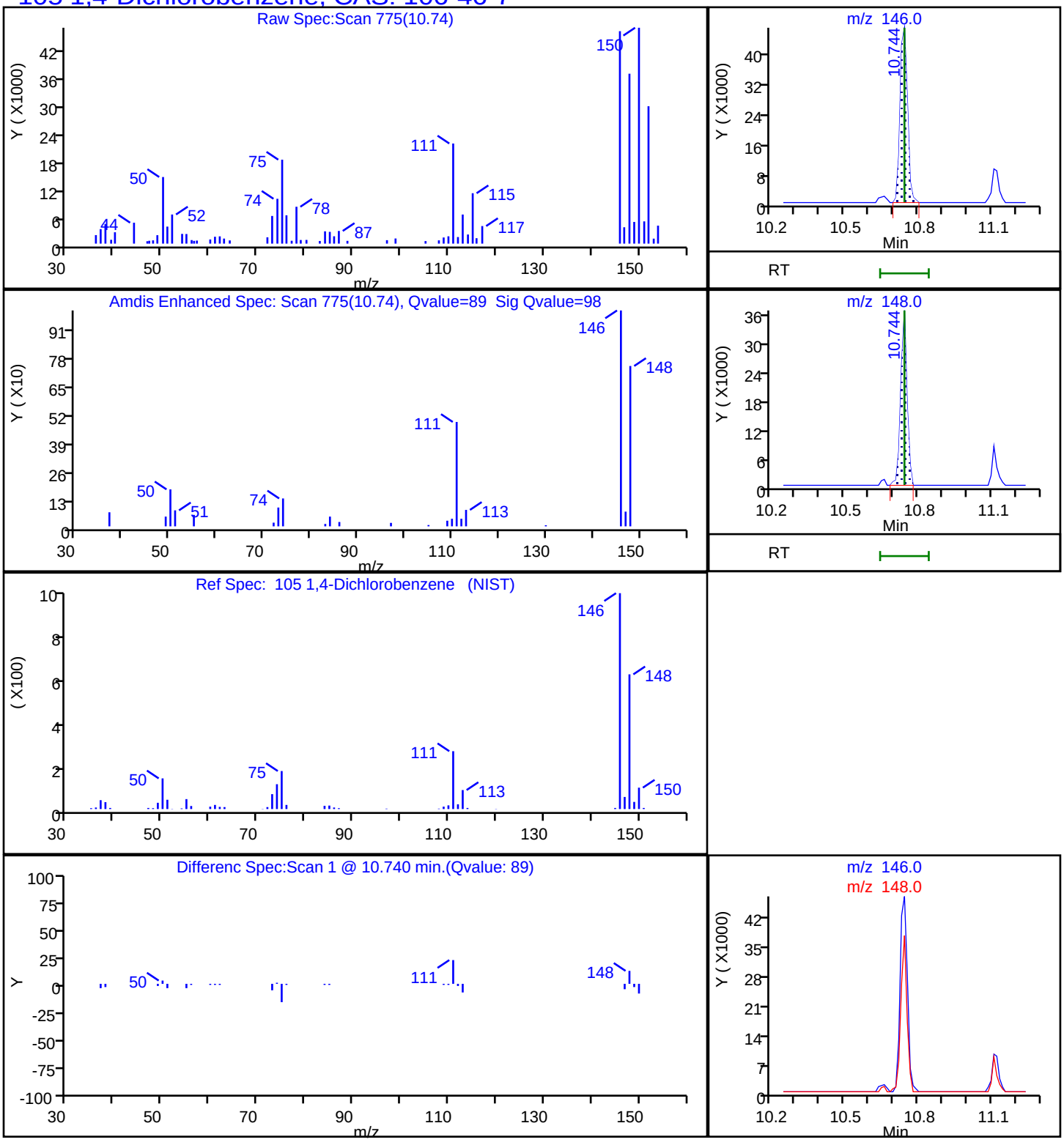
Report Date: 20-Jun-2019 11:33:29 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D

Injection Date:	19-Jun-2019 14:21:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-9	Lab Sample ID:	240-113949-9		
Client ID:	OW-19				
Operator ID:	001644	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

105 1,4-Dichlorobenzene, CAS: 106-46-7



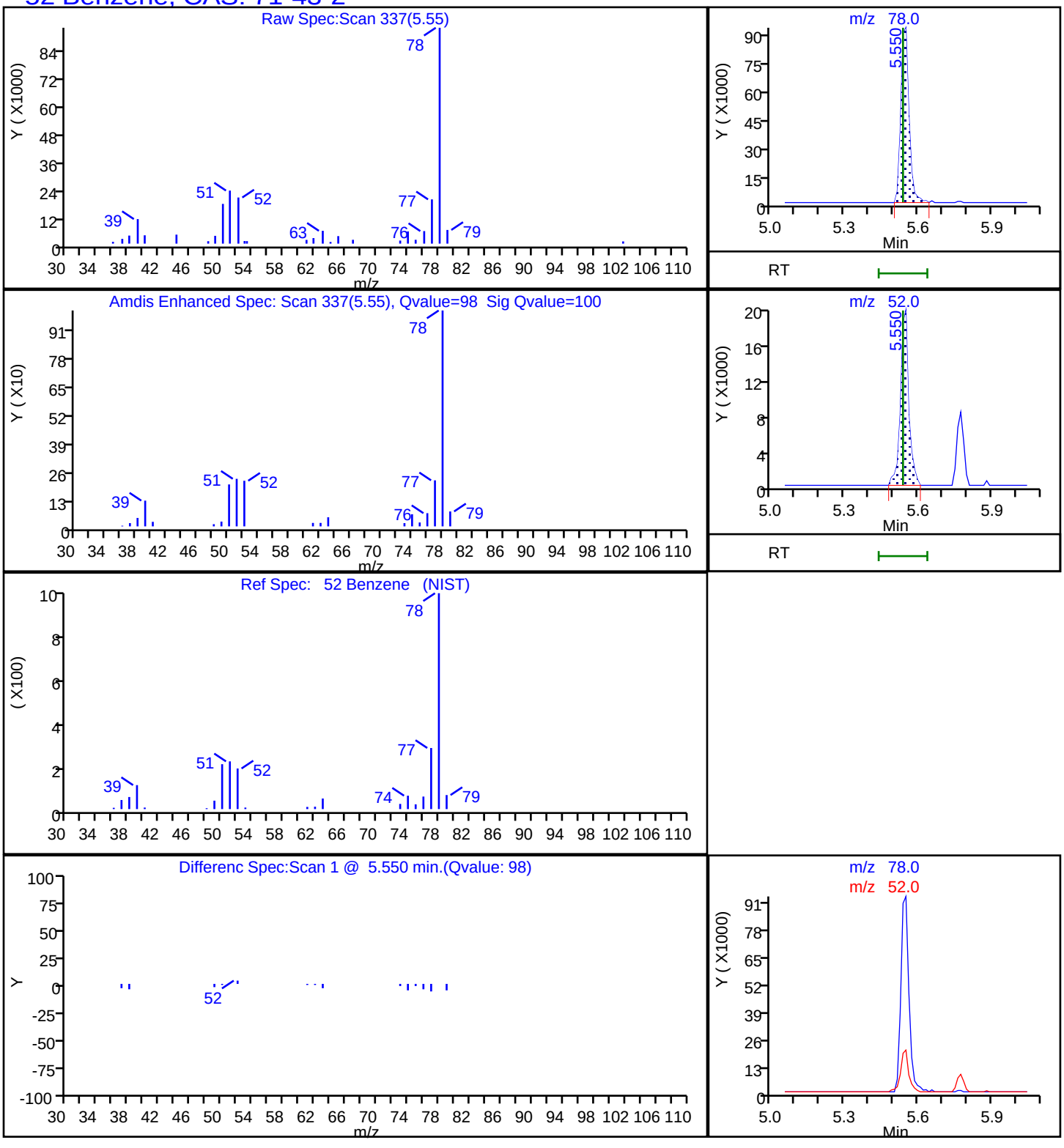
Report Date: 20-Jun-2019 11:33:28 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D

Injection Date:	19-Jun-2019 14:21:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-9	Lab Sample ID:	240-113949-9		
Client ID:	OW-19				
Operator ID:	001644	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Benzene, CAS: 71-43-2



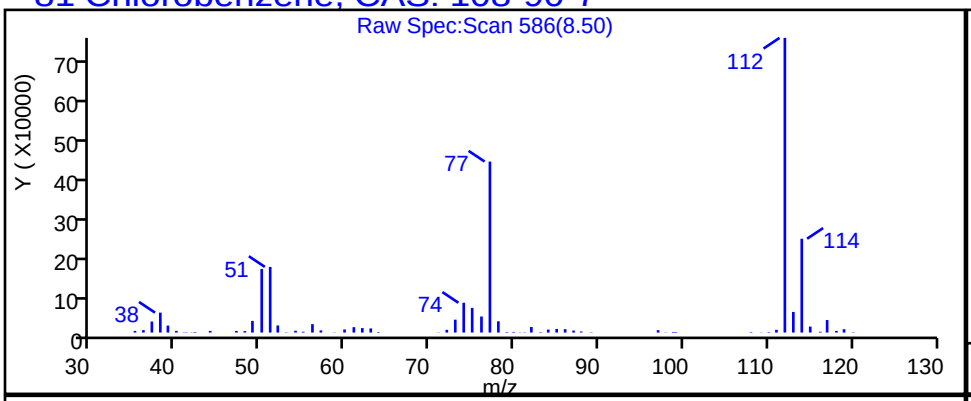
Report Date: 20-Jun-2019 11:33:28 Chrom Revision: 2.3 18-Jun-2019 21:44:00

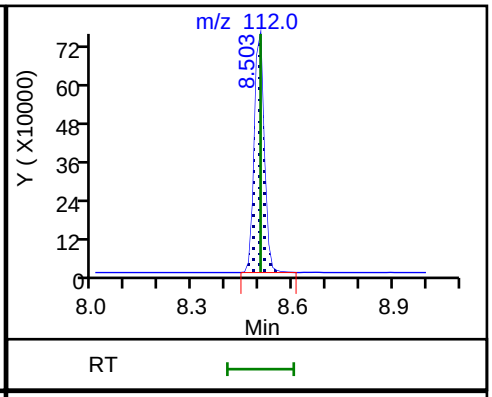
Eurofins TestAmerica, Canton

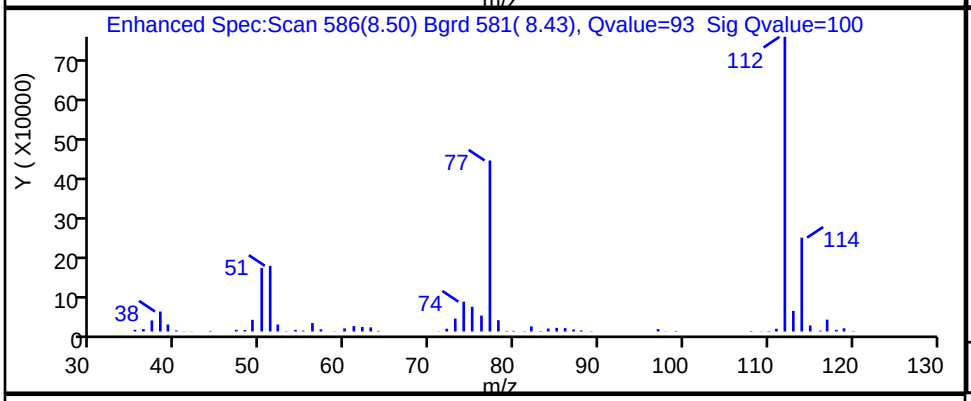
Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D

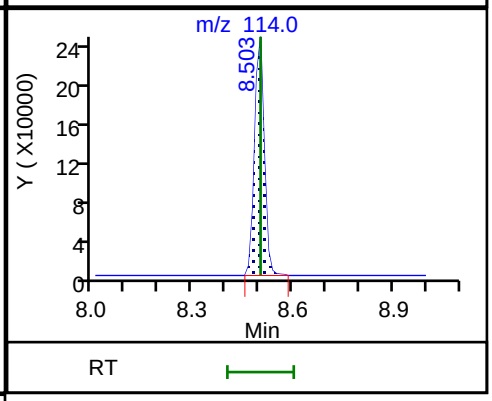
Injection Date:	19-Jun-2019 14:21:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-9	Lab Sample ID:	240-113949-9		
Client ID:	OW-19				
Operator ID:	001644	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

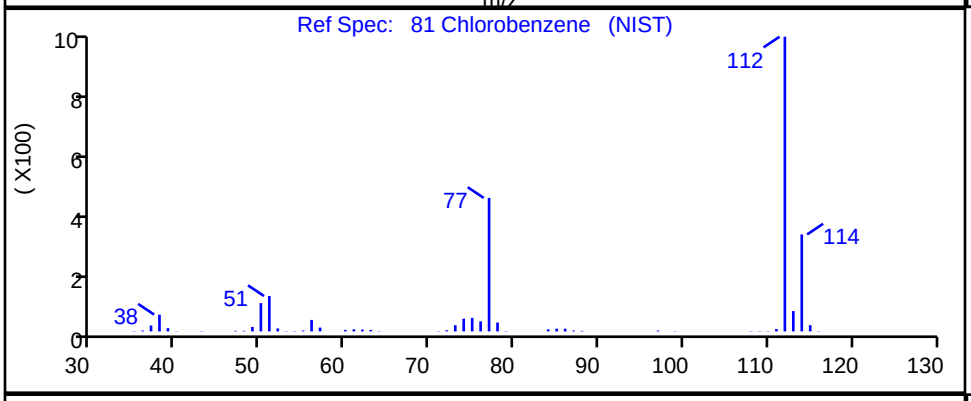
81 Chlorobenzene, CAS: 108-90-7

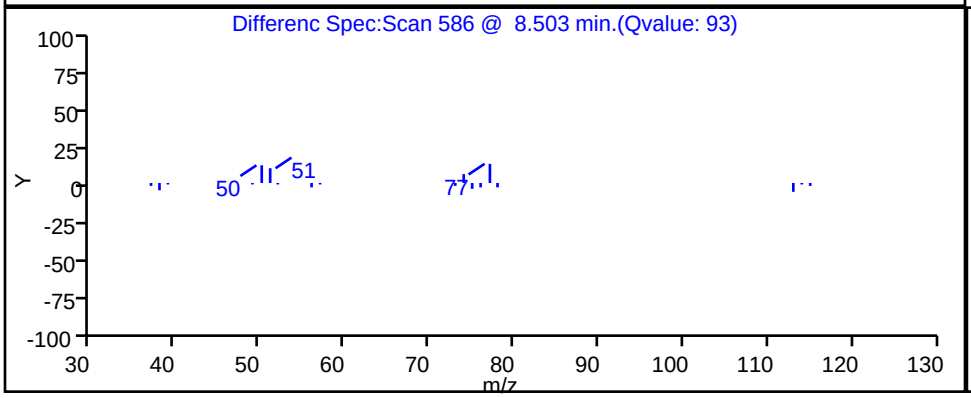


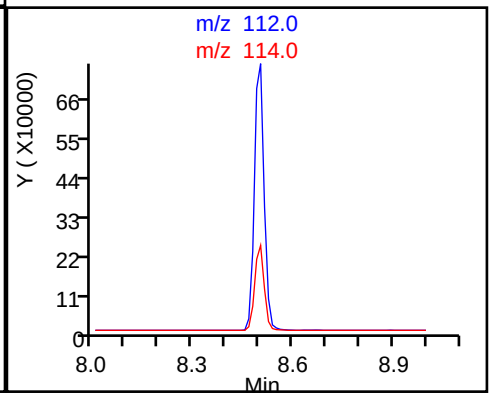












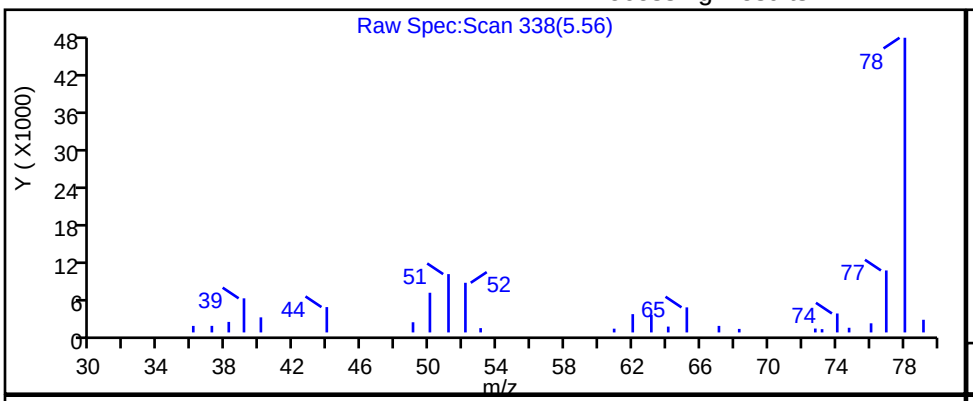
User Disabled Compound Report

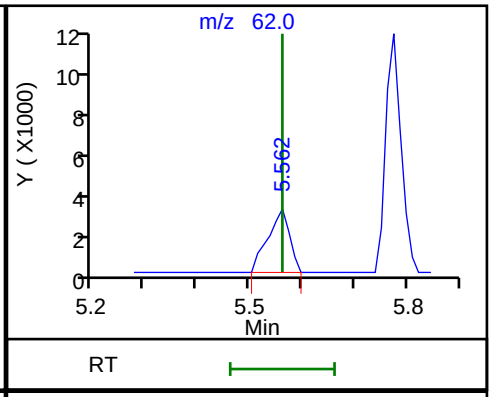
Eurofins TestAmerica, Canton

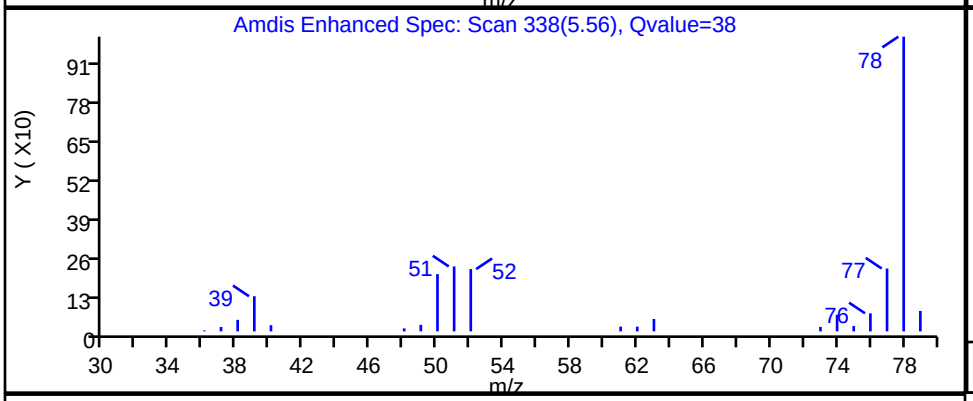
Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D				
Injection Date:	19-Jun-2019 14:21:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-9	Lab Sample ID:	240-113949-9		
Client ID:	OW-19				
Operator ID:	001644	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

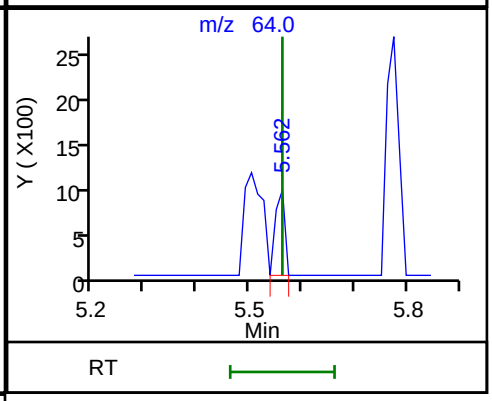
53 1,2-Dichloroethane, CAS: 107-06-2

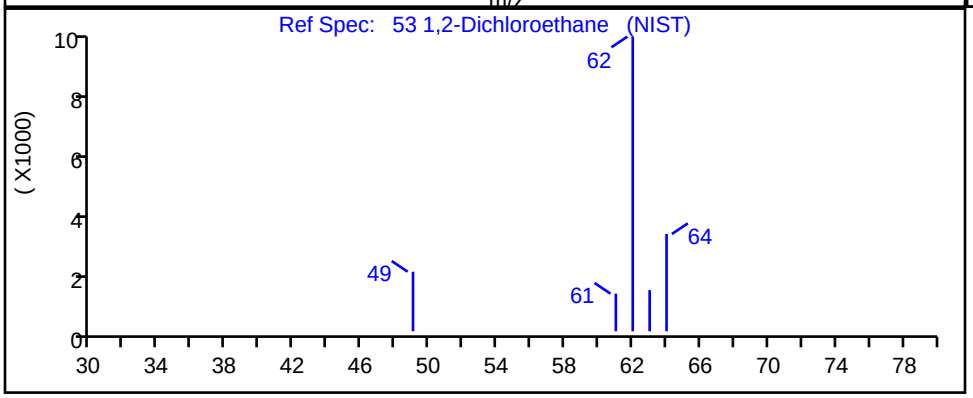
Processing Results











RT	Mass	Response	Amount
5.56	62.00	8466	0.163622
5.56	64.00	1187	

Reviewer: williamsla, 19-Jun-2019 14:58:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

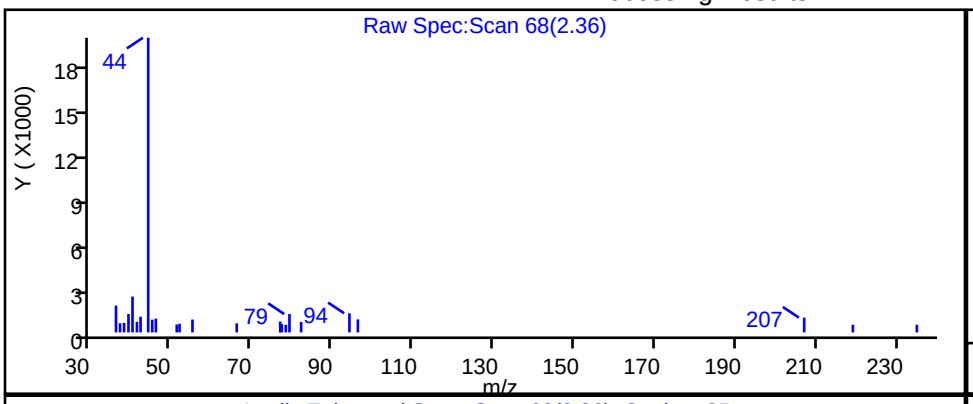
User Disabled Compound Report

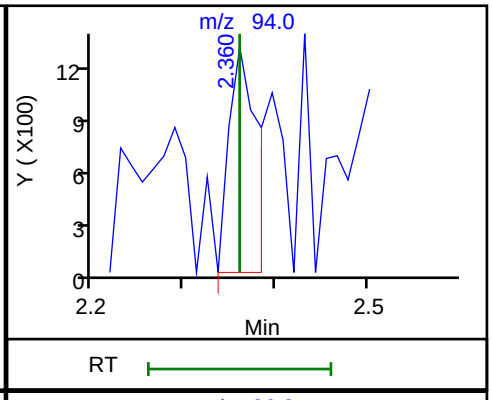
Eurofins TestAmerica, Canton

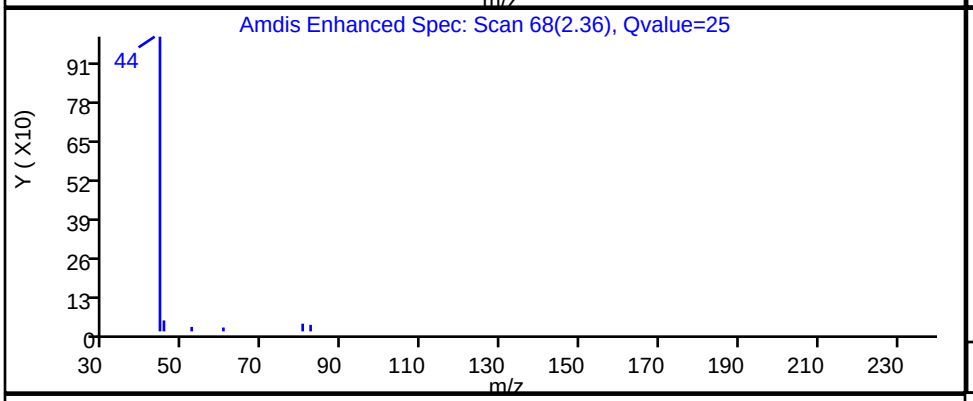
Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D				
Injection Date:	19-Jun-2019 14:21:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-9	Lab Sample ID:	240-113949-9		
Client ID:	OW-19				
Operator ID:	001644	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

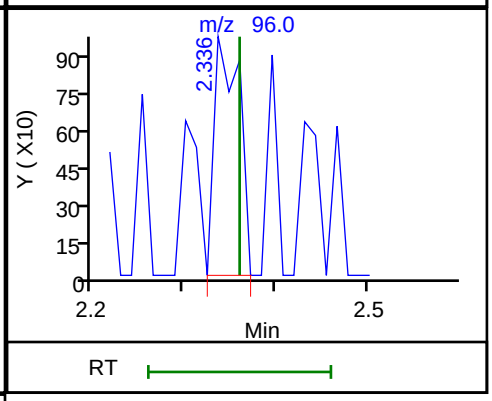
12 Bromomethane, CAS: 74-83-9

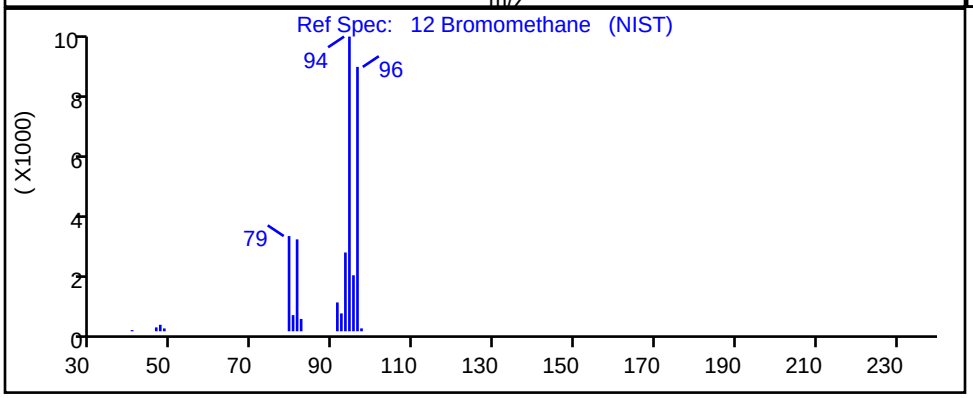
Processing Results











RT	Mass	Response	Amount
2.36	94.00	2768	0.112512
2.34	96.00	1861	

Reviewer: williamsla, 19-Jun-2019 14:58:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

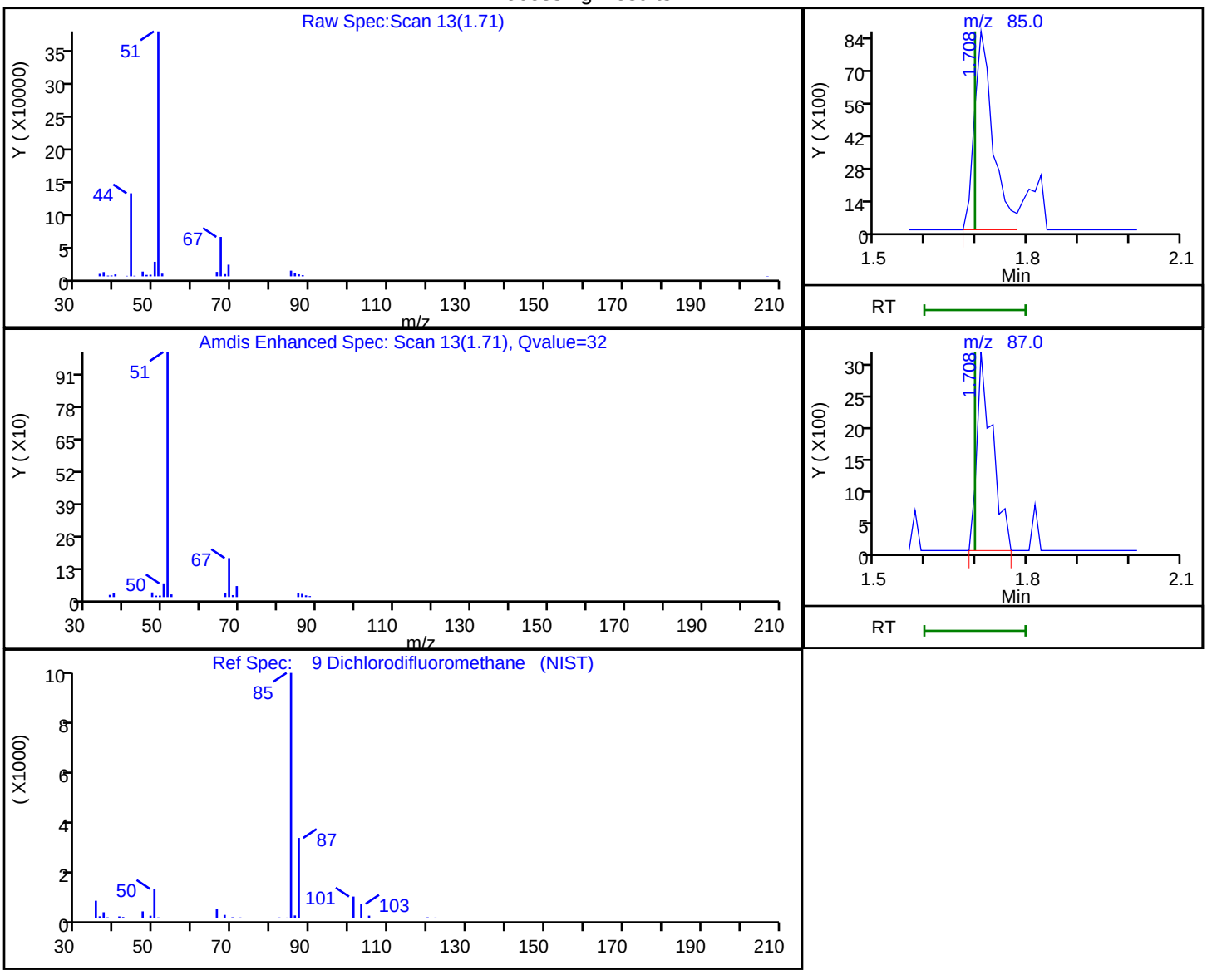
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8603.D				
Injection Date:	19-Jun-2019 14:21:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-9	Lab Sample ID:	240-113949-9		
Client ID:	OW-19				
Operator ID:	001644	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

9 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.71	85.00	22198	0.499256
1.71	87.00	6618	

Reviewer: williamsla, 19-Jun-2019 14:58:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: PUMP BLANK Lab Sample ID: 240-113949-10

Matrix: Water Lab File ID: UXR8604.D

Analysis Method: 8260B Date Collected: 06/06/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: PUMP BLANK Lab Sample ID: 240-113949-10

Matrix: Water Lab File ID: UXR8604.D

Analysis Method: 8260B Date Collected: 06/06/2019 12:00

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 14:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	74		70-123
1868-53-7	Dibromofluoromethane (Surr)	94		75-128
460-00-4	4-Bromofluorobenzene (Surr)	65		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8604.D
Lims ID: 240-113949-B-10
Client ID: PUMP BLANK
Sample Type: Client
Inject. Date: 19-Jun-2019 14:45:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-012
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 15:06:32

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.775	5.775	0.000	98	1248476	10.0	
*	2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	948825	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	97	413163	10.0	
$	4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	93	275233	9.41	
$	5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.490	0.001	95	413602	9.88	
$	6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	905991	7.37	
$	7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	95	294069	6.46	
	9 Dichlorodifluoromethane	85		1.696				ND	
	10 Chloromethane	50		1.885				ND	
	11 Vinyl chloride	62		2.004				ND	
	12 Bromomethane	94		2.360				ND	
	13 Chloroethane	64		2.467				ND	
	15 Trichlorofluoromethane	101		2.716				ND	
	19 1,1-Dichloroethene	96		3.214				ND	
	20 1,1,2-Trichloro-1,2,2-trif	151		3.237				ND	
	21 Acetone	43	3.273	3.273	0.000	99	78548	9.79	
	23 Carbon disulfide	76		3.427				ND	
	26 Methyl acetate	43		3.569				ND	
	27 Methylene Chloride	84		3.664				ND	
	30 Methyl tert-butyl ether	73		3.901				ND	
	31 trans-1,2-Dichloroethene	96		3.913				ND	
	33 1,1-Dichloroethane	63		4.281				ND	
	39 cis-1,2-Dichloroethene	96		4.791				ND	
	40 2-Butanone (MEK)	43		4.803				ND	U
	46 Chloroform	83		5.064				ND	
	47 1,1,1-Trichloroethane	97		5.218				ND	
	48 Cyclohexane	56		5.265				ND	
	50 Carbon tetrachloride	117		5.360				ND	
	52 Benzene	78		5.538				ND	
	53 1,2-Dichloroethane	62		5.562				ND	
	57 Trichloroethene	130		6.083				ND	
	59 Methylcyclohexane	83		6.249				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 1,2-Dichloropropane	63		6.285				ND	
64 Dichlorobromomethane	83		6.522				ND	
67 cis-1,3-Dichloropropene	75		6.913				ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032				ND	
69 Toluene	91		7.210				ND	
70 trans-1,3-Dichloropropene	75		7.400				ND	
72 1,1,2-Trichloroethane	97		7.566				ND	
73 Tetrachloroethene	164		7.708				ND	
76 2-Hexanone	43		7.779				ND	
78 Chlorodibromomethane	129		7.933				ND	
79 Ethylene Dibromide	107		8.052				ND	
81 Chlorobenzene	112		8.502				ND	
83 Ethylbenzene	106		8.585				ND	
84 m-Xylene & p-Xylene	106		8.692				ND	
85 o-Xylene	106		9.072				ND	
86 Styrene	104		9.084				ND	
87 Bromoform	173		9.285				ND	
89 Isopropylbenzene	105		9.416				ND	
91 1,1,2,2-Tetrachloroethane	83		9.712				ND	
103 1,3-Dichlorobenzene	146		10.649				ND	
105 1,4-Dichlorobenzene	146		10.744				ND	
109 1,2-Dichlorobenzene	146		11.111				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.894				ND	
113 1,2,4-Trichlorobenzene	180		12.724				ND	
S 130 Xylenes, Total	106		16.530				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

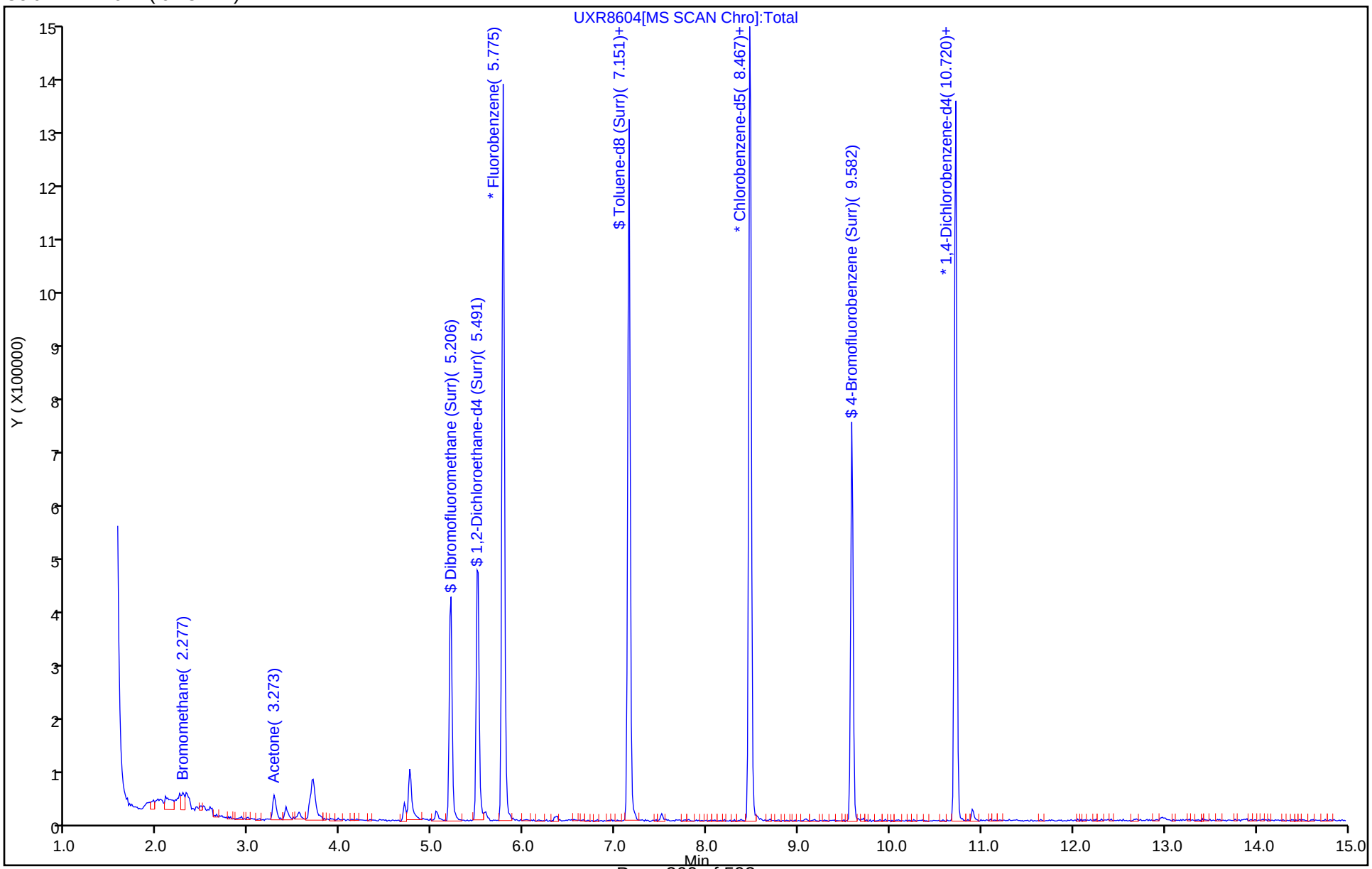
Report Date: 20-Jun-2019 11:33:32 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8604.D

Injection Date:	19-Jun-2019 14:45:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-B-10	Lab Sample ID:	240-113949-10	Worklist Smp#:	12
Client ID:	PUMP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8604.D
Lims ID: 240-113949-B-10
Client ID: PUMP BLANK
Sample Type: Client
Inject. Date: 19-Jun-2019 14:45:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-012
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 15:06:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.41	94.14
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.88	98.75
$ 6 Toluene-d8 (Surr)	10.0	7.37	73.68
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.46	64.58

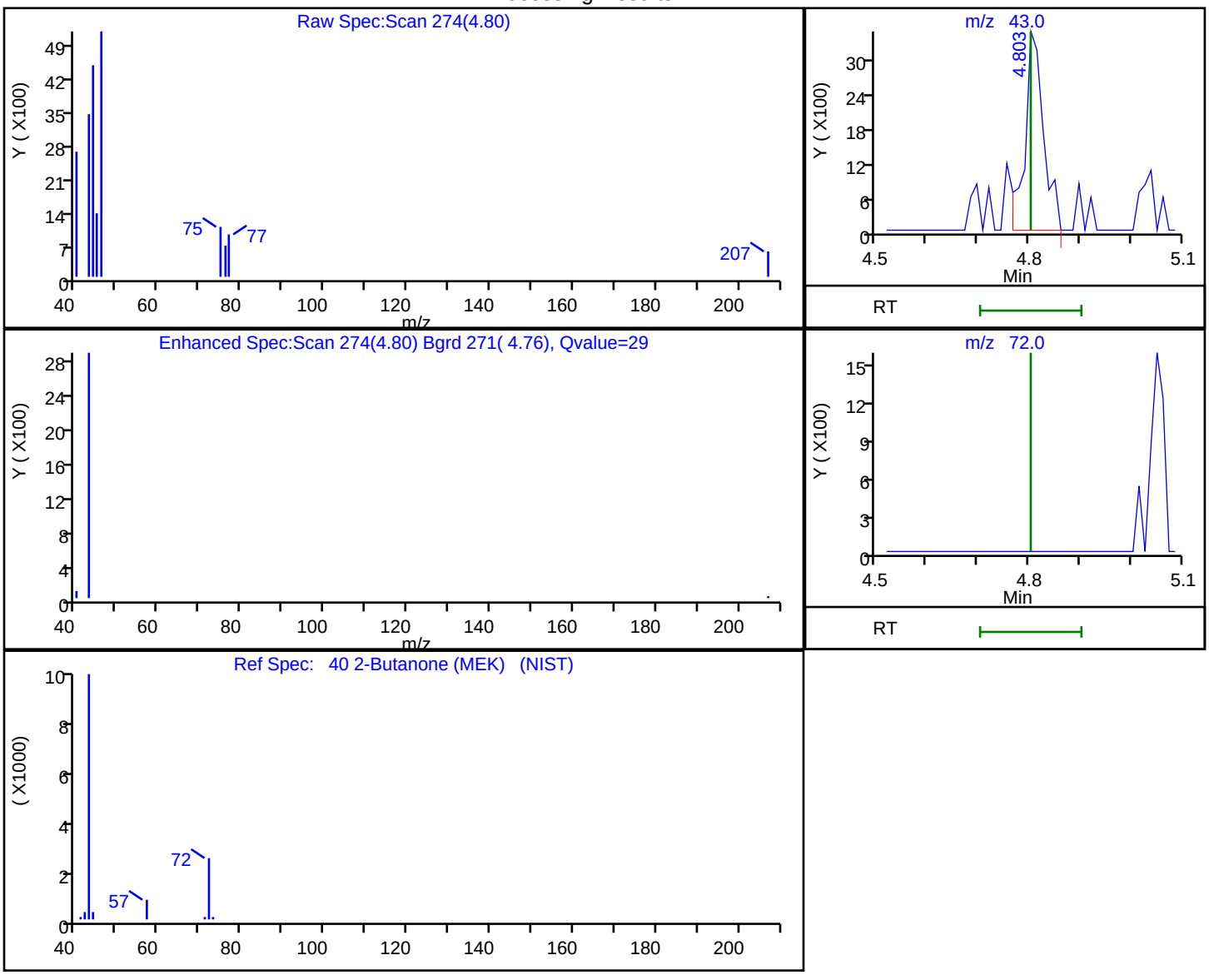
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8604.D				
Injection Date:	19-Jun-2019 14:45:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-10	Lab Sample ID:	240-113949-10		
Client ID:	PUMP BLANK				
Operator ID:	001644	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

40 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
4.80	43.00	8686	0.800782
4.80	72.00	0	

Reviewer: williamsla, 19-Jun-2019 15:06:21

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-22 Lab Sample ID: 240-113949-11

Matrix: Water Lab File ID: UXR8605.D

Analysis Method: 8260B Date Collected: 06/06/2019 14:05

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	1.1		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	2.4		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	9.0		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-22 Lab Sample ID: 240-113949-11

Matrix: Water Lab File ID: UXR8605.D

Analysis Method: 8260B Date Collected: 06/06/2019 14:05

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	74		70-123
1868-53-7	Dibromofluoromethane (Surr)	95		75-128
460-00-4	4-Bromofluorobenzene (Surr)	67		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8605.D
Lims ID: 240-113949-B-11
Client ID: OW-22
Sample Type: Client
Inject. Date: 19-Jun-2019 15:09:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-013
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 20-Jun-2019 11:19:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1267433	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.467	0.012	87	933654	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	97	437385	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	93	280769	9.46	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.502	5.490	0.012	96	415380	9.77	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	95	897590	7.42	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	87	299114	6.68	
9 Dichlorodifluoromethane	85		1.696				ND	U
10 Chloromethane	50		1.885				ND	
11 Vinyl chloride	62	2.004	2.004	0.000	40	7209	0.1663	
12 Bromomethane	94		2.360				ND	
13 Chloroethane	64	2.466	2.467	0.000	37	6295	0.2525	
15 Trichlorofluoromethane	101		2.716				ND	
19 1,1-Dichloroethene	96		3.214				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.237				ND	
21 Acetone	43	3.273	3.273	0.000	98	34341	2.97	
23 Carbon disulfide	76	3.451	3.427	0.024	94	18071	0.2083	
26 Methyl acetate	43		3.569				ND	
27 Methylene Chloride	84		3.664				ND	
30 Methyl tert-butyl ether	73		3.901				ND	
31 trans-1,2-Dichloroethene	96		3.913				ND	
33 1,1-Dichloroethane	63		4.281				ND	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	83	13825	0.3859	
40 2-Butanone (MEK)	43		4.803				ND	U
46 Chloroform	83		5.064				ND	
47 1,1,1-Trichloroethane	97		5.218				ND	
48 Cyclohexane	56	5.265	5.265	0.000	87	12990	0.2138	
50 Carbon tetrachloride	117		5.360				ND	
52 Benzene	78	5.550	5.538	0.012	97	336436	2.43	
53 1,2-Dichloroethane	62		5.562				ND	U
57 Trichloroethene	130		6.083				ND	
59 Methylcyclohexane	83		6.249				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 1,2-Dichloropropane	63		6.285				ND	
64 Dichlorobromomethane	83		6.522				ND	
67 cis-1,3-Dichloropropene	75		6.913				ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032				ND	
69 Toluene	91	7.210	7.210	0.000	98	17099	0.1159	
70 trans-1,3-Dichloropropene	75		7.400				ND	
72 1,1,2-Trichloroethane	97		7.566				ND	
73 Tetrachloroethene	164		7.708				ND	
76 2-Hexanone	43		7.779				ND	
78 Chlorodibromomethane	129		7.933				ND	
79 Ethylene Dibromide	107		8.052				ND	
81 Chlorobenzene	112	8.502	8.502	0.000	93	858299	9.03	
83 Ethylbenzene	106		8.585				ND	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	96	18201	0.3059	
85 o-Xylene	106		9.072				ND	
86 Styrene	104		9.084				ND	
87 Bromoform	173		9.285				ND	
89 Isopropylbenzene	105		9.416				ND	
91 1,1,2,2-Tetrachloroethane	83		9.712				ND	
103 1,3-Dichlorobenzene	146		10.649				ND	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	93	73625	1.06	
109 1,2-Dichlorobenzene	146	11.123	11.111	0.012	95	28563	0.4589	
111 1,2-Dibromo-3-Chloropropan	157		11.894				ND	
113 1,2,4-Trichlorobenzene	180		12.724				ND	
S 130 Xylenes, Total	106				0		0.3059	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

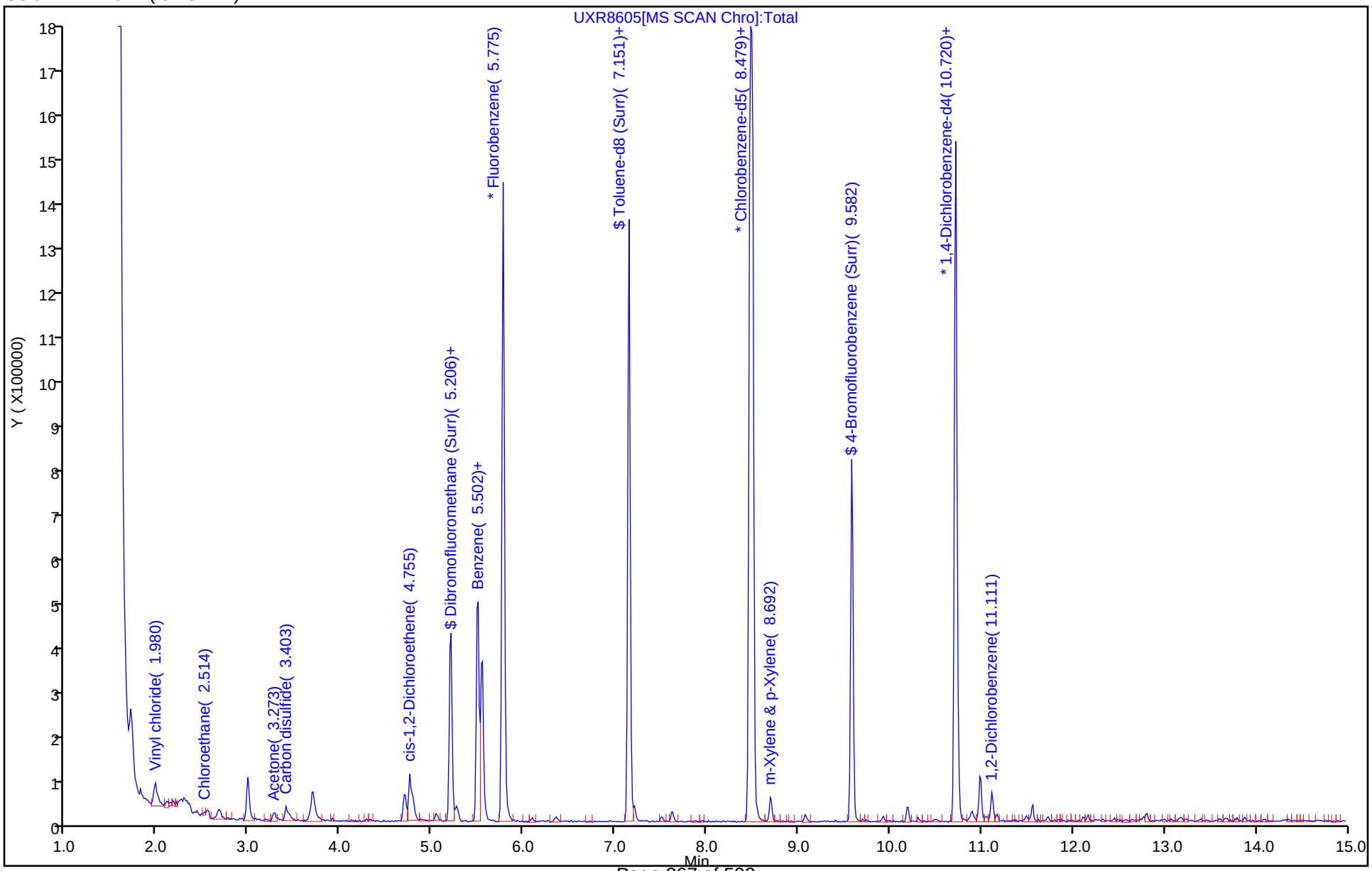
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8605.D

Injection Date:	19-Jun-2019 15:09:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-B-11	Lab Sample ID:	240-113949-11	Worklist Smp#:	13
Client ID:	OW-22				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8605.D
Lims ID: 240-113949-B-11
Client ID: OW-22
Sample Type: Client
Inject. Date: 19-Jun-2019 15:09:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-013
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 20-Jun-2019 11:19:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.46	94.60
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.77	97.69
$ 6 Toluene-d8 (Surr)	10.0	7.42	74.18
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.68	66.75

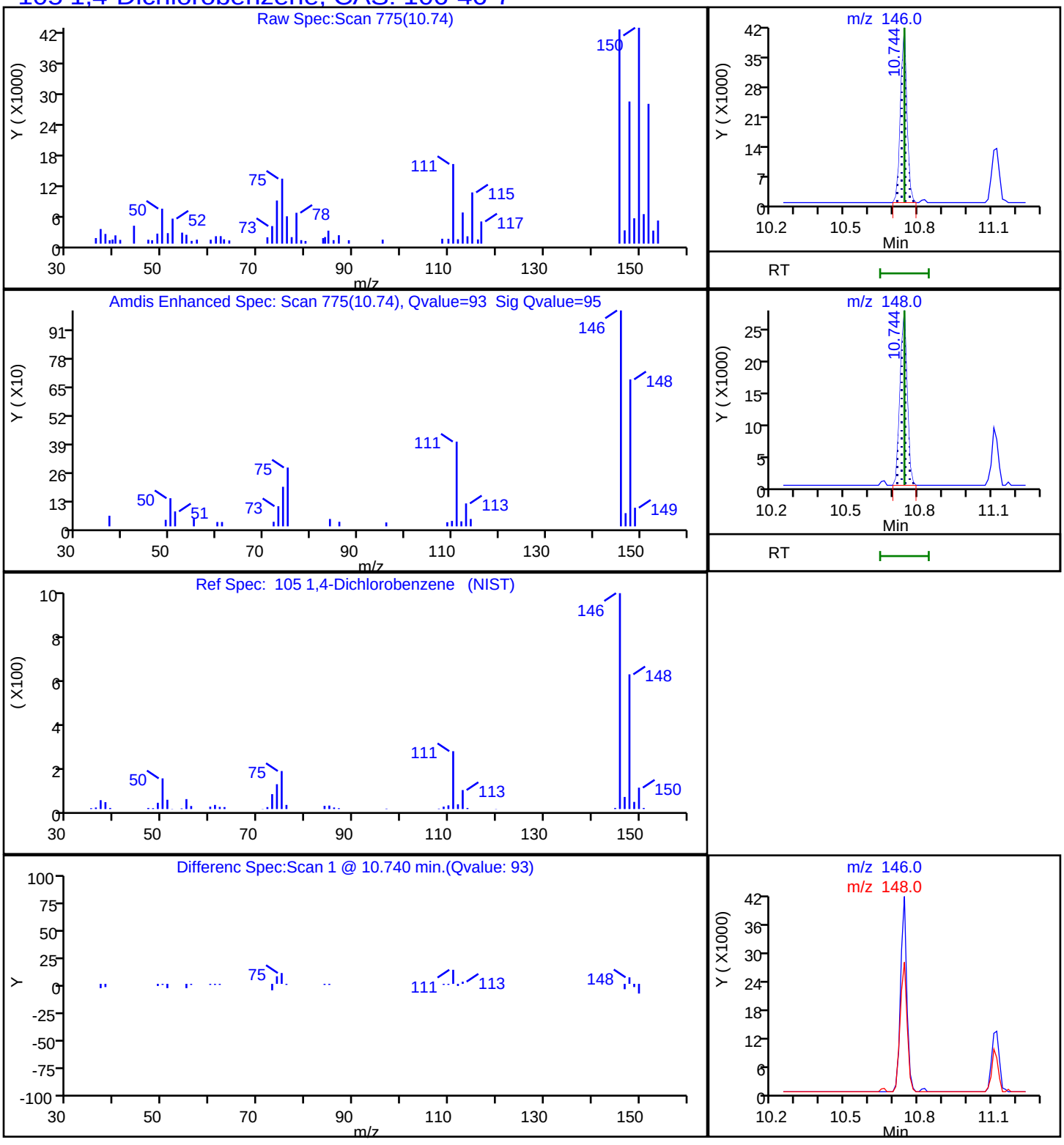
Report Date: 20-Jun-2019 11:33:35 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8605.D

Injection Date:	19-Jun-2019 15:09:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-11	Lab Sample ID:	240-113949-11		
Client ID:	OW-22				
Operator ID:	001644	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

105 1,4-Dichlorobenzene, CAS: 106-46-7



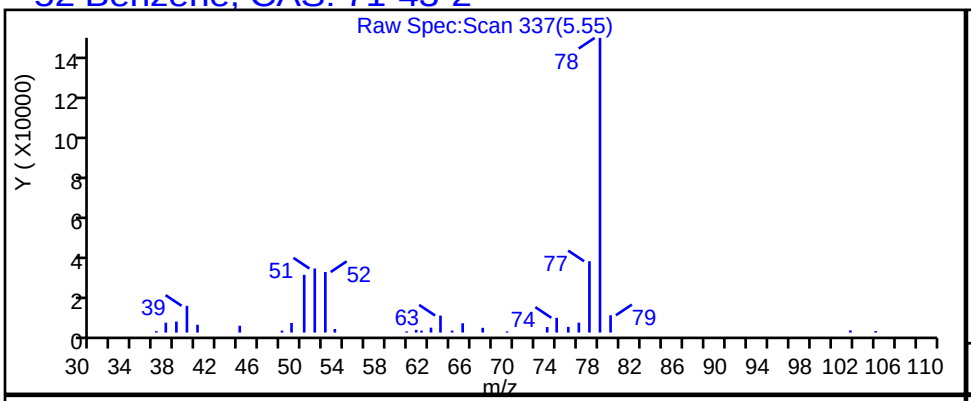
Report Date: 20-Jun-2019 11:33:35 Chrom Revision: 2.3 18-Jun-2019 21:44:00

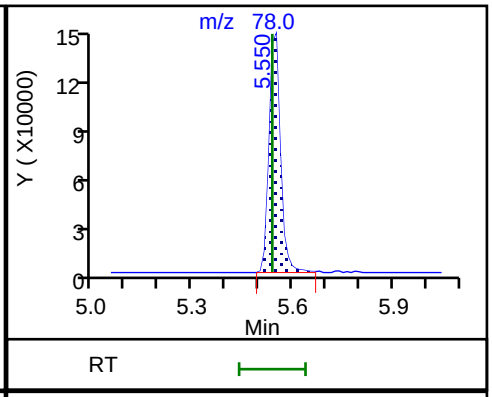
Eurofins TestAmerica, Canton

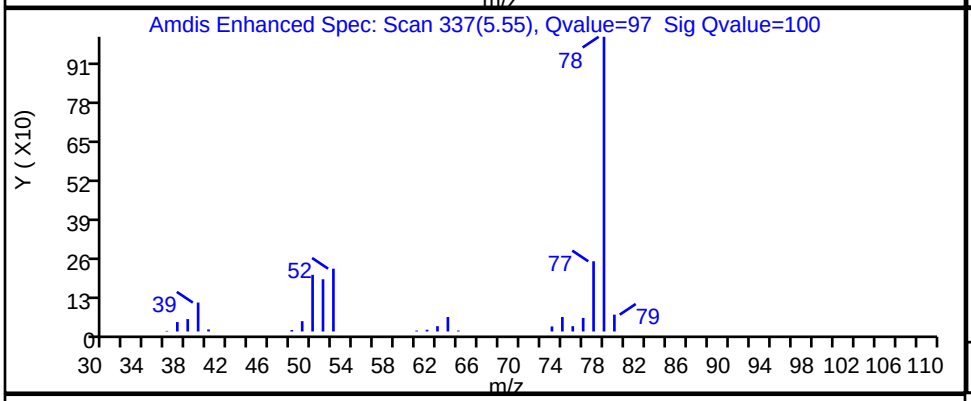
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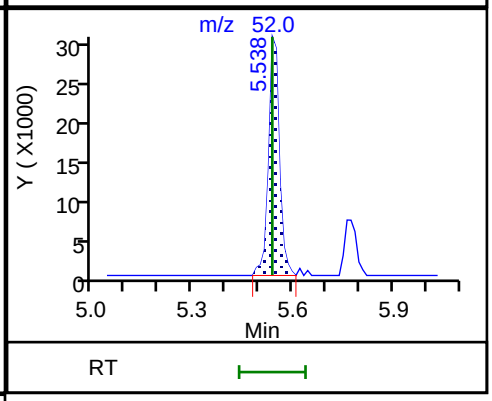
Injection Date:	19-Jun-2019 15:09:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-11	Lab Sample ID:	240-113949-11		
Client ID:	OW-22				
Operator ID:	001644	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

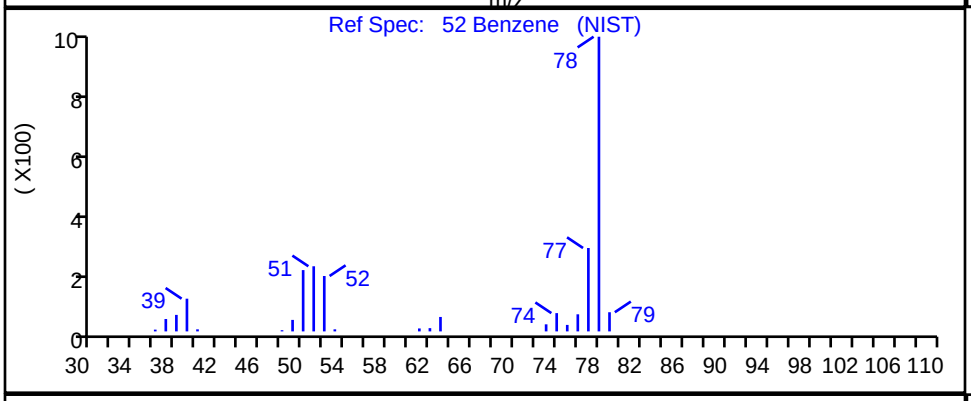
52 Benzene, CAS: 71-43-2

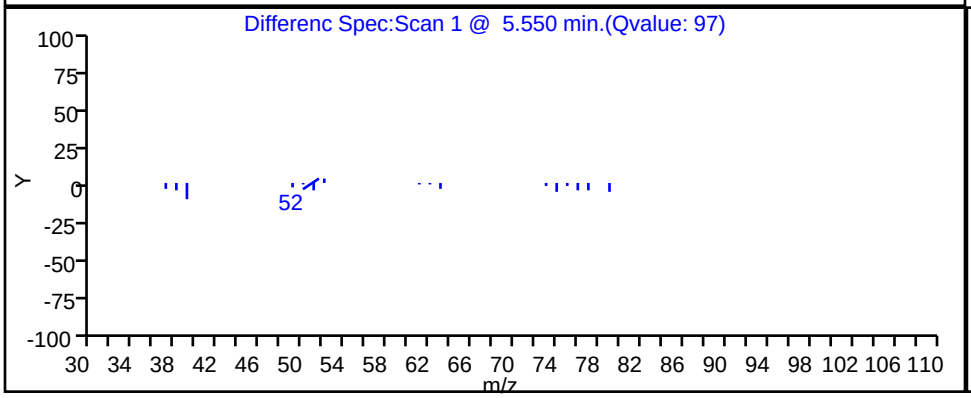


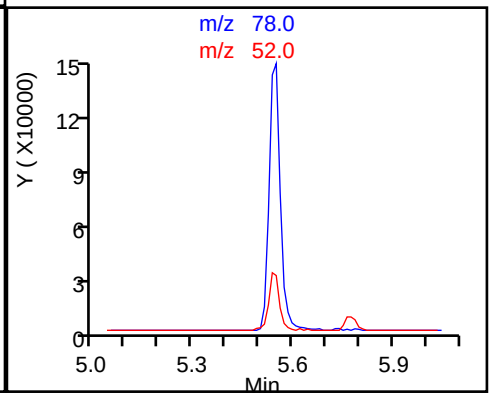












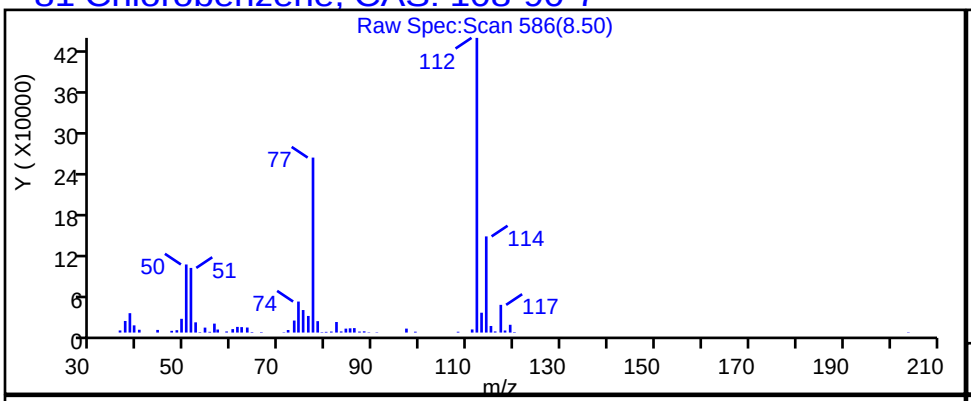
Report Date: 20-Jun-2019 11:33:35 Chrom Revision: 2.3 18-Jun-2019 21:44:00

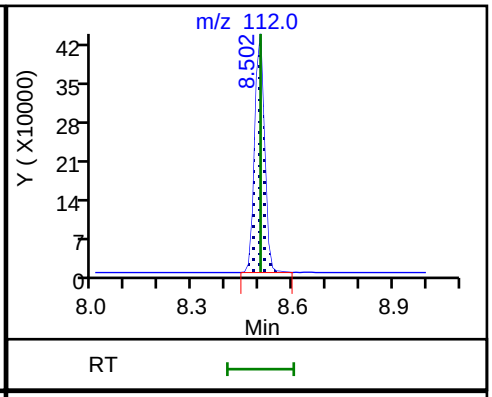
Eurofins TestAmerica, Canton

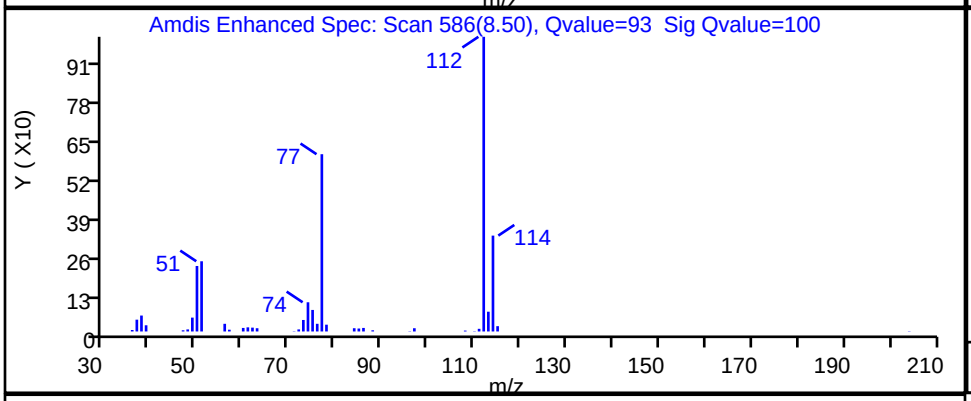
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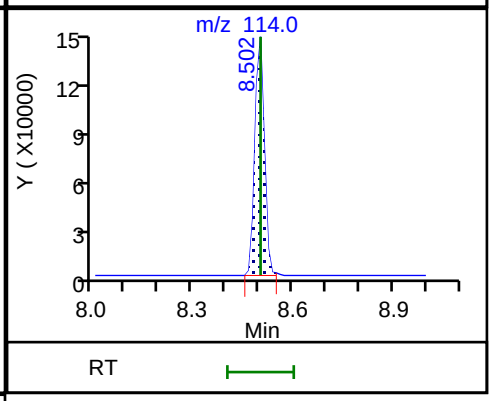
Injection Date:	19-Jun-2019 15:09:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-11	Lab Sample ID:	240-113949-11		
Client ID:	OW-22				
Operator ID:	001644	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

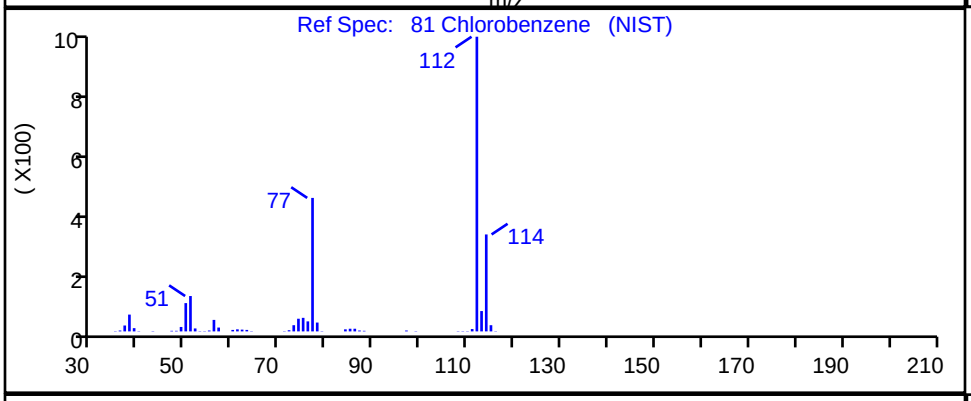
81 Chlorobenzene, CAS: 108-90-7

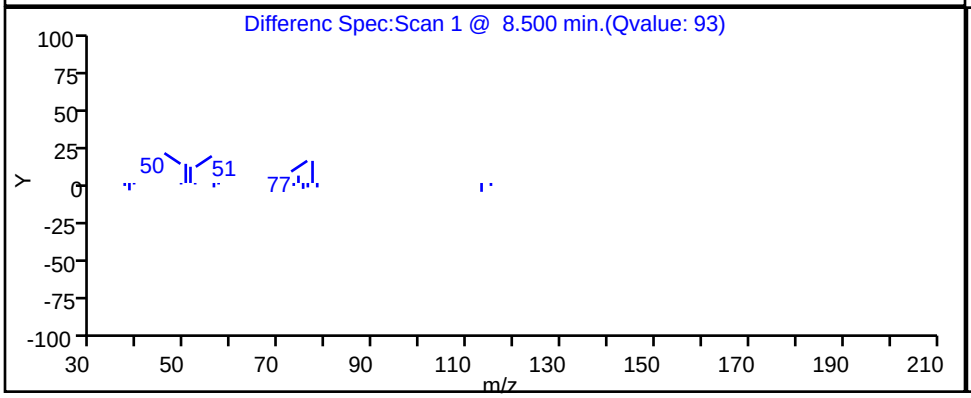


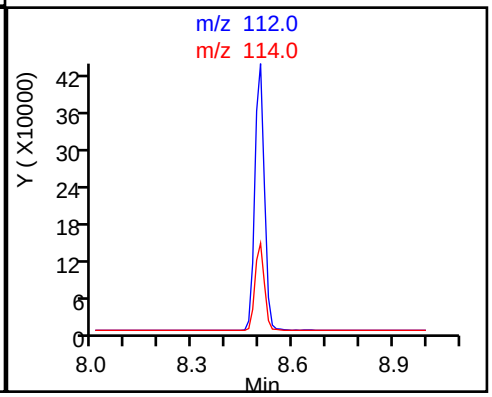












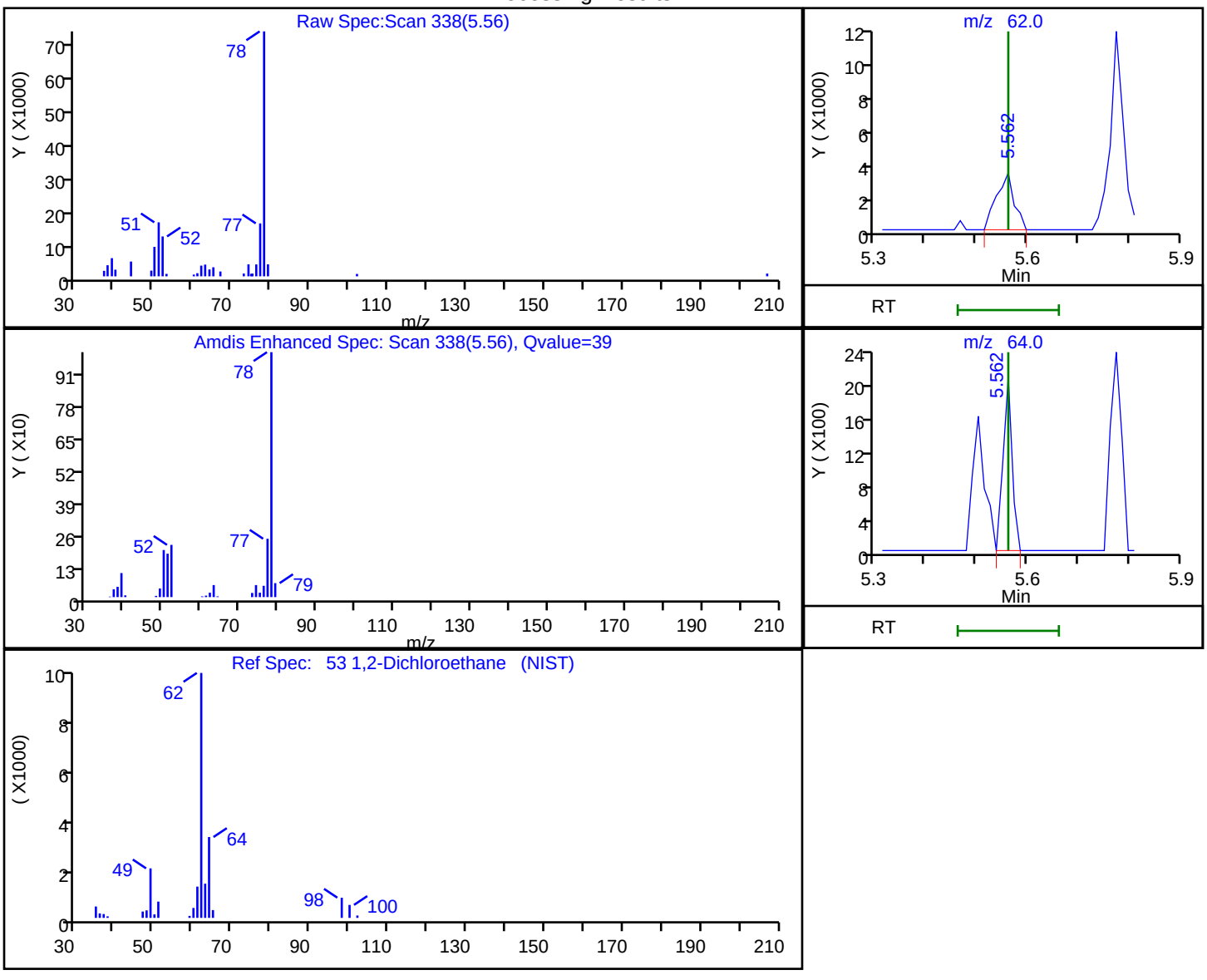
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8605.D				
Injection Date:	19-Jun-2019 15:09:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-11	Lab Sample ID:	240-113949-11		
Client ID:	OW-22				
Operator ID:	001644	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
5.56	62.00	7767	0.150683
5.56	64.00	2540	

Reviewer: williamsla, 20-Jun-2019 11:19:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

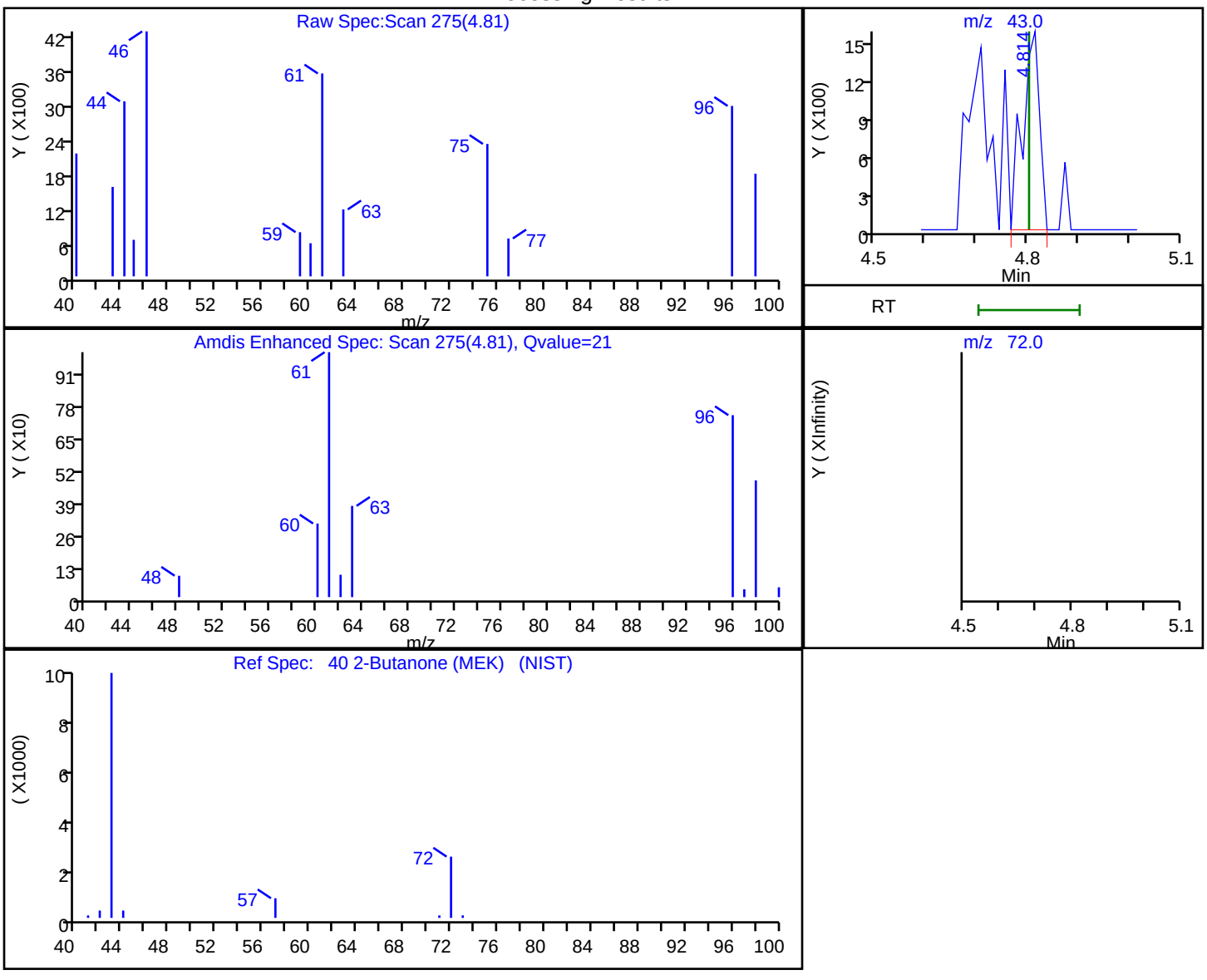
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8605.D				
Injection Date:	19-Jun-2019 15:09:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-11	Lab Sample ID:	240-113949-11		
Client ID:	OW-22				
Operator ID:	001644	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

40 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
4.81	43.00	3567	0.323931
4.80	72.00	0	

Reviewer: williamsla, 20-Jun-2019 11:19:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

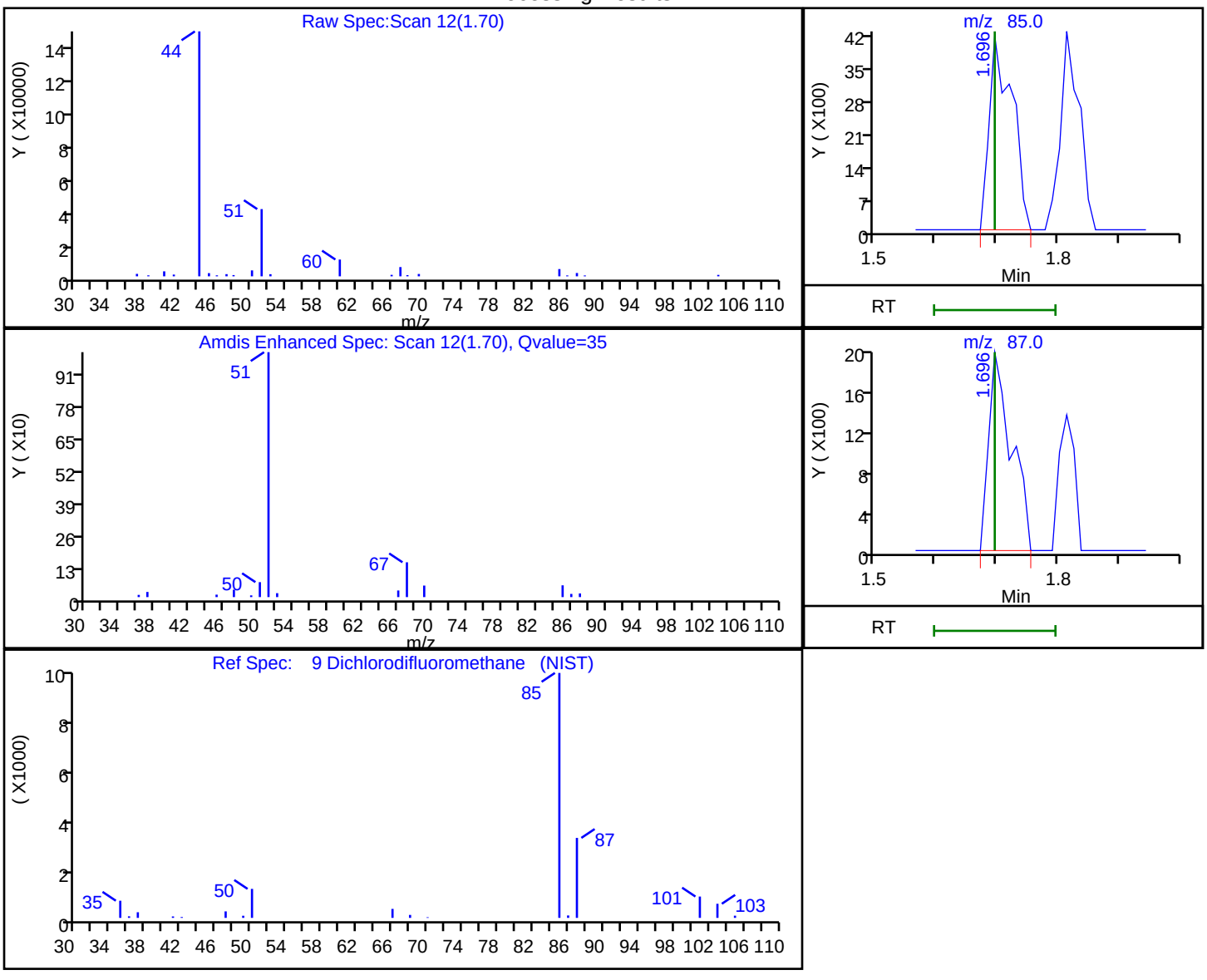
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8605.D				
Injection Date:	19-Jun-2019 15:09:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-11	Lab Sample ID:	240-113949-11		
Client ID:	OW-22				
Operator ID:	001644	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

9 Dichlorodifluoromethane, CAS: 75-71-8

Processing Results



RT	Mass	Response	Amount
1.70	85.00	10962	0.247483
1.70	87.00	4955	

Reviewer: williamsla, 20-Jun-2019 11:19:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-21 Lab Sample ID: 240-113949-12

Matrix: Water Lab File ID: UXR8606.D

Analysis Method: 8260B Date Collected: 06/06/2019 14:50

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 15:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-21 Lab Sample ID: 240-113949-12

Matrix: Water Lab File ID: UXR8606.D

Analysis Method: 8260B Date Collected: 06/06/2019 14:50

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 15:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	73		70-123
1868-53-7	Dibromofluoromethane (Surr)	95		75-128
460-00-4	4-Bromofluorobenzene (Surr)	65		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8606.D
Lims ID: 240-113949-B-12
Client ID: OW-21
Sample Type: Client
Inject. Date: 19-Jun-2019 15:33:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-014
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 20-Jun-2019 11:20:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1240263	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	89	951680	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	97	417909	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	93	276756	9.53	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	95	416935	10.0	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	903087	7.32	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	89	295389	6.47	
9 Dichlorodifluoromethane	85		1.696				ND	
10 Chloromethane	50		1.885				ND	
11 Vinyl chloride	62	2.004	2.004	0.000	93	21498	0.5069	
12 Bromomethane	94		2.360				ND	
13 Chloroethane	64		2.467				ND	
15 Trichlorofluoromethane	101		2.716				ND	
19 1,1-Dichloroethene	96		3.214				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.237				ND	
21 Acetone	43	3.273	3.273	0.000	99	48443	5.25	
23 Carbon disulfide	76		3.427				ND	
26 Methyl acetate	43		3.569				ND	
27 Methylene Chloride	84		3.664				ND	
30 Methyl tert-butyl ether	73		3.901				ND	
31 trans-1,2-Dichloroethene	96		3.913				ND	
33 1,1-Dichloroethane	63		4.281				ND	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	77	9824	0.2803	
40 2-Butanone (MEK)	43		4.803				ND	U
46 Chloroform	83		5.064				ND	
47 1,1,1-Trichloroethane	97		5.218				ND	
48 Cyclohexane	56		5.265				ND	
50 Carbon tetrachloride	117		5.360				ND	
52 Benzene	78	5.550	5.538	0.012	94	75737	0.5597	
53 1,2-Dichloroethane	62	5.573	5.562	0.011	36	7067	0.1401	
57 Trichloroethene	130		6.083				ND	
59 Methylcyclohexane	83		6.249				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 1,2-Dichloropropane	63		6.285				ND	
64 Dichlorobromomethane	83		6.522				ND	
67 cis-1,3-Dichloropropene	75		6.913				ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032				ND	
69 Toluene	91		7.210				ND	
70 trans-1,3-Dichloropropene	75		7.400				ND	
72 1,1,2-Trichloroethane	97		7.566				ND	
73 Tetrachloroethene	164		7.708				ND	
76 2-Hexanone	43		7.779				ND	
78 Chlorodibromomethane	129		7.933				ND	
79 Ethylene Dibromide	107		8.052				ND	
81 Chlorobenzene	112		8.502				ND	
83 Ethylbenzene	106		8.585				ND	
84 m-Xylene & p-Xylene	106		8.692				ND	
85 o-Xylene	106		9.072				ND	
86 Styrene	104		9.084				ND	
87 Bromoform	173		9.285				ND	
89 Isopropylbenzene	105		9.416				ND	
91 1,1,2,2-Tetrachloroethane	83		9.712				ND	
103 1,3-Dichlorobenzene	146		10.649				ND	
105 1,4-Dichlorobenzene	146		10.744				ND	
109 1,2-Dichlorobenzene	146		11.111				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.894				ND	
113 1,2,4-Trichlorobenzene	180		12.724				ND	
S 130 Xylenes, Total	106		16.530				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

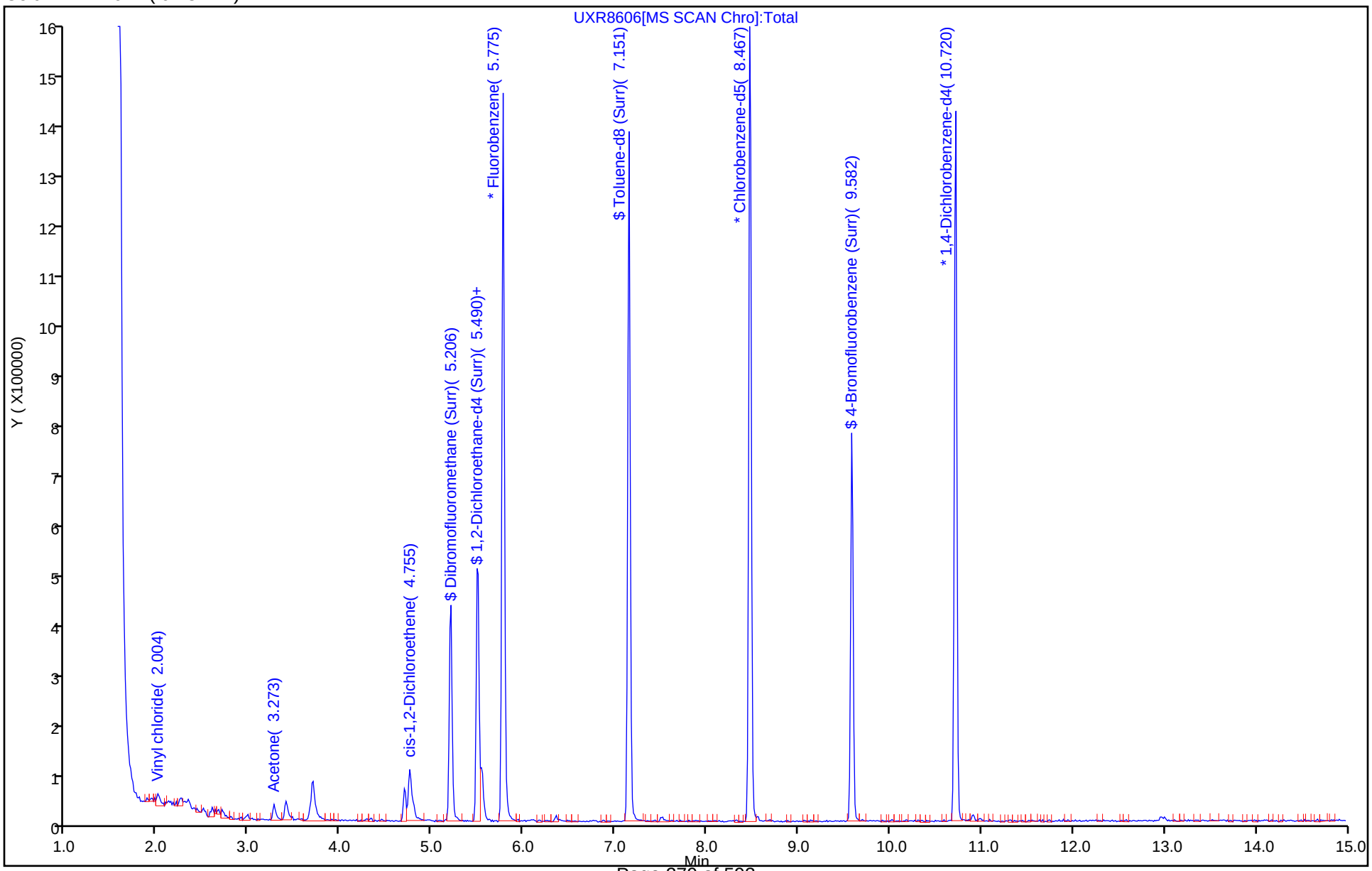
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8606.D

Injection Date:	19-Jun-2019 15:33:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-B-12	Lab Sample ID:	240-113949-12	Worklist Smp#:	14
Client ID:	OW-21				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8606.D
Lims ID: 240-113949-B-12
Client ID: OW-21
Sample Type: Client
Inject. Date: 19-Jun-2019 15:33:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-014
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 20-Jun-2019 11:20:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.53	95.29
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.21
$ 6 Toluene-d8 (Surr)	10.0	7.32	73.22
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.47	64.67

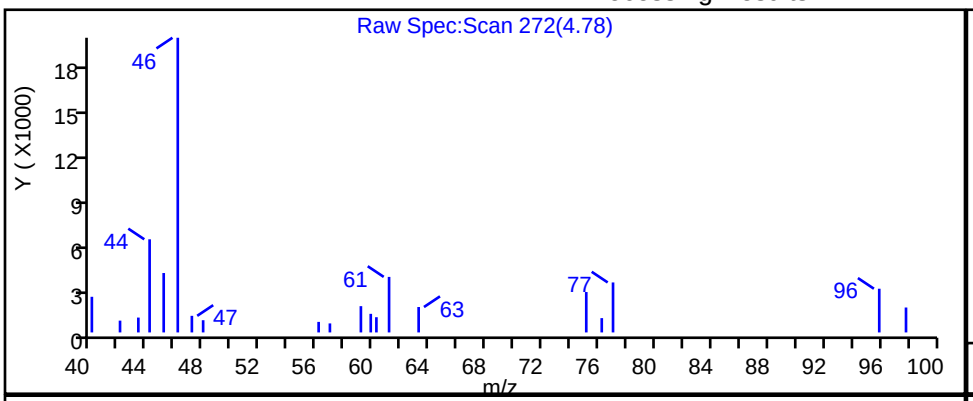
User Disabled Compound Report

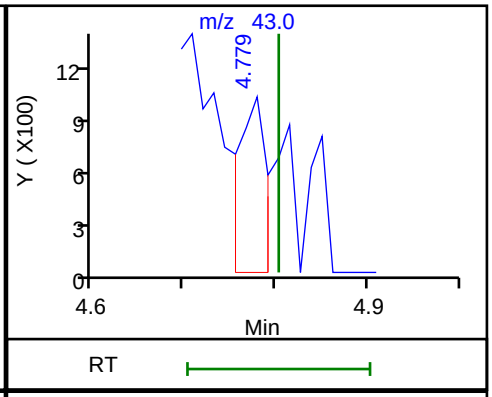
Eurofins TestAmerica, Canton

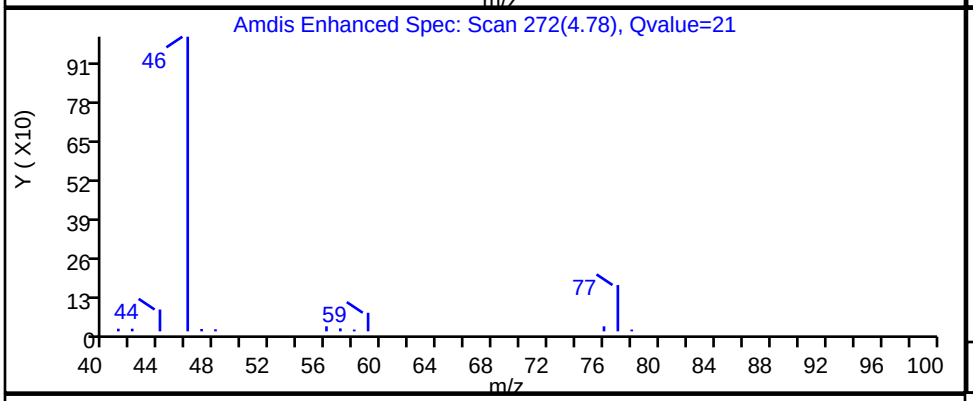
Data File:	\\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8606.D				
Injection Date:	19-Jun-2019 15:33:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-12	Lab Sample ID:	240-113949-12		
Client ID:	OW-21				
Operator ID:	001644	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

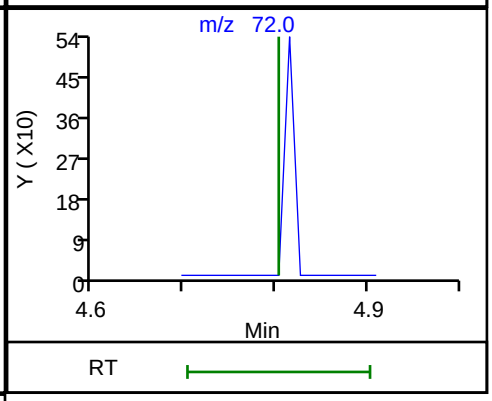
40 2-Butanone (MEK), CAS: 78-93-3

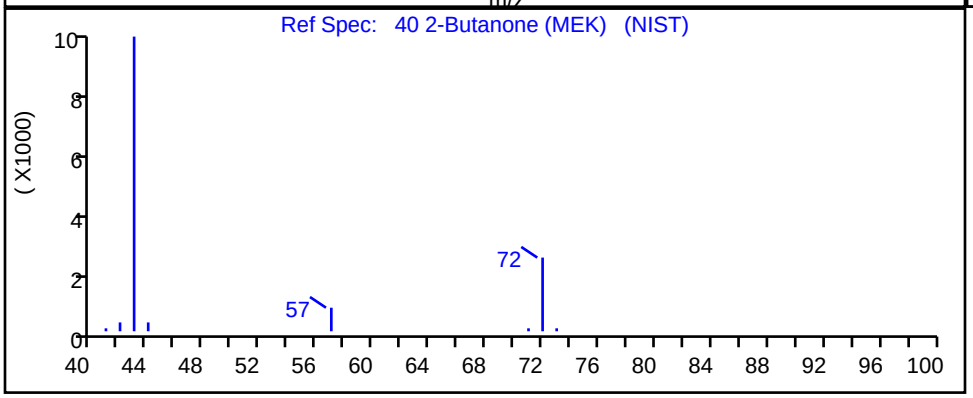
Processing Results











RT	Mass	Response	Amount
4.78	43.00	2091	0.194051
4.80	72.00	0	

Reviewer: williamsla, 20-Jun-2019 11:20:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: FIELD BLANK Lab Sample ID: 240-113949-13

Matrix: Water Lab File ID: UXR8607.D

Analysis Method: 8260B Date Collected: 06/06/2019 13:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 15:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	10		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: FIELD BLANK Lab Sample ID: 240-113949-13

Matrix: Water Lab File ID: UXR8607.D

Analysis Method: 8260B Date Collected: 06/06/2019 13:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 15:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	75		70-123
1868-53-7	Dibromofluoromethane (Surr)	96		75-128
460-00-4	4-Bromofluorobenzene (Surr)	65		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8607.D
Lims ID: 240-113949-B-13
Client ID: FIELD BLANK
Sample Type: Client
Inject. Date: 19-Jun-2019 15:57:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-015
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 20-Jun-2019 11:21:04

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.775	5.775	0.000	98	1231549	10.0	
*	2 Chlorobenzene-d5	117	8.479	8.467	0.012	88	938575	10.0	
*	3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	407527	10.0	
$	4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	92	275987	9.57	
$	5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	96	406035	9.83	
$	6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	95	915733	7.53	
$	7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	89	292752	6.50	
	9 Dichlorodifluoromethane	85		1.696				ND	
	10 Chloromethane	50		1.885				ND	
	11 Vinyl chloride	62		2.004				ND	
	12 Bromomethane	94		2.360				ND	
	13 Chloroethane	64		2.467				ND	
	15 Trichlorofluoromethane	101		2.716				ND	
	19 1,1-Dichloroethene	96		3.214				ND	
	20 1,1,2-Trichloro-1,2,2-trif	151		3.237				ND	
	21 Acetone	43	3.273	3.273	0.000	99	80333	10.2	
	23 Carbon disulfide	76		3.427				ND	
	26 Methyl acetate	43		3.569				ND	
	27 Methylene Chloride	84		3.664				ND	
	30 Methyl tert-butyl ether	73		3.901				ND	
	31 trans-1,2-Dichloroethene	96		3.913				ND	
	33 1,1-Dichloroethane	63		4.281				ND	
	39 cis-1,2-Dichloroethene	96		4.791				ND	
	40 2-Butanone (MEK)	43	4.814	4.803	0.011	60	7636	0.7137	
	46 Chloroform	83		5.064				ND	
	47 1,1,1-Trichloroethane	97		5.218				ND	
	48 Cyclohexane	56		5.265				ND	
	50 Carbon tetrachloride	117		5.360				ND	
	52 Benzene	78		5.538				ND	
	53 1,2-Dichloroethane	62		5.562				ND	
	57 Trichloroethene	130		6.083				ND	
	59 Methylcyclohexane	83		6.249				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 1,2-Dichloropropane	63		6.285				ND	
64 Dichlorobromomethane	83		6.522				ND	
67 cis-1,3-Dichloropropene	75		6.913				ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032				ND	
69 Toluene	91		7.210				ND	
70 trans-1,3-Dichloropropene	75		7.400				ND	
72 1,1,2-Trichloroethane	97		7.566				ND	
73 Tetrachloroethene	164		7.708				ND	
76 2-Hexanone	43		7.779				ND	
78 Chlorodibromomethane	129		7.933				ND	
79 Ethylene Dibromide	107		8.052				ND	
81 Chlorobenzene	112		8.502				ND	
83 Ethylbenzene	106		8.585				ND	
84 m-Xylene & p-Xylene	106		8.692				ND	
85 o-Xylene	106		9.072				ND	
86 Styrene	104		9.084				ND	
87 Bromoform	173		9.285				ND	
89 Isopropylbenzene	105		9.416				ND	
91 1,1,2,2-Tetrachloroethane	83		9.712				ND	
103 1,3-Dichlorobenzene	146		10.649				ND	
105 1,4-Dichlorobenzene	146		10.744				ND	
109 1,2-Dichlorobenzene	146		11.111				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.894				ND	
113 1,2,4-Trichlorobenzene	180		12.724				ND	
S 130 Xylenes, Total	106		16.530				ND	

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

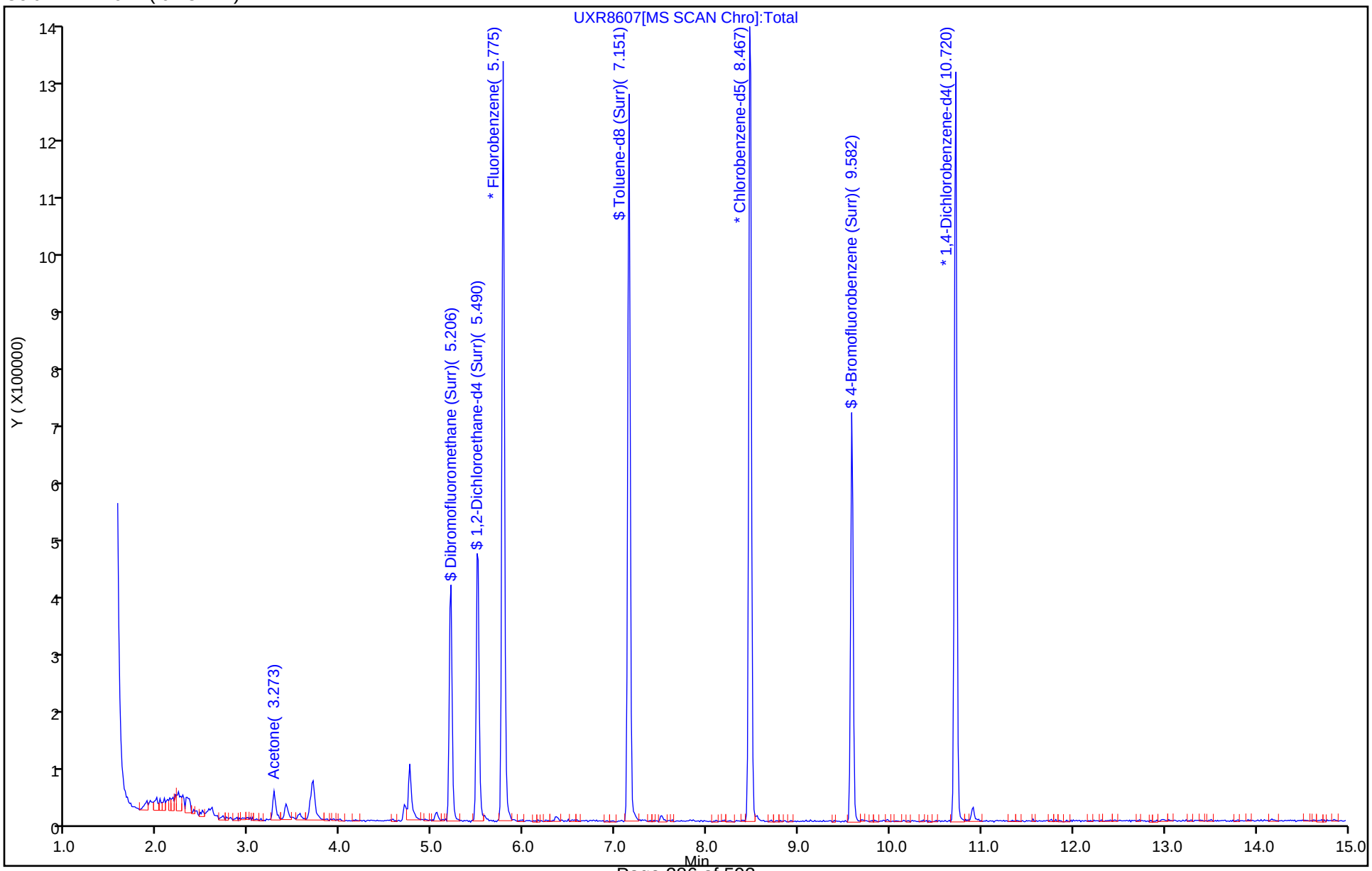
Report Date: 20-Jun-2019 11:33:45 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8607.D

Injection Date:	19-Jun-2019 15:57:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-B-13	Lab Sample ID:	240-113949-13	Worklist Smp#:	15
Client ID:	FIELD BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8607.D
Lims ID: 240-113949-B-13
Client ID: FIELD BLANK
Sample Type: Client
Inject. Date: 19-Jun-2019 15:57:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-015
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 20-Jun-2019 11:21:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.57	95.70
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.83	98.28
$ 6 Toluene-d8 (Surr)	10.0	7.53	75.28
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.50	64.99

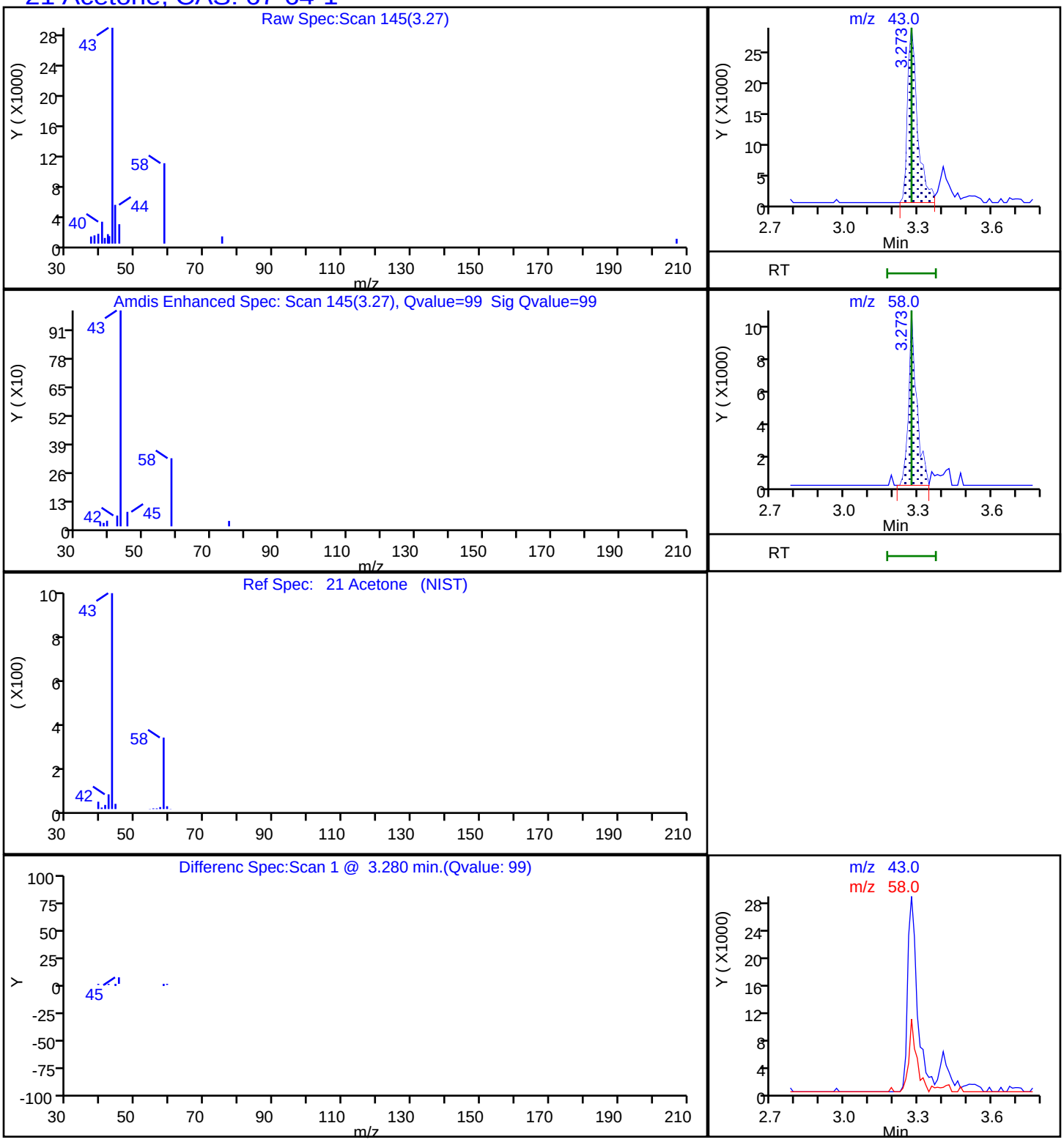
Report Date: 20-Jun-2019 11:33:45 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8607.D

Injection Date:	19-Jun-2019 15:57:30	Instrument ID:	A3UX17		
Lims ID:	240-113949-B-13	Lab Sample ID:	240-113949-13		
Client ID:	FIELD BLANK				
Operator ID:	001644	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_17	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

21 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-113949-14

Matrix: Water Lab File ID: UXJ1432.D

Analysis Method: 8260B Date Collected: 06/04/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 18:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 240-113949-14

Matrix: Water Lab File ID: UXJ1432.D

Analysis Method: 8260B Date Collected: 06/04/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 18:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	111		70-123
1868-53-7	Dibromofluoromethane (Surr)	115		75-128
460-00-4	4-Bromofluorobenzene (Surr)	99		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1432.D
Lims ID: 240-113949-A-14
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 17-Jun-2019 18:20:30 ALS Bottle#: 29 Worklist Smp#: 60
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-060
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:09 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: evansle Date: 18-Jun-2019 10:50:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	100	655811	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	84	413095	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	94	184597	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.103	4.091	0.012	96	175642	23.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	98	183776	19.8	
$ 6 Toluene-d8 (Surr)	98	6.019	6.008	0.011	93	543498	22.2	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	95	155767	19.9	
9 Dichlorodifluoromethane	85		1.156				ND	
10 Chloromethane	50		1.310				ND	
12 Vinyl chloride	62		1.381				ND	
15 Bromomethane	94		1.594				ND	
16 Chloroethane	64		1.665				ND	
18 Trichlorofluoromethane	101		1.831				ND	
21 1,1-Dichloroethene	96		2.245				ND	
22 1,1,2-Trichloro-1,2,2-trif	151		2.280				ND	
23 Acetone	43	2.292	2.292	0.000	96	4669	1.33	
26 Carbon disulfide	76		2.410				ND	
29 Methyl acetate	43		2.564				ND	
30 Methylene Chloride	84		2.647				ND	
34 trans-1,2-Dichloroethene	96		2.872				ND	
33 Methyl tert-butyl ether	73		2.884				ND	
36 1,1-Dichloroethane	63		3.215				ND	
41 cis-1,2-Dichloroethene	96		3.700				ND	
42 2-Butanone (MEK)	43		3.712				ND	U
49 Chloroform	83		3.961				ND	
50 1,1,1-Trichloroethane	97		4.114				ND	
51 Cyclohexane	56		4.162				ND	
53 Carbon tetrachloride	117		4.256				ND	
55 Benzene	78		4.422				ND	
56 1,2-Dichloroethane	62		4.434				ND	
60 Trichloroethene	130		4.966				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
62 Methylcyclohexane	83		5.132				ND	
63 1,2-Dichloropropane	63		5.156				ND	
67 Dichlorobromomethane	83		5.392				ND	
70 cis-1,3-Dichloropropene	75		5.771				ND	
71 4-Methyl-2-pentanone (MIBK	43		5.913				ND	
72 Toluene	91		6.067				ND	
73 trans-1,3-Dichloropropene	75		6.268				ND	
75 1,1,2-Trichloroethane	97		6.422				ND	
76 Tetrachloroethene	164		6.552				ND	
78 2-Hexanone	43		6.658				ND	
80 Chlorodibromomethane	129		6.777				ND	
82 Ethylene Dibromide	107		6.871				ND	
84 Chlorobenzene	112		7.333				ND	
86 Ethylbenzene	106		7.439				ND	
87 m-Xylene & p-Xylene	106		7.546				ND	
88 o-Xylene	106		7.913				ND	
89 Styrene	104		7.925				ND	
90 Bromoform	173		8.090				ND	
91 Isopropylbenzene	105		8.268				ND	
94 1,1,2,2-Tetrachloroethane	83		8.552				ND	
106 1,3-Dichlorobenzene	146		9.451				ND	
108 1,4-Dichlorobenzene	146		9.546				ND	
112 1,2-Dichlorobenzene	146		9.901				ND	
114 1,2-Dibromo-3-Chloropropan	157		10.670				ND	
116 1,2,4-Trichlorobenzene	180		11.486				ND	
S 132 Xylenes, Total	106		16.030				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00080	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00076	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent

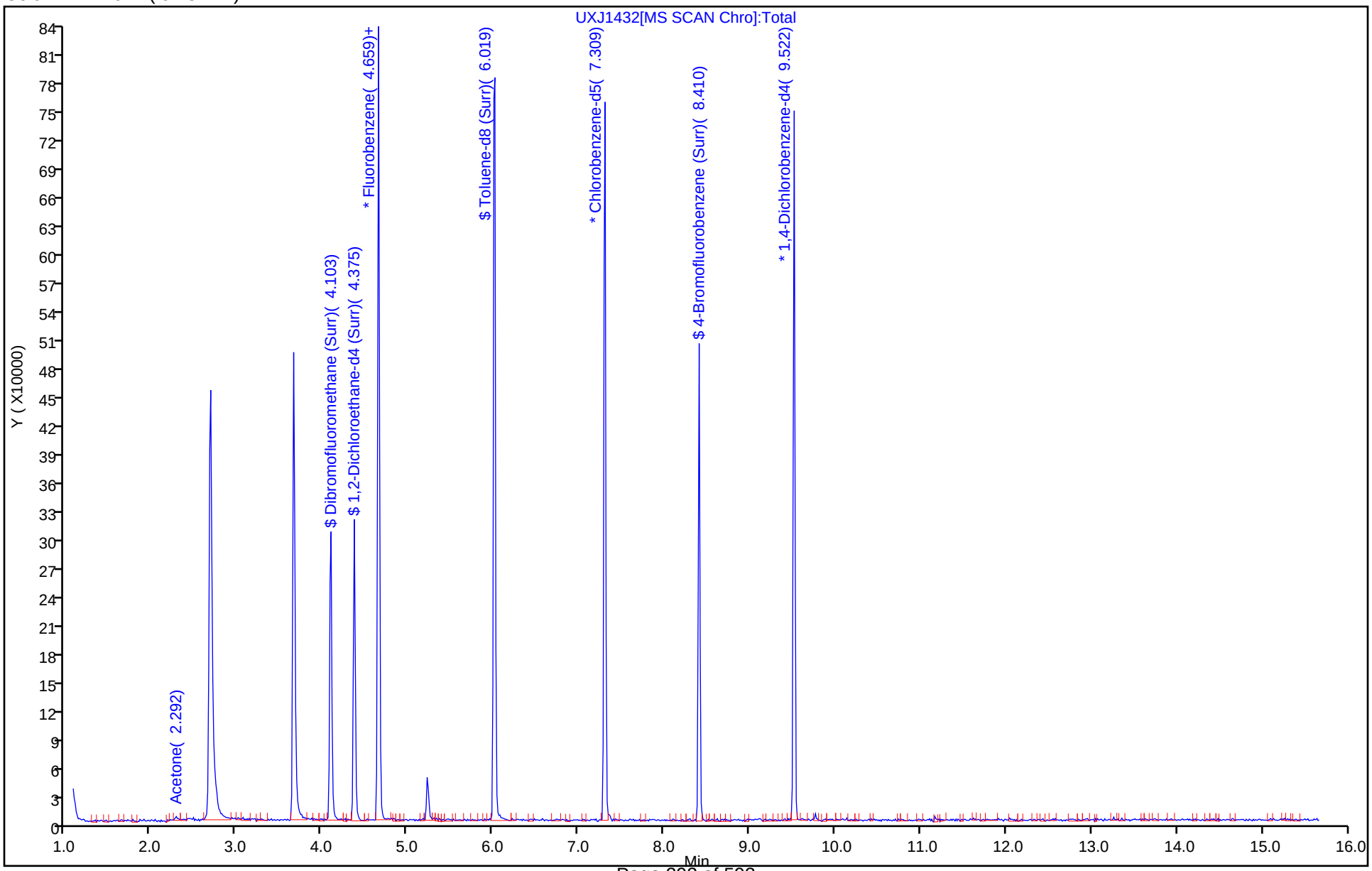
Report Date: 18-Jun-2019 10:50:24 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1432.D

Injection Date:	17-Jun-2019 18:20:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	240-113949-A-14	Lab Sample ID:	240-113949-14	Worklist Smp#:	60
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File:	\\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1432.D				
Lims ID:	240-113949-A-14				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	17-Jun-2019 18:20:30	ALS Bottle#:	29	Worklist Smp#:	60
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	240-0088184-060				
Misc. Info.:	J90617A,8260LLUX11,,43582				
Operator ID:	043582	Instrument ID:	A3UX11		
Method:	\\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m				
Limit Group:	MSV 8260B ICAL				
Last Update:	18-Jun-2019 09:17:09	Calib Date:	07-Feb-2019 20:09:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0314				

First Level Reviewer: evansle Date: 18-Jun-2019 10:50:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	23.0	114.78
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.8	99.24
$ 6 Toluene-d8 (Surr)	20.0	22.2	110.87
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.9	99.35

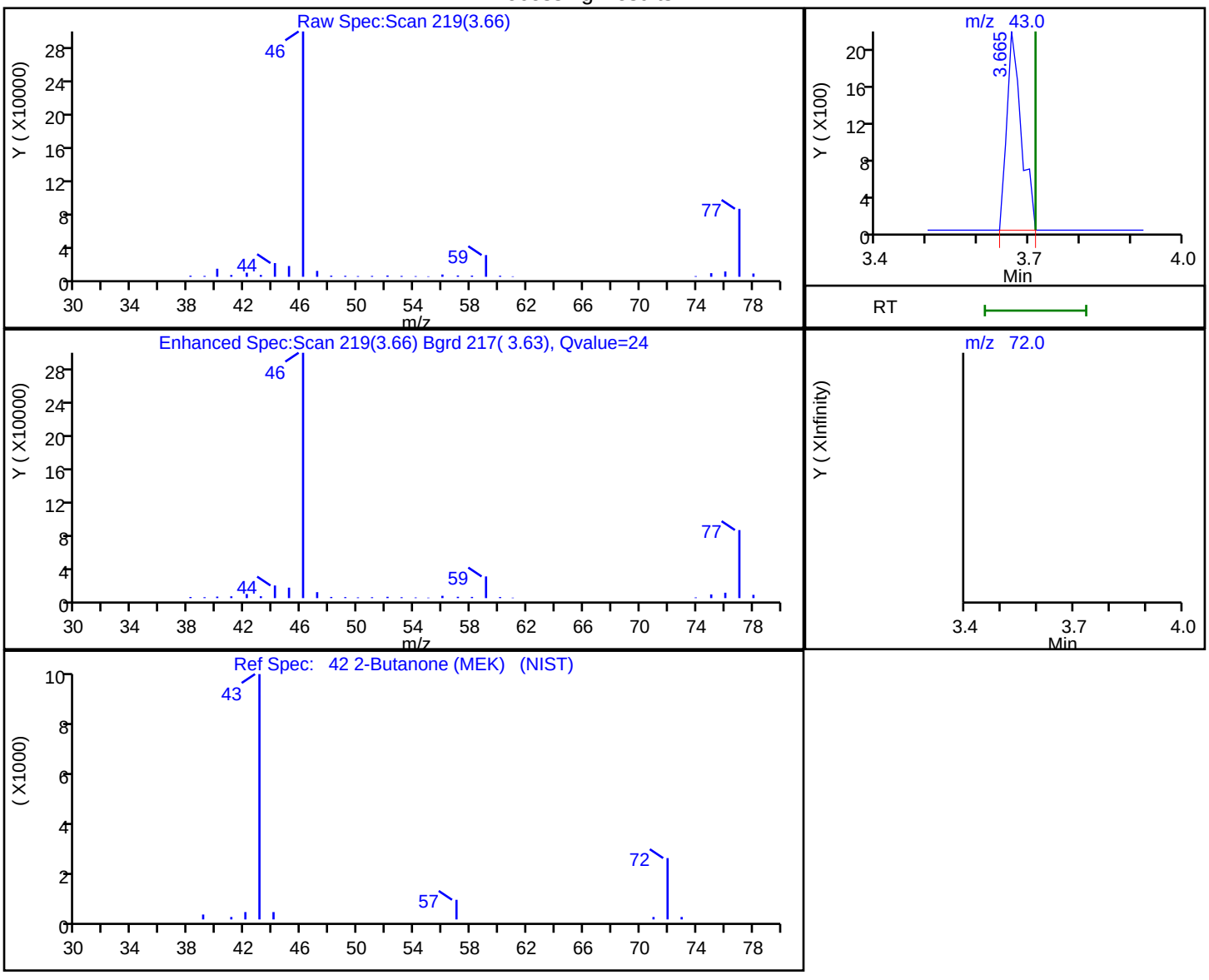
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1432.D				
Injection Date:	17-Jun-2019 18:20:30	Instrument ID:	A3UX11		
Lims ID:	240-113949-A-14	Lab Sample ID:	240-113949-14		
Client ID:	TRIP BLANK				
Operator ID:	043582	ALS Bottle#:	29	Worklist Smp#:	60
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260_11	Limit Group:	MSV 8260B ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

42 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.66	43.00	4307	0.972447
3.71	72.00	0	

Reviewer: evansle, 18-Jun-2019 09:16:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-375006/9	240-0085857-009.D
Level 2	STD8260 240-375006/8	240-0085857-008.D
Level 3	STD8260 240-375006/7	240-0085857-007.D
Level 4	STD8260 240-375006/6	240-0085857-006.D
Level 5	STD8260 240-375006/5	240-0085857-005.D
Level 6	STD8260 240-375006/4	240-0085857-004.D
Level 7	STD8260 240-375006/3	240-0085857-003.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2433 0.3107	0.2451 0.2845	0.2326	0.2542	0.3114	Ave		0.2688				12.3		15.0			
Chloromethane	0.6553 0.7038	0.6461 0.6247	0.5690	0.6402	0.6463	Ave		0.6408			0.1000	6.3		15.0			
Vinyl chloride	0.4088 0.4636	0.4071 0.4179	0.3687	0.4034	0.4422	Ave		0.4160				7.3		15.0			
Butadiene	0.4531 0.5493	0.5696 0.5053	0.4867	0.4962	0.5104	Ave		0.5101				7.6		15.0			
Bromomethane	0.1590 0.1732	0.1848 0.1639	0.1715	0.1671	0.1795	Ave		0.1713				5.2		15.0			
Chloroethane	0.2716 0.2495	0.2290 0.2220	0.2220	0.2258	0.2387	Ave		0.2369				7.7		15.0			
Dichlorofluoromethane	0.5372 0.5007	0.4993 0.4689	0.4611	0.4759	0.4669	Ave		0.4871				5.5		15.0			
Trichlorofluoromethane	0.2867 0.3768	0.3885 0.3376	0.3087	0.3300	0.3466	Ave		0.3392				10.5		15.0			
Ethyl ether	0.3195 0.3256	0.3330 0.3275	0.3017	0.3237	0.3514	Ave		0.3261				4.6		15.0			
Acrolein	0.0818 0.0813	0.0874 0.0837	0.0831	0.0856	0.0943	Ave		0.0853				5.3		15.0			
1,1-Dichloroethene	0.1830 0.2223	0.2405 0.2132	0.2032	0.2124	0.2179	Ave		0.2132				8.3		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1381 0.1701	0.1449 0.1508	0.1437	0.1476	0.1471	Ave		0.1489				6.8		15.0			
Acetone	0.3140 0.1482	0.2561 0.1375	0.1775	0.1590	0.1665	Lin1	0.4062	0.1358							0.9970		0.9900
Iodomethane	0.3786 0.4100	0.3775 0.3877	0.3868	0.4109	0.4107	Ave		0.3946				3.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.8348 0.9034	0.9091 0.8355	0.7887	0.8853	0.8620	Ave		0.8598				5.0		15.0			
3-Chloro-1-propene	0.1792 0.1935	0.1792 0.1821	0.1913	0.1784	0.1785	Ave		0.1832				3.5		15.0			
Methyl acetate	0.3609 0.3692	0.3604 0.3812	0.3591	0.3814	0.4107	Ave		0.3747				4.9		15.0			
Methylene Chloride	0.4076 0.3010	0.3451 0.2792	0.2938	0.2918	0.3042	Ave		0.3175				14.1		15.0			
2-Methyl-2-propanol	0.0498 0.0431	0.0511 0.0346	0.0397	0.0382	0.0461	Ave		0.0432				14.2		15.0			
Acrylonitrile	0.1907 0.2012	0.2003 0.2009	0.1914	0.1974	0.2130	Ave		0.1993				3.8		15.0			
trans-1,2-Dichloroethene	0.2677 0.2616	0.2809 0.2483	0.2490	0.2492	0.2699	Ave		0.2610				4.9		15.0			
Methyl tert-butyl ether	0.6485 0.6921	0.6770 0.6335	0.6203	0.6890	0.6969	Ave		0.6653				4.6		15.0			
Hexane	0.0466 0.0498	0.0409 0.0471	0.0375	0.0456	0.0403	Ave		0.0440				10.1		15.0			
1,1-Dichloroethane	0.6723 0.7149	0.7666 0.6837	0.6795	0.7036	0.6999	Ave		0.7029			0.1000	4.5		15.0			
Vinyl acetate	1.0108 1.0191	0.9872 1.0739	0.9885	1.0431	1.0304	Ave		1.0219				3.0		15.0			
cis-1,2-Dichloroethene	0.2856 0.3123	0.3188 0.2900	0.2787	0.3068	0.3109	Ave		0.3004				5.1		15.0			
2,2-Dichloropropane	0.0693 0.0765	0.0642 0.0675	0.0612	0.0731	0.0813	Ave		0.0704				10.0		15.0			
2-Butanone (MEK)	0.2597 0.2321	0.2827 0.2248	0.2157	0.2209	0.2503	Ave		0.2409				10.1		15.0			
Chlorobromomethane	0.1458 0.1391	0.1314 0.1328	0.1217	0.1333	0.1429	Ave		0.1353				6.0		15.0			
Tetrahydrofuran	0.1403 0.1467	0.1561 0.1475	0.1529	0.1567	0.1586	Ave		0.1513				4.4		15.0			
Chloroform	0.5341 0.4888	0.4879 0.4786	0.4644	0.4780	0.4696	Ave		0.4859				4.7		15.0			
1,1,1-Trichloroethane	0.2789 0.3755	0.3525 0.3416	0.3385	0.3469	0.3583	Ave		0.3417				8.9		15.0			
Cyclohexane	0.5918 0.7142	0.6309 0.6468	0.6787	0.6901	0.6358	Ave		0.6555				6.3		15.0			
1,1-Dichloropropene	0.3797 0.3819	0.3861 0.3645	0.3606	0.3702	0.3658	Ave		0.3727				2.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.2736 0.3335	0.3033 0.3077	0.2908	0.3049	0.3079	Ave		0.3031				6.0		15.0			
Isobutyl alcohol	0.0212 0.0201	0.0236 0.0161	0.0175	0.0175	0.0209	Ave		0.0196				13.5		15.0			
Benzene	1.2779 1.2071	1.2142 1.1832	1.1132	1.1853	1.2211	Ave		1.2003				4.1		15.0			
1,2-Dichloroethane	0.5560 0.5164	0.5498 0.5207	0.4919	0.5306	0.5290	Ave		0.5278				4.1		15.0			
n-Heptane	0.0350 0.0343	0.0397 0.0370	0.0392	0.0387	0.0317	Ave		0.0365				8.1		15.0			
Trichloroethene	0.2843 0.2693	0.2576 0.2474	0.2566	0.2601	0.2668	Ave		0.2631				4.5		15.0			
Methylcyclohexane	0.3403 0.3158	0.3323 0.3084	0.3261	0.3415	0.3086	Ave		0.3247				4.3		15.0			
1,2-Dichloropropane	0.4103 0.3988	0.3926 0.3890	0.3994	0.3945	0.3892	Ave		0.3962				1.9		15.0			
Dibromomethane	0.1926 0.1610	0.1647 0.1574	0.1612	0.1724	0.1642	Ave		0.1676				7.1		15.0			
1,4-Dioxane	0.0023 0.0041	0.0055 0.0013	0.0019	0.0021	0.0053	Ave		0.0032				53.7	*	15.0			
Dichlorobromomethane	0.3800 0.3797	0.3597 0.3704	0.3640	0.3652	0.3856	Ave		0.3721				2.6		15.0			
2-Chloroethyl vinyl ether	0.1916 0.2032	0.1629 0.1814	0.1504	0.1911	0.1903	Ave		0.1815				10.2		15.0			
cis-1,3-Dichloropropene	0.4537 0.4687	0.4756 0.4699	0.4545	0.4832	0.4854	Ave		0.4701				2.7		15.0			
4-Methyl-2-pentanone (MIBK)	0.5725 0.5177	0.5153 0.5285	0.5070	0.5195	0.5468	Ave		0.5296				4.3		15.0			
Toluene	1.5432 1.5171	1.6115 1.5271	1.3887	1.4778	1.5259	Ave		1.5130				4.5		15.0			
trans-1,3-Dichloropropene	0.5474 0.5455	0.5321 0.5763	0.5323	0.5424	0.5720	Ave		0.5497				3.2		15.0			
Ethyl methacrylate	0.5933 0.5455	0.5246 0.5949	0.5491	0.5713	0.5996	Ave		0.5683				5.1		15.0			
1,1,2-Trichloroethane	0.2813 0.2943	0.2995 0.2923	0.3008	0.2921	0.2873	Ave		0.2925				2.3		15.0			
Tetrachloroethene	0.2522 0.2700	0.2777 0.2653	0.2590	0.2576	0.2590	Ave		0.2630				3.3		15.0			
1,3-Dichloropropane	0.6022 0.5750	0.5668 0.6052	0.6019	0.6041	0.5860	Ave		0.5916				2.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.4970 0.4708	0.4771 0.4935	0.4646	0.4966	0.5305	Ave		0.4900				4.5		15.0			
Chlorodibromomethane	0.3301 0.3290	0.3079 0.3300	0.2883	0.3246	0.3355	Ave		0.3208				5.2		15.0			
Ethylene Dibromide	0.3519 0.3232	0.3712 0.3336	0.3196	0.3255	0.3509	Ave		0.3394				5.6		15.0			
Chlorobenzene	0.9101 0.9745	1.0605 0.9833	1.0310	0.9753	0.9709	Ave		0.9865			0.3000	4.9		15.0			
1,1,1,2-Tetrachloroethane	0.3753 0.3255	0.3320 0.3351	0.2917	0.3353	0.3249	Ave		0.3314				7.4		15.0			
Ethylbenzene	0.6055 0.5590	0.5289 0.5413	0.5287	0.5543	0.5441	Ave		0.5517				4.8		15.0			
m-Xylene & p-Xylene	0.7043 0.6617	0.7150 0.6442	0.6494	0.6408	0.6688	Ave		0.6692				4.4		15.0			
o-Xylene	0.7667 0.6786	0.7592 0.6590	0.6348	0.6709	0.6886	Ave		0.6940				7.2		15.0			
Styrene	1.0880 1.1697	1.1928 1.1746	1.0650	1.1982	1.1984	Ave		1.1552				4.8		15.0			
Bromoform	0.2176 0.2434	0.2133 0.2570	0.2294	0.2391	0.2399	Ave		0.2342			0.1000	6.5		15.0			
Isopropylbenzene	1.6466 1.6572	1.7688 1.6142	1.5345	1.5977	1.6183	Ave		1.6339				4.4		15.0			
1,1,2,2-Tetrachloroethane	0.9051 0.8156	0.8651 0.8616	0.8482	0.9665	0.8598	Ave		0.8746			0.3000	5.5		15.0			
Bromobenzene	0.6123 0.6935	0.7555 0.7294	0.7853	0.7899	0.7224	Ave		0.7269				8.4		15.0			
1,2,3-Trichloropropane	0.2573 0.2558	0.2461 0.2674	0.2704	0.2831	0.2867	Ave		0.2667				5.5		15.0			
trans-1,4-Dichloro-2-butene	0.4231 0.4103	0.4352 0.4761	0.4556	0.4871	0.4349	Ave		0.4460				6.3		15.0			
N-Propylbenzene	0.7663 0.7355	0.8735 0.7319	0.7468	0.8298	0.7474	Ave		0.7759				7.0		15.0			
2-Chlorotoluene	0.6226 0.6762	0.6703 0.6825	0.7238	0.6913	0.6426	Ave		0.6728				4.9		15.0			
1,3,5-Trimethylbenzene	2.7876 2.4575	2.5586 2.4956	2.4435	2.6378	2.3731	Ave		2.5363				5.5		15.0			
4-Chlorotoluene	0.6807 0.6947	0.6594 0.7317	0.7359	0.7632	0.7006	Ave		0.7095				5.1		15.0			
tert-Butylbenzene	1.7321 1.7851	1.9112 1.7871	1.7409	1.8293	1.8025	Ave		1.7983				3.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.6156 2.6323	2.6470 2.6794	2.5748	2.8366	2.5807	Ave		2.6523				3.4		15.0			
sec-Butylbenzene	2.6191 2.6082	2.6570 2.5573	2.5987	2.6894	2.4709	Ave		2.6001				2.7		15.0			
1,3-Dichlorobenzene	1.3250 1.3869	1.4529 1.3917	1.3651	1.4360	1.3741	Ave		1.3902				3.1		15.0			
4-Isopropyltoluene	2.0876 2.1659	2.2271 2.1679	2.1090	2.2199	1.9894	Ave		2.1381				3.9		15.0			
1,4-Dichlorobenzene	1.5488 1.4190	1.5027 1.4369	1.4237	1.4662	1.4441	Ave		1.4631				3.2		15.0			
n-Butylbenzene	1.8918 1.9003	1.9256 1.7994	1.8523	1.9624	1.8214	Ave		1.8790				3.1		15.0			
1,2-Dichlorobenzene	1.3517 1.4046	1.5284 1.3927	1.3991	1.3631	1.3670	Ave		1.4009				4.3		15.0			
1,2-Dibromo-3-Chloropropane	0.1538 0.1761	0.1076 0.1817	0.1708	0.1858	0.1952	Lin1	-0.060	0.1846							0.9960		0.9900
1,2,4-Trichlorobenzene	1.0151 1.0257	1.0136 0.8026	0.8274	0.9378	0.9372	Ave		0.9371				9.7		15.0			
Hexachlorobutadiene	0.3544 0.3495	0.4244 0.2848	0.3218	0.3243	0.3680	Ave		0.3468				12.6		15.0			
Naphthalene	2.4533 2.7167	2.8024 2.5341	2.4659	2.5611	2.7262	Ave		2.6085				5.3		15.0			
1,2,3-Trichlorobenzene	1.0226 0.9754	1.0457 0.7742	0.8386	0.8619	1.0079	Ave		0.9323				11.4		15.0			
Dibromofluoromethane (Surr)	0.2392 0.2628	0.2458 0.2497	0.2469	0.2515	0.2528	Ave		0.2498				2.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3869 0.3939	0.3923 0.3849	0.3872	0.4037	0.3985	Ave		0.3925				1.7		15.0			
Toluene-d8 (Surr)	1.2924 1.2601	1.3211 1.2683	1.2282	1.2837	1.2412	Ave		1.2707				2.5		15.0			
4-Bromofluorobenzene (Surr)	0.4840 0.5405	0.5396 0.5222	0.4986	0.5201	0.5385	Ave		0.5205				4.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-375006/9	240-0085857-009.D
Level 2	STD8260 240-375006/8	240-0085857-008.D
Level 3	STD8260 240-375006/7	240-0085857-007.D
Level 4	STD8260 240-375006/6	240-0085857-006.D
Level 5	STD8260 240-375006/5	240-0085857-005.D
Level 6	STD8260 240-375006/4	240-0085857-004.D
Level 7	STD8260 240-375006/3	240-0085857-003.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	12308 316322	25233 605252	62885	99504	162002	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Chloromethane	FB	Ave	33146 716607	66516 1329279	153817	250534	336265	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Vinyl chloride	FB	Ave	20678 472054	41912 889181	99671	157886	230067	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Butadiene	FB	Ave	22918 559264	58635 1075091	131565	194187	265550	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Bromomethane	FB	Ave	8043 176348	19029 348749	46371	65399	93396	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Chloroethane	FB	Ave	13737 254039	23571 472425	60028	88370	124170	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Dichlorofluoromethane	FB	Ave	27173 509799	51398 997617	124661	186260	242910	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Trichlorofluoromethane	FB	Ave	14500 383621	39997 718416	83444	129136	180309	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Ethyl ether	FB	Ave	16161 331566	34286 696750	81563	126682	182835	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Acrolein	FB	Ave	20682 413753	44977 890672	112261	167565	245275	5.00 100	10.0 200	25.0	37.5	50.0
1,1-Dichloroethene	FB	Ave	9256 226374	24754 453635	54931	83115	113383	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	6984 173246	14912 320822	38855	57759	76534	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Acetone	FB	Lin1	31763 301757	52728 585271	95986	124454	173294	2.00 40.0	4.00 80.0	10.0	15.0	20.0
Iodomethane	FB	Ave	19150 417472	38864 824890	104578	160820	213663	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Carbon disulfide	FB	Ave	42228 919887	93591 1777795	213224	346463	448477	1.00 20.0	2.00 40.0	5.00	7.50	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	9064 196983	18451 387397	51709	69828	92881	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Methyl acetate	FB	Ave	36507 751795	74198 1622399	194172	298568	427421	2.00 40.0	4.00 80.0	10.0	15.0	20.0
Methylene Chloride	FB	Ave	20618 306484	35526 593967	79427	114208	158250	1.00 20.0	2.00 40.0	5.00	7.50	10.0
2-Methyl-2-propanol	FB	Ave	25167 438710	52589 736399	107252	149325	239687	10.0 200	20.0 400	50.0	75.0	100
Acrylonitrile	FB	Ave	96452 2049091	206185 4275310	517555	772565	1108389	10.0 200	20.0 400	50.0	75.0	100
trans-1,2-Dichloroethene	FB	Ave	13540 266384	28919 528285	67321	97537	140444	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Methyl tert-butyl ether	FB	Ave	32802 704733	69692 1348043	167694	269642	362593	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Hexane	FB	Ave	2359 50680	4215 100115	10131	17862	20951	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,1-Dichloroethane	FB	Ave	34006 727880	78918 1454744	183689	275384	364163	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Vinyl acetate	FB	Ave	51128 1037661	101632 2284933	267233	408244	536100	1.00 20.0	2.00 40.0	5.00	7.50	10.0
cis-1,2-Dichloroethene	FB	Ave	14448 317990	32820 617093	75332	120079	161754	1.00 20.0	2.00 40.0	5.00	7.50	10.0
2,2-Dichloropropane	FB	Ave	3505 77856	6605 143528	16537	28595	42300	1.00 20.0	2.00 40.0	5.00	7.50	10.0
2-Butanone (MEK)	FB	Ave	26275 472671	58196 956616	116647	172904	260495	2.00 40.0	4.00 80.0	10.0	15.0	20.0
Chlorobromomethane	FB	Ave	7376 141651	13523 282599	32913	52162	74350	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Tetrahydrofuran	FB	Ave	14197 298732	32143 627633	82689	122620	165020	2.00 40.0	4.00 80.0	10.0	15.0	20.0
Chloroform	FB	Ave	27016 497654	50223 1018378	125543	187090	244327	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,1,1-Trichloroethane	FB	Ave	14108 382295	36293 726836	91500	135750	186447	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Cyclohexane	FB	Ave	29936 727186	64952 1376165	183482	270071	330804	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,1-Dichloropropene	FB	Ave	19206 388890	39743 775484	97499	144887	190323	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Carbon tetrachloride	FB	Ave	13839 339598	31219 654718	78615	119313	160200	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Isobutyl alcohol	CBNZ d5	Ave	19526 388170	44945 638614	90899	129810	201783	25.0 500	50.0 1000	125	188	250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	64643 1229082	124993 2517526	300936	463872	635358	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2-Dichloroethane	FB	Ave	28123 525790	56596 1107901	132968	207673	275252	1.00 20.0	2.00 40.0	5.00	7.50	10.0
n-Heptane	FB	Ave	1768 34965	4087 78793	10596	15135	16483	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Trichloroethene	FB	Ave	14379 274238	26514 526391	69372	101797	138798	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Methylcyclohexane	FB	Ave	17212 321539	34212 656098	88158	133662	160579	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2-Dichloropropane	FB	Ave	20753 406082	40412 827760	107975	154394	202475	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Dibromomethane	FB	Ave	9740 163926	16958 334925	43590	67485	85413	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,4-Dioxane	FB	Ave	2287 84082	11417 56126	10415	16648	55400	20.0 400	40.0 800	100	150	200
Dichlorobromomethane	FB	Ave	19220 386584	37029 788079	98397	142933	200640	1.00 20.0	2.00 40.0	5.00	7.50	10.0
2-Chloroethyl vinyl ether	FB	Ave	19384 413734	33548 771818	81299	149562	197998	2.00 40.0	4.00 80.0	10.0	15.0	20.0
cis-1,3-Dichloropropene	FB	Ave	22949 477198	48961 999848	122878	189097	252542	1.00 20.0	2.00 40.0	5.00	7.50	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	57921 1054335	106094 2248892	274145	406606	569011	2.00 40.0	4.00 80.0	10.0	15.0	20.0
Toluene	CBNZ d5	Ave	56794 1173251	122802 2423656	288772	437992	588013	1.00 20.0	2.00 40.0	5.00	7.50	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	20146 421842	40547 914716	110686	160767	220438	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Ethyl methacrylate	CBNZ d5	Ave	21837 421836	39975 944210	114188	169334	231047	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	10351 227604	22826 463960	62542	86588	110720	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Tetrachloroethene	CBNZ d5	Ave	9283 208820	21160 421061	53849	76351	99791	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,3-Dichloropropane	CBNZ d5	Ave	22164 444695	43193 960455	125164	179044	225815	1.00 20.0	2.00 40.0	5.00	7.50	10.0
2-Hexanone	CBNZ d5	Ave	36585 728104	72709 1566352	193203	294351	408835	2.00 40.0	4.00 80.0	10.0	15.0	20.0
Chlorodibromomethane	CBNZ d5	Ave	12148 254424	23463 523702	59940	96202	129306	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Ethylene Dibromide	CBNZ d5	Ave	12950 249963	28286 529483	66461	96465	135241	1.00 20.0	2.00 40.0	5.00	7.50	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	33496 753605	80814 1560690	214383	289057	374142	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	13811 251741	25301 531827	60647	99376	125201	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Ethylbenzene	CBNZ d5	Ave	22286 432285	40303 859062	109929	164299	209667	1.00 20.0	2.00 40.0	5.00	7.50	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	25921 511739	54485 1022342	135042	189927	257736	1.00 20.0	2.00 40.0	5.00	7.50	10.0
o-Xylene	CBNZ d5	Ave	28218 524799	57855 1045973	132007	198834	265372	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Styrene	CBNZ d5	Ave	40044 904551	90892 1864259	221462	355128	461821	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Bromoform	CBNZ d5	Ave	8007 188227	16257 407852	47692	70881	92463	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Isopropylbenzene	CBNZ d5	Ave	60599 1281621	134786 2561924	319072	473541	623622	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	18753 363689	36950 753874	91649	147871	191500	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Bromobenzene	DCBd 4	Ave	12687 309223	32270 638185	84847	120857	160900	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	5330 114071	10513 234010	29213	43310	63862	1.00 20.0	2.00 40.0	5.00	7.50	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	8767 182955	18591 416579	49230	74522	96857	1.00 20.0	2.00 40.0	5.00	7.50	10.0
N-Propylbenzene	DCBd 4	Ave	15876 327953	37310 640450	80692	126960	166474	1.00 20.0	2.00 40.0	5.00	7.50	10.0
2-Chlorotoluene	DCBd 4	Ave	12900 301543	28633 597195	78206	105764	143132	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	57756 1095829	109289 2183665	264013	403580	528575	1.00 20.0	2.00 40.0	5.00	7.50	10.0
4-Chlorotoluene	DCBd 4	Ave	14103 309752	28167 640253	79514	116769	156044	1.00 20.0	2.00 40.0	5.00	7.50	10.0
tert-Butylbenzene	DCBd 4	Ave	35887 795987	81634 1563713	188105	279889	401485	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	54192 1173763	113062 2344412	278201	433997	574802	1.00 20.0	2.00 40.0	5.00	7.50	10.0
sec-Butylbenzene	DCBd 4	Ave	54265 1163003	113493 2237659	280788	411480	550359	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	27452 618432	62058 1217725	147498	219710	306063	1.00 20.0	2.00 40.0	5.00	7.50	10.0
4-Isopropyltoluene	DCBd 4	Ave	43252 965809	95128 1896879	227872	339641	443107	1.00 20.0	2.00 40.0	5.00	7.50	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 375006

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/05/2019 18:02 Calibration End Date: 04/05/2019 20:30 Calibration ID: 50434

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	32090 632740	64186 1257283	153830	224332	321641	1.00 20.0	2.00 40.0	5.00	7.50	10.0
n-Butylbenzene	DCBd 4	Ave	39196 847353	82250 1574483	200135	300246	405683	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	28005 626301	65285 1218585	151166	208551	304481	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	3186 78540	4597 158980	18451	28429	43477	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	21032 457349	43294 702291	89403	143476	208745	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Hexachlorobutadiene	DCBd 4	Ave	7342 155865	18126 249202	34774	49624	81969	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Naphthalene	DCBd 4	Ave	50829 1211391	119700 2217294	266436	391847	607216	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	21186 434916	44664 677414	90609	131871	224489	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Dibromofluoromethane (Surr)	FB	Ave	12098 267546	25305 531368	66751	98424	131554	1.00 20.0	2.00 40.0	5.00	7.50	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	19571 401110	40390 819032	104687	157992	207353	1.00 20.0	2.00 40.0	5.00	7.50	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	47565 974516	100671 2013009	255400	380473	478308	1.00 20.0	2.00 40.0	5.00	7.50	10.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	17812 418026	41118 828854	103676	154161	207505	1.00 20.0	2.00 40.0	5.00	7.50	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-003.D
Lims ID: STD8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 05-Apr-2019 18:02:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:08 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: macenczaks Date: 08-Apr-2019 08:56:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.963	4.965	-0.002	97	531941	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.639	-0.002	94	396779	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.862	9.864	-0.002	94	218748	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.397	0.010	94	531368	40.0	40.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.679	4.681	-0.002	95	819032	40.0	39.2	
$ 6 Toluene-d8 (Surr)	98	6.336	6.338	-0.002	96	2013009	40.0	39.9	
$ 7 4-Bromofluorobenzene (Surr	95	8.738	8.740	-0.002	87	828854	40.0	40.1	
9 Dichlorodifluoromethane	85	1.248	1.249	-0.001	98	605252	40.0	42.3	
10 Chloromethane	50	1.401	1.403	-0.002	100	1329279	40.0	39.0	
11 Vinyl chloride	62	1.496	1.486	0.010	98	889181	40.0	40.2	
12 Butadiene	54	1.508	1.498	0.010	96	1075091	40.0	39.6	
13 Bromomethane	94	1.745	1.746	-0.001	91	348749	40.0	38.3	
14 Chloroethane	64	1.839	1.829	0.010	95	472425	40.0	37.5	
15 Dichlorofluoromethane	67	2.005	2.007	-0.002	99	997617	40.0	38.5	
16 Trichlorofluoromethane	101	2.052	2.042	0.010	98	718416	40.0	39.8	
17 Ethyl ether	59	2.289	2.291	-0.002	96	696750	40.0	40.2	
18 Acrolein	56	2.407	2.397	0.010	100	890672	200.0	196.3	
19 1,1-Dichloroethene	96	2.490	2.480	0.010	91	453635	40.0	40.0	
20 1,1,2-Trichloro-1,2,2-trif	151	2.502	2.504	-0.002	94	320822	40.0	40.5	
21 Acetone	43	2.537	2.539	-0.002	100	585271	80.0	78.0	
22 Iodomethane	142	2.620	2.610	0.010	96	824890	40.0	39.3	
24 Carbon disulfide	76	2.667	2.669	-0.002	99	1777795	40.0	38.9	
26 3-Chloro-1-propene	76	2.798	2.800	-0.002	89	387397	40.0	39.8	
27 Methyl acetate	43	2.821	2.823	-0.002	99	1622399	80.0	81.4	
28 Methylene Chloride	84	2.904	2.906	-0.002	91	593967	40.0	35.2	
29 2-Methyl-2-propanol	59	3.022	3.024	-0.002	97	736399	400.0	320.4	
31 Acrylonitrile	53	3.117	3.119	-0.002	99	4275310	400.0	403.3	
30 trans-1,2-Dichloroethene	96	3.141	3.143	-0.002	88	528285	40.0	38.1	
32 Methyl tert-butyl ether	73	3.153	3.155	-0.002	97	1348043	40.0	38.1	
33 Hexane	86	3.377	3.379	-0.002	94	100115	40.0	42.8	
34 1,1-Dichloroethane	63	3.508	3.510	-0.002	96	1454744	40.0	38.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.555	3.545	0.010	96	2284933	40.0	42.0	
40 cis-1,2-Dichloroethene	96	3.993	3.995	-0.002	91	617093	40.0	38.6	
39 2,2-Dichloropropane	97	3.993	3.995	-0.002	56	143528	40.0	38.3	
41 2-Butanone (MEK)	43	4.016	4.007	0.009	97	956616	80.0	74.7	
45 Chlorobromomethane	128	4.194	4.196	-0.002	84	282599	40.0	39.3	
46 Tetrahydrofuran	42	4.241	4.243	-0.002	90	627633	80.0	78.0	
47 Chloroform	83	4.265	4.267	-0.002	98	1018378	40.0	39.4	
48 1,1,1-Trichloroethane	97	4.419	4.421	-0.002	94	726836	40.0	40.0	
49 Cyclohexane	56	4.466	4.468	-0.002	90	1376165	40.0	39.5	
51 Carbon tetrachloride	117	4.561	4.563	-0.002	80	654718	40.0	40.6	
50 1,1-Dichloropropene	75	4.561	4.563	-0.002	88	775484	40.0	39.1	
52 Isobutyl alcohol	41	4.667	4.657	0.010	95	638614	1000.0	822.8	
53 Benzene	78	4.738	4.728	0.010	96	2517526	40.0	39.4	
54 1,2-Dichloroethane	62	4.750	4.752	-0.002	95	1107901	40.0	39.5	
56 n-Heptane	100	4.963	4.953	0.010	96	78793	40.0	40.6	
58 Trichloroethene	130	5.283	5.284	-0.001	92	526391	40.0	37.6	
60 Methylcyclohexane	83	5.448	5.450	-0.002	91	656098	40.0	38.0	
61 1,2-Dichloropropane	63	5.472	5.474	-0.002	97	827760	40.0	39.3	
63 Dibromomethane	93	5.578	5.568	0.010	94	334925	40.0	37.6	
64 1,4-Dioxane	88	5.602	5.592	0.010	86	56126	800.0	326.4	
65 Dichlorobromomethane	83	5.709	5.710	-0.002	96	788079	40.0	39.8	
67 2-Chloroethyl vinyl ether	63	5.969	5.971	-0.002	89	771818	80.0	79.9	
68 cis-1,3-Dichloropropene	75	6.099	6.101	-0.002	88	999848	40.0	40.0	
69 4-Methyl-2-pentanone (MIBK	43	6.241	6.231	0.010	97	2248892	80.0	79.8	
70 Toluene	91	6.395	6.397	-0.002	95	2423656	40.0	40.4	
71 trans-1,3-Dichloropropene	75	6.584	6.586	-0.002	96	914716	40.0	41.9	
72 Ethyl methacrylate	69	6.667	6.669	-0.002	92	944210	40.0	41.9	
73 1,1,2-Trichloroethane	97	6.750	6.752	-0.002	93	463960	40.0	40.0	
74 Tetrachloroethene	164	6.880	6.882	-0.002	96	421061	40.0	40.4	
75 1,3-Dichloropropane	76	6.904	6.906	-0.002	94	960455	40.0	40.9	
76 2-Hexanone	43	6.975	6.977	-0.002	99	1566352	80.0	80.6	
78 Chlorodibromomethane	129	7.105	7.107	-0.002	90	523702	40.0	41.1	
80 Ethylene Dibromide	107	7.211	7.213	-0.002	96	529483	40.0	39.3	
82 Chlorobenzene	112	7.661	7.663	-0.002	89	1560690	40.0	39.9	
83 1,1,1,2-Tetrachloroethane	131	7.744	7.746	-0.002	94	531827	40.0	40.4	
84 Ethylbenzene	106	7.767	7.769	-0.002	98	859062	40.0	39.2	
85 m-Xylene & p-Xylene	106	7.874	7.876	-0.002	98	1022342	40.0	38.5	
86 o-Xylene	106	8.253	8.254	-0.001	98	1045973	40.0	38.0	
87 Styrene	104	8.264	8.266	-0.002	93	1864259	40.0	40.7	
88 Bromoform	173	8.442	8.432	0.010	97	407852	40.0	43.9	
89 Isopropylbenzene	105	8.596	8.598	-0.002	96	2561924	40.0	39.5	
92 1,1,2,2-Tetrachloroethane	83	8.880	8.882	-0.002	75	753874	40.0	39.4	
93 Bromobenzene	156	8.892	8.893	-0.001	94	638185	40.0	40.1	
94 1,2,3-Trichloropropane	110	8.927	8.929	-0.002	91	234010	40.0	40.1	
95 trans-1,4-Dichloro-2-buten	53	8.939	8.941	-0.002	84	416579	40.0	42.7	
96 N-Propylbenzene	120	8.998	9.000	-0.002	99	640450	40.0	37.7	
97 2-Chlorotoluene	126	9.081	9.071	0.010	95	597195	40.0	40.6	
98 1,3,5-Trimethylbenzene	105	9.164	9.166	-0.002	93	2183665	40.0	39.4	
99 4-Chlorotoluene	126	9.176	9.177	-0.001	99	640253	40.0	41.3	
100 tert-Butylbenzene	119	9.483	9.485	-0.002	95	1563713	40.0	39.8	
102 1,2,4-Trimethylbenzene	105	9.531	9.532	-0.002	97	2344412	40.0	40.4	
103 sec-Butylbenzene	105	9.696	9.698	-0.002	95	2237659	40.0	39.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.803	9.805	-0.002	97	1217725	40.0	40.0	
105 4-Isopropyltoluene	119	9.838	9.840	-0.002	97	1896879	40.0	40.6	
106 1,4-Dichlorobenzene	146	9.885	9.887	-0.002	90	1257283	40.0	39.3	
109 n-Butylbenzene	91	10.240	10.242	-0.002	97	1574483	40.0	38.3	
110 1,2-Dichlorobenzene	146	10.252	10.254	-0.002	95	1218585	40.0	39.8	
111 1,2-Dibromo-3-Chloropropan	157	11.021	11.023	-0.002	79	158980	40.0	39.7	
113 1,2,4-Trichlorobenzene	180	11.838	11.840	-0.002	93	702291	40.0	34.3	
114 Hexachlorobutadiene	225	12.015	12.017	-0.002	93	249202	40.0	32.9	
115 Naphthalene	128	12.086	12.076	0.010	99	2217294	40.0	38.9	
116 1,2,3-Trichlorobenzene	180	12.323	12.325	-0.002	97	677414	40.0	33.2	
S 128 1,2-Dichloroethene, Total	96				0			76.7	
S 129 1,3-Dichloropropene, Total	75				0			81.9	
S 130 Xylenes, Total	106				0		80.0	76.5	
S 131 Trihalomethanes, Total	1				0		160.0	164.2	

Reagents:

VMRPRIMW_00328	Amount Added:	32.00	Units: uL
VMAROLISTDW_00291	Amount Added:	32.00	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
VMRGAS_00287	Amount Added:	32.00	Units: uL
vm50ss_00359	Amount Added:	32.00	Units: uL

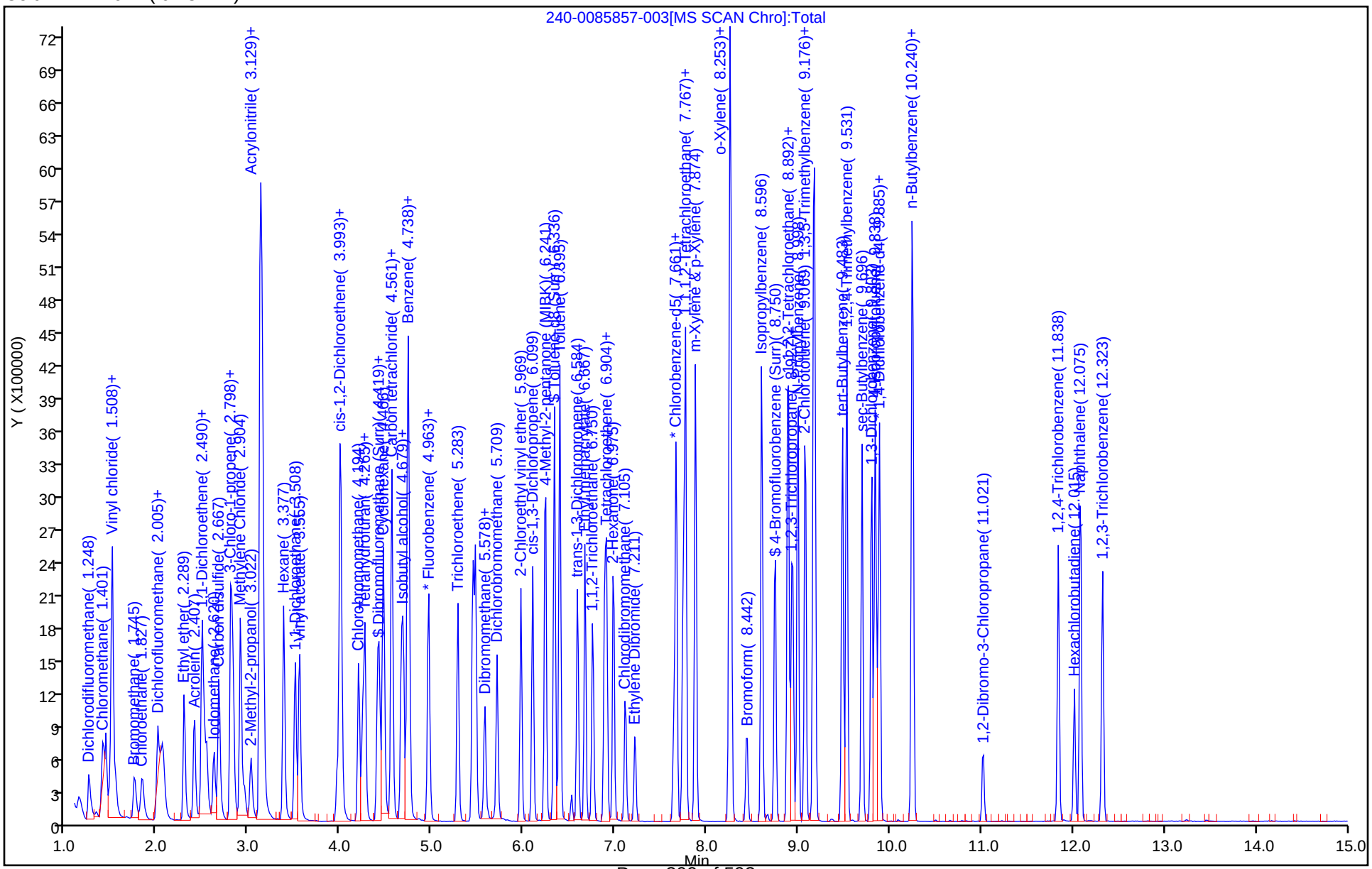
Report Date: 08-Apr-2019 12:12:09 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-003.D

Injection Date:	05-Apr-2019 18:02:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L7			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-004.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Apr-2019 18:27:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:12 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: macenczaks Date: 08-Apr-2019 09:08:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.974	4.965	0.009	95	509105	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.639	-0.002	92	386672	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.861	9.864	-0.003	96	222953	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.406	4.397	0.009	93	267546	20.0	21.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.690	4.681	0.009	95	401110	20.0	20.1	
$ 6 Toluene-d8 (Surr)	98	6.335	6.338	-0.003	96	974516	20.0	19.8	
$ 7 4-Bromofluorobenzene (Surr	95	8.749	8.740	0.009	90	418026	20.0	20.8	
9 Dichlorodifluoromethane	85	1.259	1.249	0.010	99	316322	20.0	23.1	
10 Chloromethane	50	1.401	1.403	-0.002	99	716607	20.0	22.0	
11 Vinyl chloride	62	1.495	1.486	0.009	98	472054	20.0	22.3	
12 Butadiene	54	1.507	1.498	0.009	96	559264	20.0	21.5	
13 Bromomethane	94	1.756	1.746	0.010	91	176348	20.0	20.2	
14 Chloroethane	64	1.838	1.829	0.009	96	254039	20.0	21.1	
15 Dichlorofluoromethane	67	2.004	2.007	-0.003	98	509799	20.0	20.6	
16 Trichlorofluoromethane	101	2.051	2.042	0.009	98	383621	20.0	22.2	
17 Ethyl ether	59	2.288	2.291	-0.003	94	331566	20.0	20.0	
18 Acrolein	56	2.406	2.397	0.009	98	413753	100.0	95.3	
19 1,1-Dichloroethene	96	2.489	2.480	0.009	90	226374	20.0	20.9	
20 1,1,2-Trichloro-1,2,2-trif	151	2.513	2.504	0.009	94	173246	20.0	22.9	
21 Acetone	43	2.537	2.539	-0.002	99	301757	40.0	40.6	
22 Iodomethane	142	2.619	2.610	0.009	96	417472	20.0	20.8	
24 Carbon disulfide	76	2.667	2.669	-0.002	99	919887	20.0	21.0	
26 3-Chloro-1-propene	76	2.809	2.800	0.009	89	196983	20.0	21.1	
27 Methyl acetate	43	2.832	2.823	0.009	100	751795	40.0	39.4	
28 Methylene Chloride	84	2.915	2.906	0.009	90	306484	20.0	19.0	
29 2-Methyl-2-propanol	59	3.022	3.024	-0.002	98	438710	200.0	199.5	
31 Acrylonitrile	53	3.128	3.119	0.009	100	2049091	200.0	202.0	
30 trans-1,2-Dichloroethene	96	3.140	3.143	-0.003	87	266384	20.0	20.1	
32 Methyl tert-butyl ether	73	3.152	3.155	-0.003	96	704733	20.0	20.8	
33 Hexane	86	3.377	3.379	-0.002	92	50680	20.0	22.6	
34 1,1-Dichloroethane	63	3.507	3.510	-0.003	96	727880	20.0	20.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.554	3.545	0.009	96	1037661	20.0	19.9	
40 cis-1,2-Dichloroethene	96	3.992	3.995	-0.003	91	317990	20.0	20.8	
39 2,2-Dichloropropane	97	4.004	3.995	0.009	56	77856	20.0	21.7	
41 2-Butanone (MEK)	43	4.016	4.007	0.009	97	472671	40.0	38.5	
45 Chlorobromomethane	128	4.193	4.196	-0.003	84	141651	20.0	20.6	
46 Tetrahydrofuran	42	4.241	4.243	-0.002	91	298732	40.0	38.8	
47 Chloroform	83	4.264	4.267	-0.003	98	497654	20.0	20.1	
48 1,1,1-Trichloroethane	97	4.418	4.421	-0.003	94	382295	20.0	22.0	
49 Cyclohexane	56	4.465	4.468	-0.003	88	727186	20.0	21.8	
50 1,1-Dichloropropene	75	4.560	4.563	-0.003	86	388890	20.0	20.5	
51 Carbon tetrachloride	117	4.560	4.563	-0.003	82	339598	20.0	22.0	
52 Isobutyl alcohol	41	4.667	4.657	0.010	94	388170	500.0	513.2	
53 Benzene	78	4.738	4.728	0.010	96	1229082	20.0	20.1	
54 1,2-Dichloroethane	62	4.749	4.752	-0.003	95	525790	20.0	19.6	
56 n-Heptane	100	4.962	4.953	0.009	96	34965	20.0	18.8	
58 Trichloroethene	130	5.282	5.284	-0.002	93	274238	20.0	20.5	
60 Methylcyclohexane	83	5.447	5.450	-0.003	93	321539	20.0	19.5	
61 1,2-Dichloropropane	63	5.471	5.474	-0.003	96	406082	20.0	20.1	
63 Dibromomethane	93	5.578	5.568	0.010	96	163926	20.0	19.2	
64 1,4-Dioxane	88	5.601	5.592	0.009	84	84082	400.0	510.9	
65 Dichlorobromomethane	83	5.708	5.710	-0.002	95	386584	20.0	20.4	
67 2-Chloroethyl vinyl ether	63	5.968	5.971	-0.003	89	413734	40.0	44.8	
68 cis-1,3-Dichloropropene	75	6.098	6.101	-0.003	88	477198	20.0	19.9	
69 4-Methyl-2-pentanone (MIBK	43	6.240	6.231	0.009	97	1054335	40.0	39.1	
70 Toluene	91	6.394	6.397	-0.003	96	1173251	20.0	20.1	
71 trans-1,3-Dichloropropene	75	6.583	6.586	-0.003	97	421842	20.0	19.8	
72 Ethyl methacrylate	69	6.666	6.669	-0.003	92	421836	20.0	19.2	
73 1,1,2-Trichloroethane	97	6.749	6.752	-0.003	94	227604	20.0	20.1	
74 Tetrachloroethene	164	6.879	6.882	-0.003	96	208820	20.0	20.5	
75 1,3-Dichloropropane	76	6.903	6.906	-0.003	93	444695	20.0	19.4	
76 2-Hexanone	43	6.974	6.977	-0.003	99	728104	40.0	38.4	
78 Chlorodibromomethane	129	7.104	7.107	-0.003	89	254424	20.0	20.5	
80 Ethylene Dibromide	107	7.211	7.213	-0.002	97	249963	20.0	19.0	
82 Chlorobenzene	112	7.660	7.663	-0.003	96	753605	20.0	19.8	
83 1,1,1,2-Tetrachloroethane	131	7.743	7.746	-0.003	93	251741	20.0	19.6	
84 Ethylbenzene	106	7.767	7.769	-0.002	98	432285	20.0	20.3	
85 m-Xylene & p-Xylene	106	7.873	7.876	-0.003	97	511739	20.0	19.8	
86 o-Xylene	106	8.252	8.254	-0.002	97	524799	20.0	19.6	
87 Styrene	104	8.264	8.266	-0.002	93	904551	20.0	20.2	
88 Bromoform	173	8.441	8.432	0.009	96	188227	20.0	20.8	
89 Isopropylbenzene	105	8.595	8.598	-0.003	96	1281621	20.0	20.3	
92 1,1,2,2-Tetrachloroethane	83	8.879	8.882	-0.003	75	363689	20.0	18.7	
93 Bromobenzene	156	8.891	8.893	-0.002	94	309223	20.0	19.1	
94 1,2,3-Trichloropropane	110	8.926	8.929	-0.003	89	114071	20.0	19.2	
95 trans-1,4-Dichloro-2-buten	53	8.938	8.941	-0.003	83	182955	20.0	18.4	
96 N-Propylbenzene	120	8.997	9.000	-0.003	99	327953	20.0	19.0	
97 2-Chlorotoluene	126	9.080	9.071	0.009	95	301543	20.0	20.1	
98 1,3,5-Trimethylbenzene	105	9.163	9.166	-0.003	93	1095829	20.0	19.4	
99 4-Chlorotoluene	126	9.187	9.177	0.010	99	309752	20.0	19.6	
100 tert-Butylbenzene	119	9.482	9.485	-0.003	95	795987	20.0	19.9	
102 1,2,4-Trimethylbenzene	105	9.530	9.532	-0.002	96	1173763	20.0	19.8	
103 sec-Butylbenzene	105	9.695	9.698	-0.003	95	1163003	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.802	9.805	-0.003	96	618432	20.0	20.0	
105 4-Isopropyltoluene	119	9.837	9.840	-0.003	97	965809	20.0	20.3	
106 1,4-Dichlorobenzene	146	9.885	9.887	-0.002	91	632740	20.0	19.4	
109 n-Butylbenzene	91	10.240	10.242	-0.002	97	847353	20.0	20.2	
110 1,2-Dichlorobenzene	146	10.252	10.254	-0.002	94	626301	20.0	20.1	
111 1,2-Dibromo-3-Chloropropan	157	11.021	11.023	-0.002	76	78540	20.0	19.4	
113 1,2,4-Trichlorobenzene	180	11.837	11.840	-0.003	94	457349	20.0	21.9	
114 Hexachlorobutadiene	225	12.015	12.017	-0.002	95	155865	20.0	20.2	
115 Naphthalene	128	12.086	12.076	0.010	99	1211391	20.0	20.8	
116 1,2,3-Trichlorobenzene	180	12.322	12.325	-0.003	97	434916	20.0	20.9	
S 128 1,2-Dichloroethene, Total	96				0			40.8	
S 129 1,3-Dichloropropene, Total	75				0			39.8	
S 130 Xylenes, Total	106				0		40.0	39.3	
S 131 Trihalomethanes, Total	1				0		80.0	81.8	

Reagents:

VMRPRIMW_00328	Amount Added:	16.00	Units: uL
VMAROLISTDW_00291	Amount Added:	16.00	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
VMRGAS_00287	Amount Added:	16.00	Units: uL
vm50ss_00359	Amount Added:	16.00	Units: uL

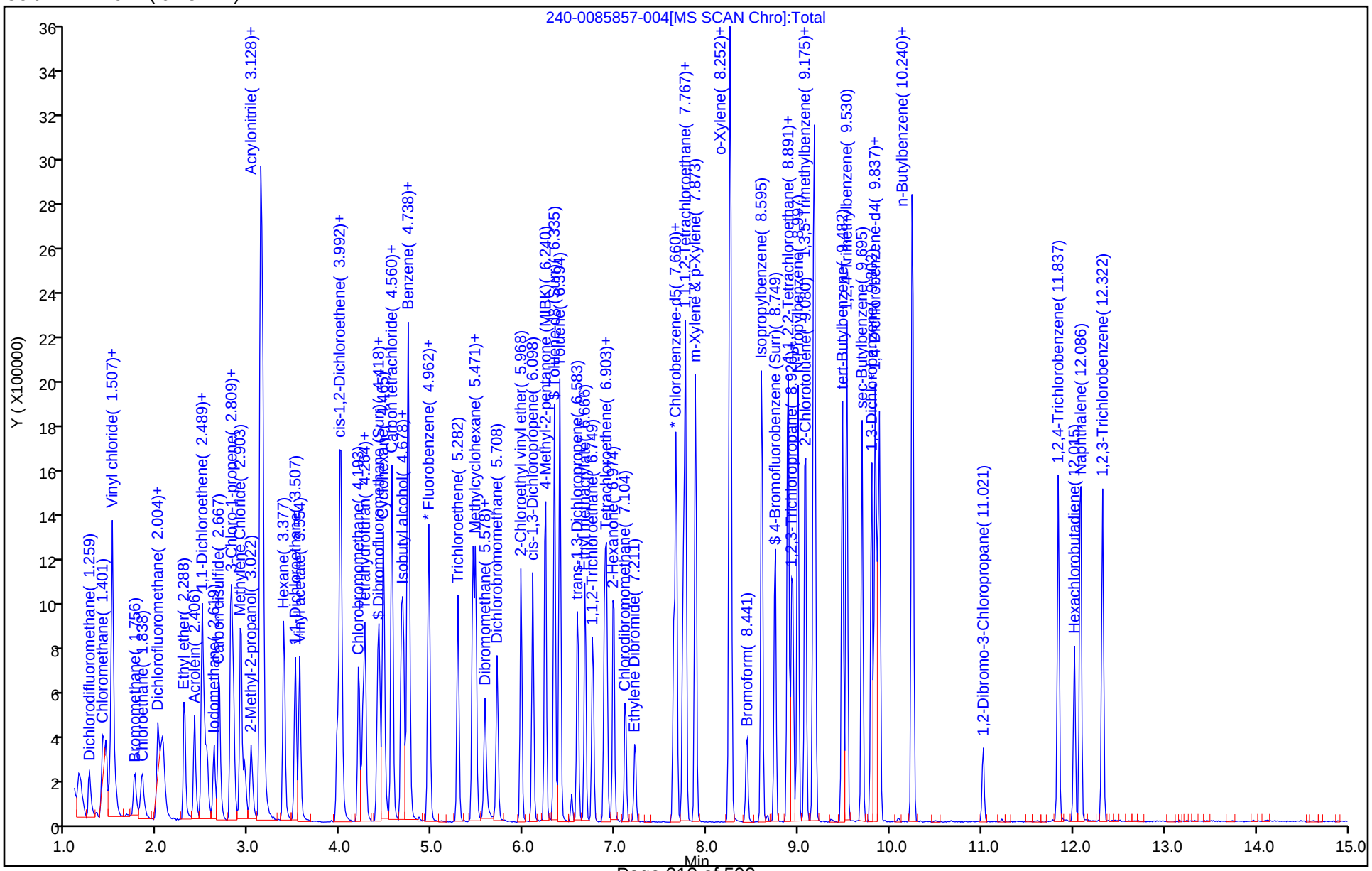
Report Date: 08-Apr-2019 12:12:12 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-004.D

Injection Date:	05-Apr-2019 18:27:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L6			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-005.D
Lims ID: STD8260 L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 05-Apr-2019 18:51:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:15 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: macenczaks Date: 08-Apr-2019 08:58:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.965	4.965	0.000	94	520297	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.639	7.639	0.000	93	385359	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.864	9.864	0.000	96	222732	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.397	4.397	0.000	58	131554	10.0	10.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.681	4.681	0.000	87	207353	10.0	10.2	
$ 6 Toluene-d8 (Surr)	98	6.338	6.338	0.000	84	478308	10.0	9.77	
$ 7 4-Bromofluorobenzene (Surr	95	8.740	8.740	0.000	76	207505	10.0	10.3	
9 Dichlorodifluoromethane	85	1.249	1.249	0.000	65	162002	10.0	11.6	
10 Chloromethane	50	1.403	1.403	0.000	89	336265	10.0	10.1	
11 Vinyl chloride	62	1.486	1.486	0.000	98	230067	10.0	10.6	
12 Butadiene	54	1.498	1.498	0.000	95	265550	10.0	10.0	
13 Bromomethane	94	1.746	1.746	0.000	90	93396	10.0	10.5	
14 Chloroethane	64	1.829	1.829	0.000	92	124170	10.0	10.1	
15 Dichlorofluoromethane	67	2.007	2.007	0.000	96	242910	10.0	9.58	
16 Trichlorofluoromethane	101	2.042	2.042	0.000	95	180309	10.0	10.2	
17 Ethyl ether	59	2.291	2.291	0.000	95	182835	10.0	10.8	
18 Acrolein	56	2.397	2.397	0.000	91	245275	50.0	55.3	
19 1,1-Dichloroethene	96	2.480	2.480	0.000	88	113383	10.0	10.2	
20 1,1,2-Trichloro-1,2,2-trif	151	2.504	2.504	0.000	73	76534	10.0	9.88	
21 Acetone	43	2.539	2.539	0.000	93	173294	20.0	21.5	
22 Iodomethane	142	2.610	2.610	0.000	95	213663	10.0	10.4	
24 Carbon disulfide	76	2.669	2.669	0.000	99	448477	10.0	10.0	
26 3-Chloro-1-propene	76	2.800	2.800	0.000	81	92881	10.0	9.75	
27 Methyl acetate	43	2.823	2.823	0.000	98	427421	20.0	21.9	
28 Methylene Chloride	84	2.906	2.906	0.000	80	158250	10.0	9.58	
29 2-Methyl-2-propanol	59	3.024	3.024	0.000	24	239687	100.0	106.6	
31 Acrylonitrile	53	3.119	3.119	0.000	100	1108389	100.0	106.9	
30 trans-1,2-Dichloroethene	96	3.143	3.143	0.000	87	140444	10.0	10.3	
32 Methyl tert-butyl ether	73	3.155	3.155	0.000	89	362593	10.0	10.5	
33 Hexane	86	3.379	3.379	0.000	95	20951	10.0	9.16	
34 1,1-Dichloroethane	63	3.510	3.510	0.000	95	364163	10.0	9.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.545	3.545	0.000	96	536100	10.0	10.1	
40 cis-1,2-Dichloroethene	96	3.995	3.995	0.000	78	161754	10.0	10.3	
39 2,2-Dichloropropane	97	3.995	3.995	0.000	54	42300	10.0	11.5	
41 2-Butanone (MEK)	43	4.007	4.007	0.000	88	260495	20.0	20.8	
45 Chlorobromomethane	128	4.196	4.196	0.000	68	74350	10.0	10.6	
46 Tetrahydrofuran	42	4.243	4.243	0.000	85	165020	20.0	21.0	
47 Chloroform	83	4.267	4.267	0.000	87	244327	10.0	9.66	
48 1,1,1-Trichloroethane	97	4.421	4.421	0.000	88	186447	10.0	10.5	
49 Cyclohexane	56	4.468	4.468	0.000	75	330804	10.0	9.70	
51 Carbon tetrachloride	117	4.563	4.563	0.000	75	160200	10.0	10.2	
50 1,1-Dichloropropene	75	4.563	4.563	0.000	88	190323	10.0	9.82	
52 Isobutyl alcohol	41	4.657	4.657	0.000	93	201783	250.0	267.7	
53 Benzene	78	4.728	4.728	0.000	95	635358	10.0	10.2	
54 1,2-Dichloroethane	62	4.752	4.752	0.000	89	275252	10.0	10.0	
56 n-Heptane	100	4.953	4.953	0.000	90	16483	10.0	8.68	
58 Trichloroethene	130	5.284	5.284	0.000	92	138798	10.0	10.1	
60 Methylcyclohexane	83	5.450	5.450	0.000	93	160579	10.0	9.50	
61 1,2-Dichloropropane	63	5.474	5.474	0.000	93	202475	10.0	9.82	
63 Dibromomethane	93	5.568	5.568	0.000	82	85413	10.0	9.79	
64 1,4-Dioxane	88	5.592	5.592	0.000	86	55400	200.0	329.4	
65 Dichlorobromomethane	83	5.710	5.710	0.000	94	200640	10.0	10.4	
67 2-Chloroethyl vinyl ether	63	5.971	5.971	0.000	90	197998	20.0	21.0	
68 cis-1,3-Dichloropropene	75	6.101	6.101	0.000	85	252542	10.0	10.3	
69 4-Methyl-2-pentanone (MIBK	43	6.231	6.231	0.000	97	569011	20.0	20.6	
70 Toluene	91	6.397	6.397	0.000	86	588013	10.0	10.1	
71 trans-1,3-Dichloropropene	75	6.586	6.586	0.000	92	220438	10.0	10.4	
72 Ethyl methacrylate	69	6.669	6.669	0.000	87	231047	10.0	10.5	
73 1,1,2-Trichloroethane	97	6.752	6.752	0.000	90	110720	10.0	9.82	
74 Tetrachloroethene	164	6.882	6.882	0.000	94	99791	10.0	9.85	
75 1,3-Dichloropropane	76	6.906	6.906	0.000	93	225815	10.0	9.91	
76 2-Hexanone	43	6.977	6.977	0.000	98	408835	20.0	21.7	
78 Chlorodibromomethane	129	7.107	7.107	0.000	85	129306	10.0	10.5	
80 Ethylene Dibromide	107	7.213	7.213	0.000	95	135241	10.0	10.3	
82 Chlorobenzene	112	7.663	7.663	0.000	86	374142	10.0	9.84	
83 1,1,1,2-Tetrachloroethane	131	7.746	7.746	0.000	85	125201	10.0	9.80	
84 Ethylbenzene	106	7.769	7.769	0.000	97	209667	10.0	9.86	
85 m-Xylene & p-Xylene	106	7.876	7.876	0.000	97	257736	10.0	10.0	
86 o-Xylene	106	8.254	8.254	0.000	82	265372	10.0	9.92	
87 Styrene	104	8.266	8.266	0.000	93	461821	10.0	10.4	
88 Bromoform	173	8.432	8.432	0.000	89	92463	10.0	10.2	
89 Isopropylbenzene	105	8.598	8.598	0.000	97	623622	10.0	9.90	
92 1,1,2,2-Tetrachloroethane	83	8.882	8.882	0.000	76	191500	10.0	9.83	
93 Bromobenzene	156	8.893	8.893	0.000	74	160900	10.0	9.94	
94 1,2,3-Trichloropropane	110	8.929	8.929	0.000	36	63862	10.0	10.8	
95 trans-1,4-Dichloro-2-buten	53	8.941	8.941	0.000	41	96857	10.0	9.75	
96 N-Propylbenzene	120	9.000	9.000	0.000	85	166474	10.0	9.63	
97 2-Chlorotoluene	126	9.071	9.071	0.000	92	143132	10.0	9.55	
98 1,3,5-Trimethylbenzene	105	9.166	9.166	0.000	89	528575	10.0	9.36	
99 4-Chlorotoluene	126	9.177	9.177	0.000	97	156044	10.0	9.88	
100 tert-Butylbenzene	119	9.485	9.485	0.000	71	401485	10.0	10.0	
102 1,2,4-Trimethylbenzene	105	9.532	9.532	0.000	70	574802	10.0	9.73	
103 sec-Butylbenzene	105	9.698	9.698	0.000	93	550359	10.0	9.50	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.805	9.805	0.000	83	306063	10.0	9.88	
105 4-Isopropyltoluene	119	9.840	9.840	0.000	89	443107	10.0	9.30	
106 1,4-Dichlorobenzene	146	9.887	9.887	0.000	91	321641	10.0	9.87	
109 n-Butylbenzene	91	10.242	10.242	0.000	96	405683	10.0	9.69	
110 1,2-Dichlorobenzene	146	10.254	10.254	0.000	95	304481	10.0	9.76	
111 1,2-Dibromo-3-Chloropropan	157	11.023	11.023	0.000	63	43477	10.0	10.9	
113 1,2,4-Trichlorobenzene	180	11.840	11.840	0.000	93	208745	10.0	10.0	
114 Hexachlorobutadiene	225	12.017	12.017	0.000	86	81969	10.0	10.6	
115 Naphthalene	128	12.076	12.076	0.000	98	607216	10.0	10.5	
116 1,2,3-Trichlorobenzene	180	12.325	12.325	0.000	98	224489	10.0	10.8	
S 130 Xylenes, Total	106				0		20.0	19.9	
S 131 Trihalomethanes, Total	1				0		40.0	40.7	

Reagents:

VMRPRIMW_00328	Amount Added:	8.00	Units: uL
VMAROLISTDW_00291	Amount Added:	8.00	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
VMRGAS_00287	Amount Added:	8.00	Units: uL
vm50ss_00359	Amount Added:	8.00	Units: uL

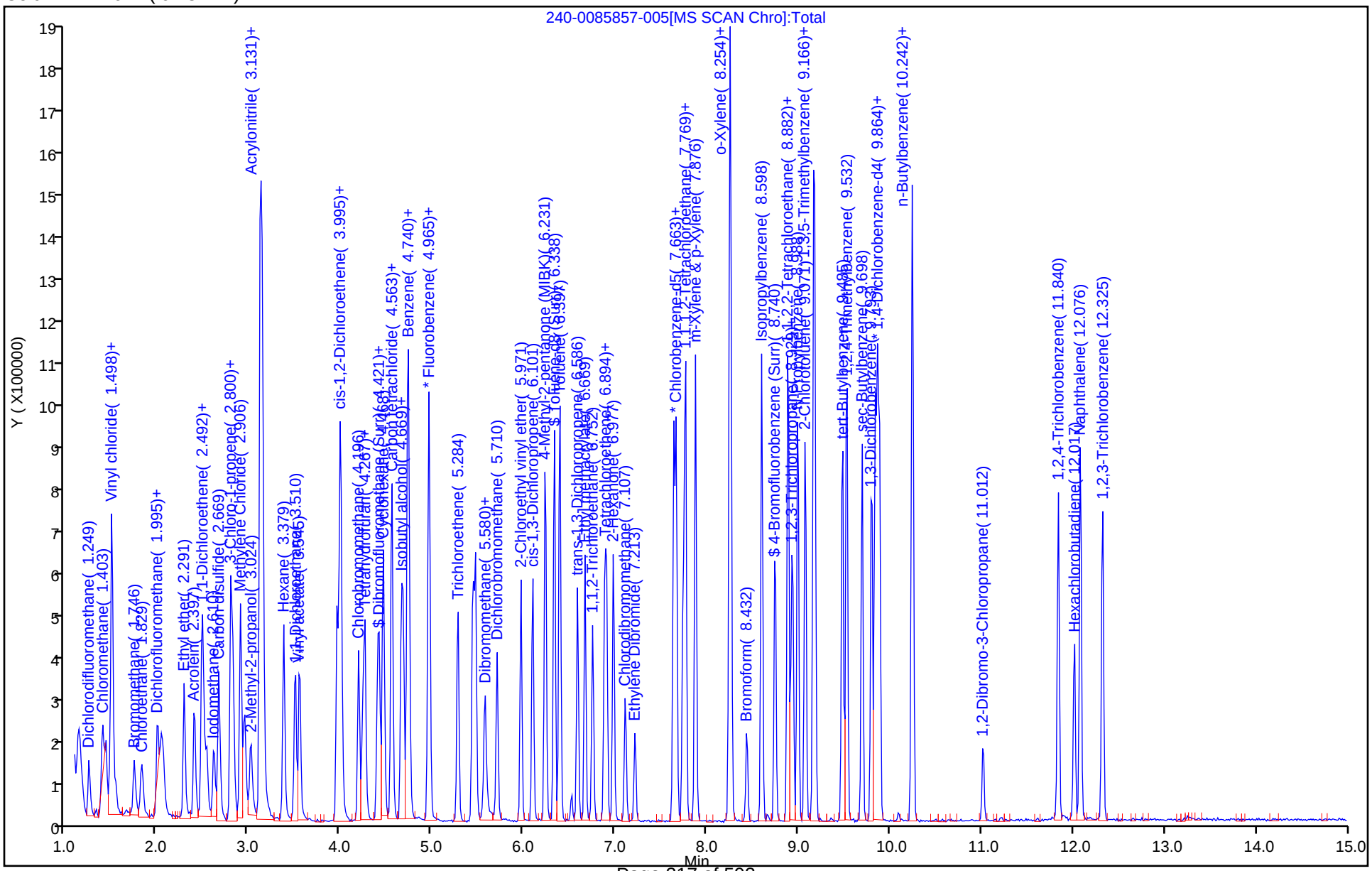
Report Date: 08-Apr-2019 12:12:16 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-005.D

Injection Date:	05-Apr-2019 18:51:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L5			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-006.D
Lims ID: STD8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 05-Apr-2019 19:16:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:18 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: macenczaks Date: 08-Apr-2019 09:11:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.975	4.975	0.000	96	521822	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.637	0.000	94	395187	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.861	9.861	0.000	96	203999	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.407	0.000	91	98424	7.50	7.55	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.691	0.000	96	157992	7.50	7.71	
$ 6 Toluene-d8 (Surr)	98	6.335	6.335	0.000	96	380473	7.50	7.58	
$ 7 4-Bromofluorobenzene (Surr	95	8.749	8.749	0.000	86	154161	7.50	7.49	
9 Dichlorodifluoromethane	85	1.259	1.259	0.000	98	99504	7.50	7.09	
10 Chloromethane	50	1.401	1.401	0.000	100	250534	7.50	7.49	
11 Vinyl chloride	62	1.496	1.496	0.000	97	157886	7.50	7.27	
12 Butadiene	54	1.508	1.508	0.000	96	194187	7.50	7.30	
13 Bromomethane	94	1.744	1.744	0.000	86	65399	7.50	7.32	
14 Chloroethane	64	1.839	1.839	0.000	96	88370	7.50	7.15	
15 Dichlorofluoromethane	67	2.004	2.004	0.000	98	186260	7.50	7.33	
16 Trichlorofluoromethane	101	2.052	2.052	0.000	94	129136	7.50	7.29	
17 Ethyl ether	59	2.288	2.288	0.000	96	126682	7.50	7.45	
18 Acrolein	56	2.407	2.407	0.000	98	167565	37.5	37.6	
19 1,1-Dichloroethene	96	2.490	2.490	0.000	90	83115	7.50	7.47	
20 1,1,2-Trichloro-1,2,2-trif	151	2.513	2.513	0.000	95	57759	7.50	7.43	
21 Acetone	43	2.537	2.537	0.000	99	124454	15.0	14.6	
22 Iodomethane	142	2.620	2.620	0.000	96	160820	7.50	7.81	
24 Carbon disulfide	76	2.679	2.679	0.000	99	346463	7.50	7.72	
26 3-Chloro-1-propene	76	2.797	2.797	0.000	89	69828	7.50	7.31	
27 Methyl acetate	43	2.833	2.833	0.000	99	298568	15.0	15.3	
28 Methylene Chloride	84	2.904	2.904	0.000	91	114208	7.50	6.89	
29 2-Methyl-2-propanol	59	3.022	3.022	0.000	98	149325	75.0	66.2	
31 Acrylonitrile	53	3.129	3.129	0.000	99	772565	75.0	74.3	
30 trans-1,2-Dichloroethene	96	3.152	3.152	0.000	87	97537	7.50	7.16	
32 Methyl tert-butyl ether	73	3.152	3.152	0.000	97	269642	7.50	7.77	
33 Hexane	86	3.377	3.377	0.000	95	17862	7.50	7.78	
34 1,1-Dichloroethane	63	3.507	3.507	0.000	95	275384	7.50	7.51	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.555	3.555	0.000	96	408244	7.50	7.66	
40 cis-1,2-Dichloroethene	96	3.992	3.992	0.000	89	120079	7.50	7.66	
39 2,2-Dichloropropane	97	3.992	3.992	0.000	55	28595	7.50	7.78	
41 2-Butanone (MEK)	43	4.016	4.016	0.000	97	172904	15.0	13.8	
45 Chlorobromomethane	128	4.205	4.205	0.000	82	52162	7.50	7.39	
46 Tetrahydrofuran	42	4.241	4.241	0.000	89	122620	15.0	15.5	
47 Chloroform	83	4.265	4.265	0.000	97	187090	7.50	7.38	
48 1,1,1-Trichloroethane	97	4.418	4.418	0.000	90	135750	7.50	7.61	
49 Cyclohexane	56	4.466	4.466	0.000	89	270071	7.50	7.90	
50 1,1-Dichloropropene	75	4.560	4.560	0.000	86	144887	7.50	7.45	
51 Carbon tetrachloride	117	4.560	4.560	0.000	81	119313	7.50	7.54	
52 Isobutyl alcohol	41	4.667	4.667	0.000	94	129810	187.5	167.9	
53 Benzene	78	4.738	4.738	0.000	96	463872	7.50	7.41	
54 1,2-Dichloroethane	62	4.750	4.750	0.000	96	207673	7.50	7.54	
56 n-Heptane	100	4.963	4.963	0.000	94	15135	7.50	7.94	
58 Trichloroethene	130	5.282	5.282	0.000	89	101797	7.50	7.41	
60 Methylcyclohexane	83	5.448	5.448	0.000	91	133662	7.50	7.89	
61 1,2-Dichloropropane	63	5.472	5.472	0.000	96	154394	7.50	7.47	
63 Dibromomethane	93	5.578	5.578	0.000	97	67485	7.50	7.71	
64 1,4-Dioxane	88	5.590	5.590	0.000	42	16648	150.0	98.7	
65 Dichlorobromomethane	83	5.708	5.708	0.000	95	142933	7.50	7.36	
67 2-Chloroethyl vinyl ether	63	5.968	5.968	0.000	90	149562	15.0	15.8	
68 cis-1,3-Dichloropropene	75	6.099	6.099	0.000	88	189097	7.50	7.71	
69 4-Methyl-2-pentanone (MIBK	43	6.241	6.241	0.000	96	406606	15.0	14.7	
70 Toluene	91	6.394	6.394	0.000	96	437992	7.50	7.33	
71 trans-1,3-Dichloropropene	75	6.584	6.584	0.000	95	160767	7.50	7.40	
72 Ethyl methacrylate	69	6.667	6.667	0.000	92	169334	7.50	7.54	
73 1,1,2-Trichloroethane	97	6.749	6.749	0.000	92	86588	7.50	7.49	
74 Tetrachloroethene	164	6.891	6.891	0.000	94	76351	7.50	7.35	
75 1,3-Dichloropropane	76	6.903	6.903	0.000	97	179044	7.50	7.66	
76 2-Hexanone	43	6.974	6.974	0.000	99	294351	15.0	15.2	
78 Chlorodibromomethane	129	7.104	7.104	0.000	88	96202	7.50	7.59	
80 Ethylene Dibromide	107	7.211	7.211	0.000	98	96465	7.50	7.19	
82 Chlorobenzene	112	7.661	7.661	0.000	97	289057	7.50	7.41	
83 1,1,1,2-Tetrachloroethane	131	7.743	7.743	0.000	92	99376	7.50	7.59	
84 Ethylbenzene	106	7.767	7.767	0.000	98	164299	7.50	7.54	
85 m-Xylene & p-Xylene	106	7.874	7.874	0.000	97	189927	7.50	7.18	
86 o-Xylene	106	8.252	8.252	0.000	98	198834	7.50	7.25	
87 Styrene	104	8.264	8.264	0.000	91	355128	7.50	7.78	
88 Bromoform	173	8.442	8.442	0.000	95	70881	7.50	7.66	
89 Isopropylbenzene	105	8.595	8.595	0.000	97	473541	7.50	7.33	
92 1,1,2,2-Tetrachloroethane	83	8.879	8.879	0.000	78	147871	7.50	8.29	
93 Bromobenzene	156	8.891	8.891	0.000	95	120857	7.50	8.15	
94 1,2,3-Trichloropropane	110	8.927	8.927	0.000	89	43310	7.50	7.96	
95 trans-1,4-Dichloro-2-buten	53	8.939	8.939	0.000	80	74522	7.50	8.19	
96 N-Propylbenzene	120	8.998	8.998	0.000	99	126960	7.50	8.02	
97 2-Chlorotoluene	126	9.069	9.069	0.000	94	105764	7.50	7.71	
98 1,3,5-Trimethylbenzene	105	9.163	9.163	0.000	93	403580	7.50	7.80	
99 4-Chlorotoluene	126	9.175	9.175	0.000	98	116769	7.50	8.07	
100 tert-Butylbenzene	119	9.483	9.483	0.000	94	279889	7.50	7.63	
102 1,2,4-Trimethylbenzene	105	9.530	9.530	0.000	97	433997	7.50	8.02	
103 sec-Butylbenzene	105	9.696	9.696	0.000	95	411480	7.50	7.76	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.802	9.802	0.000	95	219710	7.50	7.75	
105 4-Isopropyltoluene	119	9.838	9.838	0.000	97	339641	7.50	7.79	
106 1,4-Dichlorobenzene	146	9.885	9.885	0.000	90	224332	7.50	7.52	
109 n-Butylbenzene	91	10.240	10.240	0.000	98	300246	7.50	7.83	
110 1,2-Dichlorobenzene	146	10.252	10.252	0.000	94	208551	7.50	7.30	
111 1,2-Dibromo-3-Chloropropan	157	11.021	11.021	0.000	74	28429	7.50	7.88	
113 1,2,4-Trichlorobenzene	180	11.838	11.838	0.000	92	143476	7.50	7.51	
114 Hexachlorobutadiene	225	12.015	12.015	0.000	94	49624	7.50	7.02	
115 Naphthalene	128	12.086	12.086	0.000	99	391847	7.50	7.36	
116 1,2,3-Trichlorobenzene	180	12.323	12.323	0.000	96	131871	7.50	6.93	
S 128 1,2-Dichloroethene, Total	96				0			14.8	
S 129 1,3-Dichloropropene, Total	75				0			15.1	
S 130 Xylenes, Total	106				0		15.0	14.4	
S 131 Trihalomethanes, Total	1				0		30.0	30.0	

Reagents:

VMRPRIMW_00328	Amount Added:	6.00	Units: uL
VMAROLISTDW_00291	Amount Added:	6.00	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
VMRGAS_00287	Amount Added:	6.00	Units: uL
vm50ss_00359	Amount Added:	6.00	Units: uL

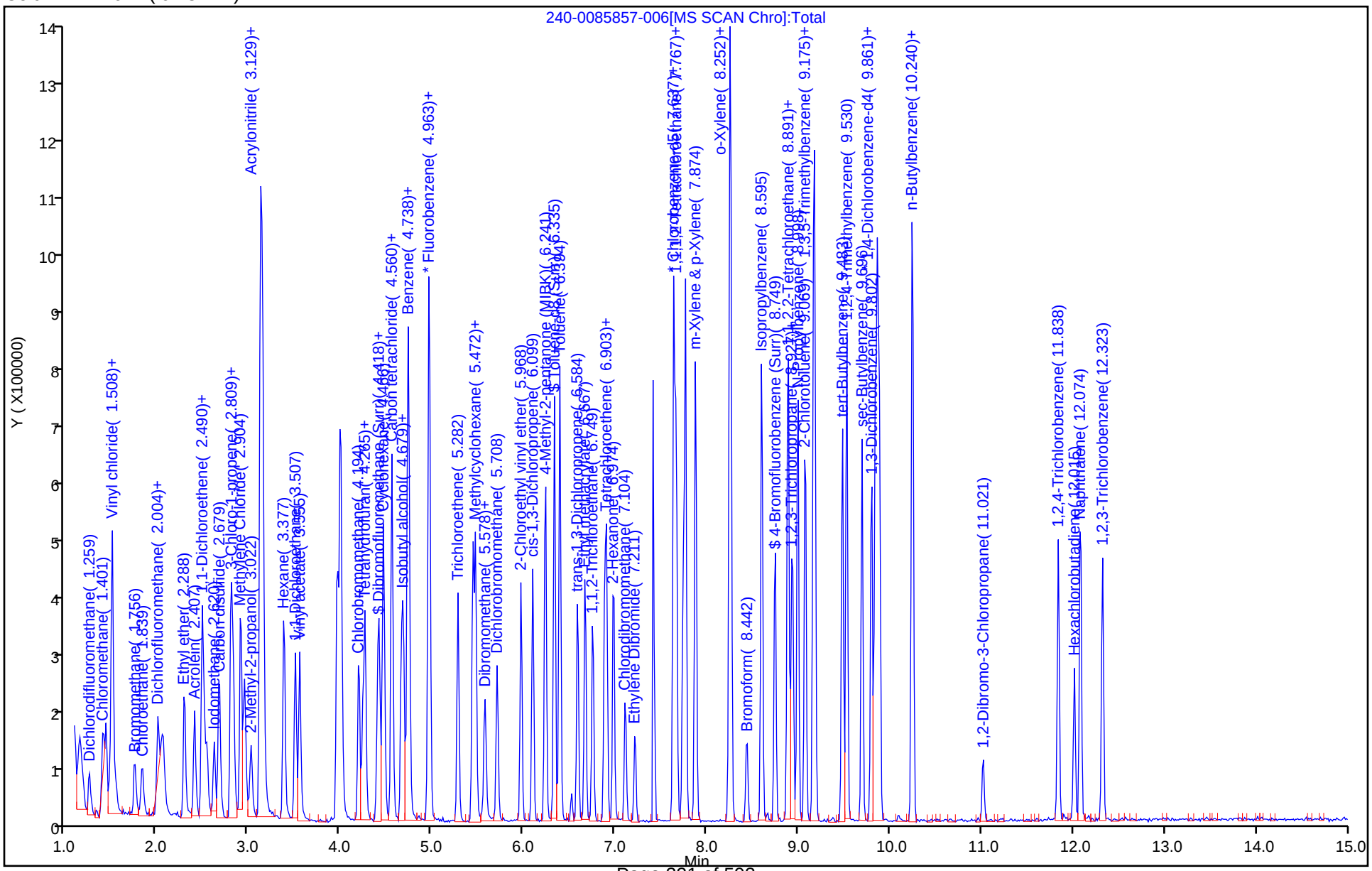
Report Date: 08-Apr-2019 12:12:19 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-006.D

Injection Date:	05-Apr-2019 19:16:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L4			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-007.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-Apr-2019 19:41:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Apr-2019 09:20:07 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: macenczaks Date: 09-Apr-2019 09:19:27

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.975	4.975	0.000	97	540685	10.0	10.0	
*	2 Chlorobenzene-d5	117	7.637	7.637	0.000	93	415878	10.0	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.862	9.862	0.000	96	216098	10.0	10.0	
$	4 Dibromofluoromethane (Surr	113	4.407	4.407	0.000	93	66751	5.00	4.94	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.691	0.000	94	104687	5.00	4.93	
$	6 Toluene-d8 (Surr)	98	6.335	6.335	0.000	95	255400	5.00	4.83	
$	7 4-Bromofluorobenzene (Surr	95	8.749	8.749	0.000	90	103676	5.00	4.79	
	9 Dichlorodifluoromethane	85	1.259	1.259	0.000	94	62885	5.00	4.33	
	10 Chloromethane	50	1.413	1.401	0.012	99	153817	5.00	4.44	
	11 Vinyl chloride	62	1.496	1.496	0.000	95	99671	5.00	4.43	
	12 Butadiene	54	1.508	1.508	0.000	96	131565	5.00	4.77	
	13 Bromomethane	94	1.756	1.744	0.012	90	46371	5.00	5.01	
	14 Chloroethane	64	1.839	1.839	0.000	93	60028	5.00	4.69	
	15 Dichlorofluoromethane	67	2.005	2.004	0.001	98	124661	5.00	4.73	
	16 Trichlorofluoromethane	101	2.052	2.052	0.000	96	83444	5.00	4.55	
	17 Ethyl ether	59	2.289	2.288	0.001	95	81563	5.00	4.63	
	18 Acrolein	56	2.407	2.407	0.000	97	112261	25.0	24.3	
	19 1,1-Dichloroethene	96	2.490	2.490	0.000	89	54931	5.00	4.77	
	20 1,1,2-Trichloro-1,2,2-trif	151	2.502	2.513	-0.011	95	38855	5.00	4.83	
	21 Acetone	43	2.549	2.537	0.012	98	95986	10.0	10.1	
	22 Iodomethane	142	2.620	2.620	0.000	96	104578	5.00	4.90	
	24 Carbon disulfide	76	2.679	2.679	0.000	98	213224	5.00	4.59	
	26 3-Chloro-1-propene	76	2.809	2.797	0.012	90	51709	5.00	5.22	
	27 Methyl acetate	43	2.833	2.833	0.000	99	194172	10.0	9.58	
	28 Methylene Chloride	84	2.916	2.904	0.012	91	79427	5.00	4.63	
	29 2-Methyl-2-propanol	59	3.022	3.022	0.000	98	107252	50.0	45.9	
	31 Acrylonitrile	53	3.129	3.129	0.000	99	517555	50.0	48.0	
	30 trans-1,2-Dichloroethene	96	3.152	3.152	0.000	89	67321	5.00	4.77	
	32 Methyl tert-butyl ether	73	3.152	3.152	0.000	97	167694	5.00	4.66	
	33 Hexane	86	3.389	3.377	0.012	92	10131	5.00	4.26	
	34 1,1-Dichloroethane	63	3.507	3.507	0.000	94	183689	5.00	4.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.555	3.555	0.000	97	267233	5.00	4.84	
40 cis-1,2-Dichloroethene	96	3.993	3.992	0.001	92	75332	5.00	4.64	
39 2,2-Dichloropropane	97	3.993	3.992	0.001	59	16537	5.00	4.34	
41 2-Butanone (MEK)	43	4.016	4.016	0.000	98	116647	10.0	8.96	
45 Chlorobromomethane	128	4.206	4.205	0.001	84	32913	5.00	4.50	
46 Tetrahydrofuran	42	4.241	4.241	0.000	89	82689	10.0	10.1	
47 Chloroform	83	4.265	4.265	0.000	97	125543	5.00	4.78	
48 1,1,1-Trichloroethane	97	4.419	4.418	0.001	93	91500	5.00	4.95	
49 Cyclohexane	56	4.466	4.466	0.000	88	183482	5.00	5.18	
51 Carbon tetrachloride	117	4.561	4.560	0.001	82	78615	5.00	4.80	
50 1,1-Dichloropropene	75	4.561	4.560	0.001	87	97499	5.00	4.84	
52 Isobutyl alcohol	41	4.667	4.667	0.000	95	90899	125.0	111.7	
53 Benzene	78	4.738	4.738	0.000	96	300936	5.00	4.64	
54 1,2-Dichloroethane	62	4.750	4.750	0.000	94	132968	5.00	4.66	
56 n-Heptane	100	4.963	4.963	0.000	96	10596	5.00	5.37	
58 Trichloroethene	130	5.282	5.282	0.000	94	69372	5.00	4.88	
60 Methylcyclohexane	83	5.448	5.448	0.000	90	88158	5.00	5.02	
61 1,2-Dichloropropane	63	5.472	5.472	0.000	95	107975	5.00	5.04	
63 Dibromomethane	93	5.578	5.578	0.000	93	43590	5.00	4.81	
64 1,4-Dioxane	88	5.590	5.590	0.000	49	10415	100.0	59.6	
65 Dichlorobromomethane	83	5.708	5.708	0.000	94	98397	5.00	4.89	
67 2-Chloroethyl vinyl ether	63	5.969	5.968	0.001	89	81299	10.0	8.28	
68 cis-1,3-Dichloropropene	75	6.099	6.099	0.000	88	122878	5.00	4.83	
69 4-Methyl-2-pentanone (MIBK	43	6.229	6.241	-0.012	97	274145	10.0	9.57	
70 Toluene	91	6.395	6.394	0.001	96	288772	5.00	4.59	
71 trans-1,3-Dichloropropene	75	6.584	6.584	0.000	95	110686	5.00	4.84	
72 Ethyl methacrylate	69	6.667	6.667	0.000	90	114188	5.00	4.83	
73 1,1,2-Trichloroethane	97	6.750	6.749	0.001	93	62542	5.00	5.14	
74 Tetrachloroethene	164	6.880	6.891	-0.011	96	53849	5.00	4.92	
75 1,3-Dichloropropane	76	6.903	6.903	0.000	96	125164	5.00	5.09	
76 2-Hexanone	43	6.974	6.974	0.000	97	193203	10.0	9.48	
78 Chlorodibromomethane	129	7.105	7.104	0.001	88	59940	5.00	4.49	
80 Ethylene Dibromide	107	7.211	7.211	0.000	99	66461	5.00	4.71	
82 Chlorobenzene	112	7.673	7.661	0.012	93	214383	5.00	5.23	
83 1,1,1,2-Tetrachloroethane	131	7.744	7.743	0.001	91	60647	5.00	4.40	
84 Ethylbenzene	106	7.767	7.767	0.000	97	109929	5.00	4.79	
85 m-Xylene & p-Xylene	106	7.874	7.874	0.000	98	135042	5.00	4.85	
86 o-Xylene	106	8.252	8.252	0.000	92	132007	5.00	4.57	
87 Styrene	104	8.264	8.264	0.000	91	221462	5.00	4.61	
88 Bromoform	173	8.442	8.442	0.000	95	47692	5.00	4.90	
89 Isopropylbenzene	105	8.596	8.595	0.001	96	319072	5.00	4.70	
92 1,1,2,2-Tetrachloroethane	83	8.880	8.879	0.001	74	91649	5.00	4.85	
93 Bromobenzene	156	8.891	8.891	0.000	94	84847	5.00	5.40	
94 1,2,3-Trichloropropane	110	8.927	8.927	0.000	87	29213	5.00	5.07	
95 trans-1,4-Dichloro-2-buten	53	8.939	8.939	0.000	78	49230	5.00	5.11	
96 N-Propylbenzene	120	8.998	8.998	0.000	99	80692	5.00	4.81	
97 2-Chlorotoluene	126	9.081	9.069	0.012	96	78206	5.00	5.38	
98 1,3,5-Trimethylbenzene	105	9.164	9.163	0.001	92	264013	5.00	4.82	
99 4-Chlorotoluene	126	9.175	9.175	0.000	99	79514	5.00	5.19	
100 tert-Butylbenzene	119	9.483	9.483	0.000	95	188105	5.00	4.84	
102 1,2,4-Trimethylbenzene	105	9.530	9.530	0.000	97	278201	5.00	4.85	
103 sec-Butylbenzene	105	9.696	9.696	0.000	94	280788	5.00	5.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.803	9.802	0.000	97	147498	5.00	4.91	
105 4-Isopropyltoluene	119	9.838	9.838	0.000	97	227872	5.00	4.93	
106 1,4-Dichlorobenzene	146	9.885	9.885	0.000	92	153830	5.00	4.87	
109 n-Butylbenzene	91	10.240	10.240	0.000	97	200135	5.00	4.93	
110 1,2-Dichlorobenzene	146	10.252	10.252	0.000	95	151166	5.00	4.99	
111 1,2-Dibromo-3-Chloropropan	157	11.021	11.021	0.000	76	18451	5.00	4.95	
113 1,2,4-Trichlorobenzene	180	11.838	11.838	0.000	95	89403	5.00	4.42	
114 Hexachlorobutadiene	225	12.015	12.015	0.000	93	34774	5.00	4.64	
115 Naphthalene	128	12.074	12.086	-0.012	98	266436	5.00	4.73	
116 1,2,3-Trichlorobenzene	180	12.323	12.323	0.000	96	90609	5.00	4.50	
S 128 1,2-Dichloroethene, Total	96				0			9.41	
S 129 1,3-Dichloropropene, Total	75				0			9.68	
S 130 Xylenes, Total	106				0		10.0	9.43	
S 131 Trihalomethanes, Total	1				0		20.0	19.1	

Reagents:

VMRPRIMW_00328	Amount Added:	4.00	Units: uL
VMAROLISTDW_00291	Amount Added:	4.00	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
VMRGAS_00287	Amount Added:	4.00	Units: uL
vm50ss_00359	Amount Added:	4.00	Units: uL

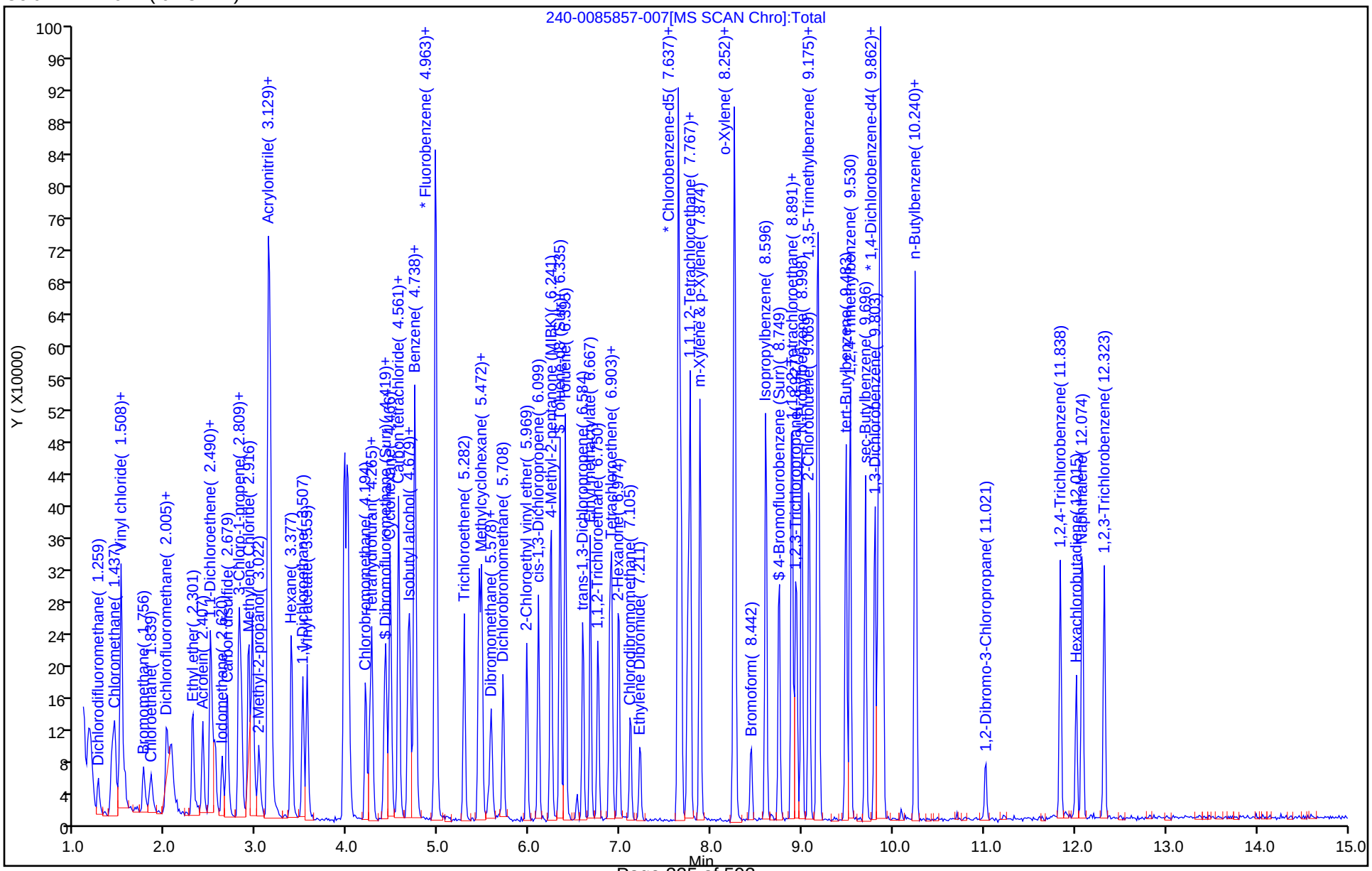
Report Date: 09-Apr-2019 09:20:07 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-007.D

Injection Date:	05-Apr-2019 19:41:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L3			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-008.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-Apr-2019 20:06:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:25 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: macenczaks Date: 08-Apr-2019 09:12:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.965	4.975	-0.010	96	514730	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.639	7.637	0.002	91	381016	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.863	9.861	0.002	96	213570	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.397	4.407	-0.010	94	25305	2.00	1.97	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.681	4.691	-0.010	93	40390	2.00	2.00	
$ 6 Toluene-d8 (Surr)	98	6.337	6.335	0.002	96	100671	2.00	2.08	
$ 7 4-Bromofluorobenzene (Surr	95	8.739	8.749	-0.010	88	41118	2.00	2.07	
9 Dichlorodifluoromethane	85	1.249	1.259	-0.010	94	25233	2.00	1.82	
10 Chloromethane	50	1.403	1.401	0.002	99	66516	2.00	2.02	
11 Vinyl chloride	62	1.486	1.496	-0.010	65	41912	2.00	1.96	
12 Butadiene	54	1.510	1.508	0.002	96	58635	2.00	2.23	
13 Bromomethane	94	1.746	1.744	0.002	93	19029	2.00	2.16	
14 Chloroethane	64	1.829	1.839	-0.010	93	23571	2.00	1.93	
15 Dichlorofluoromethane	67	2.006	2.004	0.002	95	51398	2.00	2.05	
16 Trichlorofluoromethane	101	2.042	2.052	-0.010	95	39997	2.00	2.29	
17 Ethyl ether	59	2.290	2.288	0.002	92	34286	2.00	2.04	
18 Acrolein	56	2.409	2.407	0.002	94	44977	10.0	10.2	
19 1,1-Dichloroethene	96	2.492	2.490	0.002	89	24754	2.00	2.26	
20 1,1,2-Trichloro-1,2,2-trif	151	2.515	2.513	0.002	53	14912	2.00	1.95	
21 Acetone	43	2.539	2.537	0.002	100	52728	4.00	4.55	
22 Iodomethane	142	2.622	2.620	0.002	99	38864	2.00	1.91	
24 Carbon disulfide	76	2.669	2.679	-0.010	100	93591	2.00	2.11	
26 3-Chloro-1-propene	76	2.799	2.797	0.002	87	18451	2.00	1.96	
27 Methyl acetate	43	2.823	2.833	-0.010	99	74198	4.00	3.85	
28 Methylene Chloride	84	2.906	2.904	0.002	90	35526	2.00	2.17	
29 2-Methyl-2-propanol	59	3.024	3.022	0.002	99	52589	20.0	23.6	
31 Acrylonitrile	53	3.131	3.129	0.002	99	206185	20.0	20.1	
30 trans-1,2-Dichloroethene	96	3.142	3.152	-0.010	89	28919	2.00	2.15	
32 Methyl tert-butyl ether	73	3.154	3.152	0.002	92	69692	2.00	2.04	
33 Hexane	86	3.391	3.377	0.014	86	4215	2.00	1.86	
34 1,1-Dichloroethane	63	3.509	3.507	0.002	95	78918	2.00	2.18	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.557	3.555	0.002	96	101632	2.00	1.93	
40 cis-1,2-Dichloroethene	96	3.994	3.992	0.002	88	32820	2.00	2.12	
39 2,2-Dichloropropane	97	4.006	3.992	0.014	52	6605	2.00	1.82	
41 2-Butanone (MEK)	43	4.018	4.016	0.002	96	58196	4.00	4.69	
45 Chlorobromomethane	128	4.196	4.205	-0.009	82	13523	2.00	1.94	
46 Tetrahydrofuran	42	4.243	4.241	0.002	86	32143	4.00	4.13	
47 Chloroform	83	4.267	4.265	0.002	98	50223	2.00	2.01	
48 1,1,1-Trichloroethane	97	4.420	4.418	0.002	90	36293	2.00	2.06	
49 Cyclohexane	56	4.468	4.466	0.002	91	64952	2.00	1.93	
50 1,1-Dichloropropene	75	4.562	4.560	0.002	87	39743	2.00	2.07	
51 Carbon tetrachloride	117	4.562	4.560	0.002	78	31219	2.00	2.00	
52 Isobutyl alcohol	41	4.657	4.667	-0.010	96	44945	50.0	60.3	
53 Benzene	78	4.728	4.738	-0.010	97	124993	2.00	2.02	
54 1,2-Dichloroethane	62	4.752	4.750	0.002	93	56596	2.00	2.08	
56 n-Heptane	100	4.965	4.963	0.002	39	4087	2.00	2.17	
58 Trichloroethene	130	5.284	5.282	0.002	89	26514	2.00	1.96	
60 Methylcyclohexane	83	5.450	5.448	0.002	91	34212	2.00	2.05	
61 1,2-Dichloropropane	63	5.473	5.472	0.001	95	40412	2.00	1.98	
63 Dibromomethane	93	5.580	5.578	0.002	91	16958	2.00	1.97	
64 1,4-Dioxane	88	5.604	5.590	0.014	63	11417	40.0	68.6	
65 Dichlorobromomethane	83	5.710	5.708	0.002	95	37029	2.00	1.93	
67 2-Chloroethyl vinyl ether	63	5.970	5.968	0.002	91	33548	4.00	3.59	
68 cis-1,3-Dichloropropene	75	6.101	6.099	0.002	86	48961	2.00	2.02	
69 4-Methyl-2-pentanone (MIBK	43	6.231	6.241	-0.010	97	106094	4.00	3.89	
70 Toluene	91	6.396	6.394	0.002	95	122802	2.00	2.13	
71 trans-1,3-Dichloropropene	75	6.586	6.584	0.002	94	40547	2.00	1.94	
72 Ethyl methacrylate	69	6.669	6.667	0.002	90	39975	2.00	1.85	
73 1,1,2-Trichloroethane	97	6.751	6.749	0.002	92	22826	2.00	2.05	
74 Tetrachloroethene	164	6.882	6.891	-0.009	87	21160	2.00	2.11	
75 1,3-Dichloropropane	76	6.905	6.903	0.002	94	43193	2.00	1.92	
76 2-Hexanone	43	6.976	6.974	0.002	98	72709	4.00	3.89	
78 Chlorodibromomethane	129	7.106	7.104	0.002	87	23463	2.00	1.92	
80 Ethylene Dibromide	107	7.213	7.211	0.002	95	28286	2.00	2.19	
82 Chlorobenzene	112	7.663	7.661	0.002	95	80814	2.00	2.15	
83 1,1,1,2-Tetrachloroethane	131	7.745	7.743	0.002	86	25301	2.00	2.00	
84 Ethylbenzene	106	7.769	7.767	0.002	98	40303	2.00	1.92	
85 m-Xylene & p-Xylene	106	7.876	7.874	0.002	96	54485	2.00	2.14	
86 o-Xylene	106	8.254	8.252	0.002	98	57855	2.00	2.19	
87 Styrene	104	8.266	8.264	0.002	91	90892	2.00	2.06	
88 Bromoform	173	8.444	8.442	0.002	92	16257	2.00	1.82	
89 Isopropylbenzene	105	8.597	8.595	0.002	95	134786	2.00	2.17	
92 1,1,2,2-Tetrachloroethane	83	8.881	8.879	0.002	80	36950	2.00	1.98	
93 Bromobenzene	156	8.893	8.891	0.002	90	32270	2.00	2.08	
94 1,2,3-Trichloropropane	110	8.929	8.927	0.002	85	10513	2.00	1.85	
95 trans-1,4-Dichloro-2-buten	53	8.941	8.939	0.001	84	18591	2.00	1.95	
96 N-Propylbenzene	120	9.000	8.998	0.002	98	37310	2.00	2.25	
97 2-Chlorotoluene	126	9.071	9.069	0.002	94	28633	2.00	1.99	
98 1,3,5-Trimethylbenzene	105	9.165	9.163	0.002	92	109289	2.00	2.02	
99 4-Chlorotoluene	126	9.177	9.175	0.002	98	28167	2.00	1.86	
100 tert-Butylbenzene	119	9.485	9.483	0.002	94	81634	2.00	2.13	
102 1,2,4-Trimethylbenzene	105	9.532	9.530	0.002	97	113062	2.00	2.00	
103 sec-Butylbenzene	105	9.698	9.696	0.002	95	113493	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.804	9.802	0.002	96	62058	2.00	2.09	
105 4-Isopropyltoluene	119	9.840	9.838	0.002	96	95128	2.00	2.08	
106 1,4-Dichlorobenzene	146	9.887	9.885	0.002	92	64186	2.00	2.05	
109 n-Butylbenzene	91	10.242	10.240	0.002	97	82250	2.00	2.05	
110 1,2-Dichlorobenzene	146	10.254	10.252	0.002	97	65285	2.00	2.18	
111 1,2-Dibromo-3-Chloropropan	157	11.023	11.021	0.002	62	4597	2.00	1.49	
113 1,2,4-Trichlorobenzene	180	11.840	11.838	0.002	92	43294	2.00	2.16	
114 Hexachlorobutadiene	225	12.017	12.015	0.002	90	18126	2.00	2.45	
115 Naphthalene	128	12.076	12.086	-0.010	97	119700	2.00	2.15	
116 1,2,3-Trichlorobenzene	180	12.325	12.323	0.002	94	44664	2.00	2.24	
S 128 1,2-Dichloroethene, Total	96				0			4.28	
S 129 1,3-Dichloropropene, Total	75				0			3.96	
S 130 Xylenes, Total	106				0		4.00	4.32	
S 131 Trihalomethanes, Total	1				0		8.00	7.68	

Reagents:

VMRPRIMW_00328	Amount Added:	1.60	Units: uL
VMAROLISTDW_00291	Amount Added:	1.60	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
VMRGAS_00287	Amount Added:	1.60	Units: uL
vm50ss_00359	Amount Added:	1.60	Units: uL

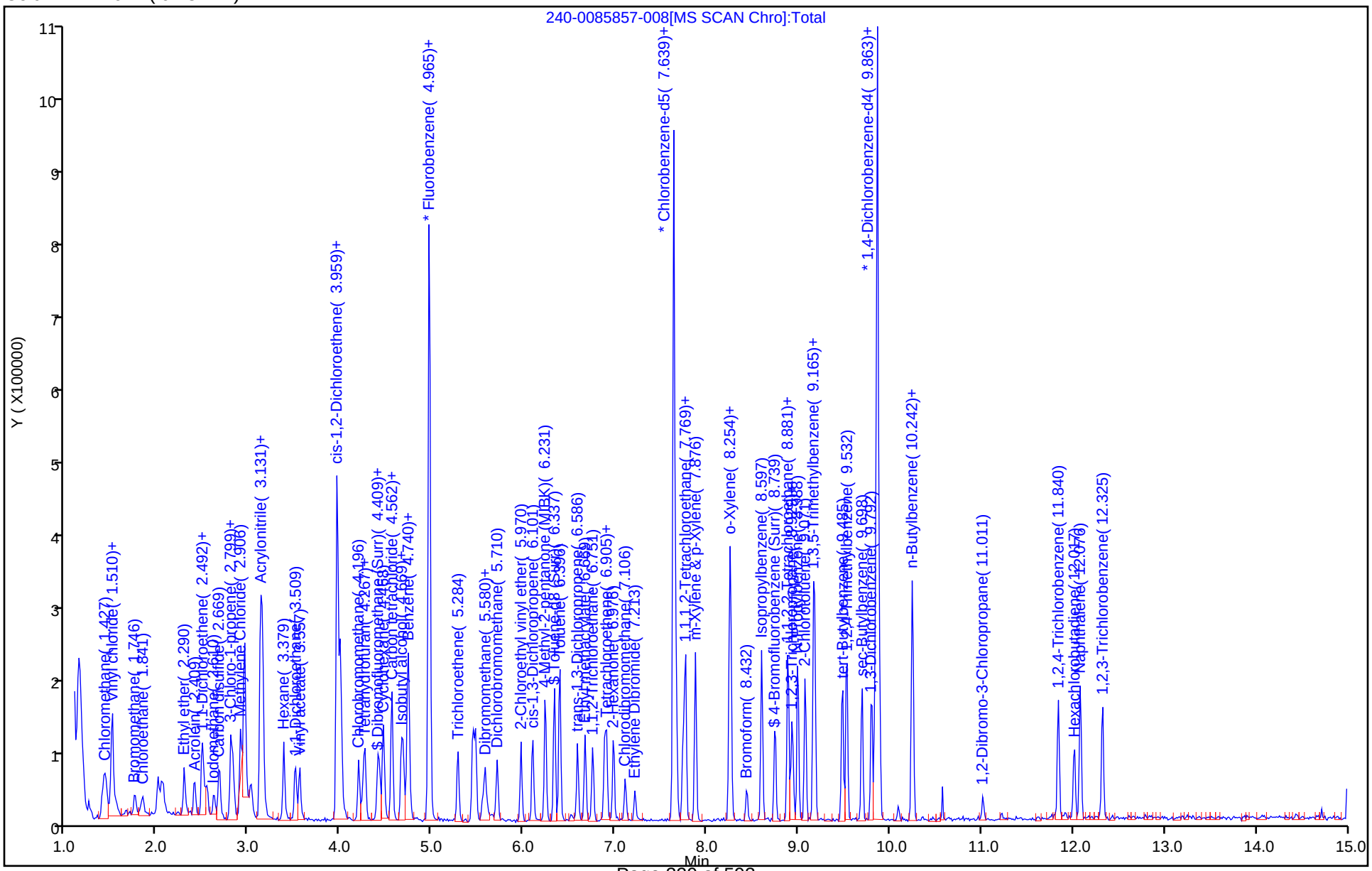
Report Date: 08-Apr-2019 12:12:26 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-008.D

Injection Date:	05-Apr-2019 20:06:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L2			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-009.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 05-Apr-2019 20:30:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub82

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:29 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: macenczaks Date: 08-Apr-2019 09:13:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.963	4.975	-0.012	96	505842	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.637	0.000	91	368035	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.862	9.861	0.001	96	207187	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.407	0.000	32	12098	1.00	0.9574	a
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.691	0.000	93	19571	1.00	0.9857	
$ 6 Toluene-d8 (Surr)	98	6.336	6.335	0.001	95	47565	1.00	1.02	
$ 7 4-Bromofluorobenzene (Surr	95	8.750	8.749	0.001	91	17812	1.00	0.9298	
9 Dichlorodifluoromethane	85	1.259	1.259	0.000	93	12308	1.00	0.9051	
10 Chloromethane	50	1.401	1.401	0.000	86	33146	1.00	1.02	
11 Vinyl chloride	62	1.496	1.496	0.000	59	20678	1.00	0.9828	
12 Butadiene	54	1.508	1.508	0.000	90	22918	1.00	0.8883	
13 Bromomethane	94	1.745	1.744	0.001	86	8043	1.00	0.9282	
14 Chloroethane	64	1.827	1.839	-0.012	96	13737	1.00	1.15	
15 Dichlorofluoromethane	67	2.005	2.004	0.001	96	27173	1.00	1.10	
16 Trichlorofluoromethane	101	2.052	2.052	0.000	97	14500	1.00	0.8450	
17 Ethyl ether	59	2.289	2.288	0.001	93	16161	1.00	0.9798	
18 Acrolein	56	2.407	2.407	0.000	98	20682	5.00	4.79	
19 1,1-Dichloroethene	96	2.478	2.490	-0.012	83	9256	1.00	0.8582	
20 1,1,2-Trichloro-1,2,2-trif	151	2.514	2.513	0.001	51	6984	1.00	0.9273	
21 Acetone	43	2.537	2.537	0.000	98	31763	2.00	1.63	
22 Iodomethane	142	2.620	2.620	0.000	95	19150	1.00	0.9594	
24 Carbon disulfide	76	2.668	2.679	-0.011	98	42228	1.00	0.9709	
26 3-Chloro-1-propene	76	2.810	2.797	0.013	89	9064	1.00	0.9783	
27 Methyl acetate	43	2.833	2.833	0.000	99	36507	2.00	1.93	
28 Methylene Chloride	84	2.916	2.904	0.012	89	20618	1.00	1.28	
29 2-Methyl-2-propanol	59	3.023	3.022	0.001	98	25167	10.0	11.5	
31 Acrylonitrile	53	3.129	3.129	0.000	97	96452	10.0	9.57	
30 trans-1,2-Dichloroethene	96	3.141	3.152	-0.011	94	13540	1.00	1.03	
32 Methyl tert-butyl ether	73	3.153	3.152	0.001	98	32802	1.00	0.9747	
33 Hexane	86	3.378	3.377	0.001	90	2359	1.00	1.06	
34 1,1-Dichloroethane	63	3.508	3.507	0.001	95	34006	1.00	0.9564	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.555	3.555	0.000	96	51128	1.00	0.9891	
40 cis-1,2-Dichloroethene	96	4.005	3.992	0.013	88	14448	1.00	0.9507	
39 2,2-Dichloropropane	97	3.993	3.992	0.001	49	3505	1.00	0.9840	
41 2-Butanone (MEK)	43	4.016	4.016	0.000	80	26275	2.00	2.16	
45 Chlorobromomethane	128	4.194	4.205	-0.011	84	7376	1.00	1.08	
46 Tetrahydrofuran	42	4.241	4.241	0.000	91	14197	2.00	1.86	
47 Chloroform	83	4.265	4.265	0.000	95	27016	1.00	1.10	
48 1,1,1-Trichloroethane	97	4.419	4.418	0.001	83	14108	1.00	0.8161	
49 Cyclohexane	56	4.466	4.466	0.000	88	29936	1.00	0.9029	
51 Carbon tetrachloride	117	4.561	4.560	0.001	80	13839	1.00	0.9026	
50 1,1-Dichloropropene	75	4.561	4.560	0.001	82	19206	1.00	1.02	
52 Isobutyl alcohol	41	4.667	4.667	0.000	94	19526	25.0	27.1	
53 Benzene	78	4.738	4.738	0.000	96	64643	1.00	1.06	
54 1,2-Dichloroethane	62	4.750	4.750	0.000	94	28123	1.00	1.05	
56 n-Heptane	100	4.951	4.963	-0.012	49	1768	1.00	0.9573	
58 Trichloroethene	130	5.283	5.282	0.001	91	14379	1.00	1.08	
60 Methylcyclohexane	83	5.448	5.448	0.000	84	17212	1.00	1.05	
61 1,2-Dichloropropane	63	5.472	5.472	0.000	96	20753	1.00	1.04	
63 Dibromomethane	93	5.578	5.578	0.000	86	9740	1.00	1.15	
64 1,4-Dioxane	88	5.602	5.590	0.012	34	2287	20.0	14.0	
65 Dichlorobromomethane	83	5.709	5.708	0.001	96	19220	1.00	1.02	
67 2-Chloroethyl vinyl ether	63	5.969	5.968	0.001	91	19384	2.00	2.11	
68 cis-1,3-Dichloropropene	75	6.099	6.099	0.000	90	22949	1.00	0.9650	
69 4-Methyl-2-pentanone (MIBK	43	6.229	6.241	-0.012	98	57921	2.00	2.16	
70 Toluene	91	6.395	6.394	0.001	97	56794	1.00	1.02	
71 trans-1,3-Dichloropropene	75	6.596	6.584	0.012	94	20146	1.00	1.00	
72 Ethyl methacrylate	69	6.667	6.667	0.000	94	21837	1.00	1.04	
73 1,1,2-Trichloroethane	97	6.750	6.749	0.001	87	10351	1.00	0.9615	
74 Tetrachloroethene	164	6.880	6.891	-0.011	92	9283	1.00	0.9592	
75 1,3-Dichloropropane	76	6.904	6.903	0.001	96	22164	1.00	1.02	
76 2-Hexanone	43	6.975	6.974	0.001	98	36585	2.00	2.03	
78 Chlorodibromomethane	129	7.117	7.104	0.013	85	12148	1.00	1.03	
80 Ethylene Dibromide	107	7.211	7.211	0.000	98	12950	1.00	1.04	
82 Chlorobenzene	112	7.661	7.661	0.000	86	33496	1.00	0.9226	
83 1,1,1,2-Tetrachloroethane	131	7.744	7.743	0.001	88	13811	1.00	1.13	
84 Ethylbenzene	106	7.767	7.767	0.000	97	22286	1.00	1.10	
85 m-Xylene & p-Xylene	106	7.874	7.874	0.000	96	25921	1.00	1.05	
86 o-Xylene	106	8.253	8.252	0.001	95	28218	1.00	1.10	
87 Styrene	104	8.264	8.264	0.000	89	40044	1.00	0.9418	
88 Bromoform	173	8.430	8.442	-0.012	93	8007	1.00	0.9288	
89 Isopropylbenzene	105	8.596	8.595	0.001	97	60599	1.00	1.01	
92 1,1,2,2-Tetrachloroethane	83	8.880	8.879	0.001	78	18753	1.00	1.03	
93 Bromobenzene	156	8.892	8.891	0.001	90	12687	1.00	0.8424	
94 1,2,3-Trichloropropane	110	8.927	8.927	0.000	84	5330	1.00	0.9646	
95 trans-1,4-Dichloro-2-buten	53	8.939	8.939	0.000	74	8767	1.00	0.9487	
96 N-Propylbenzene	120	8.998	8.998	0.000	99	15876	1.00	0.9876	
97 2-Chlorotoluene	126	9.081	9.069	0.012	94	12900	1.00	0.9255	
98 1,3,5-Trimethylbenzene	105	9.164	9.163	0.001	89	57756	1.00	1.10	
99 4-Chlorotoluene	126	9.187	9.175	0.012	96	14103	1.00	0.9595	
100 tert-Butylbenzene	119	9.483	9.483	0.000	94	35887	1.00	0.9632	
102 1,2,4-Trimethylbenzene	105	9.531	9.530	0.001	96	54192	1.00	0.9862	
103 sec-Butylbenzene	105	9.696	9.696	0.000	94	54265	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.803	9.802	0.001	89	27452	1.00	0.9531	
105 4-Isopropyltoluene	119	9.838	9.838	0.000	97	43252	1.00	0.9764	
106 1,4-Dichlorobenzene	146	9.886	9.885	0.001	93	32090	1.00	1.06	
109 n-Butylbenzene	91	10.241	10.240	0.001	92	39196	1.00	1.01	
110 1,2-Dichlorobenzene	146	10.252	10.252	0.000	91	28005	1.00	0.9648	
111 1,2-Dibromo-3-Chloropropan	157	11.022	11.021	0.001	76	3186	1.00	1.16	
113 1,2,4-Trichlorobenzene	180	11.838	11.838	0.000	90	21032	1.00	1.08	
114 Hexachlorobutadiene	225	12.015	12.015	0.000	88	7342	1.00	1.02	
115 Naphthalene	128	12.086	12.086	0.000	98	50829	1.00	0.9405	
116 1,2,3-Trichlorobenzene	180	12.323	12.323	0.000	96	21186	1.00	1.10	
S 128 1,2-Dichloroethene, Total	96				0			1.98	
S 129 1,3-Dichloropropene, Total	75				0			1.96	
S 130 Xylenes, Total	106				0		2.00	2.16	
S 131 Trihalomethanes, Total	1				0		4.00	4.08	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VMRPRIMW_00328	Amount Added:	0.80	Units: uL
VMAROLISTDW_00291	Amount Added:	0.80	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
VMRGAS_00287	Amount Added:	0.80	Units: uL
vm50ss_00359	Amount Added:	0.80	Units: uL

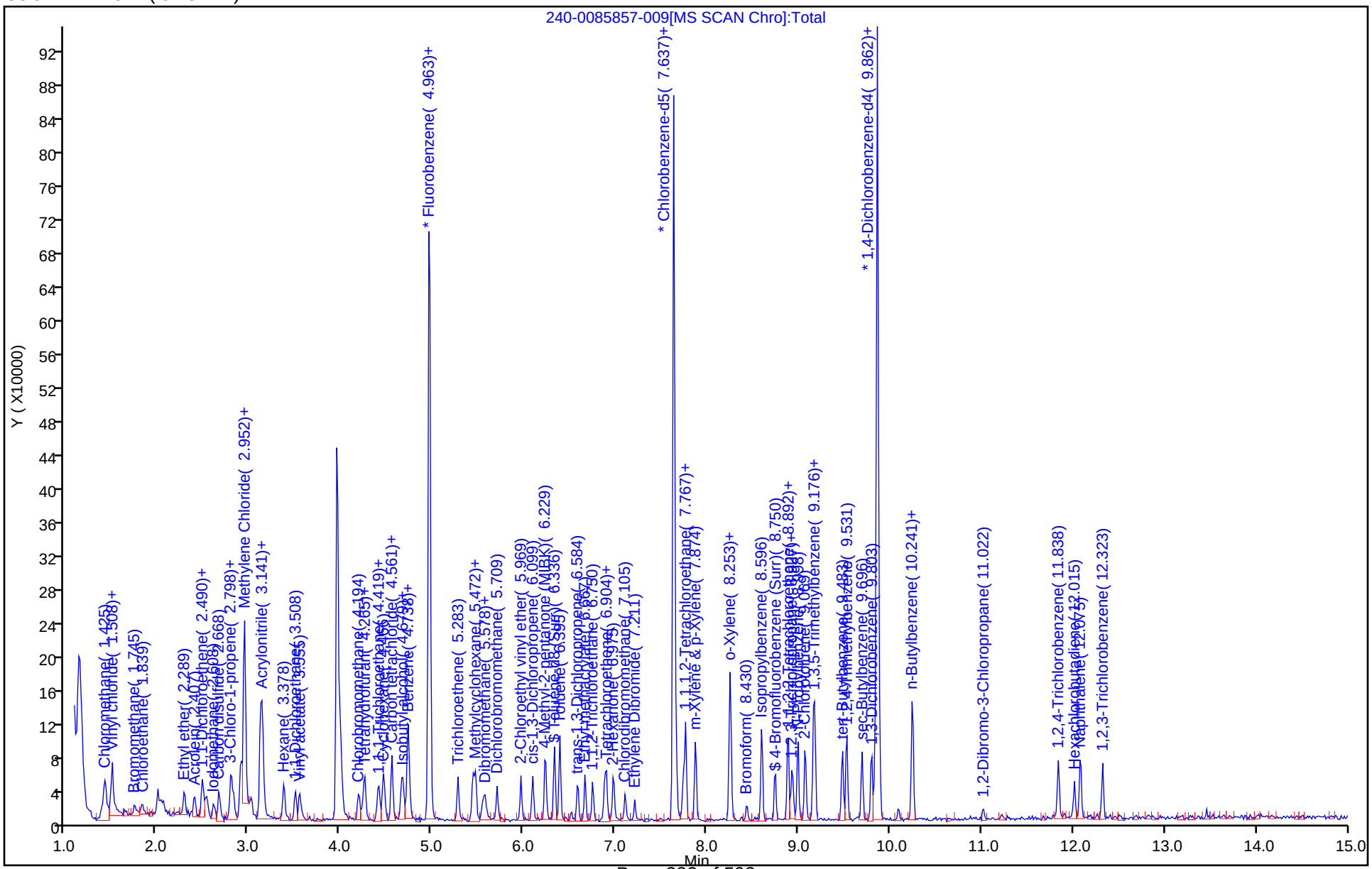
Report Date: 08-Apr-2019 12:12:30 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-009.D

Injection Date:	05-Apr-2019 20:30:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	STD8260 L1			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

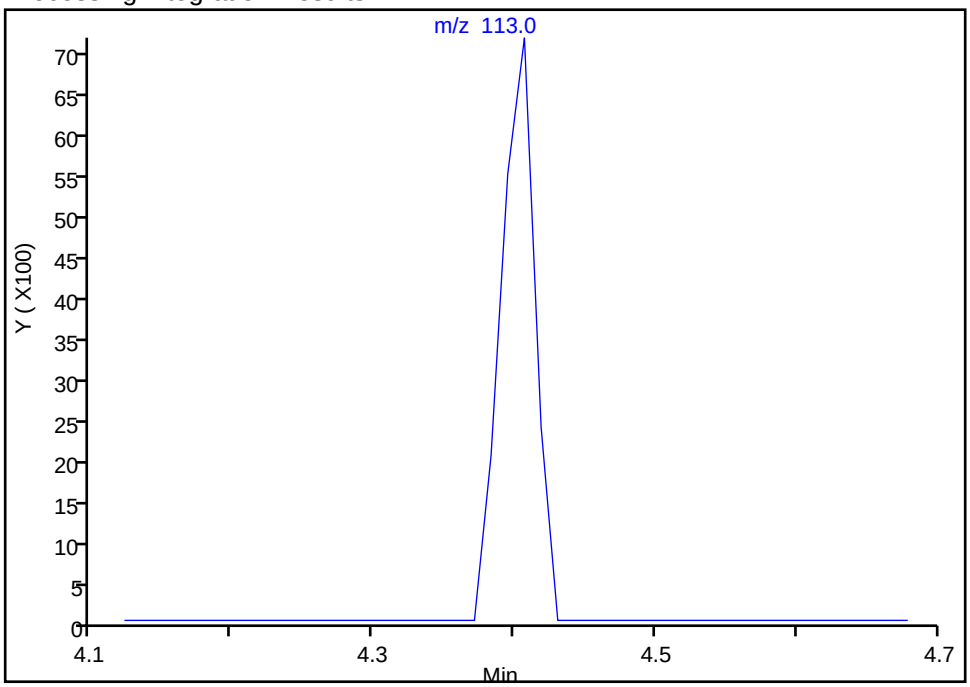
Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-009.D
Injection Date: 05-Apr-2019 20:30:30 Instrument ID: A3UX10
Lims ID: STD8260 L1
Client ID:
Operator ID: 001644 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

$ 4 Dibromofluoromethane (Surr), CAS: 1868-53-7

Signal: 1

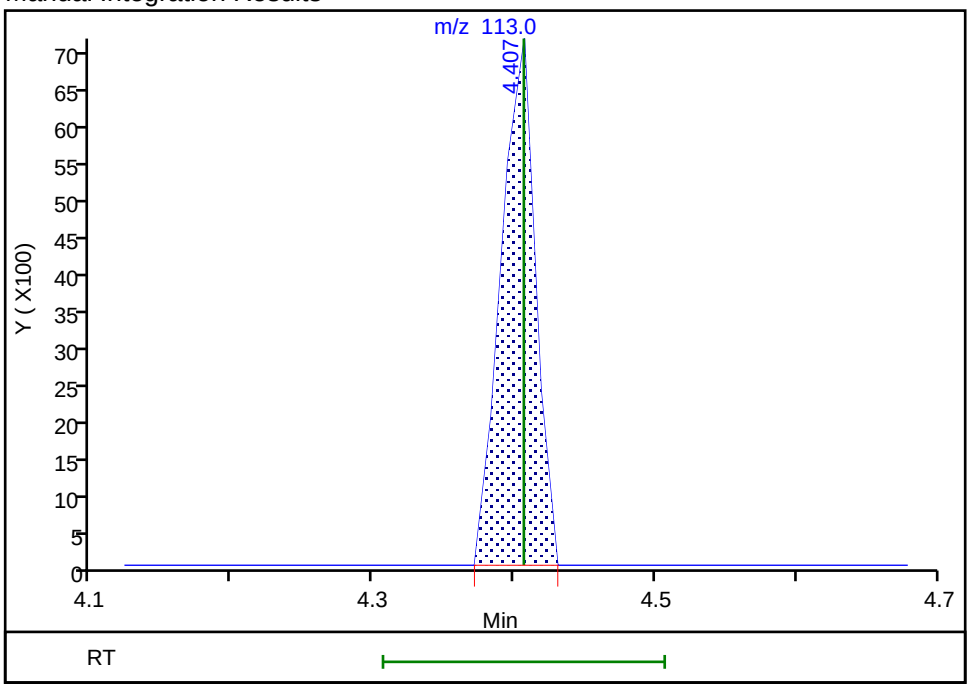
Processing Integration Results

Not Detected
Expected RT: 4.41



Manual Integration Results

RT: 4.41
Area: 12098
Amount: 0.957368
Amount Units: ug/l



Reviewer: macenczaks, 08-Apr-2019 09:12:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-367104/7	UXJ8026.D
Level 2	STD8260 240-367104/6	UXJ8025.D
Level 3	STD8260 240-367104/5	UXJ8024.D
Level 4	STD8260 240-367104/4	UXJ8023.D
Level 5	STD8260 240-367104/3	UXJ8022.D
Level 6	STD8260 240-367104/2	UXJ8021.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2561 0.2965	0.3087	0.3159	0.2838	0.3181	Ave		0.2965				8.0		15.0			
Chloromethane	0.2639 0.2275	0.2688	0.2571	0.2172	0.2275	Ave		0.2437			0.1000	9.1		15.0			
Butadiene	0.2231 0.2211	0.2477	0.2327	0.1982	0.2411	Ave		0.2273				7.7		15.0			
Vinyl chloride	0.2701 0.2501	0.2708	0.2767	0.2462	0.2748	Ave		0.2648				5.0		15.0			
Bromomethane	0.1632 0.1581	0.1890	0.1875	0.1730	0.1786	Ave		0.1749				7.2		15.0			
Chloroethane	0.1115 0.1343	0.1496	0.1465	0.1424	0.1526	Ave		0.1395				10.8		15.0			
Dichlorofluoromethane	0.3612 0.3117	0.3753	0.3677	0.3417	0.3508	Ave		0.3514				6.5		15.0			
Trichlorofluoromethane	0.3705 0.3531	0.3652	0.4043	0.3445	0.3945	Ave		0.3720				6.3		15.0			
Ethyl ether	0.1930 0.1700	0.1835	0.1844	0.1896	0.1946	Ave		0.1858				4.8		15.0			
Acrolein	0.0439 0.0444	0.0477	0.0528	0.0475	0.0503	Ave		0.0478				7.1		15.0			
1,1-Dichloroethene	0.2250 0.2095	0.2341	0.2377	0.2326	0.2395	Ave		0.2297				4.8		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1811 0.1739	0.1966	0.2010	0.2060	0.1992	Ave		0.1930				6.5		15.0			
Acetone	0.1243 0.0933	0.1241	0.1066	0.0942	0.1010	Ave		0.1072				13.1		15.0			
Iodomethane	0.4087 0.3847	0.4067	0.4107	0.4206	0.4165	Ave		0.4080				3.1		15.0			
Carbon disulfide	0.8291 0.6716	0.8391	0.7182	0.7240	0.7387	Ave		0.7535				8.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1813 0.1508	0.1680	0.1668	0.1680	0.1816	Ave		0.1694				6.7		15.0			
Methyl acetate	0.2287 0.2144	0.2201	0.2459	0.2275	0.2383	Ave		0.2292				5.0		15.0			
Methylene Chloride	0.5096 0.2300	0.3875	0.2958	0.2714	0.2723	Lin1	0.2961	0.2352							0.9950		0.9900
2-Methyl-2-propanol	0.0441 0.0356	0.0392	0.0377	0.0362	0.0395	Ave		0.0387				7.9		15.0			
Acrylonitrile	0.1160 0.1145	0.1217	0.1246	0.1171	0.1243	Ave		0.1197				3.7		15.0			
trans-1,2-Dichloroethene	0.2863 0.2479	0.2811	0.2728	0.2682	0.2837	Ave		0.2733				5.2		15.0			
Methyl tert-butyl ether	0.6061 0.5504	0.6345	0.6206	0.6201	0.6306	Ave		0.6104				5.1		15.0			
Hexane	0.0273 0.0675	0.0359	0.0643	0.0670	0.0711	Lin1	-0.048	0.0705							0.9980		0.9900
1,1-Dichloroethane	0.4752 0.3990	0.4658	0.4289	0.4510	0.4670	Ave		0.4478			0.1000	6.5		15.0			
Vinyl acetate	0.3823 0.4460	0.4155	0.4245	0.4177	0.4413	Ave		0.4212				5.4		15.0			
2,2-Dichloropropane	0.0742 0.0561	0.0707	0.0639	0.0641	0.0671	Ave		0.0660				9.5		15.0			
cis-1,2-Dichloroethene	0.2779 0.2586	0.3025	0.2735	0.2928	0.3019	Ave		0.2845				6.2		15.0			
2-Butanone (MEK)	0.1145 0.1384	0.1443	0.1550	0.1256	0.1327	Ave		0.1351				10.5		15.0			
Chlorobromomethane	0.1533 0.1283	0.1594	0.1443	0.1431	0.1455	Ave		0.1457				7.2		15.0			
Tetrahydrofuran	0.0937 0.0892	0.0870	0.0940	0.0860	0.0939	Ave		0.0906				4.1		15.0			
Chloroform	0.4187 0.3891	0.4465	0.4523	0.4492	0.4466	Ave		0.4338				5.8		15.0			
1,1,1-Trichloroethane	0.4191 0.3332	0.3915	0.3584	0.3779	0.3844	Ave		0.3774				7.8		15.0			
Cyclohexane	0.2959 0.3516	0.3335	0.3536	0.3776	0.3932	Ave		0.3509				9.7		15.0			
1,1-Dichloropropene	0.3410 0.3388	0.3355	0.3288	0.3648	0.3649	Ave		0.3456				4.5		15.0			
Carbon tetrachloride	0.3771 0.3264	0.3538	0.3631	0.3545	0.3679	Ave		0.3572				4.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0201 0.0189	0.0188	0.0203	0.0190	0.0209	Ave		0.0197				4.5		15.0			
Benzene	1.0033 0.9512	1.0488	0.9813	1.0084	1.0137	Ave		1.0011				3.3		15.0			
1,2-Dichloroethane	0.3636 0.3225	0.3571	0.3445	0.3564	0.3440	Ave		0.3480				4.2		15.0			
n-Heptane	0.0532 0.0561	0.0394	0.0663	0.0573	0.0616	Lin1	-0.009	0.0586							0.9930		0.9900
Trichloroethene	0.3229 0.2740	0.3112	0.2971	0.2881	0.2932	Ave		0.2978				5.8		15.0			
Methylcyclohexane	0.3518 0.3869	0.3966	0.3694	0.3965	0.4296	Ave		0.3885				6.8		15.0			
1,2-Dichloropropane	0.1979 0.2052	0.2205	0.2101	0.2180	0.2083	Ave		0.2100				4.0		15.0			
Dibromomethane	0.1479 0.1403	0.1518	0.1482	0.1474	0.1493	Ave		0.1475				2.6		15.0			
1,4-Dioxane	0.0021 0.0037	0.0023	0.0036	0.0028	0.0033	Lin1	-0.039	0.0036							0.9910		0.9900
Dichlorobromomethane	0.3397 0.3033	0.3234	0.3316	0.3140	0.3093	Ave		0.3202				4.3		15.0			
2-Chloroethyl vinyl ether	0.1068 0.1514	0.1286	0.1429	0.1184	0.1244	Ave		0.1287				12.6		15.0			
cis-1,3-Dichloropropene	0.3057 0.3545	0.3267	0.3461	0.3301	0.3306	Ave		0.3323				5.1		15.0			
4-Methyl-2-pentanone (MIBK)	0.2124 0.2572	0.2218	0.2653	0.2400	0.2479	Ave		0.2408				8.5		15.0			
Toluene	1.4332 1.4707	1.3622	1.4674	1.4473	1.4836	Ave		1.4441				3.0		15.0			
trans-1,3-Dichloropropene	0.4847 0.4784	0.4842	0.4783	0.4458	0.4500	Ave		0.4702				3.7		15.0			
Ethyl methacrylate	0.3475 0.4188	0.3758	0.3944	0.3988	0.4135	Ave		0.3915				6.7		15.0			
1,1,2-Trichloroethane	0.3624 0.2742	0.3027	0.3051	0.2949	0.2806	Ave		0.3033				10.3		15.0			
Tetrachloroethene	0.3266 0.3072	0.3132	0.3417	0.3262	0.3224	Ave		0.3229				3.7		15.0			
1,3-Dichloropropane	0.5058 0.4783	0.4774	0.4948	0.4817	0.4770	Ave		0.4858				2.4		15.0			
2-Hexanone	0.2241 0.2630	0.2662	0.2752	0.2548	0.2705	Ave		0.2590				7.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.3113 0.3375	0.3763	0.3706	0.3601	0.3570	Ave		0.3521				6.8		15.0			
Ethylene Dibromide	0.3621 0.3033	0.2878	0.3056	0.3062	0.3105	Ave		0.3126				8.2		15.0			
Chlorobenzene	1.0968 0.9164	0.9427	0.9575	0.9435	0.9510	Ave		0.9680			0.3000	6.7		15.0			
1,1,1,2-Tetrachloroethane	0.4421 0.3288	0.3620	0.3454	0.3664	0.3830	Ave		0.3713				10.6		15.0			
Ethylbenzene	0.5029 0.4881	0.4436	0.5010	0.4714	0.5084	Ave		0.4859				5.1		15.0			
m-Xylene & p-Xylene	0.5018 0.6004	0.4989	0.5786	0.5987	0.6211	Ave		0.5666				9.4		15.0			
o-Xylene	0.4845 0.5684	0.5086	0.5333	0.5884	0.6066	Ave		0.5483				8.7		15.0			
Styrene	0.7740 1.0043	0.8247	0.9335	0.9760	1.0322	Ave		0.9241				11.2		15.0			
Bromoform	0.2683 0.2637	0.2827	0.2965	0.2859	0.2852	Ave		0.2804			0.1000	4.3		15.0			
Isopropylbenzene	1.3016 1.4809	1.2282	1.3930	1.4757	1.5831	Ave		1.4104				9.2		15.0			
Bromobenzene	0.7752 0.7796	0.7507	0.7234	0.7177	0.7506	Ave		0.7495				3.4		15.0			
1,1,2,2-Tetrachloroethane	0.8549 0.8003	0.7913	0.8163	0.7838	0.8193	Ave		0.8110			0.3000	3.2		15.0			
1,2,3-Trichloropropane	0.2749 0.2776	0.3041	0.2874	0.2705	0.2749	Ave		0.2816				4.4		15.0			
trans-1,4-Dichloro-2-butene	0.2483 0.2604	0.2632	0.2915	0.2366	0.2526	Ave		0.2588				7.2		15.0			
N-Propylbenzene	0.6807 0.8566	0.6482	0.7462	0.7870	0.8370	Ave		0.7593				11.0		15.0			
2-Chlorotoluene	0.6217 0.7300	0.6045	0.6908	0.7052	0.7308	Ave		0.6805				8.0		15.0			
1,3,5-Trimethylbenzene	1.8263 2.3213	1.7650	2.0474	2.1790	2.2664	Ave		2.0676				11.2		15.0			
4-Chlorotoluene	0.6198 0.7574	0.6373	0.7346	0.7031	0.7299	Ave		0.6970				8.0		15.0			
tert-Butylbenzene	1.5194 2.0713	1.4757	1.8069	1.7744	1.9643	Ave		1.7687				13.4		15.0			
1,2,4-Trimethylbenzene	1.8163 2.3412	1.7839	2.0647	2.1935	2.3174	Ave		2.0862				11.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	2.2345 2.8648	2.2736	2.4455	2.4879	2.8048	Ave		2.5185				10.5		15.0			
1,3-Dichlorobenzene	1.3721 1.3792	1.3531	1.3430	1.3524	1.3792	Ave		1.3632				1.1		15.0			
4-Isopropyltoluene	1.8926 2.5053	1.9908	2.1641	2.3164	2.5054	Ave		2.2291				11.6		15.0			
1,4-Dichlorobenzene	1.7104 1.3790	1.5194	1.3950	1.3809	1.3892	Ave		1.4623				9.1		15.0			
1,2-Dichlorobenzene	1.2698 1.2958	1.2989	1.2234	1.2284	1.3312	Ave		1.2746				3.3		15.0			
n-Butylbenzene	1.7842 2.0152	1.5898	1.7143	1.8014	2.0030	Ave		1.8180				9.1		15.0			
1,2-Dibromo-3-Chloropropane	0.3467 0.2339	0.2240	0.2456	0.2445	0.2477	Lin1	0.0693	0.2354							0.9980		0.9900
1,2,4-Trichlorobenzene	0.8504 0.8238	0.7825	0.7622	0.7359	0.8577	Ave		0.8021				6.2		15.0			
Hexachlorobutadiene	0.4299 0.3238	0.4004	0.3479	0.3514	0.3693	Ave		0.3705				10.4		15.0			
Naphthalene	2.0320 2.5297	1.9621	1.8141	1.9407	2.5249	Ave		2.1339				14.7		15.0			
1,2,3-Trichlorobenzene	0.7838 0.7673	0.7031	0.7101	0.7051	0.8441	Ave		0.7522				7.5		15.0			
Dibromofluoromethane (Surr)	0.2467 0.2099	0.2246	0.2361	0.2411	0.2415	Ave		0.2333				5.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2992 0.2455	0.3054	0.2970	0.2790	0.2681	Ave		0.2824				8.1		15.0			
Toluene-d8 (Surr)	1.1868 1.1915	1.0838	1.1660	1.2217	1.2705	Ave		1.1867				5.2		15.0			
4-Bromofluorobenzene (Surr)	0.3769 0.3566	0.3761	0.4007	0.3903	0.3768	Ave		0.3796				3.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-367104/7	UXJ8026.D
Level 2	STD8260 240-367104/6	UXJ8025.D
Level 3	STD8260 240-367104/5	UXJ8024.D
Level 4	STD8260 240-367104/4	UXJ8023.D
Level 5	STD8260 240-367104/3	UXJ8022.D
Level 6	STD8260 240-367104/2	UXJ8021.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	14302 858734	33811	91261	166318	393607	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	14735 658748	29438	74271	127316	281547	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	12457 640253	27131	67238	116135	298381	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	15085 724231	29665	79953	144260	339988	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	9111 457891	20704	54178	101367	220958	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	6225 388823	16382	42315	83470	188887	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	20171 902632	41103	106239	200231	434053	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	20689 1022513	40004	116801	201892	488108	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	10777 492212	20099	53290	111089	240821	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	12263 642909	26117	76307	139233	311245	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	12563 606755	25640	68669	136302	296326	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	10111 503676	21536	58077	120721	246455	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	13879 540581	27192	61588	110371	249848	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	22823 1113991	44542	118663	246503	515391	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	46298 1945109	91902	207524	424295	914051	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	10125 436826	18405	48182	98437	224690	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	25546 1242117	48220	142070	266658	589687	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	28456 666164	42445	85471	159040	336958	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	24619 1030644	42922	108992	212100	489028	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	64753 3314967	133260	360130	686402	1538522	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	15989 717821	30791	78810	157177	351024	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	33845 1594022	69489	179324	363372	780350	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Lin1	1522 195544	3932	18570	39284	87974	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	26535 1155574	51015	123928	264327	577900	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	21348 1291718	45507	122657	244809	546119	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	4143 162380	7740	18470	37577	83030	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	15518 748792	33131	79034	171580	373545	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	12784 801645	31612	89550	147163	328459	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	8562 371594	17457	41697	83844	180067	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	10465 516929	19047	54325	100847	232324	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	23384 1126807	48908	130678	263272	552690	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	23404 964948	42875	103539	221456	475687	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	16522 1018178	36529	102175	221283	486587	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	19040 981099	36750	95002	213777	451488	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	21059 945383	38755	104922	207777	455300	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBNZ d5	Ave	17638 920911	35587	100691	178315	411928	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	56029 2754879	114875	283539	590944	1254314	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	20305 933881	39111	99528	208883	425614	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Lin1	2973 162413	4317	19161	33582	76210	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	18033 793578	34086	85827	168836	362851	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	19643 1120599	43436	106738	232379	531548	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	11053 594323	24147	60714	127764	257754	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	8259 406414	16623	42824	86362	184789	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Lin1	2371 216961	5017	20834	33357	81643	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	18968 878356	35418	95815	184018	382766	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	11930 876953	28161	82558	138767	307879	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	17074 1026562	35784	99988	193425	409067	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	23723 1489645	48587	153307	281355	613490	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	50368 2872531	103151	290746	543872	1170735	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	17032 934338	36666	94776	167511	355082	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	12213 818004	28459	78145	149850	326308	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	12734 535501	22922	60454	110808	221396	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	11477 600080	23718	67708	122571	254413	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	17776 934162	36153	98029	181024	376403	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	15753 1027463	40322	109052	191478	426962	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	10939 659131	28493	73418	135325	281679	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	12725 592368	21792	60552	115065	245052	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	38544 1789883	71386	189707	354543	750415	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	15538 642189	27415	68426	137694	302221	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	17672 953361	33590	99260	177149	401219	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	17633 1172678	37781	114642	225000	490117	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	17027 1110191	38511	105654	221095	478708	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	27201 1961423	62454	184963	366782	814512	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Ave	9430 515031	21407	58743	107418	225037	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	45741 2892282	93008	276000	554538	1249226	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	14505 744364	30472	77365	149296	318510	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	15997 764142	32123	87302	163051	347666	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	5144 265100	12345	30733	56270	116642	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4646 248656	10685	31177	49221	107185	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	12737 817872	26311	79799	163725	355179	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	11634 697021	24540	73878	146693	310087	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	34175 2216449	71649	218959	453276	961736	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	11598 723168	25871	78564	146255	309733	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	28431 1977723	59904	193232	369118	833511	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	33988 2235448	72413	220805	456294	983336	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	41813 2735311	92291	261531	517546	1190193	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	25676 1316887	54925	143622	281323	585237	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	35416 2392076	80813	231439	481868	1063145	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	32006 1316655	61678	149185	287252	589475	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 367104

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2019 13:09 Calibration End Date: 02/07/2019 15:00 Calibration ID: 49373

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichlorobenzene	DCBd 4	Ave	23761 1237285	52725	130837	255531	564881	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	33386 1924106	64537	183328	374733	849937	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	6487 223296	9092	26261	50852	105103	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	15913 786571	31765	81516	153092	363972	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	8045 309212	16252	37204	73104	156722	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	38023 2415397	79647	194010	403718	1071425	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	14666 732633	28542	75944	146668	358175	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	13778 607914	24605	68214	141317	298829	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	16708 711134	33449	85806	163525	331727	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	41706 2327197	82074	231027	459092	1002587	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	13244 696421	28481	79386	146668	297359	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8021.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Feb-2019 13:09:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-002
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub78

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:14:31 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 08:04:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.647	4.659	-0.012	94	1448052	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.297	7.309	-0.012	82	976557	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	91	477407	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	95	607914	40.0	36.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.363	4.375	-0.012	80	711134	40.0	34.8	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	2327197	40.0	40.2	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	86	696421	40.0	37.6	
9 Dichlorodifluoromethane	85	1.156	1.168	-0.012	100	858734	40.0	40.0	
10 Chloromethane	50	1.298	1.310	-0.012	100	658748	40.0	37.3	
13 Butadiene	54	1.357	1.369	-0.012	97	640253	40.0	38.9	
12 Vinyl chloride	62	1.369	1.393	-0.024	98	724231	40.0	37.8	
15 Bromomethane	94	1.570	1.606	-0.036	91	457891	40.0	36.2	
16 Chloroethane	64	1.641	1.665	-0.024	100	388823	40.0	38.5	
17 Dichlorofluoromethane	67	1.795	1.807	-0.012	98	902632	40.0	35.5	
18 Trichlorofluoromethane	101	1.843	1.831	0.012	99	1022513	40.0	38.0	
19 Ethyl ether	59	2.056	2.067	-0.011	89	492212	40.0	36.6	
20 Acrolein	56	2.150	2.162	-0.012	99	642909	200.0	185.9	
21 1,1-Dichloroethene	96	2.233	2.245	-0.012	98	606755	40.0	36.5	
22 1,1,2-Trichloro-1,2,2-trif	151	2.257	2.280	-0.023	90	503676	40.0	36.1	
23 Acetone	43	2.280	2.292	-0.012	100	540581	80.0	69.6	
25 Iodomethane	142	2.351	2.363	-0.012	96	1113991	40.0	37.7	
26 Carbon disulfide	76	2.399	2.411	-0.011	99	1945109	40.0	35.7	
28 3-Chloro-1-propene	76	2.529	2.541	-0.012	88	436826	40.0	35.6	
29 Methyl acetate	43	2.552	2.564	-0.012	97	1242117	80.0	74.9	
30 Methylene Chloride	84	2.635	2.647	-0.012	88	666164	40.0	37.9	
31 2-Methyl-2-propanol	59	2.765	2.754	0.011	97	1030644	400.0	367.7	
32 Acrylonitrile	53	2.836	2.848	-0.012	98	3314967	400.0	382.5	
34 trans-1,2-Dichloroethene	96	2.860	2.872	-0.012	98	717821	40.0	36.3	
33 Methyl tert-butyl ether	73	2.872	2.884	-0.012	94	1594022	40.0	36.1	
35 Hexane	86	3.097	3.109	-0.012	92	195544	40.0	39.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.203	3.215	-0.012	97	1155574	40.0	35.6	
37 Vinyl acetate	43	3.262	3.274	-0.012	97	1291718	40.0	42.4	
41 cis-1,2-Dichloroethene	96	3.688	3.700	-0.012	82	748792	40.0	36.3	
43 2,2-Dichloropropane	97	3.688	3.700	-0.012	59	162380	40.0	34.0	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	98	801645	80.0	82.0	
47 Chlorobromomethane	128	3.890	3.890	0.000	90	371594	40.0	35.2	
48 Tetrahydrofuran	42	3.925	3.937	-0.012	84	516929	80.0	78.8	
49 Chloroform	83	3.961	3.961	0.000	94	1126807	40.0	35.9	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	98	964948	40.0	35.3	
51 Cyclohexane	56	4.150	4.162	-0.012	88	1018178	40.0	40.1	
53 Carbon tetrachloride	117	4.245	4.256	-0.011	90	945383	40.0	36.6	
52 1,1-Dichloropropene	75	4.245	4.256	-0.011	95	981099	40.0	39.2	
54 Isobutyl alcohol	41	4.363	4.363	0.000	93	920911	1000.0	959.6	
55 Benzene	78	4.422	4.422	0.000	95	2754879	40.0	38.0	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	98	933881	40.0	37.1	
58 n-Heptane	100	4.659	4.659	0.000	71	162413	40.0	38.5	
60 Trichloroethene	130	4.966	4.966	0.000	94	793578	40.0	36.8	
62 Methylcyclohexane	83	5.120	5.132	-0.012	89	1120599	40.0	39.8	
63 1,2-Dichloropropane	63	5.144	5.156	-0.012	95	594323	40.0	39.1	
65 Dibromomethane	93	5.250	5.250	0.000	90	406414	40.0	38.1	
66 1,4-Dioxane	88	5.274	5.274	0.000	91	216961	800.0	843.3	
67 Dichlorobromomethane	83	5.381	5.392	-0.011	99	878356	40.0	37.9	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	92	876953	80.0	94.1	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	96	1026562	40.0	42.7	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	96	1489645	80.0	85.5	
72 Toluene	91	6.067	6.067	0.000	99	2872531	40.0	40.7	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	92	934338	40.0	40.7	
74 Ethyl methacrylate	69	6.351	6.363	-0.012	88	818004	40.0	42.8	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	92	535501	40.0	36.2	
76 Tetrachloroethene	164	6.552	6.552	0.000	98	600080	40.0	38.1	
77 1,3-Dichloropropane	76	6.576	6.576	0.000	88	934162	40.0	39.4	
78 2-Hexanone	43	6.659	6.659	0.000	95	1027463	80.0	81.3	
80 Chlorodibromomethane	129	6.777	6.777	0.000	90	659131	40.0	38.3	
82 Ethylene Dibromide	107	6.872	6.872	0.000	99	592368	40.0	38.8	
84 Chlorobenzene	112	7.333	7.333	0.000	98	1789883	40.0	37.9	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	96	642189	40.0	35.4	
86 Ethylbenzene	106	7.439	7.439	0.000	97	953361	40.0	40.2	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	97	1172678	40.0	42.4	
88 o-Xylene	106	7.913	7.913	0.000	96	1110191	40.0	41.5	
89 Styrene	104	7.925	7.925	0.000	94	1961423	40.0	43.5	
90 Bromoform	173	8.090	8.090	0.000	98	515031	40.0	37.6	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	2892282	40.0	42.0	
95 Bromobenzene	156	8.540	8.540	0.000	88	744364	40.0	41.6	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	94	764142	40.0	39.5	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	86	265100	40.0	39.4	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	80	248656	40.0	40.3	
98 N-Propylbenzene	120	8.658	8.658	0.000	99	817872	40.0	45.1	
99 2-Chlorotoluene	126	8.741	8.741	0.000	98	697021	40.0	42.9	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	96	2216449	40.0	44.9	
101 4-Chlorotoluene	126	8.848	8.848	0.000	98	723168	40.0	43.5	
102 tert-Butylbenzene	119	9.143	9.155	-0.012	91	1977723	40.0	46.8	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	95	2235448	40.0	44.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.356	9.356	0.000	93	2735311	40.0	45.5	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	99	1316887	40.0	40.5	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	97	2392076	40.0	45.0	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	97	1316655	40.0	37.7	
111 n-Butylbenzene	91	9.901	9.901	0.000	97	1924106	40.0	44.3	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	98	1237285	40.0	40.7	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	93	223296	40.0	39.4	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	93	786571	40.0	41.1	
117 Hexachlorobutadiene	225	11.676	11.676	0.000	96	309212	40.0	35.0	
118 Naphthalene	128	11.723	11.723	0.000	96	2415397	40.0	47.4	
119 1,2,3-Trichlorobenzene	180	11.960	11.960	0.000	94	732633	40.0	40.8	
S 133 Trihalomethanes, Total	1				0		160.0	149.7	
S 159 Total BTEX	1				0		200.0	202.8	
S 130 1,2-Dichloroethene, Total	96				0			72.6	
S 131 1,3-Dichloropropene, Total	75				0			83.4	
S 132 Xylenes, Total	106				0		80.0	83.9	

Reagents:

VMRGAS_00281	Amount Added:	32.00	Units: uL
vm50ss_stk_00079	Amount Added:	32.00	Units: uL
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL
VMRPRIMW_00320	Amount Added:	32.00	Units: uL
VMAROLISTDW_00283	Amount Added:	32.00	Units: uL

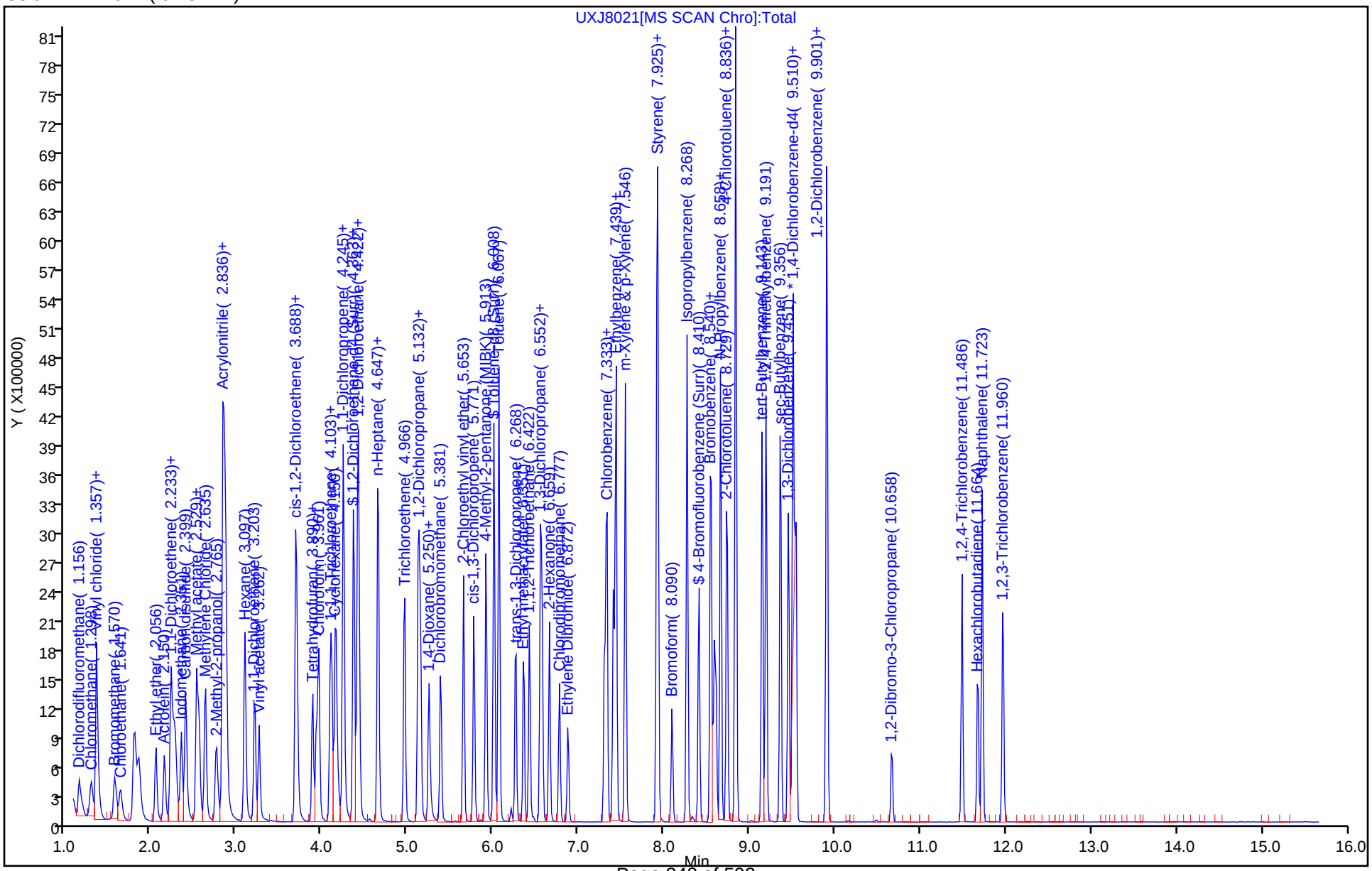
Report Date: 08-Feb-2019 09:14:32 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8021.D

Injection Date:	07-Feb-2019 13:09:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	STD8260 L6			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8022.D
Lims ID: STD8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Feb-2019 13:31:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-003
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub78

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:14:37 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	97	1237419	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	82	789116	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	94	424336	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	97	298829	20.0	20.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	95	331727	20.0	19.0	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	1002587	20.0	21.4	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	87	297359	20.0	19.9	
9 Dichlorodifluoromethane	85	1.168	1.168	0.000	99	393607	20.0	21.5	
10 Chloromethane	50	1.322	1.310	0.012	99	281547	20.0	18.7	
13 Butadiene	54	1.369	1.369	0.000	97	298381	20.0	21.2	
12 Vinyl chloride	62	1.393	1.393	0.000	98	339988	20.0	20.8	
15 Bromomethane	94	1.594	1.606	-0.012	90	220958	20.0	20.4	
16 Chloroethane	64	1.653	1.665	-0.012	99	188887	20.0	21.9	
17 Dichlorofluoromethane	67	1.807	1.807	0.000	99	434053	20.0	20.0	
18 Trichlorofluoromethane	101	1.830	1.831	-0.001	99	488108	20.0	21.2	
19 Ethyl ether	59	2.067	2.067	0.000	89	240821	20.0	20.9	
20 Acrolein	56	2.162	2.162	0.000	99	311245	100.0	105.3	
21 1,1-Dichloroethene	96	2.245	2.245	0.000	98	296326	20.0	20.8	
22 1,1,2-Trichloro-1,2,2-trif	151	2.280	2.280	0.000	90	246455	20.0	20.6	
23 Acetone	43	2.292	2.292	0.000	99	249848	40.0	37.7	
25 Iodomethane	142	2.363	2.363	0.000	98	515391	20.0	20.4	
26 Carbon disulfide	76	2.410	2.411	0.000	99	914051	20.0	19.6	
28 3-Chloro-1-propene	76	2.540	2.541	-0.001	88	224690	20.0	21.4	
29 Methyl acetate	43	2.564	2.564	0.000	97	589687	40.0	41.6	
30 Methylene Chloride	84	2.635	2.647	-0.012	87	336958	20.0	21.9	
31 2-Methyl-2-propanol	59	2.753	2.754	-0.001	95	489028	200.0	204.2	
32 Acrylonitrile	53	2.848	2.848	0.000	99	1538522	200.0	207.7	
34 trans-1,2-Dichloroethene	96	2.872	2.872	0.000	98	351024	20.0	20.8	
33 Methyl tert-butyl ether	73	2.884	2.884	0.000	96	780350	20.0	20.7	
35 Hexane	86	3.108	3.109	-0.001	91	87974	20.0	20.8	
36 1,1-Dichloroethane	63	3.215	3.215	0.000	96	577900	20.0	20.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 Vinyl acetate	43	3.262	3.274	-0.012	97	546119	20.0	21.0	
43 2,2-Dichloropropane	97	3.700	3.700	0.000	61	83030	20.0	20.3	
41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	81	373545	20.0	21.2	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	98	328459	40.0	39.3	
47 Chlorobromomethane	128	3.889	3.890	-0.001	92	180067	20.0	20.0	
48 Tetrahydrofuran	42	3.937	3.937	0.000	85	232324	40.0	41.4	
49 Chloroform	83	3.960	3.961	-0.001	94	552690	20.0	20.6	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	98	475687	20.0	20.4	
51 Cyclohexane	56	4.162	4.162	0.000	87	486587	20.0	22.4	
52 1,1-Dichloropropene	75	4.256	4.256	0.000	96	451488	20.0	21.1	
53 Carbon tetrachloride	117	4.256	4.256	0.000	91	455300	20.0	20.6	
54 Isobutyl alcohol	41	4.363	4.363	0.000	94	411928	500.0	531.2	
55 Benzene	78	4.422	4.422	0.000	95	1254314	20.0	20.3	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	98	425614	20.0	19.8	
58 n-Heptane	100	4.659	4.659	0.000	53	76210	20.0	21.2	
60 Trichloroethene	130	4.966	4.966	0.000	94	362851	20.0	19.7	
62 Methylcyclohexane	83	5.132	5.132	0.000	89	531548	20.0	22.1	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	94	257754	20.0	19.8	
65 Dibromomethane	93	5.250	5.250	0.000	90	184789	20.0	20.3	
66 1,4-Dioxane	88	5.274	5.274	0.000	89	81643	400.0	377.5	
67 Dichlorobromomethane	83	5.392	5.392	0.000	99	382766	20.0	19.3	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	92	307879	40.0	38.7	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	96	409067	20.0	19.9	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	96	613490	40.0	41.2	
72 Toluene	91	6.067	6.067	0.000	99	1170735	20.0	20.5	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	91	355082	20.0	19.1	
74 Ethyl methacrylate	69	6.363	6.363	-0.001	88	326308	20.0	21.1	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	91	221396	20.0	18.5	
76 Tetrachloroethene	164	6.552	6.552	0.000	97	254413	20.0	20.0	
77 1,3-Dichloropropane	76	6.575	6.576	-0.001	89	376403	20.0	19.6	
78 2-Hexanone	43	6.658	6.659	-0.001	97	426962	40.0	41.8	
80 Chlorodibromomethane	129	6.777	6.777	0.000	89	281679	20.0	20.3	
82 Ethylene Dibromide	107	6.871	6.872	-0.001	96	245052	20.0	19.9	
84 Chlorobenzene	112	7.333	7.333	0.000	97	750415	20.0	19.6	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	96	302221	20.0	20.6	
86 Ethylbenzene	106	7.439	7.439	0.000	98	401219	20.0	20.9	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	98	490117	20.0	21.9	
88 o-Xylene	106	7.913	7.913	0.000	96	478708	20.0	22.1	
89 Styrene	104	7.924	7.925	-0.001	93	814512	20.0	22.3	
90 Bromoform	173	8.090	8.090	0.000	98	225037	20.0	20.3	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	1249226	20.0	22.4	
95 Bromobenzene	156	8.552	8.540	0.012	95	318510	20.0	20.0	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	96	347666	20.0	20.2	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	85	116642	20.0	19.5	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	80	107185	20.0	19.5	
98 N-Propylbenzene	120	8.658	8.658	0.000	99	355179	20.0	22.0	
99 2-Chlorotoluene	126	8.741	8.741	0.000	98	310087	20.0	21.5	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	90	961736	20.0	21.9	
101 4-Chlorotoluene	126	8.836	8.848	-0.012	94	309733	20.0	20.9	
102 tert-Butylbenzene	119	9.143	9.155	-0.012	91	833511	20.0	22.2	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	96	983336	20.0	22.2	
105 sec-Butylbenzene	105	9.356	9.356	0.000	93	1190193	20.0	22.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	97	585237	20.0	20.2	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	97	1063145	20.0	22.5	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	96	589475	20.0	19.0	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	97	564881	20.0	20.9	
111 n-Butylbenzene	91	9.901	9.901	0.000	97	849937	20.0	22.0	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	90	105103	20.0	20.8	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	93	363972	20.0	21.4	
117 Hexachlorobutadiene	225	11.675	11.676	-0.001	95	156722	20.0	19.9	
118 Naphthalene	128	11.723	11.723	0.000	96	1071425	20.0	23.7	
119 1,2,3-Trichlorobenzene	180	11.971	11.960	0.011	95	358175	20.0	22.4	
S 159 Total BTEX	1				0		100.0	105.8	
S 133 Trihalomethanes, Total	1				0		80.0	80.5	
S 130 1,2-Dichloroethene, Total	96				0			42.0	
S 131 1,3-Dichloropropene, Total	75				0			39.0	
S 132 Xylenes, Total	106				0		40.0	44.1	

Reagents:

VMRGAS_00281	Amount Added:	16.00	Units: uL
vm50ss_stk_00079	Amount Added:	16.00	Units: uL
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL
VMRPRIMW_00320	Amount Added:	16.00	Units: uL
VMAROLISTDW_00283	Amount Added:	16.00	Units: uL

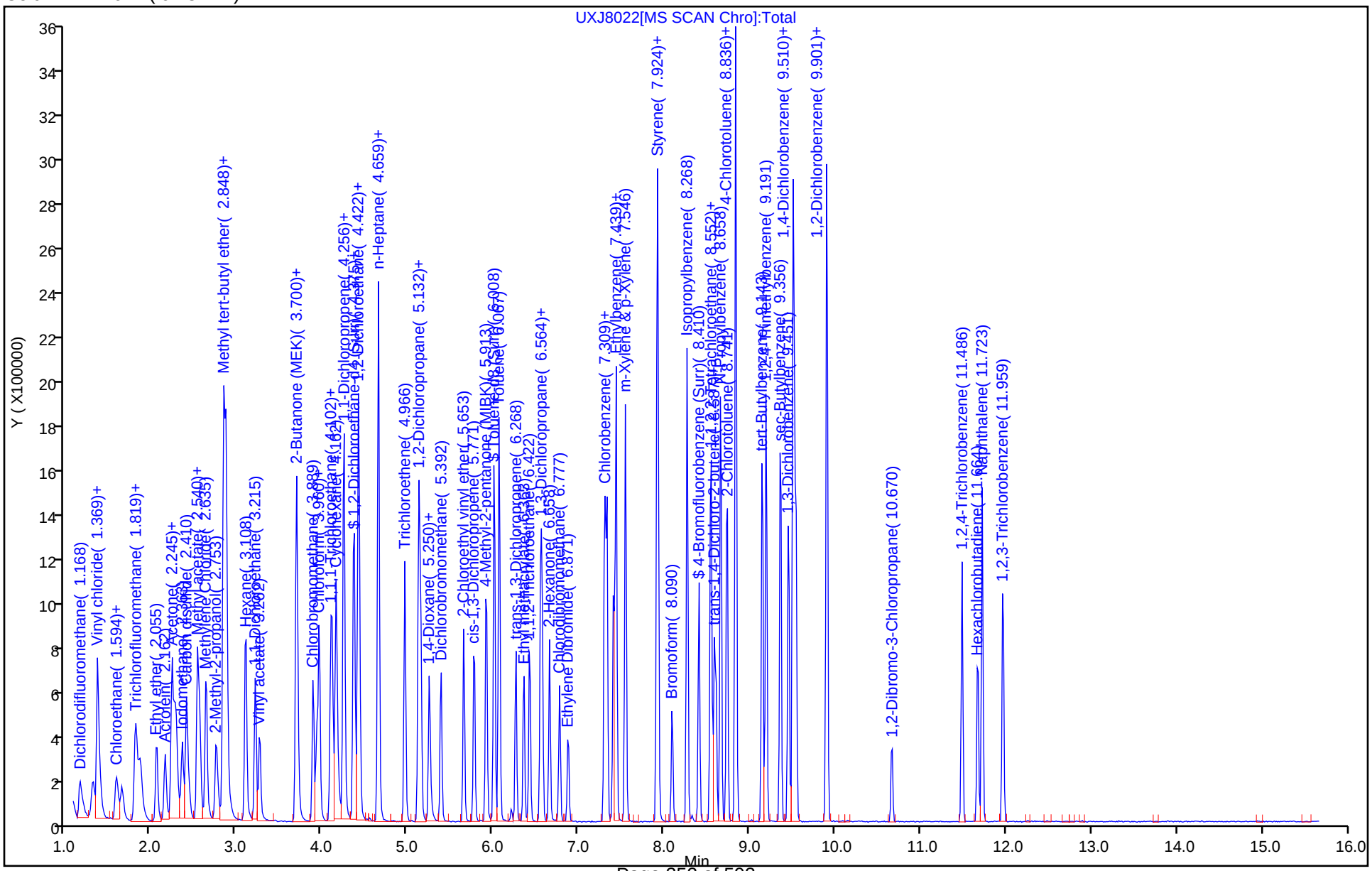
Report Date: 08-Feb-2019 09:14:38 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8022.D

Injection Date:	07-Feb-2019 13:31:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	STD8260 L5			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8023.D
Lims ID: STD8260 L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 07-Feb-2019 13:53:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-004
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub78

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:14:43 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 07:55:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	99	1172070	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	77	751566	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	92	416048	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.103	4.103	0.000	93	141317	10.0	10.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	74	163525	10.0	9.88	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	81	459092	10.0	10.3	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	86	146668	10.0	10.3	
9 Dichlorodifluoromethane	85	1.168	1.168	0.000	96	166318	10.0	9.57	
10 Chloromethane	50	1.310	1.310	0.000	69	127316	10.0	8.92	
13 Butadiene	54	1.369	1.369	0.000	92	116135	10.0	8.72	
12 Vinyl chloride	62	1.393	1.393	0.000	81	144260	10.0	9.30	
15 Bromomethane	94	1.606	1.606	0.000	84	101367	10.0	9.89	
16 Chloroethane	64	1.665	1.665	0.000	85	83470	10.0	10.2	
17 Dichlorofluoromethane	67	1.807	1.807	0.000	95	200231	10.0	9.72	
18 Trichlorofluoromethane	101	1.831	1.831	0.000	86	201892	10.0	9.26	
19 Ethyl ether	59	2.067	2.067	0.000	85	111089	10.0	10.2	
20 Acrolein	56	2.162	2.162	0.000	88	139233	50.0	49.7	
21 1,1-Dichloroethene	96	2.245	2.245	0.000	93	136302	10.0	10.1	
22 1,1,2-Trichloro-1,2,2-trif	151	2.280	2.280	0.000	84	120721	10.0	10.7	
23 Acetone	43	2.292	2.292	0.000	94	110371	20.0	17.6	
25 Iodomethane	142	2.363	2.363	0.000	95	246503	10.0	10.3	
26 Carbon disulfide	76	2.411	2.411	0.000	98	424295	10.0	9.61	
28 3-Chloro-1-propene	76	2.541	2.541	0.000	79	98437	10.0	9.91	
29 Methyl acetate	43	2.564	2.564	0.000	97	266658	20.0	19.9	
30 Methylene Chloride	84	2.647	2.647	0.000	79	159040	10.0	10.3	
31 2-Methyl-2-propanol	59	2.754	2.754	0.000	88	212100	100.0	93.5	
32 Acrylonitrile	53	2.848	2.848	0.000	100	686402	100.0	97.9	
34 trans-1,2-Dichloroethene	96	2.872	2.872	0.000	92	157177	10.0	9.81	
33 Methyl tert-butyl ether	73	2.884	2.884	0.000	89	363372	10.0	10.2	
35 Hexane	86	3.109	3.109	0.000	90	39284	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.215	3.215	0.000	96	264327	10.0	10.1	
37 Vinyl acetate	43	3.274	3.274	0.000	95	244809	10.0	9.92	
41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	81	171580	10.0	10.3	
43 2,2-Dichloropropane	97	3.700	3.700	0.000	60	37577	10.0	9.71	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	98	147163	20.0	18.6	
47 Chlorobromomethane	128	3.890	3.890	0.000	72	83844	10.0	9.82	
48 Tetrahydrofuran	42	3.937	3.937	0.000	84	100847	20.0	19.0	
49 Chloroform	83	3.961	3.961	0.000	93	263272	10.0	10.4	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	56	221456	10.0	10.0	
51 Cyclohexane	56	4.162	4.162	0.000	87	221283	10.0	10.8	
53 Carbon tetrachloride	117	4.256	4.256	0.000	80	207777	10.0	9.93	
52 1,1-Dichloropropene	75	4.256	4.256	0.000	93	213777	10.0	10.6	
54 Isobutyl alcohol	41	4.363	4.363	0.000	91	178315	250.0	241.4	
55 Benzene	78	4.422	4.422	0.000	90	590944	10.0	10.1	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	74	208883	10.0	10.2	
58 n-Heptane	100	4.659	4.659	0.000	44	33582	10.0	9.94	
60 Trichloroethene	130	4.966	4.966	0.000	90	168836	10.0	9.68	
62 Methylcyclohexane	83	5.132	5.132	0.000	87	232379	10.0	10.2	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	91	127764	10.0	10.4	
65 Dibromomethane	93	5.250	5.250	0.000	82	86362	10.0	10.0	
66 1,4-Dioxane	88	5.274	5.274	0.000	91	33357	200.0	169.0	
67 Dichlorobromomethane	83	5.392	5.392	0.000	98	184018	10.0	9.81	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	90	138767	20.0	18.4	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	86	193425	10.0	9.93	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	91	281355	20.0	19.9	
72 Toluene	91	6.067	6.067	0.000	91	543872	10.0	10.0	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	90	167511	10.0	9.48	
74 Ethyl methacrylate	69	6.363	6.363	0.000	84	149850	10.0	10.2	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	89	110808	10.0	9.72	
76 Tetrachloroethene	164	6.552	6.552	0.000	97	122571	10.0	10.1	
77 1,3-Dichloropropane	76	6.576	6.576	0.000	87	181024	10.0	9.92	
78 2-Hexanone	43	6.659	6.659	0.000	94	191478	20.0	19.7	
80 Chlorodibromomethane	129	6.777	6.777	0.000	89	135325	10.0	10.2	
82 Ethylene Dibromide	107	6.872	6.872	0.000	59	115065	10.0	9.80	
84 Chlorobenzene	112	7.333	7.333	0.000	97	354543	10.0	9.75	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	94	137694	10.0	9.87	
86 Ethylbenzene	106	7.439	7.439	0.000	98	177149	10.0	9.70	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	97	225000	10.0	10.6	
88 o-Xylene	106	7.913	7.913	0.000	96	221095	10.0	10.7	
89 Styrene	104	7.925	7.925	0.000	91	366782	10.0	10.6	
90 Bromoform	173	8.090	8.090	0.000	95	107418	10.0	10.2	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	554538	10.0	10.5	
95 Bromobenzene	156	8.540	8.540	0.000	81	149296	10.0	9.58	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	96	163051	10.0	9.66	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	53	56270	10.0	9.61	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	80	49221	10.0	9.14	
98 N-Propylbenzene	120	8.658	8.658	0.000	92	163725	10.0	10.4	
99 2-Chlorotoluene	126	8.741	8.741	0.000	95	146693	10.0	10.4	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	88	453276	10.0	10.5	
101 4-Chlorotoluene	126	8.848	8.848	0.000	93	146255	10.0	10.1	
102 tert-Butylbenzene	119	9.155	9.155	0.000	91	369118	10.0	10.0	a
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	70	456294	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.356	9.356	0.000	89	517546	10.0	9.88	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	78	281323	10.0	9.92	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	93	481868	10.0	10.4	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	96	287252	10.0	9.44	
111 n-Butylbenzene	91	9.901	9.901	0.000	96	374733	10.0	9.91	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	85	255531	10.0	9.64	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	81	50852	10.0	10.1	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	93	153092	10.0	9.18	
117 Hexachlorobutadiene	225	11.676	11.676	0.000	80	73104	10.0	9.49	
118 Naphthalene	128	11.723	11.723	0.000	96	403718	10.0	9.09	
119 1,2,3-Trichlorobenzene	180	11.960	11.960	0.000	92	146668	10.0	9.37	
S 133 Trihalomethanes, Total	1				0		40.0	40.6	
S 159 Total BTEX	1				0		50.0	51.1	
S 132 Xylenes, Total	106				0		20.0	21.3	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VMRGAS_00281	Amount Added:	8.00	Units: uL
vm50ss_stk_00079	Amount Added:	8.00	Units: uL
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL
VMRPRIMW_00320	Amount Added:	8.00	Units: uL
VMAROLISTDW_00283	Amount Added:	8.00	Units: uL

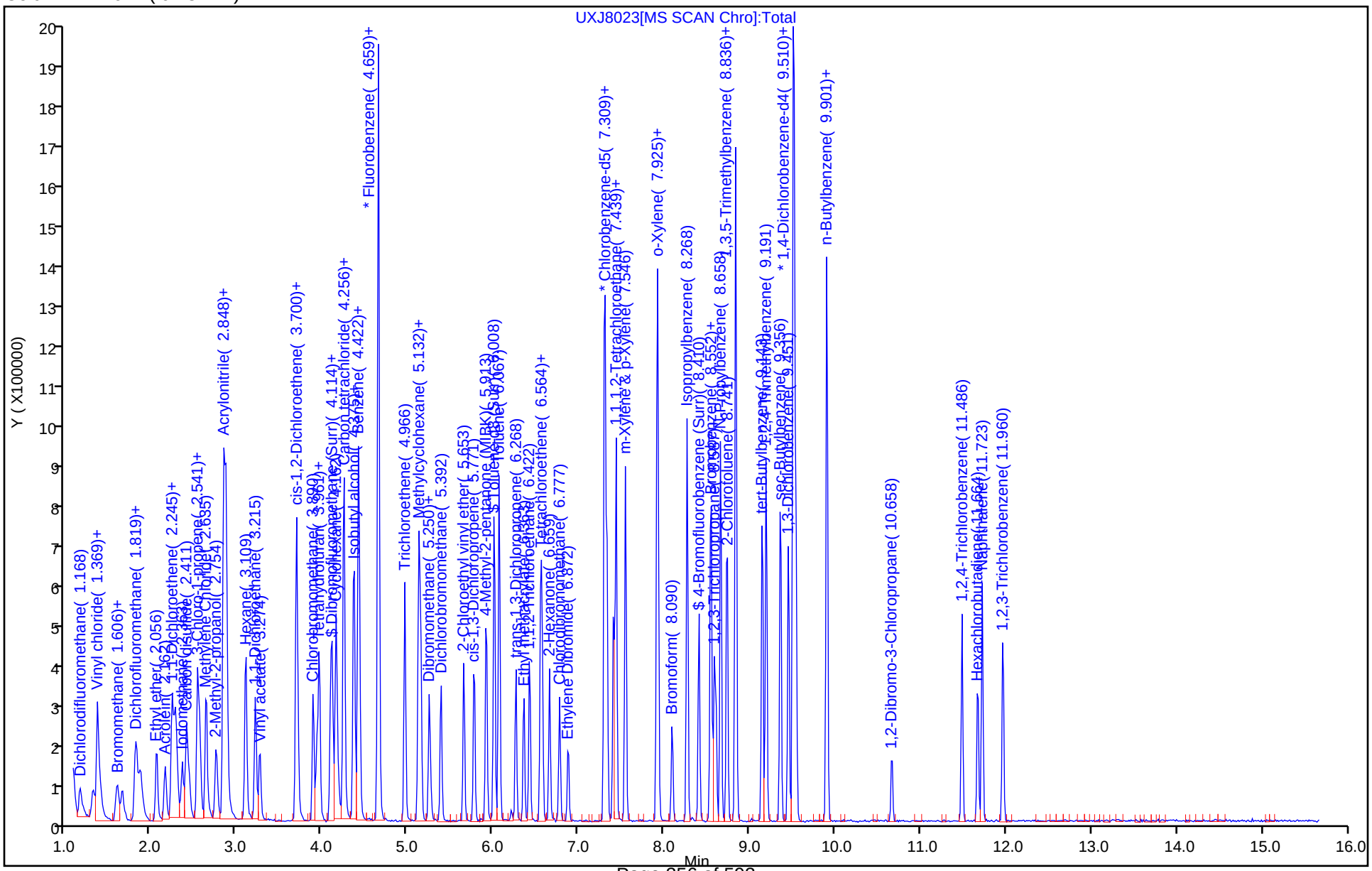
Report Date: 08-Feb-2019 09:14:44 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8023.D

Injection Date:	07-Feb-2019 13:53:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	STD8260 L4			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

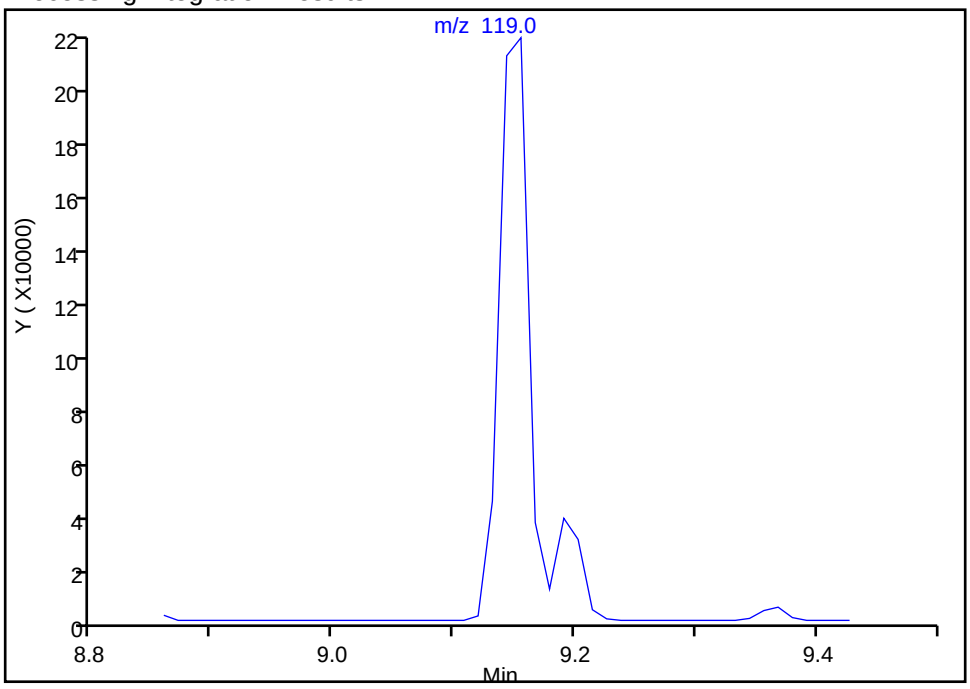
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Injection Date: 07-Feb-2019 13:53:30 Instrument ID: A3UX11
Lims ID: STD8260 L4
Client ID:
Operator ID: 43582 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

102 tert-Butylbenzene, CAS: 98-06-6

Signal: 1

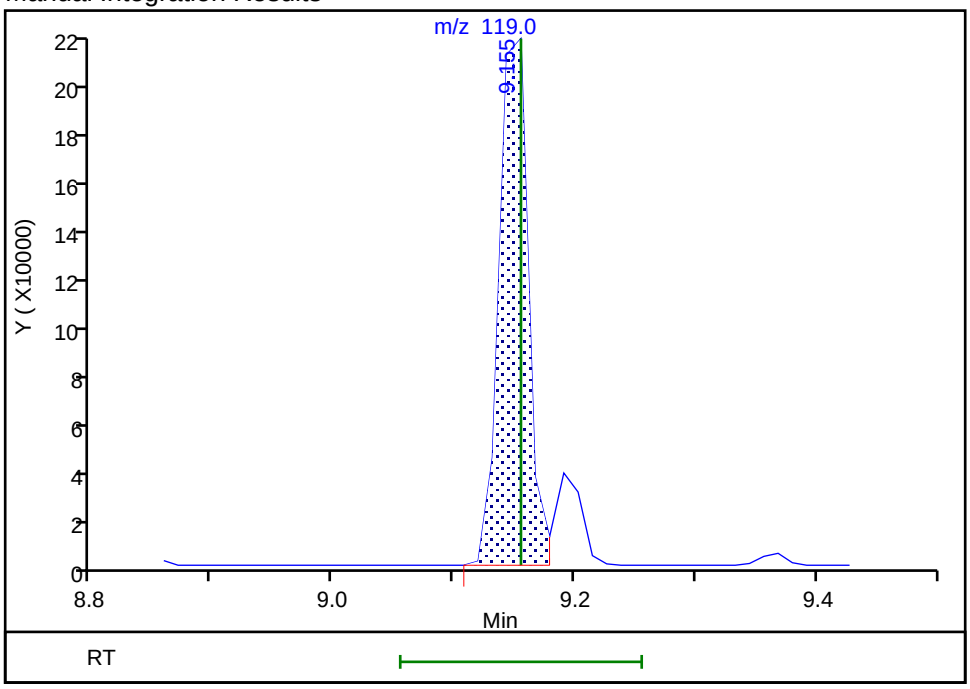
Not Detected
Expected RT: 9.16

Processing Integration Results



Manual Integration Results

RT: 9.16
Area: 369118
Amount: 10.032482
Amount Units: ug/l



Reviewer: evansle, 08-Feb-2019 08:24:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8024.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Feb-2019 14:15:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-005
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub78

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:14:48 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 08:27:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	99	1155721	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.297	7.309	-0.012	83	792526	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	92	427773	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	94	68214	5.00	5.06	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	97	85806	5.00	5.26	
$ 6 Toluene-d8 (Surr)	98	6.007	6.008	-0.001	91	231027	5.00	4.91	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	88	79386	5.00	5.28	
9 Dichlorodifluoromethane	85	1.156	1.168	-0.012	98	91261	5.00	5.33	
10 Chloromethane	50	1.298	1.310	-0.012	99	74271	5.00	5.27	
13 Butadiene	54	1.357	1.369	-0.012	95	67238	5.00	5.12	
12 Vinyl chloride	62	1.381	1.393	-0.012	98	79953	5.00	5.23	
15 Bromomethane	94	1.582	1.606	-0.024	88	54178	5.00	5.36	
16 Chloroethane	64	1.641	1.665	-0.024	99	42315	5.00	5.25	
17 Dichlorofluoromethane	67	1.807	1.807	0.000	99	106239	5.00	5.23	
18 Trichlorofluoromethane	101	1.854	1.831	0.023	90	116801	5.00	5.43	
19 Ethyl ether	59	2.055	2.067	-0.012	87	53290	5.00	4.96	
20 Acrolein	56	2.162	2.162	0.000	99	76307	25.0	27.6	
21 1,1-Dichloroethene	96	2.233	2.245	-0.012	98	68669	5.00	5.17	
22 1,1,2-Trichloro-1,2,2-trif	151	2.268	2.280	-0.012	88	58077	5.00	5.21	
23 Acetone	43	2.280	2.292	-0.012	98	61588	10.0	9.94	
25 Iodomethane	142	2.351	2.363	-0.012	97	118663	5.00	5.03	
26 Carbon disulfide	76	2.410	2.411	0.000	99	207524	5.00	4.77	
28 3-Chloro-1-propene	76	2.540	2.541	-0.001	89	48182	5.00	4.92	
29 Methyl acetate	43	2.564	2.564	0.000	97	142070	10.0	10.7	
30 Methylene Chloride	84	2.635	2.647	-0.012	89	85471	5.00	5.03	
31 2-Methyl-2-propanol	59	2.753	2.754	-0.001	94	108992	50.0	48.7	
32 Acrylonitrile	53	2.836	2.848	-0.012	98	360130	50.0	52.1	
34 trans-1,2-Dichloroethene	96	2.872	2.872	0.000	97	78810	5.00	4.99	
33 Methyl tert-butyl ether	73	2.872	2.884	-0.012	96	179324	5.00	5.08	
35 Hexane	86	3.097	3.109	-0.012	92	18570	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.215	3.215	0.000	96	123928	5.00	4.79	
37 Vinyl acetate	43	3.262	3.274	-0.012	98	122657	5.00	5.04	
43 2,2-Dichloropropane	97	3.688	3.700	-0.012	62	18470	5.00	4.84	
41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	82	79034	5.00	4.81	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	99	89550	10.0	11.5	
47 Chlorobromomethane	128	3.889	3.890	-0.001	91	41697	5.00	4.95	
48 Tetrahydrofuran	42	3.937	3.937	0.000	86	54325	10.0	10.4	
49 Chloroform	83	3.960	3.961	-0.001	94	130678	5.00	5.21	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	99	103539	5.00	4.75	
51 Cyclohexane	56	4.162	4.162	0.000	87	102175	5.00	5.04	
52 1,1-Dichloropropene	75	4.244	4.256	-0.012	94	95002	5.00	4.76	
53 Carbon tetrachloride	117	4.256	4.256	0.000	97	104922	5.00	5.08	
54 Isobutyl alcohol	41	4.363	4.363	0.000	92	100691	125.0	129.3	
55 Benzene	78	4.422	4.422	0.000	95	283539	5.00	4.90	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	98	99528	5.00	4.95	
58 n-Heptane	100	4.659	4.659	0.000	40	19161	5.00	5.82	
60 Trichloroethene	130	4.966	4.966	0.000	97	85827	5.00	4.99	
62 Methylcyclohexane	83	5.132	5.132	0.000	88	106738	5.00	4.75	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	95	60714	5.00	5.00	
65 Dibromomethane	93	5.250	5.250	0.000	91	42824	5.00	5.02	
66 1,4-Dioxane	88	5.274	5.274	0.000	87	20834	100.0	111.1	
67 Dichlorobromomethane	83	5.380	5.392	-0.012	99	95815	5.00	5.18	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	-0.001	92	82558	10.0	11.1	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	96	99988	5.00	5.21	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	95	153307	10.0	11.0	
72 Toluene	91	6.067	6.067	0.000	99	290746	5.00	5.08	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	91	94776	5.00	5.09	
74 Ethyl methacrylate	69	6.362	6.363	-0.001	86	78145	5.00	5.04	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	90	60454	5.00	5.03	
76 Tetrachloroethene	164	6.552	6.552	0.000	98	67708	5.00	5.29	
77 1,3-Dichloropropane	76	6.575	6.576	-0.001	90	98029	5.00	5.09	
78 2-Hexanone	43	6.658	6.659	-0.001	93	109052	10.0	10.6	
80 Chlorodibromomethane	129	6.777	6.777	0.000	88	73418	5.00	5.26	
82 Ethylene Dibromide	107	6.871	6.872	-0.001	97	60552	5.00	4.89	
84 Chlorobenzene	112	7.333	7.333	0.000	98	189707	5.00	4.95	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	95	68426	5.00	4.65	
86 Ethylbenzene	106	7.439	7.439	0.000	97	99260	5.00	5.16	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	95	114642	5.00	5.11	
88 o-Xylene	106	7.913	7.913	0.000	96	105654	5.00	4.86	
89 Styrene	104	7.924	7.925	-0.001	93	184963	5.00	5.05	
90 Bromoform	173	8.090	8.090	0.000	96	58743	5.00	5.29	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	276000	5.00	4.94	
95 Bromobenzene	156	8.540	8.540	0.000	94	77365	5.00	4.83	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	94	87302	5.00	5.03	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	85	30733	5.00	5.10	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	80	31177	5.00	5.63	
98 N-Propylbenzene	120	8.658	8.658	0.000	98	79799	5.00	4.91	
99 2-Chlorotoluene	126	8.741	8.741	0.000	98	73878	5.00	5.08	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	94	218959	5.00	4.95	
101 4-Chlorotoluene	126	8.847	8.848	-0.001	97	78564	5.00	5.27	
102 tert-Butylbenzene	119	9.143	9.155	-0.012	90	193232	5.00	5.11	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	96	220805	5.00	4.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.356	9.356	0.000	94	261531	5.00	4.86	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	97	143622	5.00	4.93	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	97	231439	5.00	4.85	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	95	149185	5.00	4.77	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	96	130837	5.00	4.80	
111 n-Butylbenzene	91	9.901	9.901	0.000	97	183328	5.00	4.71	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	91	26261	5.00	4.92	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	92	81516	5.00	4.75	
117 Hexachlorobutadiene	225	11.675	11.676	-0.001	93	37204	5.00	4.70	
118 Naphthalene	128	11.723	11.723	0.000	96	194010	5.00	4.25	
119 1,2,3-Trichlorobenzene	180	11.959	11.960	-0.001	96	75944	5.00	4.72	
S 159 Total BTEX	1				0		25.0	25.1	
S 133 Trihalomethanes, Total	1				0		20.0	20.9	
S 130 1,2-Dichloroethene, Total	96				0			9.80	
S 131 1,3-Dichloropropene, Total	75				0			10.3	
S 132 Xylenes, Total	106				0		10.0	9.97	

Reagents:

VMRGAS_00281	Amount Added:	4.00	Units: uL
vm50ss_stk_00079	Amount Added:	4.00	Units: uL
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL
VMRPRIMW_00320	Amount Added:	4.00	Units: uL
VMAROLISTDW_00283	Amount Added:	4.00	Units: uL

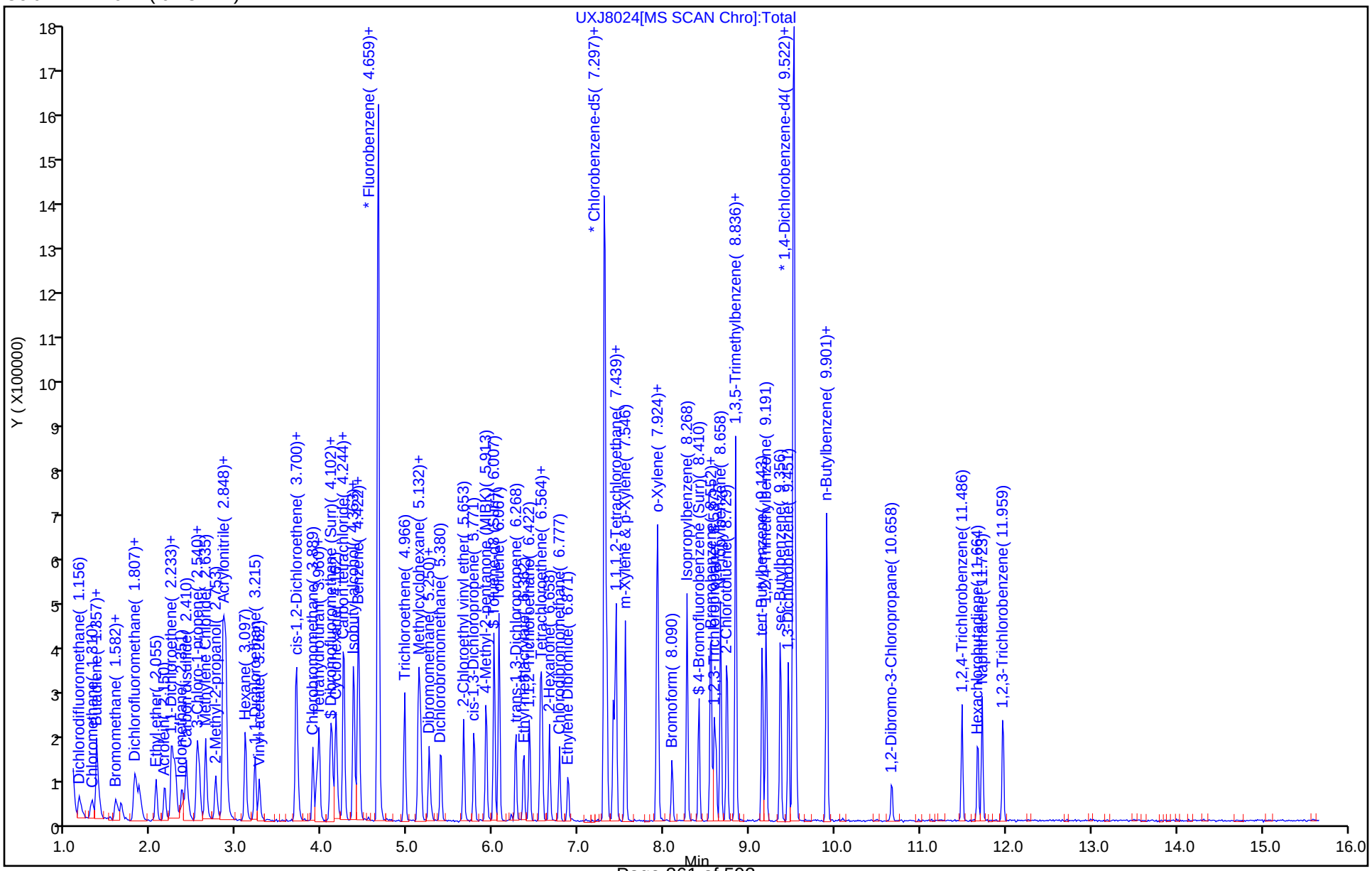
Report Date: 08-Feb-2019 09:14:49 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8024.D

Injection Date:	07-Feb-2019 14:15:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	STD8260 L3			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8025.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Feb-2019 14:38:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-006
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub78

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:14:54 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 08:07:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	99	1095260	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	83	757263	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	93	405932	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	97	24605	2.00	1.93	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	81	33449	2.00	2.16	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	93	82074	2.00	1.83	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	86	28481	2.00	1.98	
9 Dichlorodifluoromethane	85	1.156	1.168	-0.012	94	33811	2.00	2.08	
10 Chloromethane	50	1.298	1.310	-0.012	99	29438	2.00	2.21	
13 Butadiene	54	1.357	1.369	-0.012	96	27131	2.00	2.18	
12 Vinyl chloride	62	1.381	1.393	-0.012	39	29665	2.00	2.05	
15 Bromomethane	94	1.582	1.606	-0.024	87	20704	2.00	2.16	
16 Chloroethane	64	1.641	1.665	-0.024	96	16382	2.00	2.14	
17 Dichlorofluoromethane	67	1.795	1.807	-0.012	97	41103	2.00	2.14	
18 Trichlorofluoromethane	101	1.819	1.831	-0.012	82	40004	2.00	1.96	
19 Ethyl ether	59	2.056	2.067	-0.011	86	20099	2.00	1.97	
20 Acrolein	56	2.150	2.162	-0.012	97	26117	10.0	9.98	
21 1,1-Dichloroethene	96	2.233	2.245	-0.012	96	25640	2.00	2.04	
22 1,1,2-Trichloro-1,2,2-trif	151	2.268	2.280	-0.012	89	21536	2.00	2.04	
23 Acetone	43	2.280	2.292	-0.012	97	27192	4.00	4.63	
25 Iodomethane	142	2.351	2.363	-0.012	97	44542	2.00	1.99	
26 Carbon disulfide	76	2.410	2.411	0.000	99	91902	2.00	2.23	
28 3-Chloro-1-propene	76	2.529	2.541	-0.012	89	18405	2.00	1.98	
29 Methyl acetate	43	2.552	2.564	-0.012	96	48220	4.00	3.84	
30 Methylene Chloride	84	2.635	2.647	-0.012	90	42445	2.00	2.04	
31 2-Methyl-2-propanol	59	2.754	2.754	0.000	96	42922	20.0	20.2	
32 Acrylonitrile	53	2.836	2.848	-0.012	96	133260	20.0	20.3	
34 trans-1,2-Dichloroethene	96	2.860	2.872	-0.012	96	30791	2.00	2.06	
33 Methyl tert-butyl ether	73	2.872	2.884	-0.012	93	69489	2.00	2.08	
35 Hexane	86	3.097	3.109	-0.012	84	3932	2.00	1.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.215	3.215	0.000	96	51015	2.00	2.08	
37 Vinyl acetate	43	3.262	3.274	-0.012	96	45507	2.00	1.97	
41 cis-1,2-Dichloroethene	96	3.688	3.700	-0.012	80	33131	2.00	2.13	
43 2,2-Dichloropropane	97	3.688	3.700	-0.012	60	7740	2.00	2.14	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	99	31612	4.00	4.27	
47 Chlorobromomethane	128	3.890	3.890	0.000	89	17457	2.00	2.19	
48 Tetrahydrofuran	42	3.925	3.937	-0.012	77	19047	4.00	3.84	
49 Chloroform	83	3.961	3.961	0.000	93	48908	2.00	2.06	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	97	42875	2.00	2.07	
51 Cyclohexane	56	4.162	4.162	0.000	89	36529	2.00	1.90	
53 Carbon tetrachloride	117	4.245	4.256	-0.011	95	38755	2.00	1.98	
52 1,1-Dichloropropene	75	4.245	4.256	-0.011	91	36750	2.00	1.94	
54 Isobutyl alcohol	41	4.363	4.363	0.000	90	35587	50.0	47.8	
55 Benzene	78	4.422	4.422	0.000	94	114875	2.00	2.10	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	98	39111	2.00	2.05	
58 n-Heptane	100	4.647	4.659	-0.012	33	4317	2.00	1.50	
60 Trichloroethene	130	4.966	4.966	0.000	89	34086	2.00	2.09	
62 Methylcyclohexane	83	5.132	5.132	0.000	86	43436	2.00	2.04	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	94	24147	2.00	2.10	
65 Dibromomethane	93	5.250	5.250	0.000	89	16623	2.00	2.06	
66 1,4-Dioxane	88	5.274	5.274	0.000	45	5017	40.0	36.4	
67 Dichlorobromomethane	83	5.381	5.392	-0.011	99	35418	2.00	2.02	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	92	28161	4.00	3.99	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	96	35784	2.00	1.97	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	94	48587	4.00	3.68	
72 Toluene	91	6.067	6.067	0.000	96	103151	2.00	1.89	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	91	36666	2.00	2.06	
74 Ethyl methacrylate	69	6.351	6.363	-0.012	87	28459	2.00	1.92	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	84	22922	2.00	2.00	
76 Tetrachloroethene	164	6.552	6.552	0.000	95	23718	2.00	1.94	
77 1,3-Dichloropropane	76	6.576	6.576	0.000	90	36153	2.00	1.97	
78 2-Hexanone	43	6.659	6.659	-0.001	98	40322	4.00	4.11	
80 Chlorodibromomethane	129	6.777	6.777	0.000	85	28493	2.00	2.14	
82 Ethylene Dibromide	107	6.871	6.872	-0.001	95	21792	2.00	1.84	
84 Chlorobenzene	112	7.333	7.333	0.000	93	71386	2.00	1.95	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	94	27415	2.00	1.95	
86 Ethylbenzene	106	7.439	7.439	0.000	99	33590	2.00	1.83	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	98	37781	2.00	1.76	
88 o-Xylene	106	7.913	7.913	0.000	96	38511	2.00	1.86	
89 Styrene	104	7.925	7.925	0.000	93	62454	2.00	1.78	
90 Bromoform	173	8.090	8.090	0.000	95	21407	2.00	2.02	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	93008	2.00	1.74	
95 Bromobenzene	156	8.540	8.540	0.000	91	30472	2.00	2.00	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	92	32123	2.00	1.95	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	84	12345	2.00	2.16	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	67	10685	2.00	2.03	
98 N-Propylbenzene	120	8.658	8.658	0.000	99	26311	2.00	1.71	
99 2-Chlorotoluene	126	8.741	8.741	0.000	97	24540	2.00	1.78	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	97	71649	2.00	1.71	
101 4-Chlorotoluene	126	8.836	8.848	-0.012	98	25871	2.00	1.83	
102 tert-Butylbenzene	119	9.143	9.155	-0.012	90	59904	2.00	1.67	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	92	72413	2.00	1.71	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.356	9.356	0.000	93	92291	2.00	1.81	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	96	54925	2.00	1.99	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	96	80813	2.00	1.79	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	93	61678	2.00	2.08	
111 n-Butylbenzene	91	9.901	9.901	0.000	97	64537	2.00	1.75	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	95	52725	2.00	2.04	
114 1,2-Dibromo-3-Chloropropan	157	10.658	10.670	-0.012	83	9092	2.00	1.61	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	90	31765	2.00	1.95	
117 Hexachlorobutadiene	225	11.676	11.676	0.000	95	16252	2.00	2.16	
118 Naphthalene	128	11.723	11.723	0.000	95	79647	2.00	1.84	
119 1,2,3-Trichlorobenzene	180	11.971	11.960	0.011	90	28542	2.00	1.87	
S 133 Trihalomethanes, Total	1				0		8.00	8.23	
S 159 Total BTEX	1				0		10.0	9.42	
S 130 1,2-Dichloroethene, Total	96				0			4.18	
S 131 1,3-Dichloropropene, Total	75				0			4.03	
S 132 Xylenes, Total	106				0		4.00	3.62	

Reagents:

VMRGAS_00281	Amount Added:	1.60	Units: uL
vm50ss_stk_00079	Amount Added:	1.60	Units: uL
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL
VMRPRIMW_00320	Amount Added:	1.60	Units: uL
VMAROLISTDW_00283	Amount Added:	1.60	Units: uL

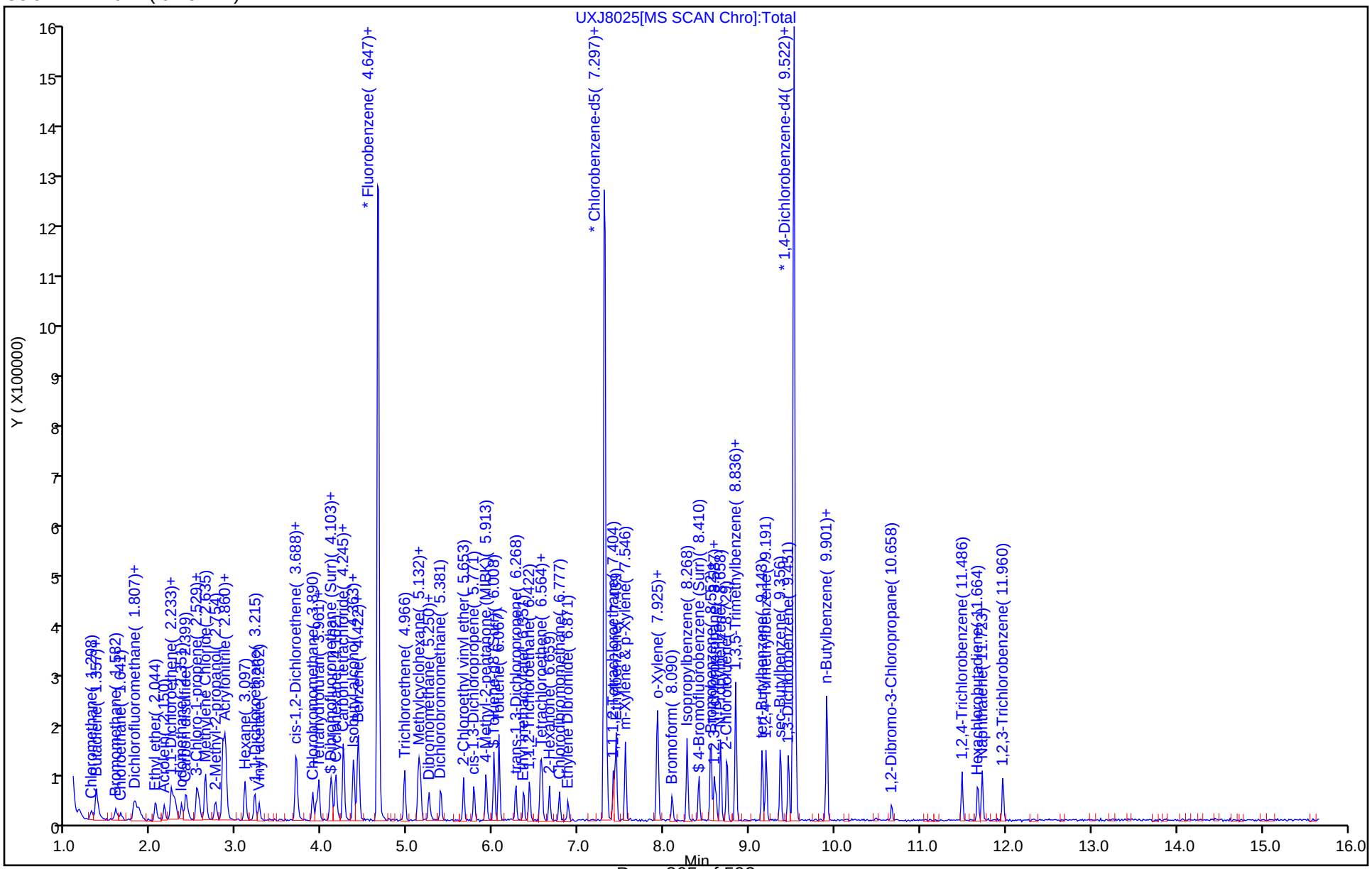
Report Date: 08-Feb-2019 09:14:55 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8025.D

Injection Date:	07-Feb-2019 14:38:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	STD8260 L2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8026.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Feb-2019 15:00:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-007
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub78

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:15:00 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 08:08:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	99	1116865	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	83	702853	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	92	374248	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	94	13778	1.00	1.06	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	96	16708	1.00	1.06	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	41706	1.00	1.00	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	89	13244	1.00	0.99	
9 Dichlorodifluoromethane	85	1.168	1.168	0.000	94	14302	1.00	0.8637	
10 Chloromethane	50	1.322	1.310	0.012	1	14735	1.00	1.08	a
13 Butadiene	54	1.369	1.369	0.000	92	12457	1.00	0.9813	
12 Vinyl chloride	62	1.393	1.393	0.000	93	15085	1.00	1.02	
15 Bromomethane	94	1.594	1.606	-0.012	85	9111	1.00	0.9329	
16 Chloroethane	64	1.653	1.665	-0.012	39	6225	1.00	0.7992	
17 Dichlorofluoromethane	67	1.807	1.807	0.000	95	20171	1.00	1.03	
18 Trichlorofluoromethane	101	1.854	1.831	0.023	84	20689	1.00	1.00	
19 Ethyl ether	59	2.055	2.067	-0.012	81	10777	1.00	1.04	
20 Acrolein	56	2.150	2.162	-0.012	98	12263	5.00	4.60	
21 1,1-Dichloroethene	96	2.245	2.245	0.000	94	12563	1.00	0.9793	
22 1,1,2-Trichloro-1,2,2-trif	151	2.280	2.280	0.000	63	10111	1.00	0.9383	
23 Acetone	43	2.280	2.292	-0.012	98	13879	2.00	2.32	
25 Iodomethane	142	2.351	2.363	-0.012	99	22823	1.00	1.00	
26 Carbon disulfide	76	2.410	2.411	0.000	98	46298	1.00	1.10	
28 3-Chloro-1-propene	76	2.541	2.541	0.000	88	10125	1.00	1.07	
29 Methyl acetate	43	2.564	2.564	0.000	97	25546	2.00	2.00	
30 Methylene Chloride	84	2.635	2.647	-0.012	93	28456	1.00	0.9073	
31 2-Methyl-2-propanol	59	2.754	2.754	0.000	95	24619	10.0	11.4	
32 Acrylonitrile	53	2.836	2.848	-0.012	97	64753	10.0	9.69	
34 trans-1,2-Dichloroethene	96	2.872	2.872	0.000	97	15989	1.00	1.05	
33 Methyl tert-butyl ether	73	2.872	2.884	-0.012	94	33845	1.00	0.99	
35 Hexane	86	3.097	3.109	-0.012	83	1522	1.00	1.07	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.215	3.215	0.000	95	26535	1.00	1.06	
37 Vinyl acetate	43	3.262	3.274	-0.012	95	21348	1.00	0.9075	
43 2,2-Dichloropropane	97	3.688	3.700	-0.012	54	4143	1.00	1.12	
41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	83	15518	1.00	0.9767	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	69	12784	2.00	1.69	
47 Chlorobromomethane	128	3.901	3.890	0.011	94	8562	1.00	1.05	
48 Tetrahydrofuran	42	3.937	3.937	0.000	84	10465	2.00	2.07	
49 Chloroform	83	3.960	3.961	-0.001	96	23384	1.00	0.9654	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	96	23404	1.00	1.11	
51 Cyclohexane	56	4.162	4.162	0.000	85	16522	1.00	0.8432	
52 1,1-Dichloropropene	75	4.244	4.256	-0.012	93	19040	1.00	0.9865	
53 Carbon tetrachloride	117	4.244	4.256	-0.012	96	21059	1.00	1.06	
54 Isobutyl alcohol	41	4.375	4.363	0.012	83	17638	25.0	25.5	
55 Benzene	78	4.422	4.422	0.000	94	56029	1.00	1.00	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	95	20305	1.00	1.04	
58 n-Heptane	100	4.659	4.659	0.000	37	2973	1.00	1.07	
60 Trichloroethene	130	4.966	4.966	0.000	93	18033	1.00	1.08	
62 Methylcyclohexane	83	5.132	5.132	0.000	86	19643	1.00	0.9055	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	91	11053	1.00	0.9425	
65 Dibromomethane	93	5.250	5.250	0.000	87	8259	1.00	1.00	
66 1,4-Dioxane	88	5.274	5.274	0.000	23	2371	20.0	22.7	
67 Dichlorobromomethane	83	5.392	5.392	0.000	96	18968	1.00	1.06	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	94	11930	2.00	1.66	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	94	17074	1.00	0.9202	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	93	23723	2.00	1.76	
72 Toluene	91	6.067	6.067	0.000	98	50368	1.00	0.99	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	94	17032	1.00	1.03	
74 Ethyl methacrylate	69	6.363	6.363	0.000	86	12213	1.00	0.8877	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	84	12734	1.00	1.19	
76 Tetrachloroethene	164	6.552	6.552	0.000	97	11477	1.00	1.01	
77 1,3-Dichloropropane	76	6.576	6.576	0.000	90	17776	1.00	1.04	
78 2-Hexanone	43	6.658	6.659	-0.001	96	15753	2.00	1.73	
80 Chlorodibromomethane	129	6.777	6.777	0.000	93	10939	1.00	0.8840	
82 Ethylene Dibromide	107	6.871	6.872	-0.001	94	12725	1.00	1.16	a
84 Chlorobenzene	112	7.333	7.333	0.000	97	38544	1.00	1.13	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	93	15538	1.00	1.19	
86 Ethylbenzene	106	7.439	7.439	0.000	96	17672	1.00	1.03	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	98	17633	1.00	0.8856	
88 o-Xylene	106	7.913	7.913	0.000	95	17027	1.00	0.8837	
89 Styrene	104	7.924	7.925	-0.001	91	27201	1.00	0.8376	
90 Bromoform	173	8.090	8.090	0.000	95	9430	1.00	0.9571	
91 Isopropylbenzene	105	8.268	8.268	0.000	94	45741	1.00	0.9228	
95 Bromobenzene	156	8.552	8.540	0.012	85	14505	1.00	1.03	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	93	15997	1.00	1.05	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	82	5144	1.00	0.9763	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	67	4646	1.00	0.9595	
98 N-Propylbenzene	120	8.658	8.658	0.000	98	12737	1.00	0.8965	
99 2-Chlorotoluene	126	8.729	8.741	-0.012	97	11634	1.00	0.9136	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	89	34175	1.00	0.8833	
101 4-Chlorotoluene	126	8.847	8.848	-0.001	97	11598	1.00	0.8892	
102 tert-Butylbenzene	119	9.143	9.155	-0.012	89	28431	1.00	0.8591	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	95	33988	1.00	0.8707	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.356	9.356	0.000	93	41813	1.00	0.8872	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	96	25676	1.00	1.01	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	95	35416	1.00	0.8491	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	92	32006	1.00	1.17	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	88	23761	1.00	1.00	
111 n-Butylbenzene	91	9.901	9.901	0.000	95	33386	1.00	0.9814	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	90	6487	1.00	1.18	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	92	15913	1.00	1.06	
117 Hexachlorobutadiene	225	11.676	11.676	0.000	92	8045	1.00	1.16	
118 Naphthalene	128	11.723	11.723	0.000	96	38023	1.00	0.9522	
119 1,2,3-Trichlorobenzene	180	11.971	11.960	0.011	92	14666	1.00	1.04	
S 159 Total BTEX	1				0		5.00	4.80	
S 133 Trihalomethanes, Total	1				0		4.00	3.87	
S 130 1,2-Dichloroethene, Total	96				0			2.02	
S 131 1,3-Dichloropropene, Total	75				0			1.95	
S 132 Xylenes, Total	106				0		2.00	1.77	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VMRGAS_00281	Amount Added:	0.80	Units: uL
vm50ss_stk_00079	Amount Added:	0.80	Units: uL
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL
VMRPRIMW_00320	Amount Added:	0.80	Units: uL
VMAROLISTDW_00283	Amount Added:	0.80	Units: uL

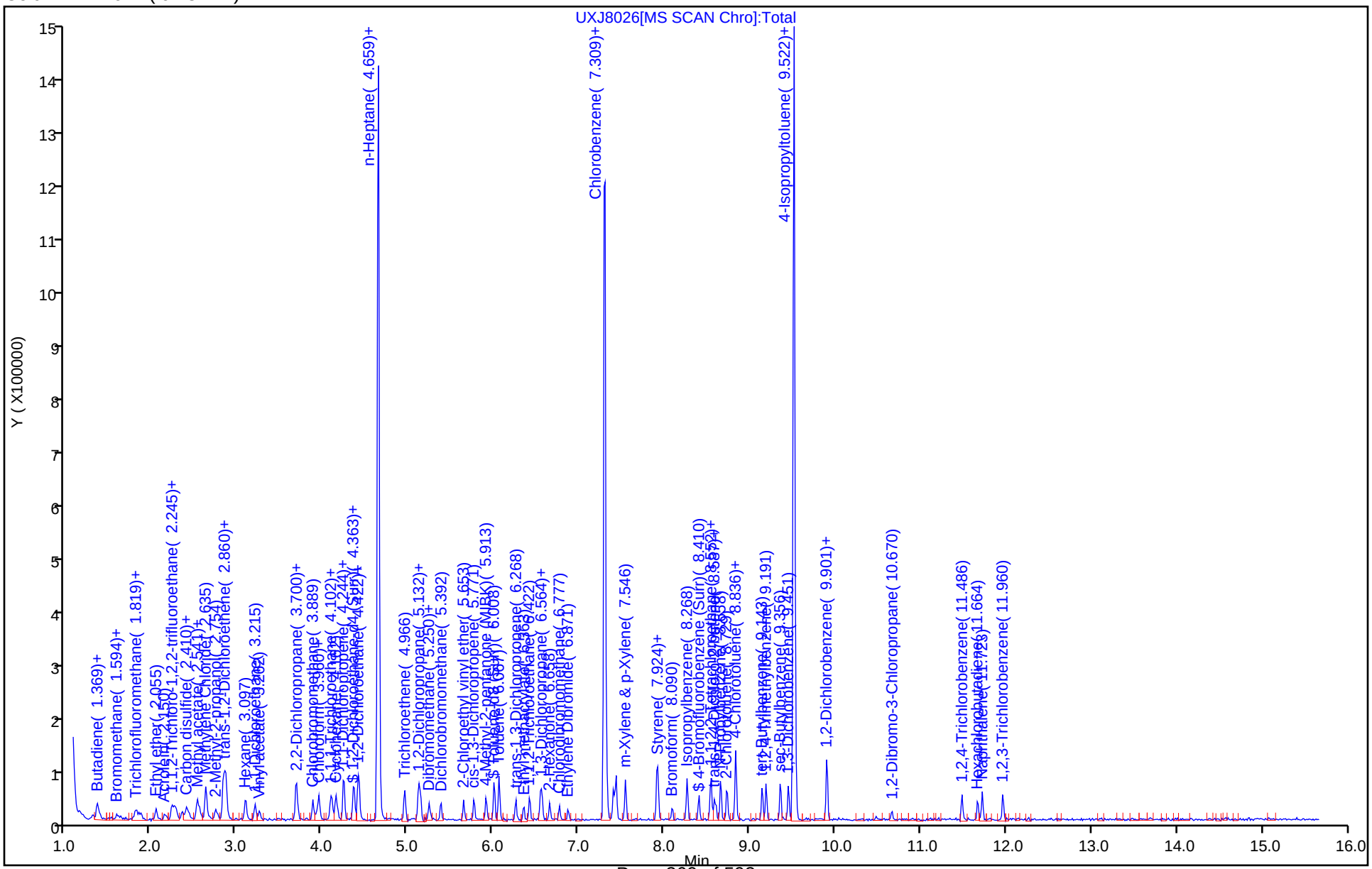
Report Date: 08-Feb-2019 09:15:01 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8026.D

Injection Date:	07-Feb-2019 15:00:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	STD8260 L1			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Canton

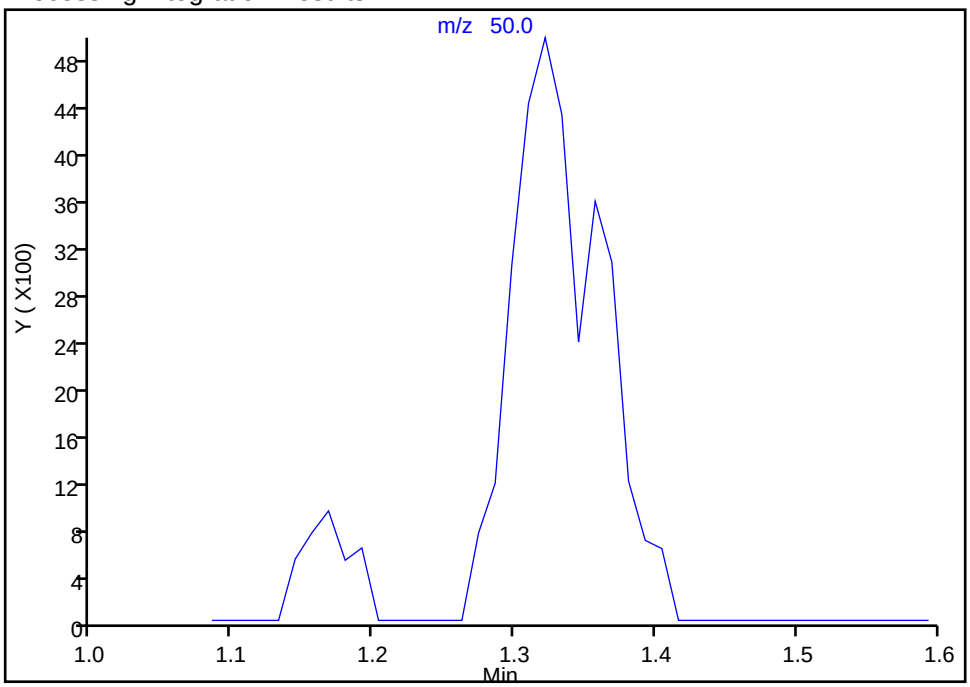
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Injection Date: 07-Feb-2019 15:00:30 Instrument ID: A3UX11
Lims ID: STD8260 L1
Client ID:
Operator ID: 43582 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

10 Chloromethane, CAS: 74-87-3

Signal: 1

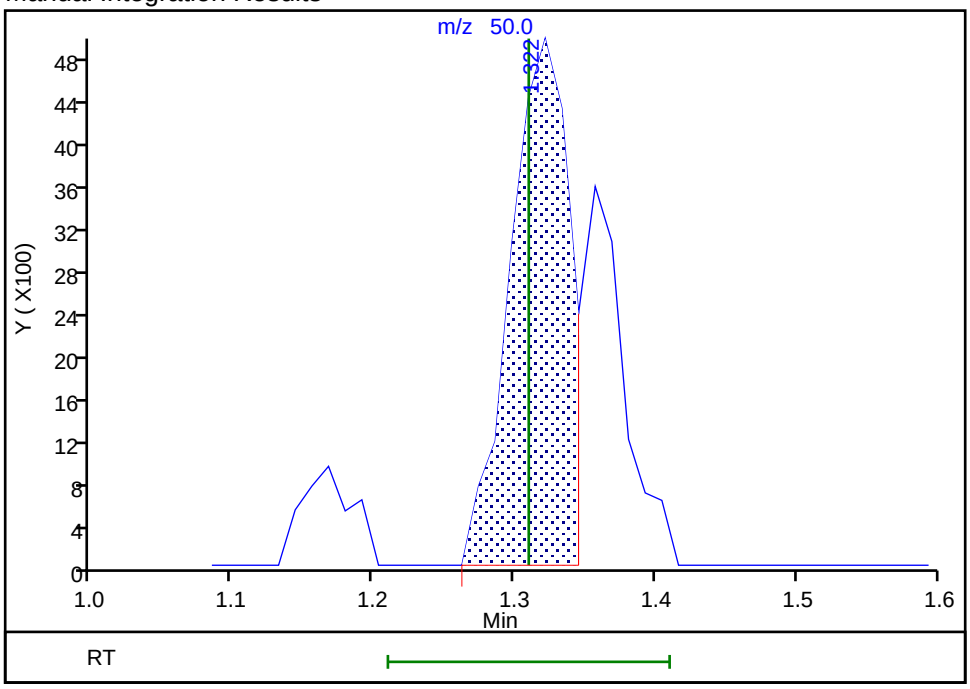
Not Detected
Expected RT: 1.31

Processing Integration Results



Manual Integration Results

RT: 1.32
Area: 14735
Amount: 1.082937
Amount Units: ug/l



Reviewer: evansle, 08-Feb-2019 08:08:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Canton

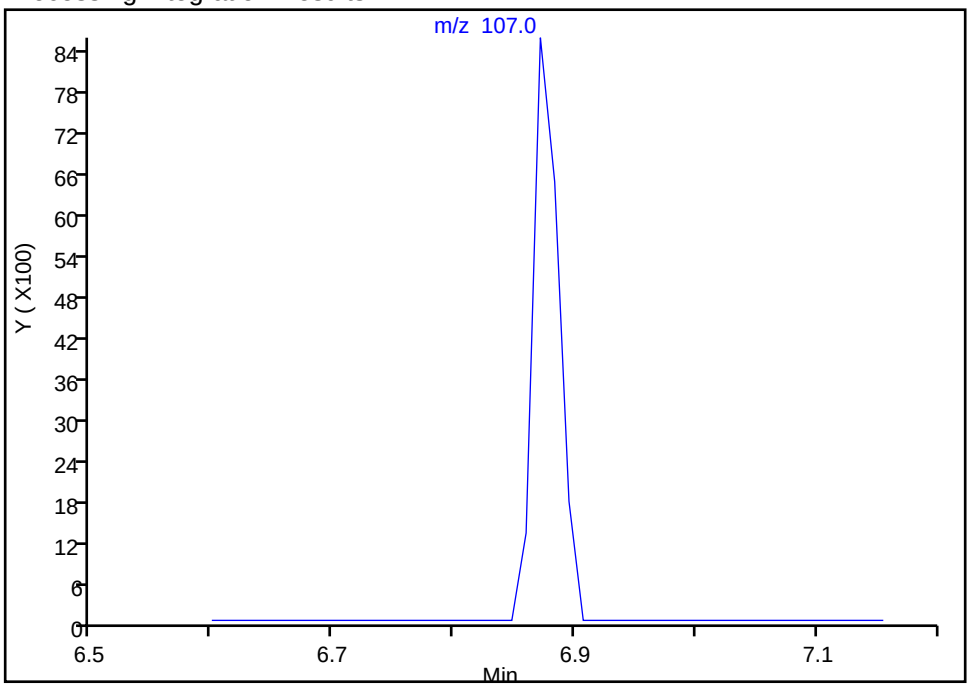
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Injection Date: 07-Feb-2019 15:00:30 Instrument ID: A3UX11
Lims ID: STD8260 L1
Client ID:
Operator ID: 43582 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

82 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

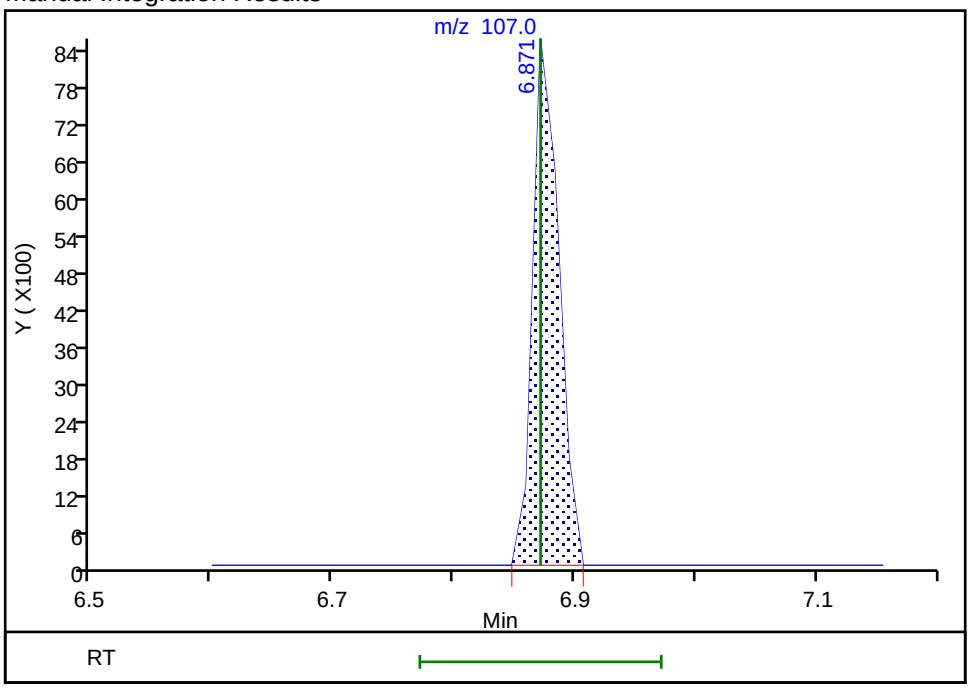
Not Detected
Expected RT: 6.87

Processing Integration Results



Manual Integration Results

RT: 6.87
Area: 12725
Amount: 1.158386
Amount Units: ug/l



Reviewer: evansle, 08-Feb-2019 08:23:09
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-385628/8	UXR8416.D
Level 2	STD8260 240-385628/7	UXR8415.D
Level 3	STD8260 240-385628/6	UXR8414.D
Level 4	STD8260 240-385628/5	UXR8413.D
Level 5	STD8260 240-385628/4	UXR8412.D
Level 6	STD8260 240-385628/3	UXR8411.D
Level 7	STD8260 240-385628/2	UXR8410.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3814 0.3532	0.3395 0.3605	0.3599	0.3105	0.3412	Ave		0.3495				6.3		15.0			
Chloromethane	0.4007 0.4068	0.4329 0.3901	0.3933	0.4102	0.3878	Ave		0.4031			0.1000	3.9		15.0			
Vinyl chloride	0.3795 0.3444	0.3357 0.3348	0.3408	0.3313	0.3270	Ave		0.3419				5.1		15.0			
Butadiene	0.3929 0.3717	0.4039 0.3801	0.3842	0.3604	0.3646	Ave		0.3797				4.1		15.0			
Bromomethane	0.2290 0.1759	0.1897 0.1764	0.1922	0.2036	0.1867	Ave		0.1934				9.5		15.0			
Chloroethane	0.2218 0.1894	0.1915 0.1874	0.2022	0.1914	0.1930	Ave		0.1967				6.1		15.0			
Dichlorofluoromethane	0.5083 0.4578	0.4711 0.4525	0.4694	0.4695	0.4521	Ave		0.4687				4.1		15.0			
Trichlorofluoromethane	0.5004 0.4763	0.4788 0.4757	0.4636	0.4428	0.4495	Ave		0.4696				4.1		15.0			
Ethyl ether	0.2410 0.2099	0.2278 0.2178	0.2409	0.2393	0.2342	Ave		0.2301				5.3		15.0			
Acrolein	0.0365 0.0381	0.0372 0.0370	0.0348	0.0360	0.0353	Ave		0.0364				3.2		15.0			
1,1-Dichloroethene	0.2755 0.2247	0.2519 0.2347	0.2402	0.2420	0.2502	Ave		0.2456				6.6		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1862 0.1741	0.1832 0.1820	0.1810	0.1844	0.1860	Ave		0.1824				2.3		15.0			
Acetone	0.1068 0.0518	0.0874 0.0559	0.0693	0.0616	0.0566	Lin1	0.1148	0.0525							0.9960		0.9900
Iodomethane	0.3913 0.3201	0.3386 0.3380	0.3390	0.3528	0.3529	Ave		0.3475				6.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7267 0.6377	0.6667 0.7062	0.6729	0.6931	0.6892	Ave		0.6846				4.2		15.0			
3-Chloro-1-propene	0.1383 0.1328	0.1361 0.1406	0.1284	0.1266	0.1458	Ave		0.1355				5.0		15.0			
Methyl acetate	0.1679 0.1480	0.1722 0.1571	0.1699	0.1731	0.1662	Ave		0.1649				5.6		15.0			
Methylene Chloride	0.4207 0.2399	0.3253 0.2487	0.2883	0.2963	0.2692	Lin1	0.1856	0.2420							0.9980		0.9900
2-Methyl-2-propanol	0.0109 0.0104	0.0112 0.0074	0.0086	0.0112	0.0097	Ave		0.0099				14.7		15.0			
Acrylonitrile	0.0901 0.0786	0.0864 0.0821	0.0884	0.0865	0.0872	Ave		0.0856				4.6		15.0			
Methyl tert-butyl ether	0.5421 0.4982	0.5268 0.5261	0.5228	0.5444	0.5404	Ave		0.5287				3.0		15.0			
trans-1,2-Dichloroethene	0.2873 0.2381	0.2478 0.2444	0.2477	0.2745	0.2582	Ave		0.2569				7.0		15.0			
Hexane	0.0653 0.0644	0.0601 0.0714	0.0653	0.0627	0.0724	Ave		0.0659				6.8		15.0			
1,1-Dichloroethane	0.5082 0.4391	0.4756 0.4635	0.4896	0.5053	0.4961	Ave		0.4825			0.1000	5.2		15.0			
Vinyl acetate	0.3307 0.3746	0.3338 0.4109	0.3638	0.3651	0.3820	Ave		0.3658				7.6		15.0			
2,2-Dichloropropane	0.0571 0.0467	0.0554 0.0464	0.0476	0.0473	0.0493	Ave		0.0500				8.8		15.0			
cis-1,2-Dichloroethene	0.3113 0.2528	0.2882 0.2740	0.2803	0.2853	0.2865	Ave		0.2826				6.2		15.0			
2-Butanone (MEK)	0.1049 0.0814	0.0903 0.0817	0.0788	0.0863	0.0848	Ave		0.0869				10.1		15.0			
Chlorobromomethane	0.1303 0.1104	0.1195 0.1188	0.1190	0.1251	0.1236	Ave		0.1210				5.2		15.0			
Tetrahydrofuran	0.0544 0.0480	0.0541 0.0512	0.0496	0.0484	0.0523	Ave		0.0512				5.1		15.0			
Chloroform	0.5107 0.4292	0.4565 0.4574	0.4817	0.4954	0.4870	Ave		0.4740				5.9		15.0			
1,1,1-Trichloroethane	0.3608 0.3295	0.3202 0.3467	0.3569	0.3504	0.3638	Ave		0.3469				4.7		15.0			
Cyclohexane	0.4185 0.4942	0.4283 0.5237	0.4926	0.4651	0.5331	Ave		0.4794				9.2		15.0			
1,1-Dichloropropene	0.3401 0.3309	0.3335 0.3461	0.3536	0.3582	0.3653	Ave		0.3468				3.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	0.3044 0.2939	0.2949 0.3211	0.3076	0.3012	0.3221	Ave		0.3064				3.7		15.0			
Isobutyl alcohol	0.0078 0.0073	0.0086 0.0058	0.0055	0.0077	0.0071	Qua	-0.105	0.0087	-0.000003						0.9970		0.9900
Benzene	1.1330 0.9969	1.0820 1.0657	1.1171	1.1332	1.1098	Ave		1.0911				4.5		15.0			
1,2-Dichloroethane	0.4472 0.3752	0.4047 0.3943	0.3991	0.4194	0.4070	Ave		0.4067				5.5		15.0			
n-Heptane	0.0600 0.0650	0.0508 0.0669	0.0589	0.0601	0.0706	Ave		0.0617				10.4		15.0			
Trichloroethene	0.2777 0.2395	0.2731 0.2551	0.2802	0.2727	0.2693	Ave		0.2668				5.4		15.0			
Methylcyclohexane	0.3482 0.3996	0.3444 0.4345	0.3926	0.3750	0.4345	Ave		0.3898				9.4		15.0			
1,2-Dichloropropane	0.3019 0.2507	0.2614 0.2584	0.2705	0.2816	0.2658	Ave		0.2700				6.3		15.0			
Dibromomethane	0.1607 0.1286	0.1372 0.1370	0.1405	0.1472	0.1447	Ave		0.1423				7.1		15.0			
1,4-Dioxane	0.0021 0.0026	0.0023 +++++	0.0020	0.0027	0.0023	Ave		0.0023				12.6		15.0			
Dichlorobromomethane	0.2978 0.3019	0.2918 0.3332	0.3132	0.3160	0.3187	Ave		0.3104				4.6		15.0			
2-Chloroethyl vinyl ether	0.1095 0.1289	0.0984 0.1428	0.1092	0.1213	0.1369	Ave		0.1210				13.4		15.0			
cis-1,3-Dichloropropene	0.2862 0.3345	0.2727 0.3643	0.3086	0.3219	0.3375	Ave		0.3180				9.9		15.0			
4-Methyl-2-pentanone (MIBK)	0.1270 0.1684	0.1464 0.1861	0.1576	0.1603	0.1804	Ave		0.1609				12.5		15.0			
Toluene	1.4622 1.5224	1.5290 1.6536	1.6223	1.5882	1.6875	Ave		1.5807				5.1		15.0			
trans-1,3-Dichloropropene	0.3506 0.4016	0.3333 0.4619	0.3726	0.3748	0.4262	Ave		0.3887				11.5		15.0			
Ethyl methacrylate	0.2538 0.3227	0.2544 0.3692	0.2737	0.2855	0.3287	Ave		0.2983				14.5		15.0			
1,1,2-Trichloroethane	0.3201 0.2632	0.2826 0.2852	0.2952	0.3059	0.3028	Ave		0.2936				6.3		15.0			
Tetrachloroethene	0.3319 0.2803	0.3226 0.3116	0.3141	0.3131	0.3340	Ave		0.3154				5.7		15.0			
1,3-Dichloropropane	0.5785 0.4795	0.5294 0.5207	0.5495	0.5215	0.5418	Ave		0.5316				5.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.1190 0.1521	0.1156 0.1740	0.1460	0.1462	0.1624	Ave		0.1450				14.7		15.0			
Chlorodibromomethane	0.2446 0.2640	0.2532 0.3169	0.2649	0.2791	0.2990	Ave		0.2745				9.4		15.0			
Ethylene Dibromide	0.2610 0.2534	0.2533 0.2779	0.2676	0.2678	0.2833	Ave		0.2663				4.3		15.0			
Chlorobenzene	1.0991 0.9129	1.0431 1.0105	0.9864	1.0319	1.0400	Ave		1.0177			0.3000	5.7		15.0			
1,1,1,2-Tetrachloroethane	0.3266 0.2965	0.3082 0.3352	0.3395	0.3135	0.3394	Ave		0.3227				5.2		15.0			
Ethylbenzene	0.4480 0.5098	0.4843 0.5456	0.4961	0.5231	0.5683	Ave		0.5108				7.8		15.0			
m-Xylene & p-Xylene	0.5488 0.6313	0.5794 0.7017	0.6446	0.6512	0.7043	Ave		0.6374				9.1		15.0			
o-Xylene	0.4367 0.5958	0.5291 0.6552	0.6006	0.5980	0.6702	Ave		0.5836				13.6		15.0			
Styrene	0.8124 1.0515	0.8425 1.1515	1.0382	1.0503	1.1390	Ave		1.0122				13.2		15.0			
Bromoform	0.1201 0.1486	0.1580 0.1801	0.1516	0.1523	0.1538	Ave		0.1521			0.1000	11.6		15.0			
Isopropylbenzene	1.2463 1.6134	1.3660 1.8059	1.5332	1.6088	1.7412	Ave		1.5593				12.7		15.0			
1,1,2,2-Tetrachloroethane	0.5699 0.5355	0.6126 0.5562	0.5936	0.5848	0.6184	Ave		0.5816			0.3000	5.1		15.0			
Bromobenzene	0.7449 0.7066	0.7148 0.7400	0.7281	0.7577	0.7905	Ave		0.7404				3.8		15.0			
1,2,3-Trichloropropane	0.1945 0.1864	0.2042 0.2017	0.2013	0.1974	0.2102	Ave		0.1994				3.8		15.0			
trans-1,4-Dichloro-2-butene	0.1391 0.1810	0.1977 0.2034	0.1531	0.1826	0.2105	Ave		0.1811				14.6		15.0			
N-Propylbenzene	0.6023 0.8066	0.6540 0.8493	0.7976	0.8115	0.8870	Ave		0.7726				13.5		15.0			
2-Chlorotoluene	0.6364 0.6679	0.6277 0.7078	0.6881	0.7245	0.7549	Ave		0.6868				6.7		15.0			
1,3,5-Trimethylbenzene	1.7680 2.6198	2.1940 2.7778	2.5705	2.6373	2.8574	Lin1	-0.983	2.7876							0.9990		0.9900
4-Chlorotoluene	0.5963 0.7101	0.7407 0.7505	0.7730	0.7649	0.8224	Ave		0.7368				9.6		15.0			
tert-Butylbenzene	1.6775 2.1212	1.7220 2.2399	1.9496	2.0173	2.3206	Ave		2.0069				12.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	1.8650 2.7058	2.3084 2.8947	2.6065	2.7969	3.0320	Lin1	-0.995	2.9034							0.9980		0.9900
sec-Butylbenzene	2.2995 3.0120	2.6400 3.2183	2.8522	2.9166	3.3740	Ave		2.9018				12.3		15.0			
1,3-Dichlorobenzene	1.3945 1.3861	1.5207 1.4444	1.5047	1.5791	1.6203	Ave		1.4928				6.0		15.0			
4-Isopropyltoluene	1.8134 2.5811	2.1179 2.7275	2.4397	2.5583	2.8643	Ave		2.4432				14.9		15.0			
1,4-Dichlorobenzene	1.6440 1.4284	1.6328 1.5041	1.6000	1.6597	1.6602	Ave		1.5899				5.6		15.0			
n-Butylbenzene	1.6182 2.2463	1.7711 2.3833	1.9359	2.1301	2.4211	Ave		2.0723				14.8		15.0			
1,2-Dichlorobenzene	1.4780 1.3118	1.4320 1.3461	1.4233	1.4674	1.5037	Ave		1.4232				5.0		15.0			
1,2-Dibromo-3-Chloropropane	0.0766 0.0782	0.0784 0.0879	0.0651	0.0770	0.0844	Ave		0.0783				9.2		15.0			
1,2,4-Trichlorobenzene	0.6336 0.7725	0.6893 0.8266	0.6866	0.7103	0.8189	Ave		0.7340				10.0		15.0			
Hexachlorobutadiene	0.5398 0.3907	0.4447 0.3963	0.4132	0.4423	0.4550	Ave		0.4403				11.5		15.0			
Naphthalene	0.8186 1.6356	0.8743 1.8442	1.1273	1.2006	1.6068	Lin1	-1.617	1.7921							0.9920		0.9900
1,2,3-Trichlorobenzene	0.6361 0.7522	0.6429 0.7626	0.6762	0.7357	0.8361	Ave		0.7203				10.1		15.0			
Dibromofluoromethane (Surr)	0.2307 0.2391	0.2265 0.2404	0.2332	0.2389	0.2304	Ave		0.2342				2.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3485 0.3192	0.3613 0.3250	0.3433	0.3465	0.3046	Ave		0.3355				5.9		15.0			
Toluene-d8 (Surr)	1.0951 1.3757	1.2077 1.4160	1.3147	1.3327	1.3299	Ave		1.2960				8.4		15.0			
4-Bromofluorobenzene (Surr)	0.3782 0.5236	0.4392 0.5379	0.4930	0.4847	0.5028	Ave		0.4799				11.4		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-385628/8	UXR8416.D
Level 2	STD8260 240-385628/7	UXR8415.D
Level 3	STD8260 240-385628/6	UXR8414.D
Level 4	STD8260 240-385628/5	UXR8413.D
Level 5	STD8260 240-385628/4	UXR8412.D
Level 6	STD8260 240-385628/3	UXR8411.D
Level 7	STD8260 240-385628/2	UXR8410.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	64507 1268617	119860 2476004	258464	280838	625256	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloromethane	FB	Ave	67774 1461109	152820 2678751	282409	371002	710673	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl chloride	FB	Ave	64189 1237030	118524 2299345	244701	299622	599148	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Butadiene	FB	Ave	66461 1334883	142594 2610578	275876	325927	668126	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromomethane	FB	Ave	38742 631835	66974 1211662	137998	184145	342112	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Chloroethane	FB	Ave	37516 680414	67614 1286980	145171	173088	353611	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	85983 1644468	166303 3107566	337097	424630	828429	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	84634 1710678	169033 3266898	332934	400443	823724	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl ether	FB	Ave	40765 753796	80407 1496040	172996	216439	429216	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acrolein	FB	Ave	30861 684707	65726 1271872	124923	162734	323156	5.00 100	10.0 200	20.0	25.0	50.0
1,1-Dichloroethene	FB	Ave	46600 806911	88923 1611946	172504	218830	458558	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	31490 625291	64673 1250091	129973	166755	340824	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Acetone	FB	Lin1	36137 372375	61721 768442	99476	111481	207599	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Iodomethane	FB	Ave	66178 1149721	119539 2320944	243465	319089	646705	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon disulfide	FB	Ave	122909 2290492	235359 4849842	483194	626780	1262893	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	23394 477003	48063 965733	92192	114515	267175	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methyl acetate	FB	Ave	56787 1062938	121593 2157169	244028	313110	609166	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Methylene Chloride	FB	Lin1	71166 861669	114844 1707929	207045	267981	493349	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Methyl-2-propanol	FB	Ave	18508 372668	39392 507378	61505	101289	178174	10.0 200	20.0 400	40.0	50.0	100
Acrylonitrile	FB	Ave	152367 2823291	304975 5638398	634851	782545	1598662	10.0 200	20.0 400	40.0	50.0	100
Methyl tert-butyl ether	FB	Ave	91689 1789494	185953 3613067	375428	492303	990260	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	48601 855282	87495 1678615	177835	248253	473108	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexane	FB	Ave	11045 231189	21223 490034	46900	56672	132656	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloroethane	FB	Ave	85962 1577223	167899 3182876	351589	456954	908980	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Vinyl acetate	FB	Ave	55932 1345313	117820 2822126	261231	330216	699913	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	9662 167637	19554 318872	34199	42799	90291	1.00 20.0	2.00 40.0	4.00	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	52650 908038	101747 1881596	201315	257971	525043	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	35491 584472	63729 1122061	113198	156096	310821	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorobromomethane	FB	Ave	22040 396423	42196 815604	85450	113112	226551	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrahydrofuran	FB	Ave	18413 344994	38216 703892	71223	87515	191578	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chloroform	FB	Ave	86388 1541518	161169 3140883	345926	448024	892368	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	61031 1183624	113050 2380899	256273	316855	666591	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Cyclohexane	FB	Ave	70792 1774937	151189 3596385	353729	420655	976937	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	57527 1188509	117719 2376903	253919	323959	669412	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Carbon tetrachloride	FB	Ave	51487 1055760	104091 2204866	220856	272347	590220	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isobutyl alcohol	CBNZ d5	Qua	23516 469102	52519 692186	70178	123989	225260	25.0 500	50.0 1000	100	125	250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	191632 3580478	381956 7318443	802209	1024763	2033550	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane	FB	Ave	75635 1347535	142861 2707925	286584	379289	745794	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Heptane	FB	Ave	10149 233615	17937 459181	42278	54315	129356	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Trichloroethene	FB	Ave	46963 860299	96395 1751832	201242	246601	493505	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Methylcyclohexane	FB	Ave	58896 1435254	121581 2984075	281920	339130	796114	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	51066 900308	92273 1774489	194254	254673	487049	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dibromomethane	FB	Ave	27189 461752	48451 941143	100899	133132	265061	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,4-Dioxane	FB	Ave	7092 186326	16396 +++++	28282	49729	83603	20.0 400	40.0 +++++	80.0	100	200
Dichlorobromomethane	FB	Ave	50370 1084209	103002 2288154	224907	285784	583903	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	37026 925764	69459 1962028	156817	219452	501890	2.00 40.0	4.00 80.0	8.00	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	48401 1201461	96283 2501845	221604	291082	618462	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	42952 1209779	103397 2556182	226399	289939	661267	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Toluene	CBNZ d5	Ave	176669 3895146	374652 7958161	824876	1025973	2154041	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	42361 1027547	81657 2223069	189445	242101	544014	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	30661 825605	62344 1776902	139148	184437	419557	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	38677 673403	69245 1372682	150113	197588	386499	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	40101 717027	79035 1499784	159689	202280	426274	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	69898 1226905	129726 2506036	279388	336864	691557	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Hexanone	CBNZ d5	Ave	28760 778439	56648 1674664	148454	188907	414493	2.00 40.0	4.00 80.0	8.00	10.0	20.0
Chlorodibromomethane	CBNZ d5	Ave	29554 675573	62037 1525161	134713	180281	381660	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylene Dibromide	CBNZ d5	Ave	31537 648417	62068 1337338	136045	172986	361638	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	132805 2335588	255579 4863006	501558	666613	1327481	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	39457 758679	75523 1613321	172611	202546	433227	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	54132 1304430	118675 2625786	252248	337933	725443	1.00 20.0	2.00 40.0	4.00	5.00	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	66308 1615205	141980 3377136	327779	420690	899057	1.00 20.0	2.00 40.0	4.00	5.00	10.0
o-Xylene	CBNZ d5	Ave	52769 1524293	129640 3153041	305396	386311	855424	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Styrene	CBNZ d5	Ave	98156 2690255	206431 5541840	527860	678497	1453887	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromoform	CBNZ d5	Ave	14512 380085	38707 866679	77073	98413	196275	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Isopropylbenzene	CBNZ d5	Ave	150588 4127840	334710 8691256	779570	1039318	2222518	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	37017 729011	80489 1470957	164911	201864	412733	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Bromobenzene	DCBd 4	Ave	48381 961926	93909 1956973	202287	261544	527551	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	12632 253771	26824 533351	55912	68129	140303	1.00 20.0	2.00 40.0	4.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	9037 246369	25968 537989	42531	63038	140457	1.00 20.0	2.00 40.0	4.00	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	39123 1097993	85919 2246139	221583	280098	591960	1.00 20.0	2.00 40.0	4.00	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	41339 909255	82461 1871886	191171	250065	503816	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Lin1	114838 3566251	288240 7346306	714102	910286	1906940	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	38734 966585	97315 1984812	214734	264005	548851	1.00 20.0	2.00 40.0	4.00	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	108961 2887571	226231 5923776	541619	696300	1548713	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Lin1	121136 3683345	303268 7655457	724104	965376	2023471	1.00 20.0	2.00 40.0	4.00	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	149360 4100206	346846 8511268	792377	1006692	2251713	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	90577 1886869	199787 3819907	418020	545036	1081355	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	117786 3513614	278244 7213350	677762	883040	1911581	1.00 20.0	2.00 40.0	4.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1 Analy Batch No.: 385628

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/11/2019 17:37 Calibration End Date: 06/11/2019 20:00 Calibration ID: 51508

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	106781 1944524	214519 3977831	444502	572876	1107986	1.00 20.0	2.00 40.0	4.00	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	105109 3057877	232683 6302964	537824	735232	1615817	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	96002 1785735	188135 3560042	395418	506484	1003564	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	4978 106515	10306 232580	18080	26583	56349	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	41155 1051592	90553 2186184	190757	245169	546546	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	35063 531786	58420 1048199	114781	152669	303677	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Naphthalene	DCBd 4	Lin1	53168 2226488	114863 4877293	313179	414415	1072320	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	41317 1023954	84465 2016908	187868	253927	557998	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	39028 858871	79950 1651180	167466	216033	422100	1.00 20.0	2.00 40.0	4.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	58951 1146449	127531 2231889	246492	313361	558133	1.00 20.0	2.00 40.0	4.00	5.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	132316 3519672	295907 6814862	668465	860963	1697521	1.00 20.0	2.00 40.0	4.00	5.00	10.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	45699 1339738	107617 2588879	250690	313145	641849	1.00 20.0	2.00 40.0	4.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8410.D
Lims ID: STD8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-Jun-2019 17:37:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-002
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:07:07 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: williamsla Date: 12-Jun-2019 12:15:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1716884	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1203149	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	661172	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	94	1651180	40.0	41.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.491	-0.001	99	2231889	40.0	38.8	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	6814862	40.0	43.7	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	88	2588879	40.0	44.8	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	2476004	40.0	41.3	
10 Chloromethane	50	1.885	1.886	-0.001	99	2678751	40.0	38.7	
11 Vinyl chloride	62	2.004	2.004	0.000	97	2299345	40.0	39.2	
119 Butadiene	54	2.040	2.040	0.000	91	2610578	40.0	40.0	
12 Bromomethane	94	2.348	2.360	-0.012	93	1211662	40.0	36.5	
13 Chloroethane	64	2.467	2.467	0.000	98	1286980	40.0	38.1	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	3107566	40.0	38.6	
15 Trichlorofluoromethane	101	2.704	2.716	-0.012	99	3266898	40.0	40.5	
16 Ethyl ether	59	2.976	2.988	-0.012	96	1496040	40.0	37.9	
18 Acrolein	56	3.119	3.119	0.000	99	1271872	200.0	203.4	
19 1,1-Dichloroethene	96	3.202	3.202	0.000	95	1611946	40.0	38.2	
20 1,1,2-Trichloro-1,2,2-trif	151	3.225	3.226	-0.001	94	1250091	40.0	39.9	
21 Acetone	43	3.273	3.273	0.000	99	768442	80.0	83.0	
22 Iodomethane	142	3.356	3.356	0.000	98	2320944	40.0	38.9	
23 Carbon disulfide	76	3.415	3.415	0.000	100	4849842	40.0	41.3	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	965733	40.0	41.5	
26 Methyl acetate	43	3.569	3.569	0.000	99	2157169	80.0	76.2	
27 Methylene Chloride	84	3.664	3.664	0.000	98	1707929	40.0	40.3	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	87	507378	400.0	298.3	
29 Acrylonitrile	53	3.890	3.901	-0.011	99	5638398	400.0	383.6	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	96	3613067	40.0	39.8	
31 trans-1,2-Dichloroethene	96	3.901	3.913	-0.012	95	1678615	40.0	38.1	
32 Hexane	86	4.139	4.139	0.000	91	490034	40.0	43.3	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	97	3182876	40.0	38.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.316	4.317	-0.001	97	2822126	40.0	44.9	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	55	318872	40.0	37.2	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	1881596	40.0	38.8	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	100	1122061	80.0	75.2	
44 Chlorobromomethane	128	5.004	5.004	0.000	95	815604	40.0	39.3	
45 Tetrahydrofuran	42	5.040	5.040	0.000	96	703892	80.0	80.1	
46 Chloroform	83	5.064	5.064	0.000	94	3140883	40.0	38.6	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	2380899	40.0	40.0	
48 Cyclohexane	56	5.265	5.265	0.000	93	3596385	40.0	43.7	
50 Carbon tetrachloride	117	5.360	5.360	0.000	89	2204866	40.0	41.9	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	92	2376903	40.0	39.9	
51 Isobutyl alcohol	41	5.431	5.431	0.000	92	692186	1000.0	992.8	
52 Benzene	78	5.538	5.538	0.000	97	7318443	40.0	39.1	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	2707925	40.0	38.8	
55 n-Heptane	100	5.728	5.728	0.000	95	459181	40.0	43.3	
57 Trichloroethene	130	6.083	6.083	0.000	97	1751832	40.0	38.2	
59 Methylcyclohexane	83	6.249	6.249	0.000	93	2984075	40.0	44.6	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	1774489	40.0	38.3	
62 Dibromomethane	93	6.392	6.392	0.000	94	941143	40.0	38.5	
63 1,4-Dioxane	88		6.404				ND	ND	U
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	2288154	40.0	42.9	
66 2-Chloroethyl vinyl ether	63	6.759	6.771	-0.012	92	1962028	80.0	94.4	
67 cis-1,3-Dichloropropene	75	6.902	6.914	-0.012	93	2501845	40.0	45.8	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	97	2556182	80.0	92.5	
69 Toluene	91	7.210	7.210	0.000	97	7958161	40.0	41.8	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	95	2223069	40.0	47.5	
71 Ethyl methacrylate	69	7.447	7.447	0.000	92	1776902	40.0	49.5	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	93	1372682	40.0	38.9	
73 Tetrachloroethene	164	7.696	7.696	0.000	96	1499784	40.0	39.5	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	96	2506036	40.0	39.2	
76 2-Hexanone	43	7.779	7.779	0.000	97	1674664	80.0	96.0	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	1525161	40.0	46.2	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	1337338	40.0	41.7	
81 Chlorobenzene	112	8.503	8.503	-0.001	93	4863006	40.0	39.7	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	93	1613321	40.0	41.6	
83 Ethylbenzene	106	8.586	8.586	0.000	99	2625786	40.0	42.7	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	3377136	40.0	44.0	
85 o-Xylene	106	9.072	9.072	0.000	98	3153041	40.0	44.9	
86 Styrene	104	9.084	9.084	0.000	93	5541840	40.0	45.5	
87 Bromoform	173	9.285	9.285	0.000	97	866679	40.0	47.4	
89 Isopropylbenzene	105	9.416	9.416	0.000	96	8691256	40.0	46.3	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	96	1470957	40.0	38.3	
92 Bromobenzene	156	9.736	9.736	0.000	98	1956973	40.0	40.0	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	83	533351	40.0	40.5	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	76	537989	40.0	44.9	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	2246139	40.0	44.0	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	1871886	40.0	41.2	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	92	7346306	40.0	40.2	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	1984812	40.0	40.7	
99 tert-Butylbenzene	119	10.305	10.305	0.000	92	5923776	40.0	44.6	
101 1,2,4-Trimethylbenzene	105	10.352	10.353	-0.001	96	7655457	40.0	40.2	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	8511268	40.0	44.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	3819907	40.0	38.7	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	7213350	40.0	44.7	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	3977831	40.0	37.8	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	6302964	40.0	46.0	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	96	3560042	40.0	37.8	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	82	232580	40.0	45.0	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	95	2186184	40.0	45.0	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	96	1048199	40.0	36.0	
115 Naphthalene	128	12.985	12.985	0.000	99	4877293	40.0	42.1	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	97	2016908	40.0	42.4	
S 128 1,2-Dichloroethene, Total	96				0			76.8	
S 129 1,3-Dichloropropene, Total	75				0			93.4	
S 130 Xylenes, Total	106				0		80.0	88.9	
S 131 Trihalomethanes, Total	1				0		160.0	175.1	
S 158 Total BTEX	1		0.000				200.0	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

Reagents:

VMAROLISTDW_00300	Amount Added:	32.00	Units: uL
VMRPRIMW_00338	Amount Added:	32.00	Units: uL
VMRGAS_00296	Amount Added:	32.00	Units: uL
vm50ss_00366	Amount Added:	32.00	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL

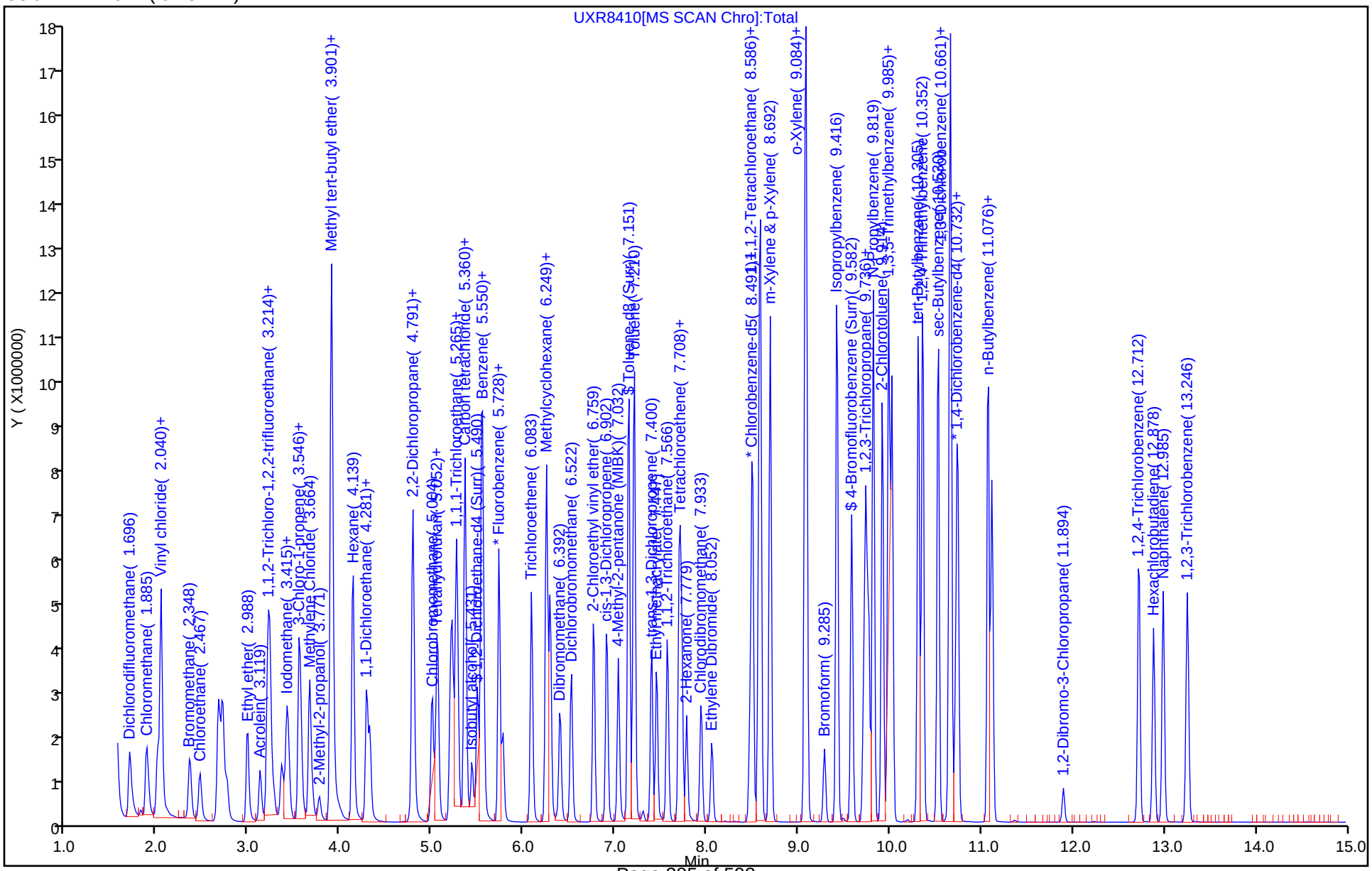
Report Date: 12-Jun-2019 13:07:10 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8410.D

Injection Date:	11-Jun-2019 17:37:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L7			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



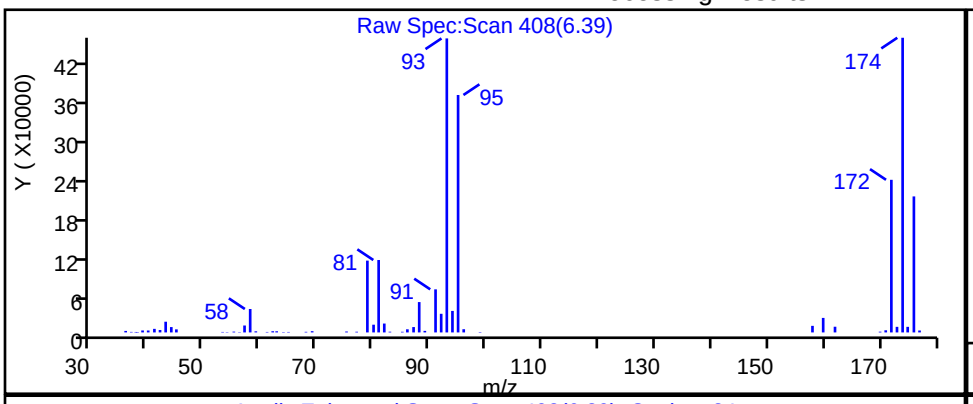
User Disabled Compound Report

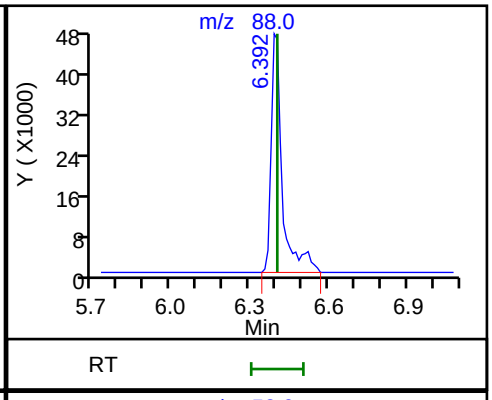
Eurofins TestAmerica, Canton

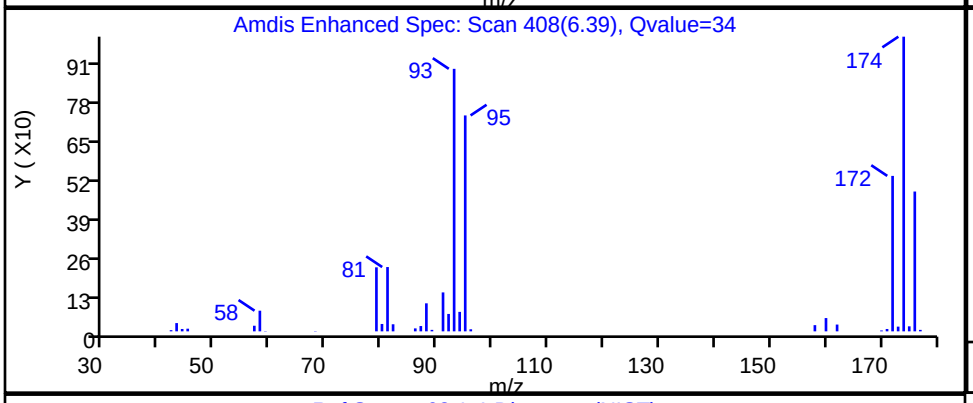
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Injection Date: 11-Jun-2019 17:37:30 Instrument ID: A3UX17
Lims ID: STD8260 L7
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_17 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

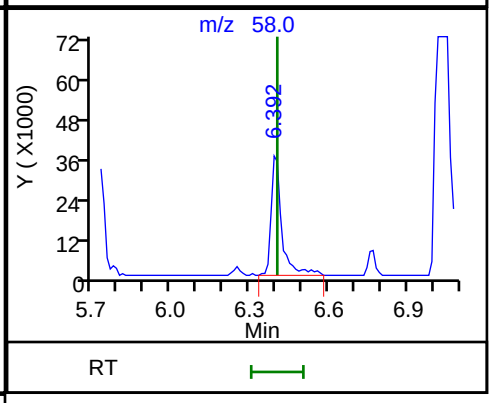
63 1,4-Dioxane, CAS: 123-91-1

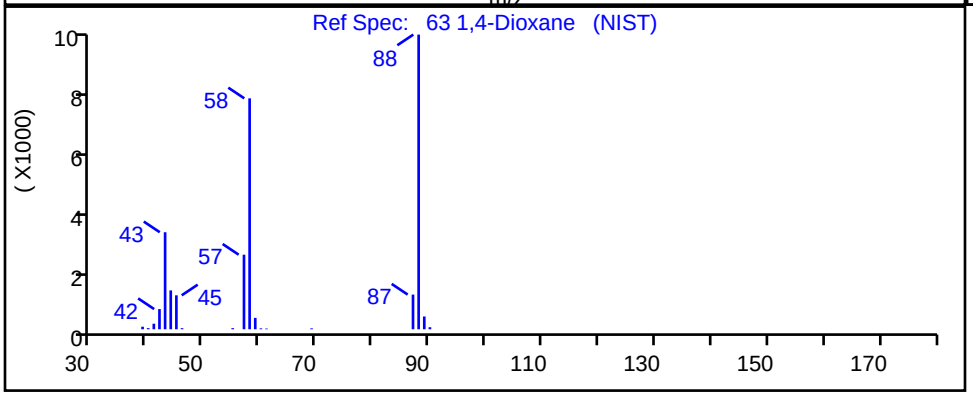
Processing Results











RT	Mass	Response	Amount
6.39	88.00	139467	378.3832
6.39	58.00	104245	

Reviewer: williamsla, 12-Jun-2019 12:18:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8411.D
Lims ID: STD8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-Jun-2019 18:01:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-003
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:07:20 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1795885	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1279258	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	680642	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	93	858871	20.0	20.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.491	-0.001	98	1146449	20.0	19.0	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	3519672	20.0	21.2	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	1339738	20.0	21.8	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	1268617	20.0	20.2	
10 Chloromethane	50	1.885	1.886	-0.001	99	1461109	20.0	20.2	
11 Vinyl chloride	62	2.004	2.004	0.000	97	1237030	20.0	20.1	
119 Butadiene	54	2.040	2.040	0.000	90	1334883	20.0	19.6	
12 Bromomethane	94	2.348	2.360	-0.012	93	631835	20.0	18.2	
13 Chloroethane	64	2.466	2.467	-0.001	99	680414	20.0	19.3	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	98	1644468	20.0	19.5	
15 Trichlorofluoromethane	101	2.715	2.716	-0.001	98	1710678	20.0	20.3	
16 Ethyl ether	59	2.988	2.988	0.000	93	753796	20.0	18.2	
18 Acrolein	56	3.119	3.119	0.000	98	684707	100.0	104.7	
19 1,1-Dichloroethene	96	3.202	3.202	0.000	95	806911	20.0	18.3	
20 1,1,2-Trichloro-1,2,2-trif	151	3.225	3.226	-0.001	94	625291	20.0	19.1	
21 Acetone	43	3.273	3.273	0.000	100	372375	40.0	37.3	
22 Iodomethane	142	3.356	3.356	0.000	98	1149721	20.0	18.4	
23 Carbon disulfide	76	3.415	3.415	0.000	100	2290492	20.0	18.6	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	477003	20.0	19.6	
26 Methyl acetate	43	3.569	3.569	0.000	99	1062938	40.0	35.9	
27 Methylene Chloride	84	3.664	3.664	0.000	98	861669	20.0	19.1	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	91	372668	200.0	209.4	
29 Acrylonitrile	53	3.901	3.901	0.000	99	2823291	200.0	183.6	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	94	1789494	20.0	18.8	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	96	855282	20.0	18.5	
32 Hexane	86	4.139	4.139	-0.001	93	231189	20.0	19.5	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	97	1577223	20.0	18.2	
34 Vinyl acetate	43	4.316	4.317	-0.001	97	1345313	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.791	4.791	0.000	56	167637	20.0	18.7	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	908038	20.0	17.9	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	584472	40.0	37.5	
44 Chlorobromomethane	128	5.004	5.004	0.000	96	396423	20.0	18.2	
45 Tetrahydrofuran	42	5.040	5.040	0.000	96	344994	40.0	37.6	
46 Chloroform	83	5.063	5.064	-0.001	93	1541518	20.0	18.1	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	1183624	20.0	19.0	
48 Cyclohexane	56	5.265	5.265	0.000	93	1774937	20.0	20.6	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	93	1188509	20.0	19.1	
50 Carbon tetrachloride	117	5.360	5.360	0.000	88	1055760	20.0	19.2	
51 Isobutyl alcohol	41	5.431	5.431	0.000	91	469102	500.0	521.7	
52 Benzene	78	5.538	5.538	0.000	97	3580478	20.0	18.3	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	1347535	20.0	18.5	
55 n-Heptane	100	5.728	5.728	0.000	94	233615	20.0	21.1	
57 Trichloroethene	130	6.083	6.083	0.000	97	860299	20.0	18.0	
59 Methylcyclohexane	83	6.249	6.249	0.000	94	1435254	20.0	20.5	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	900308	20.0	18.6	
62 Dibromomethane	93	6.392	6.392	0.000	95	461752	20.0	18.1	
63 1,4-Dioxane	88	6.403	6.404	-0.001	45	186326	400.0	444.3	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	1084209	20.0	19.5	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	925764	40.0	42.6	
67 cis-1,3-Dichloropropene	75	6.913	6.914	-0.001	93	1201461	20.0	21.0	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	96	1209779	40.0	41.9	
69 Toluene	91	7.210	7.210	0.000	97	3895146	20.0	19.3	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	96	1027547	20.0	20.7	
71 Ethyl methacrylate	69	7.459	7.447	0.012	93	825605	20.0	21.6	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	93	673403	20.0	17.9	
73 Tetrachloroethene	164	7.696	7.696	0.000	96	717027	20.0	17.8	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	96	1226905	20.0	18.0	
76 2-Hexanone	43	7.779	7.779	0.000	96	778439	40.0	42.0	
78 Chlorodibromomethane	129	7.933	7.933	0.000	91	675573	20.0	19.2	
79 Ethylene Dibromide	107	8.052	8.052	0.000	98	648417	20.0	19.0	
81 Chlorobenzene	112	8.502	8.503	-0.001	93	2335588	20.0	17.9	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	92	758679	20.0	18.4	
83 Ethylbenzene	106	8.585	8.586	-0.001	99	1304430	20.0	20.0	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	1615205	20.0	19.8	
85 o-Xylene	106	9.072	9.072	0.000	95	1524293	20.0	20.4	
86 Styrene	104	9.084	9.084	0.000	95	2690255	20.0	20.8	
87 Bromoform	173	9.285	9.285	0.000	96	380085	20.0	19.5	
89 Isopropylbenzene	105	9.416	9.416	0.000	96	4127840	20.0	20.7	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	729011	20.0	18.4	
92 Bromobenzene	156	9.736	9.736	0.000	97	961926	20.0	19.1	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	84	253771	20.0	18.7	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	71	246369	20.0	20.0	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	1097993	20.0	20.9	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	909255	20.0	19.5	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	92	3566251	20.0	19.1	
98 4-Chlorotoluene	126	10.020	10.020	0.000	99	966585	20.0	19.3	
99 tert-Butylbenzene	119	10.317	10.305	0.012	92	2887571	20.0	21.1	
101 1,2,4-Trimethylbenzene	105	10.352	10.353	-0.001	96	3683345	20.0	19.0	
102 sec-Butylbenzene	105	10.530	10.530	0.000	95	4100206	20.0	20.8	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	1886869	20.0	18.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	3513614	20.0	21.1	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	1944524	20.0	18.0	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	3057877	20.0	21.7	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	96	1785735	20.0	18.4	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	78	106515	20.0	20.0	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	95	1051592	20.0	21.0	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	96	531786	20.0	17.7	
115 Naphthalene	128	12.985	12.985	0.000	99	2226488	20.0	19.2	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	96	1023954	20.0	20.9	
S 128 1,2-Dichloroethene, Total	96				0			36.4	
S 129 1,3-Dichloropropene, Total	75				0			41.7	
S 130 Xylenes, Total	106				0		40.0	40.2	
S 131 Trihalomethanes, Total	1				0		80.0	76.3	
S 158 Total BTEX	1		0.000				100.0	ND	

Reagents:

VMAROLISTDW_00300	Amount Added:	16.00	Units: uL
VMRPRIMW_00338	Amount Added:	16.00	Units: uL
VMRGAS_00296	Amount Added:	16.00	Units: uL
vm50ss_00366	Amount Added:	16.00	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL

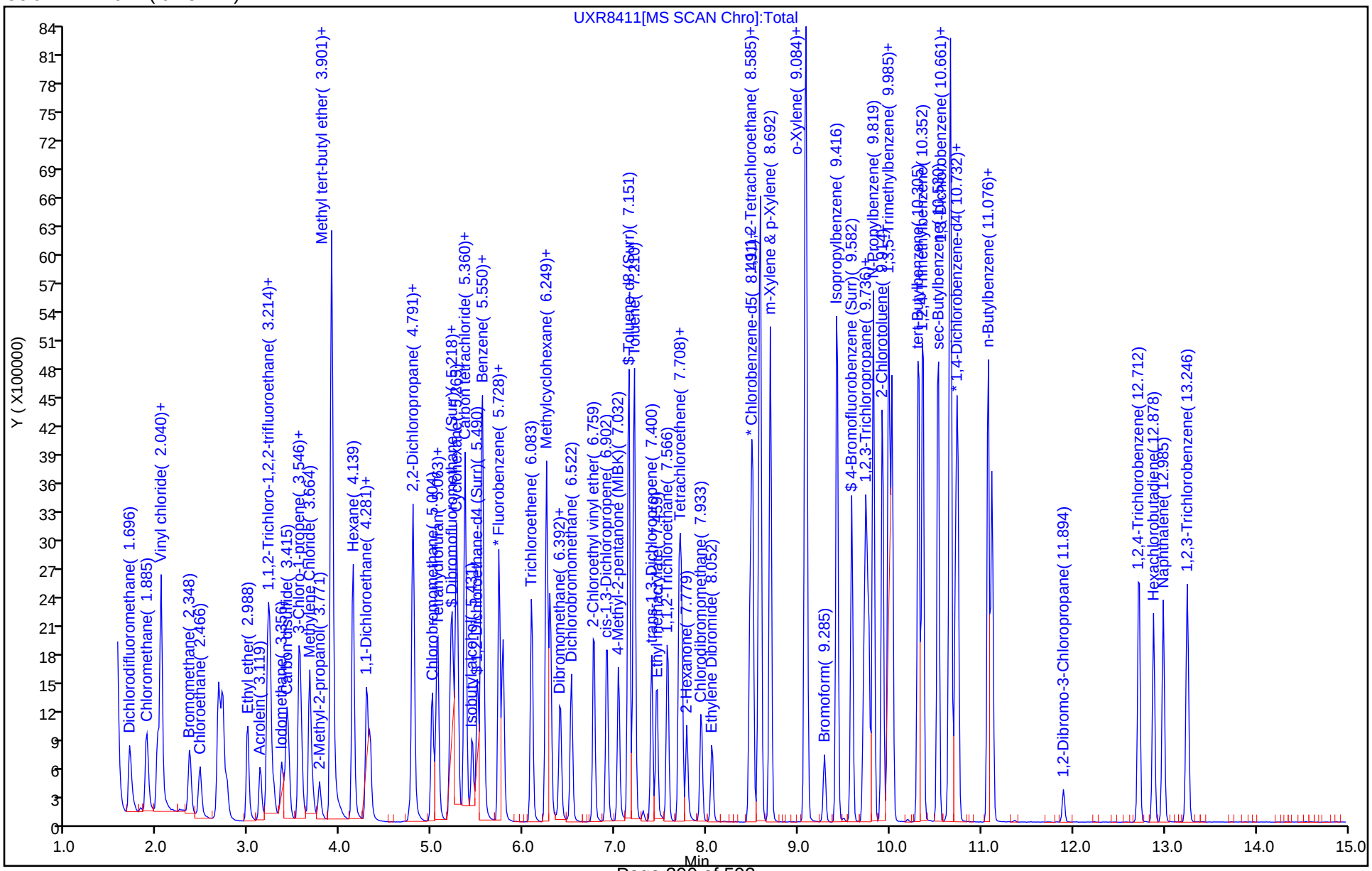
Report Date: 12-Jun-2019 13:07:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8411.D

Injection Date:	11-Jun-2019 18:01:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L6			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8412.D
Lims ID: STD8260 L5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 11-Jun-2019 18:25:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-004
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:07:34 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: williamsla Date: 12-Jun-2019 11:48:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1832420	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1276440	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	667379	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	93	422100	10.0	9.84	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.491	0.000	98	558133	10.0	9.08	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	1697521	10.0	10.3	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	641849	10.0	10.5	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	625256	10.0	9.76	
10 Chloromethane	50	1.886	1.886	0.000	99	710673	10.0	9.62	
11 Vinyl chloride	62	2.004	2.004	0.000	97	599148	10.0	9.56	
119 Butadiene	54	2.040	2.040	0.000	89	668126	10.0	9.60	
12 Bromomethane	94	2.360	2.360	0.000	91	342112	10.0	9.65	
13 Chloroethane	64	2.467	2.467	0.000	99	353611	10.0	9.81	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	828429	10.0	9.65	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	823724	10.0	9.57	
16 Ethyl ether	59	2.988	2.988	0.000	95	429216	10.0	10.2	
18 Acrolein	56	3.119	3.119	0.000	99	323156	50.0	48.4	
19 1,1-Dichloroethene	96	3.202	3.202	0.000	95	458558	10.0	10.2	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.226	0.000	93	340824	10.0	10.2	
21 Acetone	43	3.273	3.273	0.000	100	207599	20.0	19.4	
22 Iodomethane	142	3.356	3.356	0.000	98	646705	10.0	10.2	
23 Carbon disulfide	76	3.415	3.415	0.000	100	1262893	10.0	10.1	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	91	267175	10.0	10.8	
26 Methyl acetate	43	3.569	3.569	0.000	99	609166	20.0	20.2	
27 Methylene Chloride	84	3.664	3.664	0.000	99	493349	10.0	10.4	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	90	178174	100.0	98.1	
29 Acrylonitrile	53	3.901	3.901	0.000	100	1598662	100.0	101.9	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	95	990260	10.0	10.2	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	95	473108	10.0	10.1	
32 Hexane	86	4.139	4.139	0.000	93	132656	10.0	11.0	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	97	908980	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.317	4.317	0.000	97	699913	10.0	10.4	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	54	90291	10.0	9.86	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	525043	10.0	10.1	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	310821	20.0	19.5	
44 Chlorobromomethane	128	5.004	5.004	0.000	94	226551	10.0	10.2	
45 Tetrahydrofuran	42	5.040	5.040	0.000	93	191578	20.0	20.4	
46 Chloroform	83	5.064	5.064	0.000	93	892368	10.0	10.3	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	666591	10.0	10.5	
48 Cyclohexane	56	5.265	5.265	0.000	93	976937	10.0	11.1	
50 Carbon tetrachloride	117	5.360	5.360	0.000	86	590220	10.0	10.5	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	92	669412	10.0	10.5	
51 Isobutyl alcohol	41	5.431	5.431	0.000	90	225260	250.0	232.4	
52 Benzene	78	5.538	5.538	0.000	98	2033550	10.0	10.2	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	745794	10.0	10.0	
55 n-Heptane	100	5.728	5.728	0.000	94	129356	10.0	11.4	
57 Trichloroethene	130	6.083	6.083	0.000	97	493505	10.0	10.1	
59 Methylcyclohexane	83	6.249	6.249	0.000	95	796114	10.0	11.1	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	487049	10.0	9.84	
62 Dibromomethane	93	6.392	6.392	0.000	94	265061	10.0	10.2	
63 1,4-Dioxane	88	6.404	6.404	0.000	43	83603	200.0	195.4	
64 Dichlorobromomethane	83	6.522	6.522	0.000	98	583903	10.0	10.3	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	501890	20.0	22.6	
67 cis-1,3-Dichloropropene	75	6.914	6.914	0.000	93	618462	10.0	10.6	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	97	661267	20.0	22.4	
69 Toluene	91	7.210	7.210	0.000	98	2154041	10.0	10.7	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	96	544014	10.0	11.0	
71 Ethyl methacrylate	69	7.447	7.447	0.000	92	419557	10.0	11.0	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	94	386499	10.0	10.3	
73 Tetrachloroethene	164	7.696	7.696	0.000	96	426274	10.0	10.6	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	95	691557	10.0	10.2	
76 2-Hexanone	43	7.779	7.779	0.000	94	414493	20.0	22.4	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	381660	10.0	10.9	
79 Ethylene Dibromide	107	8.052	8.052	0.000	98	361638	10.0	10.6	
81 Chlorobenzene	112	8.503	8.503	0.000	93	1327481	10.0	10.2	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	92	433227	10.0	10.5	
83 Ethylbenzene	106	8.586	8.586	0.000	99	725443	10.0	11.1	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	899057	10.0	11.1	
85 o-Xylene	106	9.072	9.072	0.000	98	855424	10.0	11.5	
86 Styrene	104	9.084	9.084	0.000	93	1453887	10.0	11.3	
87 Bromoform	173	9.285	9.285	0.000	96	196275	10.0	10.1	
89 Isopropylbenzene	105	9.416	9.416	0.000	96	2222518	10.0	11.2	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	412733	10.0	10.6	
92 Bromobenzene	156	9.736	9.736	0.000	97	527551	10.0	10.7	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	84	140303	10.0	10.5	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	68	140457	10.0	11.6	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	591960	10.0	11.5	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	503816	10.0	11.0	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	1906940	10.0	10.6	
98 4-Chlorotoluene	126	10.020	10.020	0.000	99	548851	10.0	11.2	
99 tert-Butylbenzene	119	10.305	10.305	0.000	92	1548713	10.0	11.6	
101 1,2,4-Trimethylbenzene	105	10.353	10.353	0.000	96	2023471	10.0	10.8	
102 sec-Butylbenzene	105	10.530	10.530	0.000	95	2251713	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	96	1081355	10.0	10.9	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	1911581	10.0	11.7	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	94	1107986	10.0	10.4	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	1615817	10.0	11.7	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	1003564	10.0	10.6	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	81	56349	10.0	10.8	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	95	546546	10.0	11.2	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	97	303677	10.0	10.3	
115 Naphthalene	128	12.985	12.985	0.000	99	1072320	10.0	9.87	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	96	557998	10.0	11.6	
S 130 Xylenes, Total	106				0		20.0	22.5	
S 131 Trihalomethanes, Total	1				0		40.0	41.5	
S 158 Total BTEX	1		0.000				50.0	ND	

Reagents:

VMAROLISTDW_00300	Amount Added:	8.00	Units: uL
VMRPRIMW_00338	Amount Added:	8.00	Units: uL
VMRGAS_00296	Amount Added:	8.00	Units: uL
vm50ss_00366	Amount Added:	8.00	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL

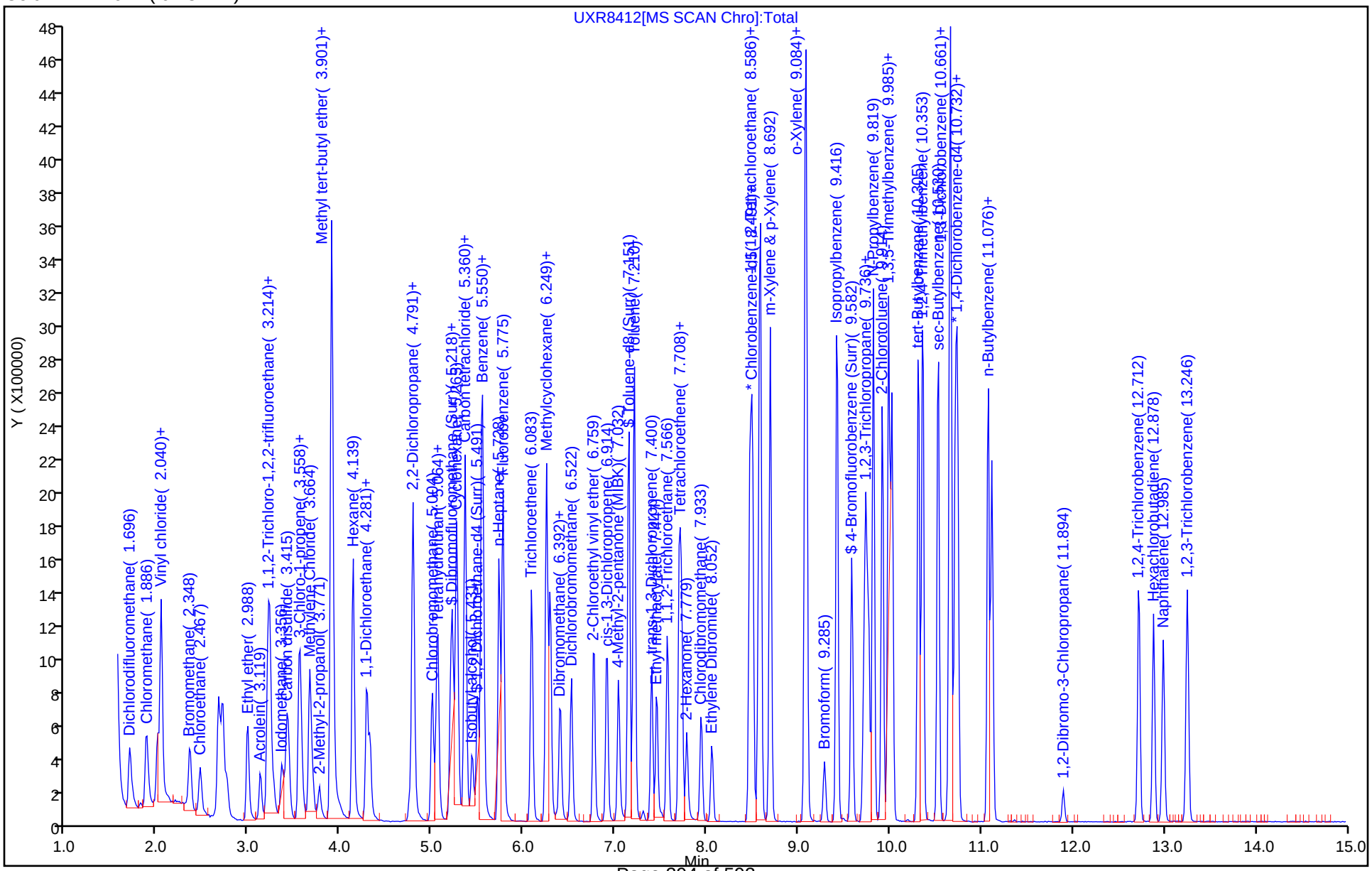
Report Date: 12-Jun-2019 13:07:37 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8412.D

Injection Date:	11-Jun-2019 18:25:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L5			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8413.D
Lims ID: STD8260 L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 11-Jun-2019 18:49:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-005
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:07:47 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: williamsla Date: 12-Jun-2019 11:58:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1808693	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1292019	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	690320	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.206	0.000	94	216033	5.00	5.10	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	97	313361	5.00	5.16	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	860963	5.00	5.14	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	88	313145	5.00	5.05	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	97	280838	5.00	4.44	
10 Chloromethane	50	1.885	1.885	0.000	99	371002	5.00	5.09	
11 Vinyl chloride	62	2.004	2.004	0.000	97	299622	5.00	4.84	
119 Butadiene	54	2.040	2.040	0.000	91	325927	5.00	4.75	
12 Bromomethane	94	2.360	2.360	0.000	92	184145	5.00	5.27	
13 Chloroethane	64	2.467	2.467	0.000	99	173088	5.00	4.87	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	424630	5.00	5.01	
15 Trichlorofluoromethane	101	2.704	2.704	0.000	98	400443	5.00	4.71	
16 Ethyl ether	59	2.988	2.988	0.000	94	216439	5.00	5.20	
18 Acrolein	56	3.119	3.119	0.000	99	162734	25.0	24.7	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	96	218830	5.00	4.93	
20 1,1,2-Trichloro-1,2,2-trif	151	3.225	3.225	0.000	93	166755	5.00	5.05	
21 Acetone	43	3.273	3.273	0.000	100	111481	10.0	9.55	
22 Iodomethane	142	3.356	3.356	0.000	99	319089	5.00	5.08	
23 Carbon disulfide	76	3.415	3.415	0.000	100	626780	5.00	5.06	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	89	114515	5.00	4.67	
26 Methyl acetate	43	3.569	3.569	0.000	99	313110	10.0	10.5	
27 Methylene Chloride	84	3.664	3.664	0.000	98	267981	5.00	5.36	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	89	101289	50.0	56.5	
29 Acrylonitrile	53	3.901	3.901	0.000	97	782545	50.0	50.5	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	94	492303	5.00	5.15	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	95	248253	5.00	5.34	
32 Hexane	86	4.139	4.139	0.000	92	56672	5.00	4.75	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	97	456954	5.00	5.24	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.328	4.328	0.000	97	330216	5.00	4.99	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	53	42799	5.00	4.73	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	257971	5.00	5.05	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	156096	10.0	9.93	
44 Chlorobromomethane	128	5.004	5.004	0.000	95	113112	5.00	5.17	
45 Tetrahydrofuran	42	5.040	5.040	0.000	96	87515	10.0	9.46	
46 Chloroform	83	5.064	5.064	0.000	92	448024	5.00	5.23	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	96	316855	5.00	5.05	
48 Cyclohexane	56	5.265	5.265	0.000	93	420655	5.00	4.85	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	93	323959	5.00	5.16	
50 Carbon tetrachloride	117	5.360	5.360	0.000	82	272347	5.00	4.91	
51 Isobutyl alcohol	41	5.443	5.443	0.000	90	123989	125.0	127.6	
52 Benzene	78	5.538	5.538	0.000	97	1024763	5.00	5.19	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	379289	5.00	5.16	
55 n-Heptane	100	5.728	5.728	0.000	93	54315	5.00	4.86	
57 Trichloroethene	130	6.083	6.083	0.000	98	246601	5.00	5.11	
59 Methylcyclohexane	83	6.249	6.249	0.000	94	339130	5.00	4.81	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	254673	5.00	5.21	
62 Dibromomethane	93	6.392	6.392	0.000	95	133132	5.00	5.17	
63 1,4-Dioxane	88	6.404	6.404	0.000	44	49729	100.0	117.7	
64 Dichlorobromomethane	83	6.522	6.522	0.000	98	285784	5.00	5.09	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	219452	10.0	10.0	
67 cis-1,3-Dichloropropene	75	6.913	6.913	0.000	93	291082	5.00	5.06	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	97	289939	10.0	9.96	
69 Toluene	91	7.210	7.210	0.000	99	1025973	5.00	5.02	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	95	242101	5.00	4.82	
71 Ethyl methacrylate	69	7.459	7.459	0.000	92	184437	5.00	4.79	
72 1,1,2-Trichloroethane	97	7.578	7.578	0.000	94	197588	5.00	5.21	
73 Tetrachloroethene	164	7.696	7.696	0.000	97	202280	5.00	4.96	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	95	336864	5.00	4.90	
76 2-Hexanone	43	7.779	7.779	0.000	95	188907	10.0	10.1	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	180281	5.00	5.08	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	172986	5.00	5.03	
81 Chlorobenzene	112	8.503	8.503	0.000	93	666613	5.00	5.07	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	91	202546	5.00	4.86	
83 Ethylbenzene	106	8.586	8.586	0.000	99	337933	5.00	5.12	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	420690	5.00	5.11	
85 o-Xylene	106	9.072	9.072	0.000	95	386311	5.00	5.12	
86 Styrene	104	9.084	9.084	0.000	93	678497	5.00	5.19	
87 Bromoform	173	9.285	9.285	0.000	95	98413	5.00	5.01	
89 Isopropylbenzene	105	9.427	9.427	0.000	96	1039318	5.00	5.16	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	96	201864	5.00	5.03	
92 Bromobenzene	156	9.736	9.736	0.000	96	261544	5.00	5.12	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	84	68129	5.00	4.95	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	67	63038	5.00	5.04	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	280098	5.00	5.25	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	250065	5.00	5.27	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	910286	5.00	5.08	
98 4-Chlorotoluene	126	10.020	10.020	0.000	99	264005	5.00	5.19	
99 tert-Butylbenzene	119	10.317	10.317	0.000	91	696300	5.00	5.03	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	965376	5.00	5.16	
102 sec-Butylbenzene	105	10.530	10.530	0.000	95	1006692	5.00	5.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	98	545036	5.00	5.29	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	883040	5.00	5.24	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	572876	5.00	5.22	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	735232	5.00	5.14	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	96	506484	5.00	5.16	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	76	26583	5.00	4.92	
113 1,2,4-Trichlorobenzene	180	12.712	12.712	0.000	94	245169	5.00	4.84	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	95	152669	5.00	5.02	
115 Naphthalene	128	12.985	12.985	0.000	99	414415	5.00	4.25	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	97	253927	5.00	5.11	
S 128 1,2-Dichloroethene, Total	96				0			10.4	
S 129 1,3-Dichloropropene, Total	75				0			9.88	
S 130 Xylenes, Total	106				0		10.0	10.2	
S 131 Trihalomethanes, Total	1				0		20.0	20.4	
S 158 Total BTEX	1		0.000				25.0	ND	

Reagents:

VMAROLISTDW_00300	Amount Added:	4.00	Units: uL
VMRPRIMW_00338	Amount Added:	4.00	Units: uL
VMRGAS_00296	Amount Added:	4.00	Units: uL
vm50ss_00366	Amount Added:	4.00	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL

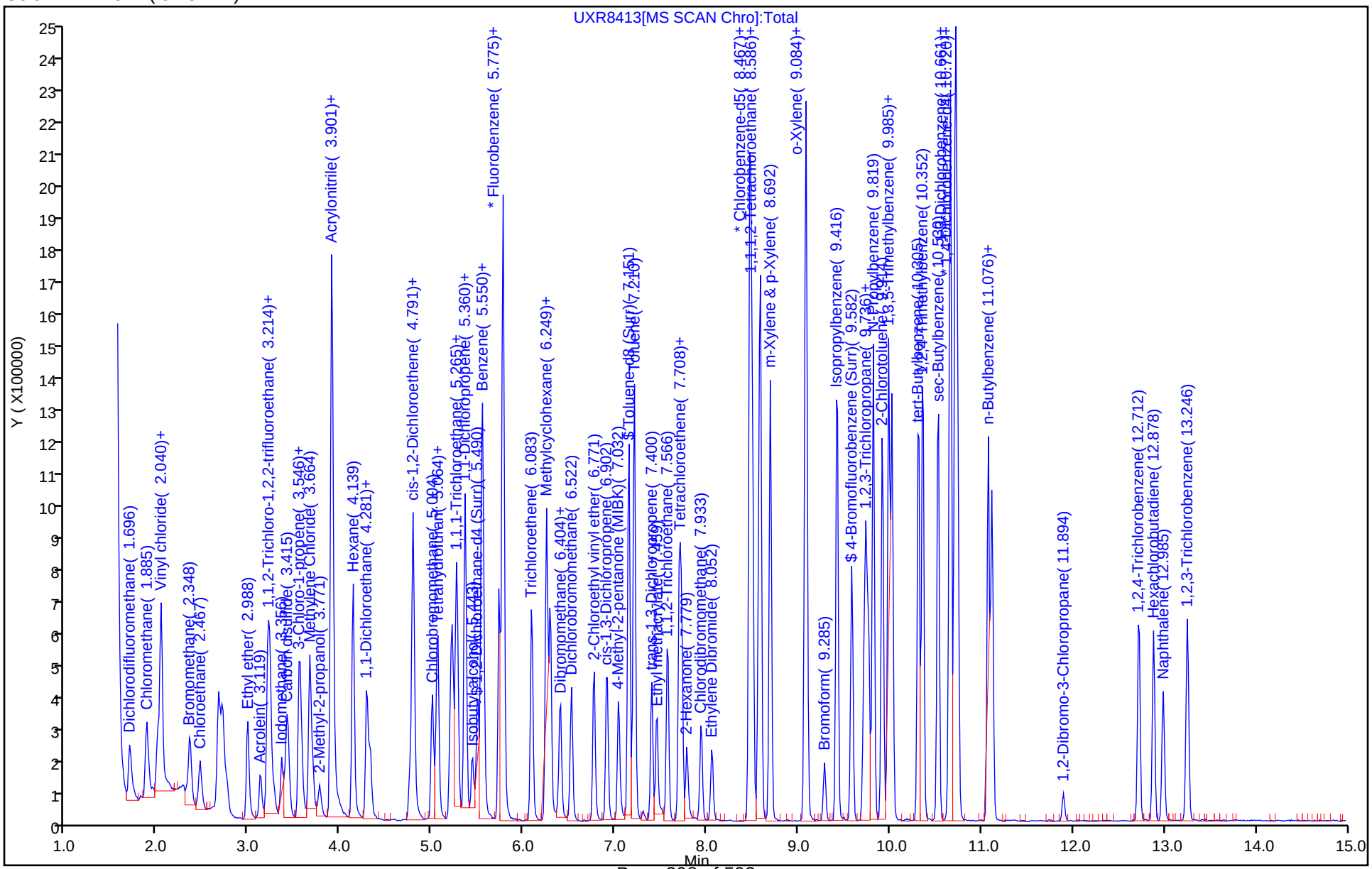
Report Date: 12-Jun-2019 13:07:50 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8413.D

Injection Date:	11-Jun-2019 18:49:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L4			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8414.D
Lims ID: STD8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-Jun-2019 19:12:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-006
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:07:59 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1795215	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1271153	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	694527	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.206	-0.012	93	167466	4.00	3.98	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.490	0.001	97	246492	4.00	4.09	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	668465	4.00	4.06	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	86	250690	4.00	4.11	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	258464	4.00	4.12	
10 Chloromethane	50	1.886	1.885	0.001	99	282409	4.00	3.90	
11 Vinyl chloride	62	2.004	2.004	0.000	97	244701	4.00	3.99	
119 Butadiene	54	2.040	2.040	0.000	88	275876	4.00	4.05	
12 Bromomethane	94	2.360	2.360	0.000	91	137998	4.00	3.98	
13 Chloroethane	64	2.467	2.467	0.000	98	145171	4.00	4.11	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	337097	4.00	4.01	
15 Trichlorofluoromethane	101	2.716	2.704	0.012	98	332934	4.00	3.95	
16 Ethyl ether	59	2.988	2.988	0.000	93	172996	4.00	4.19	
18 Acrolein	56	3.131	3.119	0.012	99	124923	20.0	19.1	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	97	172504	4.00	3.91	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.225	0.001	94	129973	4.00	3.97	
21 Acetone	43	3.273	3.273	0.000	98	99476	8.00	8.37	
22 Iodomethane	142	3.356	3.356	0.000	98	243465	4.00	3.90	
23 Carbon disulfide	76	3.427	3.415	0.012	99	483194	4.00	3.93	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	92192	4.00	3.79	
26 Methyl acetate	43	3.569	3.569	0.000	99	244028	8.00	8.24	
27 Methylene Chloride	84	3.664	3.664	0.000	98	207045	4.00	4.00	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	85	61505	40.0	34.6	
29 Acrylonitrile	53	3.901	3.901	0.000	100	634851	40.0	41.3	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	81	375428	4.00	3.96	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	94	177835	4.00	3.86	
32 Hexane	86	4.139	4.139	0.000	93	46900	4.00	3.96	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	96	351589	4.00	4.06	
34 Vinyl acetate	43	4.328	4.328	0.000	97	261231	4.00	3.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.791	4.791	0.000	55	34199	4.00	3.81	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	201315	4.00	3.97	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	55	113198	8.00	7.26	
44 Chlorobromomethane	128	5.004	5.004	0.000	96	85450	4.00	3.94	
45 Tetrahydrofuran	42	5.040	5.040	0.000	96	71223	8.00	7.76	
46 Chloroform	83	5.064	5.064	0.000	92	345926	4.00	4.07	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	97	256273	4.00	4.12	
48 Cyclohexane	56	5.265	5.265	0.000	93	353729	4.00	4.11	
50 Carbon tetrachloride	117	5.360	5.360	0.000	86	220856	4.00	4.01	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	92	253919	4.00	4.08	
51 Isobutyl alcohol	41	5.431	5.443	-0.012	95	70178	100.0	77.5	
52 Benzene	78	5.538	5.538	0.000	97	802209	4.00	4.10	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	286584	4.00	3.93	
55 n-Heptane	100	5.728	5.728	0.000	90	42278	4.00	3.81	
57 Trichloroethene	130	6.083	6.083	0.000	96	201242	4.00	4.20	
59 Methylcyclohexane	83	6.249	6.249	0.000	93	281920	4.00	4.03	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	94	194254	4.00	4.01	
62 Dibromomethane	93	6.392	6.392	0.000	94	100899	4.00	3.95	
63 1,4-Dioxane	88	6.404	6.404	0.000	40	28282	80.0	67.5	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	224907	4.00	4.04	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	94	156817	8.00	7.22	
67 cis-1,3-Dichloropropene	75	6.902	6.913	-0.011	91	221604	4.00	3.88	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	98	226399	8.00	7.84	
69 Toluene	91	7.210	7.210	0.000	97	824876	4.00	4.11	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	95	189445	4.00	3.83	
71 Ethyl methacrylate	69	7.447	7.459	-0.012	93	139148	4.00	3.67	
72 1,1,2-Trichloroethane	97	7.566	7.578	-0.012	92	150113	4.00	4.02	
73 Tetrachloroethene	164	7.708	7.696	0.012	97	159689	4.00	3.98	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	96	279388	4.00	4.13	
76 2-Hexanone	43	7.779	7.779	0.000	95	148454	8.00	8.05	
78 Chlorodibromomethane	129	7.933	7.933	0.000	91	134713	4.00	3.86	
79 Ethylene Dibromide	107	8.052	8.052	0.000	98	136045	4.00	4.02	
81 Chlorobenzene	112	8.503	8.503	0.001	92	501558	4.00	3.88	
82 1,1,1,2-Tetrachloroethane	131	8.562	8.574	-0.012	89	172611	4.00	4.21	
83 Ethylbenzene	106	8.586	8.586	0.000	99	252248	4.00	3.89	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	327779	4.00	4.05	
85 o-Xylene	106	9.072	9.072	0.000	95	305396	4.00	4.12	
86 Styrene	104	9.084	9.084	0.000	90	527860	4.00	4.10	
87 Bromoform	173	9.285	9.285	0.000	95	77073	4.00	3.99	
89 Isopropylbenzene	105	9.416	9.427	-0.011	97	779570	4.00	3.93	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	96	164911	4.00	4.08	
92 Bromobenzene	156	9.736	9.736	0.000	97	202287	4.00	3.93	
94 1,2,3-Trichloropropane	110	9.760	9.771	-0.011	85	55912	4.00	4.04	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	67	42531	4.00	3.38	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	221583	4.00	4.13	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	191171	4.00	4.01	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	92	714102	4.00	4.04	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	214734	4.00	4.20	
99 tert-Butylbenzene	119	10.305	10.317	-0.012	92	541619	4.00	3.89	
101 1,2,4-Trimethylbenzene	105	10.353	10.364	-0.012	97	724104	4.00	3.93	
102 sec-Butylbenzene	105	10.530	10.530	0.000	95	792377	4.00	3.93	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	418020	4.00	4.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	677762	4.00	3.99	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	94	444502	4.00	4.03	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	537824	4.00	3.74	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	395418	4.00	4.00	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	74	18080	4.00	3.33	
113 1,2,4-Trichlorobenzene	180	12.724	12.712	0.012	93	190757	4.00	3.74	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	95	114781	4.00	3.75	
115 Naphthalene	128	12.985	12.985	0.000	100	313179	4.00	3.42	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	95	187868	4.00	3.76	
S 128 1,2-Dichloroethene, Total	96				0			7.82	
S 129 1,3-Dichloropropene, Total	75				0			7.72	
S 130 Xylenes, Total	106				0		8.00	8.16	
S 131 Trihalomethanes, Total	1				0		16.0	15.9	
S 158 Total BTEX	1		0.000				20.0	ND	

Reagents:

VMAROLISTDW_00300	Amount Added:	3.20	Units: uL
VMRPRIMW_00338	Amount Added:	3.20	Units: uL
VMRGAS_00296	Amount Added:	3.20	Units: uL
vm50ss_00366	Amount Added:	3.20	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL

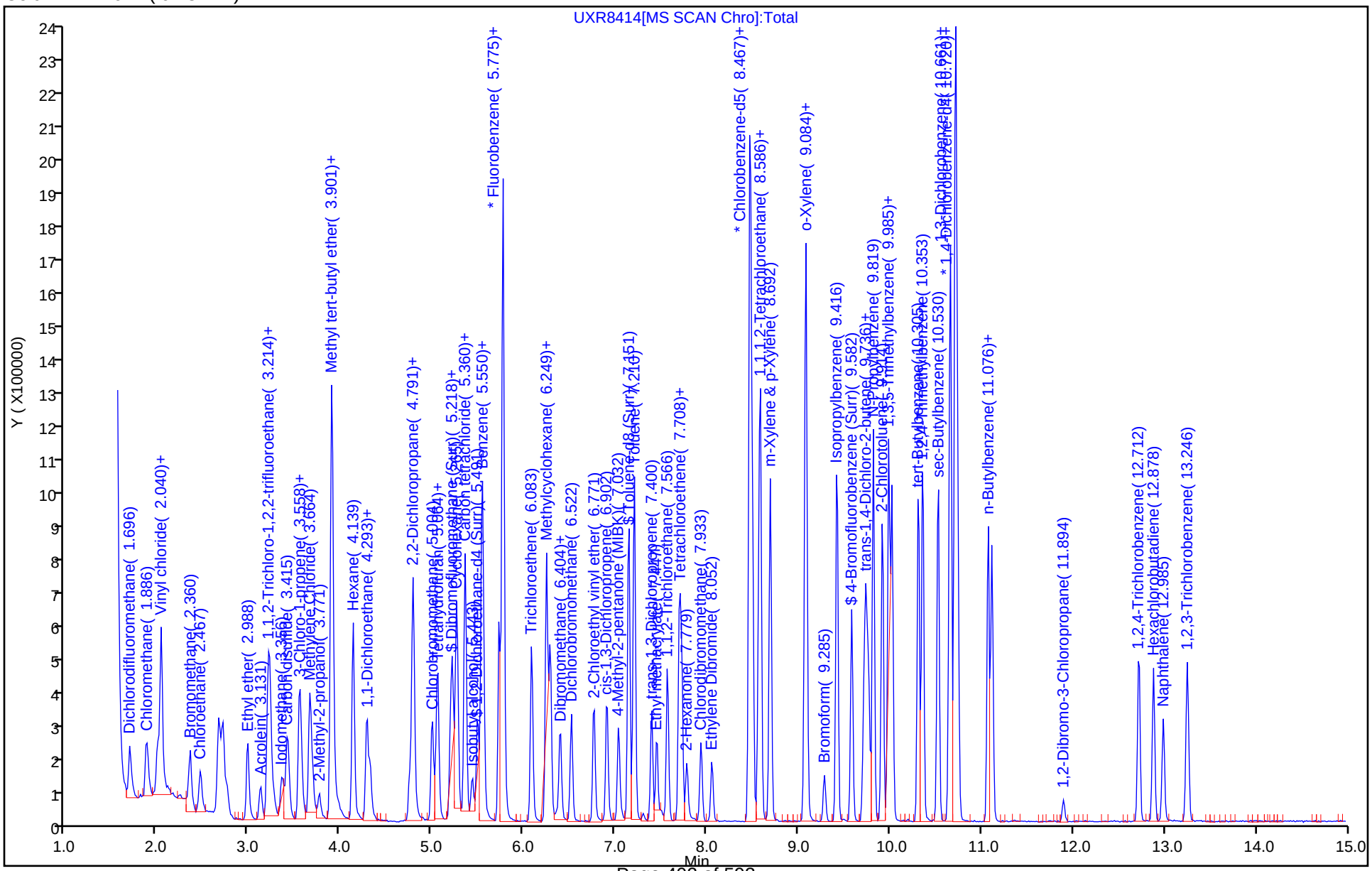
Report Date: 12-Jun-2019 13:08:01 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8414.D

Injection Date:	11-Jun-2019 19:12:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L3			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8415.D
Lims ID: STD8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-Jun-2019 19:36:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-007
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:08:11 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: williamsla Date: 12-Jun-2019 11:55:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1765088	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1225132	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	656893	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.206	-0.012	92	79950	2.00	1.93	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	96	127531	2.00	2.15	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	93	295907	2.00	1.86	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	87	107617	2.00	1.83	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	97	119860	2.00	1.94	
10 Chloromethane	50	1.885	1.885	0.000	99	152820	2.00	2.15	
11 Vinyl chloride	62	2.004	2.004	0.000	98	118524	2.00	1.96	
119 Butadiene	54	2.040	2.040	0.000	90	142594	2.00	2.13	
12 Bromomethane	94	2.360	2.360	0.000	93	66974	2.00	1.96	
13 Chloroethane	64	2.466	2.467	-0.001	96	67614	2.00	1.95	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	166303	2.00	2.01	
15 Trichlorofluoromethane	101	2.716	2.704	0.012	96	169033	2.00	2.04	
16 Ethyl ether	59	2.988	2.988	0.000	93	80407	2.00	1.98	
18 Acrolein	56	3.119	3.119	0.000	97	65726	10.0	10.2	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	95	88923	2.00	2.05	
20 1,1,2-Trichloro-1,2,2-trif	151	3.225	3.225	0.000	95	64673	2.00	2.01	
21 Acetone	43	3.273	3.273	0.000	100	61721	4.00	4.47	
22 Iodomethane	142	3.356	3.356	0.000	97	119539	2.00	1.95	
23 Carbon disulfide	76	3.415	3.415	0.000	99	235359	2.00	1.95	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	89	48063	2.00	2.01	
26 Methyl acetate	43	3.569	3.569	0.000	98	121593	4.00	4.18	
27 Methylene Chloride	84	3.664	3.664	0.000	98	114844	2.00	1.92	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	89	39392	20.0	22.5	
29 Acrylonitrile	53	3.901	3.901	0.000	97	304975	20.0	20.2	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	87	185953	2.00	1.99	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	95	87495	2.00	1.93	
32 Hexane	86	4.139	4.139	0.000	93	21223	2.00	1.82	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	97	167899	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.328	4.328	0.000	98	117820	2.00	1.82	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	52	19554	2.00	2.22	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	101747	2.00	2.04	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	63729	4.00	4.16	
44 Chlorobromomethane	128	5.004	5.004	0.000	93	42196	2.00	1.98	
45 Tetrahydrofuran	42	5.040	5.040	0.000	95	38216	4.00	4.23	
46 Chloroform	83	5.063	5.064	-0.001	93	161169	2.00	1.93	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	97	113050	2.00	1.85	
48 Cyclohexane	56	5.265	5.265	0.000	94	151189	2.00	1.79	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	91	117719	2.00	1.92	
50 Carbon tetrachloride	117	5.360	5.360	0.000	89	104091	2.00	1.92	
51 Isobutyl alcohol	41	5.443	5.443	0.000	84	52519	50.0	62.6	
52 Benzene	78	5.538	5.538	0.000	97	381956	2.00	1.98	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	142861	2.00	1.99	
55 n-Heptane	100	5.728	5.728	0.000	77	17937	2.00	1.65	
57 Trichloroethene	130	6.083	6.083	0.000	96	96395	2.00	2.05	
59 Methylcyclohexane	83	6.249	6.249	0.000	93	121581	2.00	1.77	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	92273	2.00	1.94	
62 Dibromomethane	93	6.392	6.392	0.000	92	48451	2.00	1.93	
63 1,4-Dioxane	88	6.404	6.404	0.000	43	16396	40.0	39.8	
64 Dichlorobromomethane	83	6.522	6.522	0.000	98	103002	2.00	1.88	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	92	69459	4.00	3.25	
67 cis-1,3-Dichloropropene	75	6.913	6.913	0.000	93	96283	2.00	1.72	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	98	103397	4.00	3.64	
69 Toluene	91	7.210	7.210	0.000	98	374652	2.00	1.93	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	95	81657	2.00	1.71	
71 Ethyl methacrylate	69	7.447	7.459	-0.012	92	62344	2.00	1.71	
72 1,1,2-Trichloroethane	97	7.566	7.578	-0.012	92	69245	2.00	1.93	
73 Tetrachloroethene	164	7.696	7.696	0.000	95	79035	2.00	2.05	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	92	129726	2.00	1.99	
76 2-Hexanone	43	7.779	7.779	0.000	96	56648	4.00	3.19	
78 Chlorodibromomethane	129	7.933	7.933	0.000	91	62037	2.00	1.84	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	62068	2.00	1.90	
81 Chlorobenzene	112	8.502	8.503	0.000	94	255579	2.00	2.05	
82 1,1,1,2-Tetrachloroethane	131	8.562	8.574	-0.012	90	75523	2.00	1.91	
83 Ethylbenzene	106	8.585	8.586	-0.001	98	118675	2.00	1.90	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	141980	2.00	1.82	
85 o-Xylene	106	9.072	9.072	0.000	95	129640	2.00	1.81	
86 Styrene	104	9.084	9.084	0.000	87	206431	2.00	1.66	
87 Bromoform	173	9.285	9.285	0.000	95	38707	2.00	2.08	
89 Isopropylbenzene	105	9.416	9.427	-0.011	96	334710	2.00	1.75	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	96	80489	2.00	2.11	
92 Bromobenzene	156	9.736	9.736	0.000	96	93909	2.00	1.93	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	81	26824	2.00	2.05	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	64	25968	2.00	2.18	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	85919	2.00	1.69	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	82461	2.00	1.83	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	92	288240	2.00	1.93	
98 4-Chlorotoluene	126	10.020	10.020	0.000	97	97315	2.00	2.01	
99 tert-Butylbenzene	119	10.317	10.317	0.000	93	226231	2.00	1.72	
101 1,2,4-Trimethylbenzene	105	10.352	10.364	-0.012	96	303268	2.00	1.93	
102 sec-Butylbenzene	105	10.530	10.530	0.000	95	346846	2.00	1.82	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	199787	2.00	2.04	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	278244	2.00	1.73	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	96	214519	2.00	2.05	
108 n-Butylbenzene	91	11.076	11.076	0.000	97	232683	2.00	1.71	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	95	188135	2.00	2.01	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	75	10306	2.00	2.00	
113 1,2,4-Trichlorobenzene	180	12.724	12.712	0.012	94	90553	2.00	1.88	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	94	58420	2.00	2.02	
115 Naphthalene	128	12.985	12.985	0.000	98	114863	2.00	1.88	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	94	84465	2.00	1.79	
S 128 1,2-Dichloroethene, Total	96				0			3.97	
S 129 1,3-Dichloropropene, Total	75				0			3.43	
S 130 Xylenes, Total	106				0		4.00	3.63	
S 131 Trihalomethanes, Total	1				0		8.00	7.73	
S 158 Total BTEX	1		0.000				10.0	ND	

Reagents:

VMAROLISTDW_00300	Amount Added:	1.60	Units: uL
VMRPRIMW_00338	Amount Added:	1.60	Units: uL
VMRGAS_00296	Amount Added:	1.60	Units: uL
vm50ss_00366	Amount Added:	1.60	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL

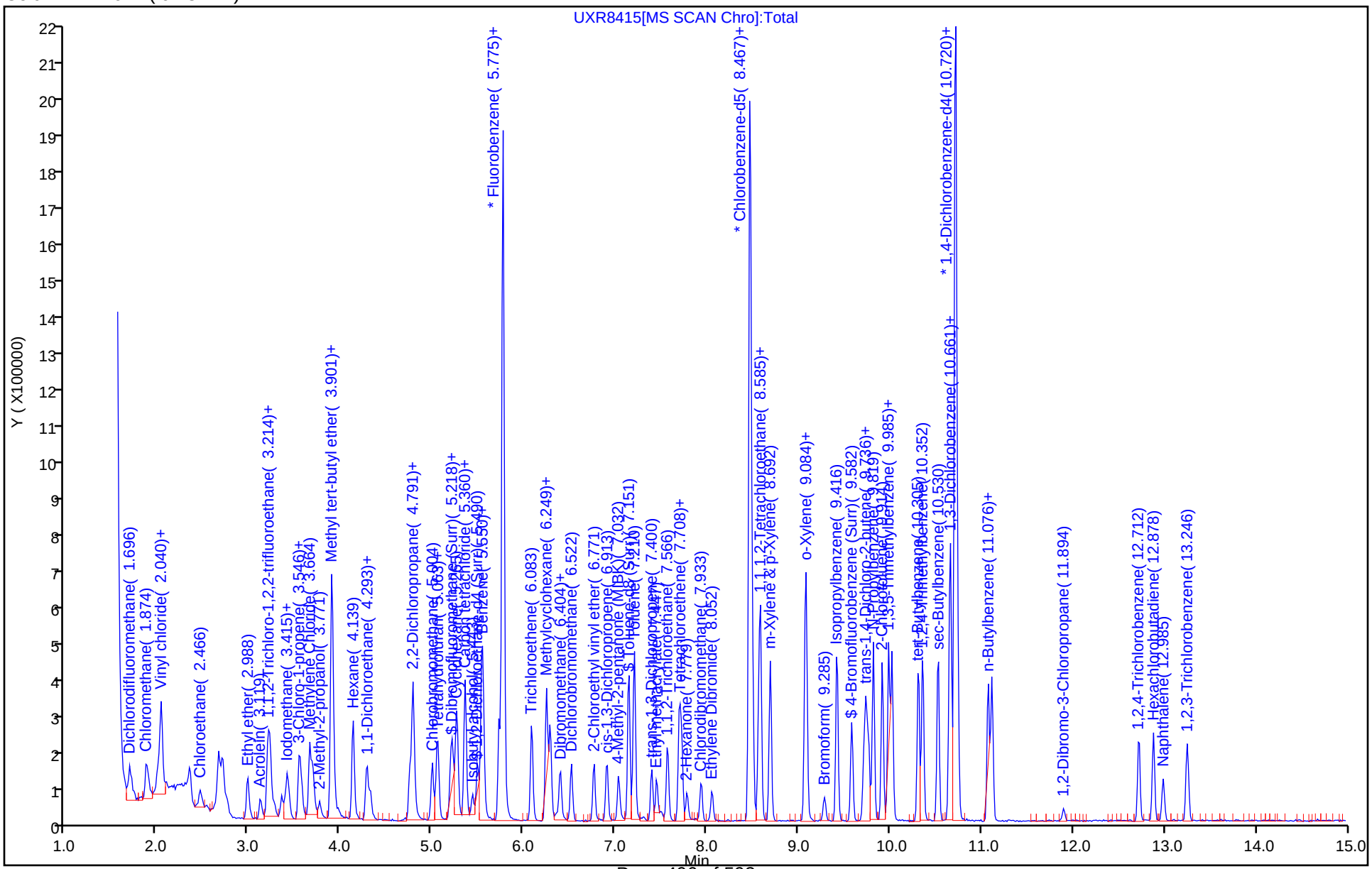
Report Date: 12-Jun-2019 13:08:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8415.D

Injection Date:	11-Jun-2019 19:36:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L2			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8416.D
Lims ID: STD8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-Jun-2019 20:00:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-008
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:08:22 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: williamsla Date: 12-Jun-2019 11:51:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1691424	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	87	1208257	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	649532	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.206	0.000	93	39028	1.00	0.9853	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	97	58951	1.00	1.04	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	95	132316	1.00	0.8450	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	89	45699	1.00	0.7881	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	64507	1.00	1.09	
10 Chloromethane	50	1.885	1.885	0.000	98	67774	1.00	0.99	
11 Vinyl chloride	62	2.004	2.004	0.000	97	64189	1.00	1.11	
119 Butadiene	54	2.040	2.040	0.000	88	66461	1.00	1.03	
12 Bromomethane	94	2.360	2.360	0.000	91	38742	1.00	1.18	
13 Chloroethane	64	2.466	2.467	-0.001	97	37516	1.00	1.13	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	96	85983	1.00	1.08	
15 Trichlorofluoromethane	101	2.704	2.704	0.000	97	84634	1.00	1.07	
16 Ethyl ether	59	2.988	2.988	0.000	91	40765	1.00	1.05	
18 Acrolein	56	3.119	3.119	0.000	95	30861	5.00	5.01	
19 1,1-Dichloroethene	96	3.202	3.214	-0.012	97	46600	1.00	1.12	
20 1,1,2-Trichloro-1,2,2-trif	151	3.225	3.225	0.000	95	31490	1.00	1.02	
21 Acetone	43	3.285	3.273	0.012	95	36137	2.00	1.88	
22 Iodomethane	142	3.368	3.356	0.012	97	66178	1.00	1.13	
23 Carbon disulfide	76	3.415	3.415	0.000	100	122909	1.00	1.06	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	92	23394	1.00	1.02	
26 Methyl acetate	43	3.569	3.569	0.000	97	56787	2.00	2.04	
27 Methylene Chloride	84	3.664	3.664	0.000	96	71166	1.00	0.9715	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	88	18508	10.0	11.0	
29 Acrylonitrile	53	3.901	3.901	0.000	98	152367	10.0	10.5	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	72	91689	1.00	1.03	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	71	48601	1.00	1.12	
32 Hexane	86	4.127	4.139	-0.012	95	11045	1.00	0.99	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	96	85962	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 Vinyl acetate	43	4.328	4.328	0.000	98	55932	1.00	0.9039	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	65	9662	1.00	1.14	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	86	52650	1.00	1.10	
40 2-Butanone (MEK)	43	4.814	4.803	0.011	85	35491	2.00	2.42	
44 Chlorobromomethane	128	5.004	5.004	0.000	96	22040	1.00	1.08	
45 Tetrahydrofuran	42	5.052	5.040	0.012	36	18413	2.00	2.13	
46 Chloroform	83	5.063	5.064	-0.001	94	86388	1.00	1.08	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	96	61031	1.00	1.04	
48 Cyclohexane	56	5.265	5.265	0.000	94	70792	1.00	0.8731	
50 Carbon tetrachloride	117	5.360	5.360	0.000	88	51487	1.00	0.99	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	92	57527	1.00	0.9807	
51 Isobutyl alcohol	41	5.443	5.443	0.000	80	23516	25.0	34.8	
52 Benzene	78	5.538	5.538	0.000	97	191632	1.00	1.04	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	96	75635	1.00	1.10	
55 n-Heptane	100	5.739	5.728	0.011	90	10149	1.00	0.9717	
57 Trichloroethene	130	6.095	6.083	0.012	95	46963	1.00	1.04	
59 Methylcyclohexane	83	6.249	6.249	0.000	96	58896	1.00	0.8932	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	95	51066	1.00	1.12	
62 Dibromomethane	93	6.392	6.392	0.000	93	27189	1.00	1.13	
63 1,4-Dioxane	88	6.415	6.404	0.011	39	7092	20.0	18.0	
64 Dichlorobromomethane	83	6.522	6.522	0.000	98	50370	1.00	0.9595	
66 2-Chloroethyl vinyl ether	63	6.759	6.771	-0.012	91	37026	2.00	1.81	
67 cis-1,3-Dichloropropene	75	6.902	6.913	-0.011	92	48401	1.00	0.9000	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	93	42952	2.00	1.58	
69 Toluene	91	7.210	7.210	0.000	98	176669	1.00	0.9250	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	96	42361	1.00	0.9020	
71 Ethyl methacrylate	69	7.459	7.459	0.000	88	30661	1.00	0.8507	
72 1,1,2-Trichloroethane	97	7.566	7.578	-0.012	92	38677	1.00	1.09	
73 Tetrachloroethene	164	7.696	7.696	0.000	96	40101	1.00	1.05	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	92	69898	1.00	1.09	
76 2-Hexanone	43	7.779	7.779	0.000	90	28760	2.00	1.64	
78 Chlorodibromomethane	129	7.945	7.933	0.012	94	29554	1.00	0.8910	
79 Ethylene Dibromide	107	8.052	8.052	0.000	94	31537	1.00	0.9800	
81 Chlorobenzene	112	8.502	8.503	0.000	93	132805	1.00	1.08	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	87	39457	1.00	1.01	
83 Ethylbenzene	106	8.585	8.586	-0.001	99	54132	1.00	0.8772	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	66308	1.00	0.8610	
85 o-Xylene	106	9.084	9.072	0.012	97	52769	1.00	0.7483	
86 Styrene	104	9.084	9.084	0.000	93	98156	1.00	0.8026	
87 Bromoform	173	9.285	9.285	0.000	77	14512	1.00	0.7899	
89 Isopropylbenzene	105	9.416	9.427	-0.011	97	150588	1.00	0.7993	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	37017	1.00	0.9799	
92 Bromobenzene	156	9.736	9.736	0.000	97	48381	1.00	1.01	
94 1,2,3-Trichloropropane	110	9.759	9.771	-0.012	85	12632	1.00	0.9754	
93 trans-1,4-Dichloro-2-buten	53	9.759	9.771	-0.012	64	9037	1.00	0.7684	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	39123	1.00	0.7796	
96 2-Chlorotoluene	126	9.914	9.914	0.000	96	41339	1.00	0.9267	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	92	114838	1.00	0.9868	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	38734	1.00	0.8093	
99 tert-Butylbenzene	119	10.317	10.317	0.000	94	108961	1.00	0.8359	
101 1,2,4-Trimethylbenzene	105	10.364	10.364	0.000	96	121136	1.00	0.9851	
102 sec-Butylbenzene	105	10.530	10.530	0.000	95	149360	1.00	0.7924	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
103 1,3-Dichlorobenzene	146	10.661	10.649	0.012	96	90577	1.00	0.9341	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	96	117786	1.00	0.7422	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	91	106781	1.00	1.03	
108 n-Butylbenzene	91	11.076	11.076	0.000	94	105109	1.00	0.7809	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	95	96002	1.00	1.04	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	75	4978	1.00	0.9793	
113 1,2,4-Trichlorobenzene	180	12.724	12.712	0.012	92	41155	1.00	0.8632	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	92	35063	1.00	1.23	
115 Naphthalene	128	12.985	12.985	0.000	98	53168	1.00	1.36	
116 1,2,3-Trichlorobenzene	180	13.258	13.246	0.012	98	41317	1.00	0.8832	
S 128 1,2-Dichloroethene, Total	96				0			2.22	
S 129 1,3-Dichloropropene, Total	75				0			1.80	
S 130 Xylenes, Total	106				0		2.00	1.61	
S 131 Trihalomethanes, Total	1				0		4.00	3.72	
S 158 Total BTEX	1		0.000				5.00	ND	

Reagents:

VMRPRIMW_00338	Amount Added:	0.80	Units: uL
VMAROLISTDW_00300	Amount Added:	0.80	Units: uL
VMRGAS_00296	Amount Added:	0.80	Units: uL
vm50ss_00366	Amount Added:	0.80	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL

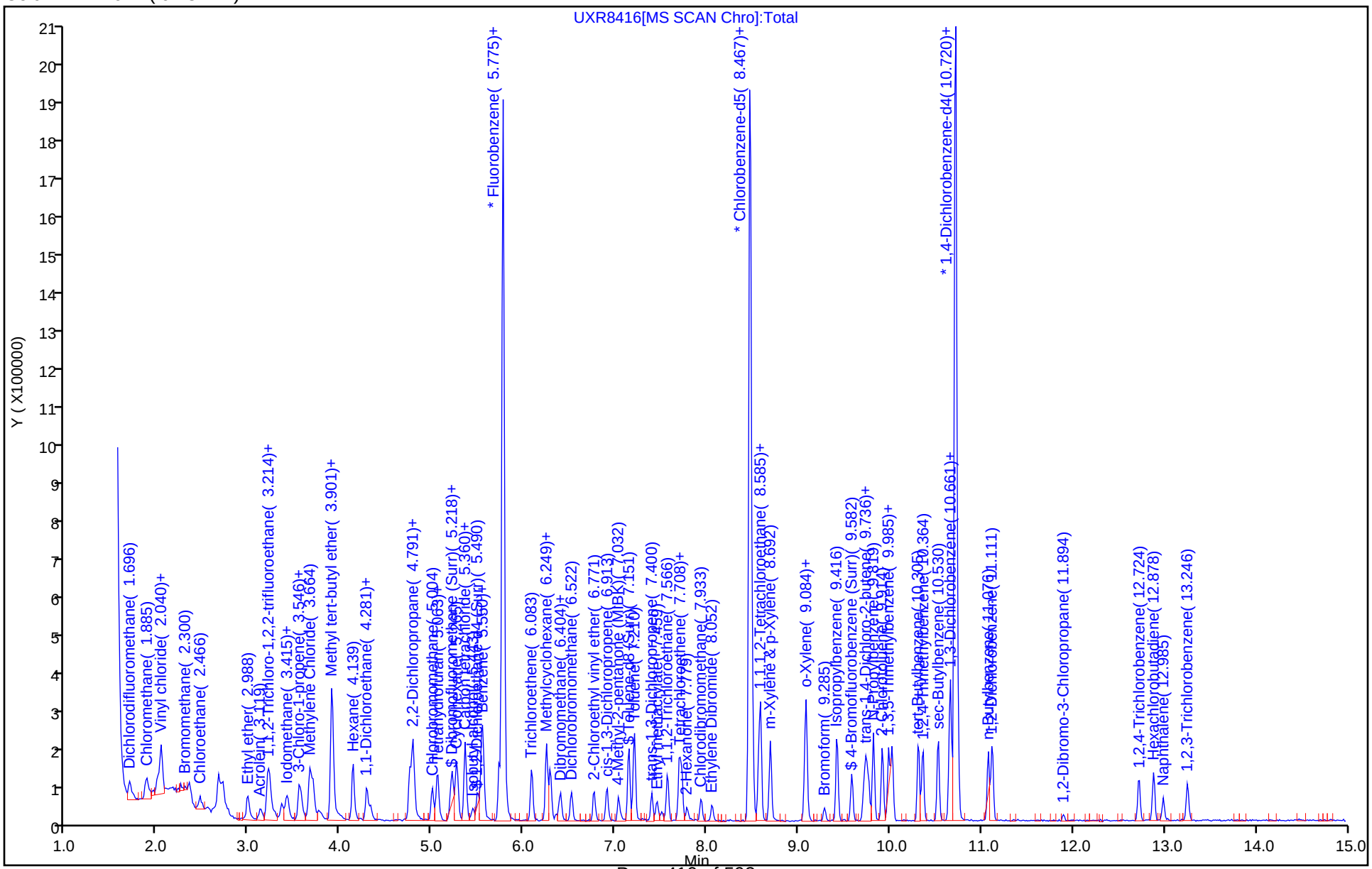
Report Date: 12-Jun-2019 13:08:24 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8416.D

Injection Date:	11-Jun-2019 20:00:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	STD8260 L1			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-375006/10 Calibration Date: 04/05/2019 20:55

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 20:30

Lab File ID: 240-0085857-010.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2688	0.2691		0.0100	0.0100	0.0	50.0
Chloromethane	Ave	0.6408	0.6191	0.1000	0.00966	0.0100	-3.4	50.0
Vinyl chloride	Ave	0.4160	0.4228		0.0102	0.0100	1.6	20.0
Butadiene	Ave	0.5101	0.4756		0.00933	0.0100	-6.7	50.0
Bromomethane	Ave	0.1713	0.1909		0.0111	0.0100	11.4	50.0
Chloroethane	Ave	0.2369	0.2326		0.00982	0.0100	-1.8	50.0
Dichlorofluoromethane	Ave	0.4871	0.5237		0.0108	0.0100	7.5	50.0
Trichlorofluoromethane	Ave	0.3392	0.3238		0.00954	0.0100	-4.6	50.0
Ethyl ether	Ave	0.3261	0.3501		0.0107	0.0100	7.4	50.0
Acrolein	Ave	0.0853	0.0800		0.0469	0.0500	-6.2	50.0
1,1-Dichloroethene	Ave	0.2132	0.2290		0.0107	0.0100	7.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1489	0.1444		0.00969	0.0100	-3.1	50.0
Acetone	Lin1		0.1582		0.0203	0.0200	1.5	50.0
Iodomethane	Ave	0.3946	0.4109		0.0104	0.0100	4.1	50.0
Carbon disulfide	Ave	0.8598	0.8592		0.00999	0.0100	-0.0	50.0
3-Chloro-1-propene	Ave	0.1832	0.1814		0.00990	0.0100	-1.0	50.0
Methyl acetate	Ave	0.3747	0.3664		0.0196	0.0200	-2.2	50.0
Methylene Chloride	Ave	0.3175	0.3042		0.00958	0.0100	-4.2	50.0
2-Methyl-2-propanol	Ave	0.0432	0.0367		0.0849	0.100	-15.1	50.0
Acrylonitrile	Ave	0.1993	0.1993		0.100	0.100	0.0	50.0
trans-1,2-Dichloroethene	Ave	0.2610	0.2808		0.0108	0.0100	7.6	50.0
Methyl tert-butyl ether	Ave	0.6653	0.6941		0.0104	0.0100	4.3	50.0
Hexane	Ave	0.0440	0.0435		0.00990	0.0100	-1.0	20.0
1,1-Dichloroethane	Ave	0.7029	0.7162	0.1000	0.0102	0.0100	1.9	50.0
Vinyl acetate	Ave	1.022	1.044		0.0102	0.0100	2.2	50.0
2,2-Dichloropropane	Ave	0.0704	0.0696		0.00988	0.0100	-1.2	50.0
cis-1,2-Dichloroethene	Ave	0.3004	0.3064		0.0102	0.0100	2.0	50.0
2-Butanone (MEK)	Ave	0.2409	0.2118		0.0176	0.0200	-12.1	50.0
Chlorobromomethane	Ave	0.1353	0.1459		0.0108	0.0100	7.8	50.0
Tetrahydrofuran	Ave	0.1513	0.1507		0.0199	0.0200	-0.3	50.0
Chloroform	Ave	0.4859	0.4858		0.0100	0.0100	-0.0	20.0
1,1,1-Trichloroethane	Ave	0.3417	0.3545		0.0104	0.0100	3.7	50.0
Cyclohexane	Ave	0.6555	0.6417		0.00979	0.0100	-2.1	50.0
1,1-Dichloropropene	Ave	0.3727	0.3536		0.00949	0.0100	-5.1	50.0
Carbon tetrachloride	Ave	0.3031	0.3078		0.0102	0.0100	1.5	50.0
Isobutyl alcohol	Ave	0.0196	0.0174		0.222	0.250	-11.3	50.0
Benzene	Ave	1.200	1.188		0.00990	0.0100	-1.0	50.0
1,2-Dichloroethane	Ave	0.5278	0.5305		0.0101	0.0100	0.5	50.0
n-Heptane	Ave	0.0365	0.0321		0.00880	0.0100	-12.0	50.0
Trichloroethene	Ave	0.2631	0.2410		0.00916	0.0100	-8.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-375006/10 Calibration Date: 04/05/2019 20:55

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 20:30

Lab File ID: 240-0085857-010.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3247	0.3104		0.00956	0.0100	-4.4	50.0
1,2-Dichloropropane	Ave	0.3962	0.3976		0.0100	0.0100	0.3	20.0
Dibromomethane	Ave	0.1676	0.1624		0.00969	0.0100	-3.1	50.0
1,4-Dioxane	Ave	0.0032	0.0009		0.0536	0.200	-73.2*	50.0
Dichlorobromomethane	Ave	0.3721	0.3691		0.00992	0.0100	-0.8	50.0
2-Chloroethyl vinyl ether	Ave	0.1815	0.1842		0.0101	0.0100	1.5	50.0
cis-1,3-Dichloropropene	Ave	0.4701	0.4465		0.00950	0.0100	-5.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5296	0.5206		0.0197	0.0200	-1.7	50.0
Toluene	Ave	1.513	1.530		0.0101	0.0100	1.1	20.0
trans-1,3-Dichloropropene	Ave	0.5497	0.5582		0.0102	0.0100	1.5	50.0
Ethyl methacrylate	Ave	0.5683	0.5894		0.0104	0.0100	3.7	50.0
1,1,2-Trichloroethane	Ave	0.2925	0.3167		0.0108	0.0100	8.3	50.0
Tetrachloroethene	Ave	0.2630	0.2452		0.00932	0.0100	-6.8	50.0
1,3-Dichloropropane	Ave	0.5916	0.6021		0.0102	0.0100	1.8	50.0
2-Hexanone	Ave	0.4900	0.5184		0.0212	0.0200	5.8	50.0
Chlorodibromomethane	Ave	0.3208	0.3444		0.0107	0.0100	7.4	50.0
Ethylene Dibromide	Ave	0.3394	0.3514		0.0104	0.0100	3.5	50.0
Chlorobenzene	Ave	0.9865	0.9902	0.3000	0.0100	0.0100	0.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3314	0.3531		0.0107	0.0100	6.5	50.0
Ethylbenzene	Ave	0.5517	0.5259		0.00953	0.0100	-4.7	20.0
m-Xylene & p-Xylene	Ave	0.6692	0.6313		0.00943	0.0100	-5.7	50.0
o-Xylene	Ave	0.6940	0.6714		0.00967	0.0100	-3.3	50.0
Styrene	Ave	1.155	1.092		0.00946	0.0100	-5.4	50.0
Bromoform	Ave	0.2342	0.2452	0.1000	0.0105	0.0100	4.7	50.0
Isopropylbenzene	Ave	1.634	1.587		0.00971	0.0100	-2.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8746	0.8882	0.3000	0.0102	0.0100	1.6	50.0
Bromobenzene	Ave	0.7269	0.6973		0.00959	0.0100	-4.1	50.0
1,2,3-Trichloropropane	Ave	0.2667	0.2753		0.0103	0.0100	3.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.4460	0.4748		0.0106	0.0100	6.5	50.0
N-Propylbenzene	Ave	0.7759	0.7456		0.00961	0.0100	-3.9	50.0
2-Chlorotoluene	Ave	0.6728	0.6837		0.0102	0.0100	1.6	50.0
1,3,5-Trimethylbenzene	Ave	2.536	2.390		0.00942	0.0100	-5.8	50.0
4-Chlorotoluene	Ave	0.7095	0.7193		0.0101	0.0100	1.4	50.0
tert-Butylbenzene	Ave	1.798	1.631		0.00907	0.0100	-9.3	50.0
1,2,4-Trimethylbenzene	Ave	2.652	2.558		0.00964	0.0100	-3.6	50.0
sec-Butylbenzene	Ave	2.600	2.411		0.00927	0.0100	-7.3	50.0
1,3-Dichlorobenzene	Ave	1.390	1.321		0.00950	0.0100	-5.0	50.0
4-Isopropyltoluene	Ave	2.138	2.027		0.00948	0.0100	-5.2	50.0
1,4-Dichlorobenzene	Ave	1.463	1.376		0.00940	0.0100	-6.0	50.0
n-Butylbenzene	Ave	1.879	1.678		0.00893	0.0100	-10.7	50.0
1,2-Dichlorobenzene	Ave	1.401	1.392		0.00994	0.0100	-0.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-375006/10 Calibration Date: 04/05/2019 20:55

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 20:30

Lab File ID: 240-0085857-010.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1723		0.00966	0.0100	-3.4	50.0
1,2,4-Trichlorobenzene	Ave	0.9371	0.7133		0.00761	0.0100	-23.9	50.0
Hexachlorobutadiene	Ave	0.3468	0.2435		0.00702	0.0100	-29.8	50.0
Naphthalene	Ave	2.609	2.234		0.00857	0.0100	-14.3	50.0
1,2,3-Trichlorobenzene	Ave	0.9323	0.6374		0.00684	0.0100	-31.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2498	0.2668		0.0107	0.0100	6.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3925	0.3982		0.0101	0.0100	1.5	50.0
Toluene-d8 (Surr)	Ave	1.271	1.310		0.0103	0.0100	3.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5205	0.5461		0.0105	0.0100	4.9	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-010.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 05-Apr-2019 20:55:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub63

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:29 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

First Level Reviewer: macenczaks Date: 08-Apr-2019 09:26:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.975	4.975	0.000	96	524868	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.637	0.000	93	372354	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.862	9.861	0.001	94	206834	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.407	0.000	92	140055	10.0	10.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.691	0.000	95	209015	10.0	10.1	
$ 6 Toluene-d8 (Surr)	98	6.335	6.335	0.000	96	487624	10.0	10.3	
$ 7 4-Bromofluorobenzene (Surr	95	8.749	8.749	0.000	89	203356	10.0	10.5	
9 Dichlorodifluoromethane	85	1.259	1.259	0.000	98	141221	10.0	10.0	
10 Chloromethane	50	1.401	1.401	0.000	98	324958	10.0	9.66	
11 Vinyl chloride	62	1.484	1.496	-0.012	97	221922	10.0	10.2	
12 Butadiene	54	1.508	1.508	0.000	96	249647	10.0	9.33	
13 Bromomethane	94	1.744	1.744	0.000	90	100170	10.0	11.1	
14 Chloroethane	64	1.839	1.839	0.000	94	122101	10.0	9.82	
15 Dichlorofluoromethane	67	2.005	2.004	0.001	98	274877	10.0	10.8	
16 Trichlorofluoromethane	101	2.052	2.052	0.000	99	169953	10.0	9.54	
17 Ethyl ether	59	2.289	2.288	0.001	99	183758	10.0	10.7	
18 Acrolein	56	2.407	2.407	0.000	100	209924	50.0	46.9	
19 1,1-Dichloroethene	96	2.490	2.490	0.000	90	120208	10.0	10.7	
20 1,1,2-Trichloro-1,2,2-trif	151	2.502	2.513	-0.011	97	75763	10.0	9.69	
21 Acetone	43	2.537	2.537	0.000	98	166086	20.0	20.3	
22 Iodomethane	142	2.620	2.620	0.000	97	215685	10.0	10.4	
24 Carbon disulfide	76	2.667	2.679	-0.012	99	450979	10.0	10.0	
26 3-Chloro-1-propene	76	2.797	2.797	0.000	89	95191	10.0	9.90	
27 Methyl acetate	43	2.821	2.833	-0.012	100	384631	20.0	19.6	
28 Methylene Chloride	84	2.904	2.904	0.000	91	159677	10.0	9.58	
29 2-Methyl-2-propanol	59	3.022	3.022	0.000	98	192426	100.0	84.9	
31 Acrylonitrile	53	3.129	3.129	0.000	100	1046255	100.0	100.0	
30 trans-1,2-Dichloroethene	96	3.141	3.152	-0.011	88	147361	10.0	10.8	
32 Methyl tert-butyl ether	73	3.152	3.152	0.000	95	364284	10.0	10.4	
33 Hexane	86	3.377	3.377	0.000	93	22837	10.0	9.90	
34 1,1-Dichloroethane	63	3.507	3.507	0.000	95	375895	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.555	3.555	0.000	96	548180	10.0	10.2	
40 cis-1,2-Dichloroethene	96	3.993	3.992	0.000	90	160819	10.0	10.2	
39 2,2-Dichloropropane	97	3.993	3.992	0.000	60	36518	10.0	9.88	
41 2-Butanone (MEK)	43	4.016	4.016	0.000	97	222345	20.0	17.6	
45 Chlorobromomethane	128	4.206	4.205	0.001	87	76566	10.0	10.8	
46 Tetrahydrofuran	42	4.241	4.241	0.000	91	158226	20.0	19.9	
47 Chloroform	83	4.265	4.265	0.000	95	254962	10.0	10.0	
48 1,1,1-Trichloroethane	97	4.419	4.418	0.000	93	186043	10.0	10.4	
49 Cyclohexane	56	4.466	4.466	0.000	89	336828	10.0	9.79	
50 1,1-Dichloropropene	75	4.560	4.560	0.000	84	185610	10.0	9.49	
51 Carbon tetrachloride	117	4.560	4.560	0.000	85	161526	10.0	10.2	
52 Isobutyl alcohol	41	4.667	4.667	0.000	93	161531	250.0	221.8	
53 Benzene	78	4.738	4.738	0.000	96	623494	10.0	9.90	
54 1,2-Dichloroethane	62	4.750	4.750	0.000	95	278429	10.0	10.1	
56 n-Heptane	100	4.963	4.963	0.000	92	16863	10.0	8.80	
58 Trichloroethene	130	5.282	5.282	0.000	92	126495	10.0	9.16	
60 Methylcyclohexane	83	5.448	5.448	0.000	92	162929	10.0	9.56	
61 1,2-Dichloropropane	63	5.472	5.472	0.000	96	208674	10.0	10.0	
63 Dibromomethane	93	5.578	5.578	0.000	96	85235	10.0	9.69	
64 1,4-Dioxane	88	5.602	5.590	0.012	60	9103	200.0	53.6	
65 Dichlorobromomethane	83	5.708	5.708	0.000	96	193743	10.0	9.92	
67 2-Chloroethyl vinyl ether	63	5.969	5.968	0.001	91	96668	10.0	10.1	
68 cis-1,3-Dichloropropene	75	6.099	6.099	0.000	88	234370	10.0	9.50	
69 4-Methyl-2-pentanone (MIBK	43	6.241	6.241	0.000	97	546474	20.0	19.7	
70 Toluene	91	6.395	6.394	0.001	96	569693	10.0	10.1	
71 trans-1,3-Dichloropropene	75	6.584	6.584	0.000	97	207832	10.0	10.2	
72 Ethyl methacrylate	69	6.667	6.667	0.000	92	219446	10.0	10.4	
73 1,1,2-Trichloroethane	97	6.750	6.749	0.001	91	117920	10.0	10.8	
74 Tetrachloroethene	164	6.880	6.891	-0.011	94	91297	10.0	9.32	
75 1,3-Dichloropropane	76	6.903	6.903	0.000	97	224187	10.0	10.2	
76 2-Hexanone	43	6.974	6.974	0.000	98	386069	20.0	21.2	
78 Chlorodibromomethane	129	7.105	7.104	0.001	87	128254	10.0	10.7	
80 Ethylene Dibromide	107	7.211	7.211	0.000	96	130825	10.0	10.4	
82 Chlorobenzene	112	7.661	7.661	0.000	88	368689	10.0	10.0	
83 1,1,1,2-Tetrachloroethane	131	7.744	7.743	0.001	94	131464	10.0	10.7	
84 Ethylbenzene	106	7.767	7.767	0.000	98	195826	10.0	9.53	
85 m-Xylene & p-Xylene	106	7.874	7.874	0.000	98	235053	10.0	9.43	
86 o-Xylene	106	8.252	8.252	0.000	97	250006	10.0	9.67	
87 Styrene	104	8.264	8.264	0.000	92	406738	10.0	9.46	
88 Bromoform	173	8.442	8.442	0.000	97	91290	10.0	10.5	
89 Isopropylbenzene	105	8.595	8.595	0.000	97	590843	10.0	9.71	
92 1,1,2,2-Tetrachloroethane	83	8.879	8.879	0.000	76	183701	10.0	10.2	
93 Bromobenzene	156	8.891	8.891	0.000	95	144228	10.0	9.59	
94 1,2,3-Trichloropropane	110	8.927	8.927	0.000	90	56943	10.0	10.3	
95 trans-1,4-Dichloro-2-buten	53	8.939	8.939	0.000	80	98212	10.0	10.6	
96 N-Propylbenzene	120	8.998	8.998	0.000	99	154210	10.0	9.61	
97 2-Chlorotoluene	126	9.081	9.069	0.012	95	141408	10.0	10.2	
98 1,3,5-Trimethylbenzene	105	9.163	9.163	0.000	94	494377	10.0	9.42	
99 4-Chlorotoluene	126	9.175	9.175	0.000	99	148780	10.0	10.1	
100 tert-Butylbenzene	119	9.483	9.483	0.000	93	337405	10.0	9.07	
102 1,2,4-Trimethylbenzene	105	9.530	9.530	0.000	97	529022	10.0	9.64	
103 sec-Butylbenzene	105	9.696	9.696	0.000	95	498620	10.0	9.27	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 1,3-Dichlorobenzene	146	9.802	9.802	0.000	95	273127	10.0	9.50	
105 4-Isopropyltoluene	119	9.838	9.838	0.000	97	419261	10.0	9.48	
106 1,4-Dichlorobenzene	146	9.885	9.885	0.000	90	284569	10.0	9.40	
109 n-Butylbenzene	91	10.240	10.240	0.000	98	347085	10.0	8.93	
110 1,2-Dichlorobenzene	146	10.252	10.252	0.000	95	287941	10.0	9.94	
111 1,2-Dibromo-3-Chloropropan	157	11.021	11.021	0.000	73	35643	10.0	9.66	
113 1,2,4-Trichlorobenzene	180	11.838	11.838	0.000	95	147536	10.0	7.61	
114 Hexachlorobutadiene	225	12.015	12.015	0.000	92	50355	10.0	7.02	
115 Naphthalene	128	12.086	12.086	0.000	98	462131	10.0	8.57	
116 1,2,3-Trichlorobenzene	180	12.323	12.323	0.000	94	131845	10.0	6.84	
S 130 Xylenes, Total	106				0		20.0	19.1	
S 131 Trihalomethanes, Total	1				0		40.0	41.1	

Reagents:

VMFASPW_00294	Amount Added:	8.00	Units: uL
VMFASGW_00303	Amount Added:	8.00	Units: uL
VMFASAW_00274	Amount Added:	8.00	Units: uL
VM50IS_00075	Amount Added:	1.00	Units: uL
vm50ss_00359	Amount Added:	8.00	Units: uL

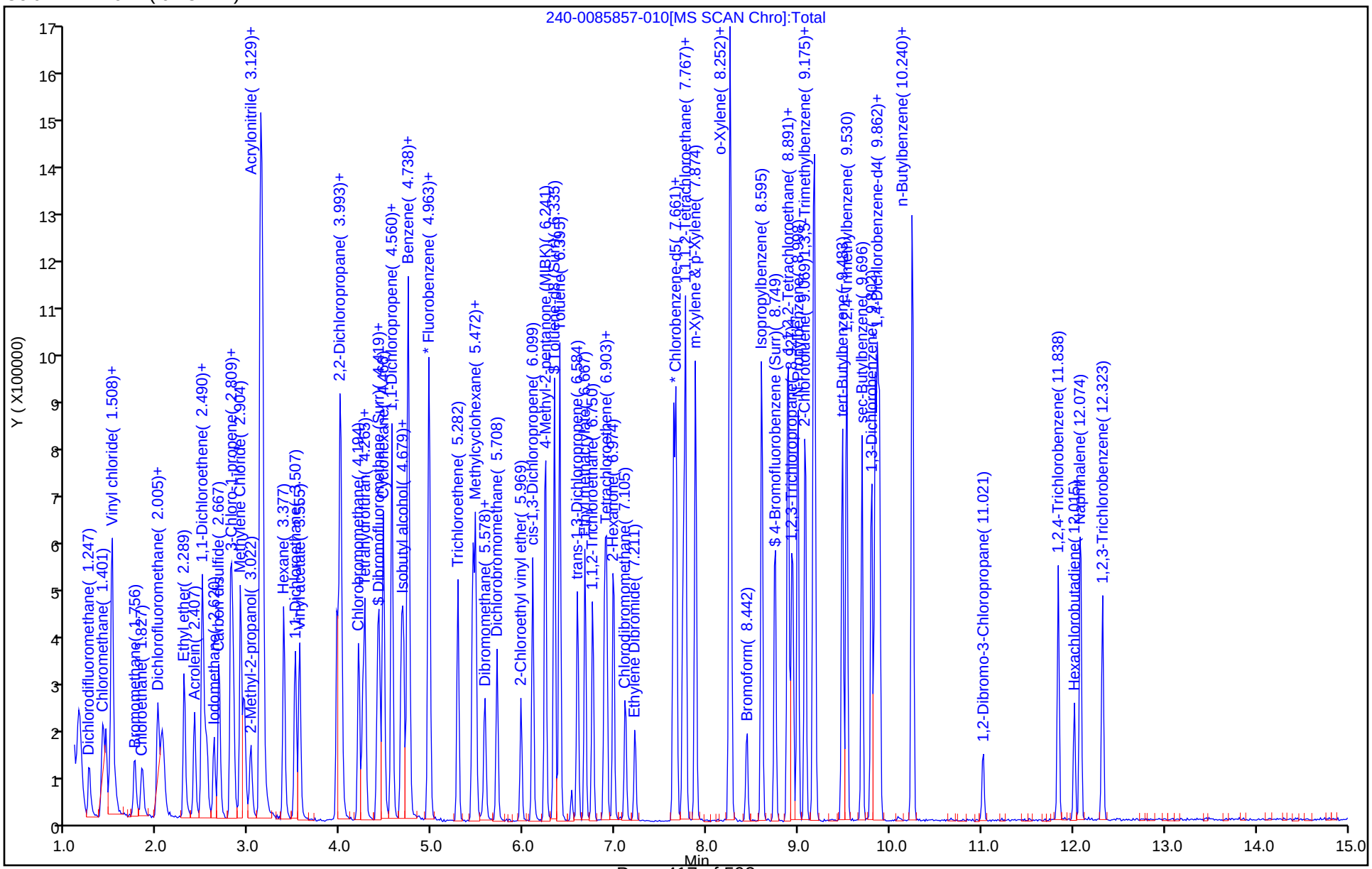
Report Date: 08-Apr-2019 12:12:34 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-010.D

Injection Date:	05-Apr-2019 20:55:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	ICV			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-375255/5 Calibration Date: 04/08/2019 11:54

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 20:30

Lab File ID: 240-0085913-005.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2498	0.2350		0.00941	0.0100	-5.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3925	0.3572		0.00910	0.0100	-9.0	50.0
Toluene-d8 (Surr)	Ave	1.271	1.216		0.00957	0.0100	-4.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5205	0.5164		0.00992	0.0100	-0.8	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\240-0085913-005.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 08-Apr-2019 11:54:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085913-005
Operator ID: 002808 Instrument ID: A3UX10
Sublist:

Method: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Apr-2019 09:14:44 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: macenczaks Date: 08-Apr-2019 12:14:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.965	4.976	-0.011	97	521634	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.640	7.638	0.002	93	400037	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.864	9.863	0.002	97	222248	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.397	4.396	0.001	93	122566	10.0	9.41	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.681	4.692	-0.011	95	186349	10.0	9.10	
$ 6 Toluene-d8 (Surr)	98	6.338	6.336	0.002	96	486592	10.0	9.57	
$ 7 4-Bromofluorobenzene (Surr	95	8.740	8.738	0.002	86	206568	10.0	9.92	
25 Acetonitrile	41	2.788	2.785	0.003	98	307863	100.0	108.0	
36 Isopropyl ether	87	3.569	3.566	0.003	98	146660	10.0	10.7	
37 2-Chloro-1,3-butadiene	53	3.581	3.578	0.003	91	414759	10.0	10.4	
38 Tert-butyl ethyl ether	59	3.877	3.874	0.003	96	574755	10.0	11.3	
42 Ethyl acetate	43	4.066	4.063	0.003	99	529479	20.0	20.1	
43 Propionitrile	54	4.066	4.063	0.003	79	388297	100.0	105.1	
44 Methacrylonitrile	41	4.196	4.193	0.003	97	1691415	100.0	100.4	
55 Tert-amyl methyl ether	73	4.835	4.832	0.003	92	390916	10.0	12.0	
57 n-Butanol	56	5.226	5.223	0.003	82	180841	250.0	225.1	
59 Ethyl acrylate	55	5.368	5.377	-0.009	97	368131	10.0	10.1	
62 Methyl methacrylate	41	5.569	5.566	0.003	91	485015	20.0	19.8	
66 2-Nitropropane	41	5.912	5.909	0.003	97	131408	20.0	20.3	
77 n-Butyl acetate	56	7.095	7.092	0.003	97	198285	10.0	10.1	
81 1-Chlorohexane	91	7.640	7.649	-0.009	81	166082	10.0	10.4	
91 Cyclohexanone	55	8.693	8.690	0.003	94	86459	100.0	85.8	
101 Pentachloroethane	167	9.497	9.494	0.003	94	203186	20.0	23.9	
107 1,2,3-Trimethylbenzene	105	9.935	9.944	-0.009	99	659343	10.0	10.5	
108 Benzyl chloride	126	10.018	10.027	-0.009	99	81803	10.0	13.3	
112 1,3,5-Trichlorobenzene	180	11.225	11.234	-0.009	95	203963	10.0	10.2	
117 2-Methylnaphthalene	142	13.237	13.245	-0.008	99	697373	20.0	16.6	

Reagents:

VMFASA9W_00226	Amount Added:	8.00	Units: uL	
vm50ss_stk_00080	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00142	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00075	Amount Added:	1.00	Units: uL	Run Reagent

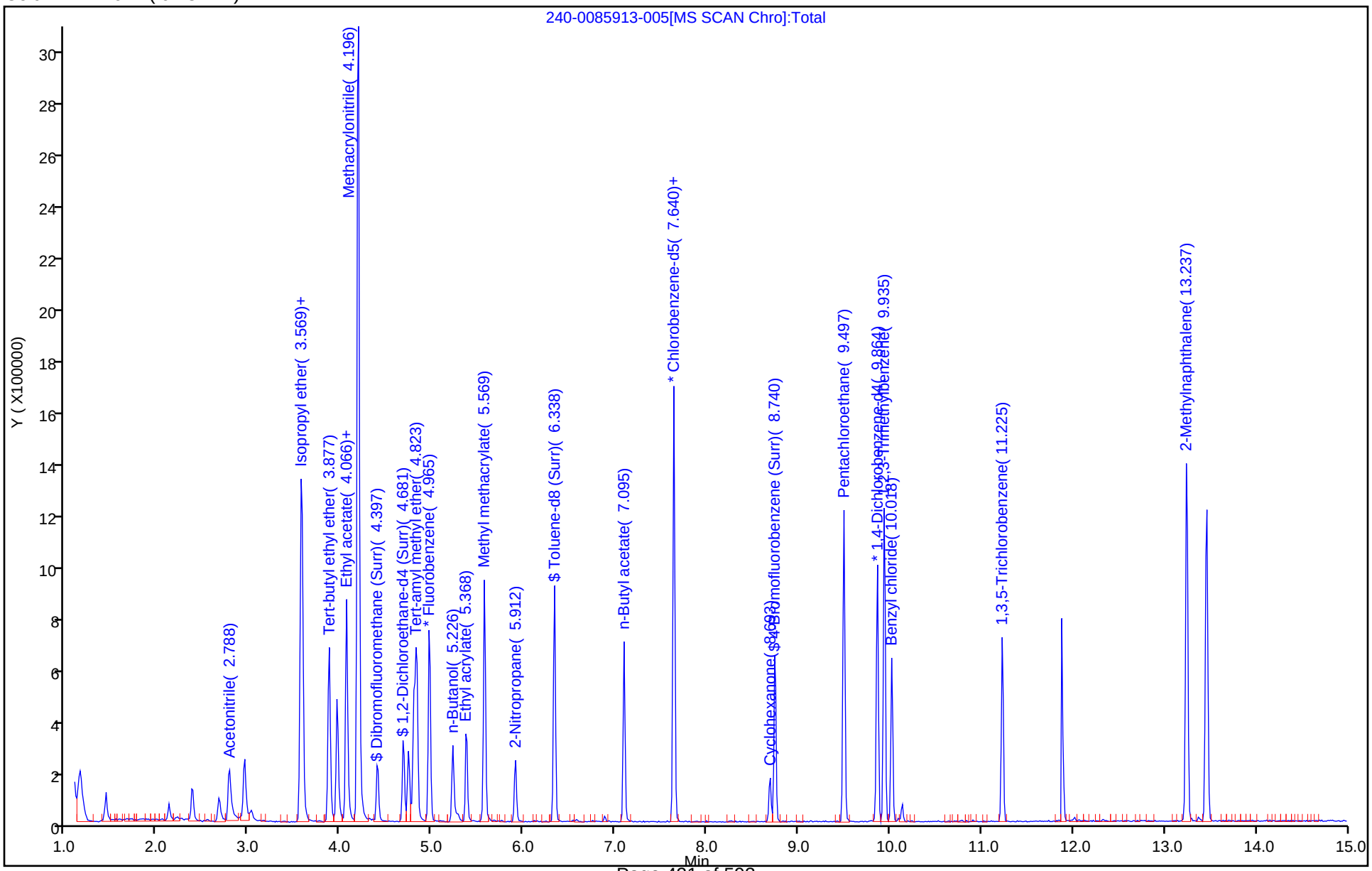
Report Date: 09-Apr-2019 09:14:46 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\240-0085913-005.D

Injection Date:	08-Apr-2019 11:54:30	Instrument ID:	A3UX10	Operator ID:	002808
Lims ID:	ICV A9			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-375255/5 Calibration Date: 04/08/2019 11:54

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 21:20

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 23:49

Lab File ID: 240-0085913-005.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0546	0.0590		0.108	0.100	8.0	50.0
Isopropyl ether	Ave	0.2628	0.2812		0.0107	0.0100	7.0	50.0
2-Chloro-1,3-butadiene	Ave	0.7640	0.7951		0.0104	0.0100	4.1	50.0
Tert-butyl ethyl ether	Ave	0.9749	1.102		0.0113	0.0100	13.0	50.0
Ethyl acetate	Ave	0.5048	0.5075		0.0201	0.0200	0.5	50.0
Propionitrile	Ave	0.0708	0.0744		0.105	0.100	5.1	50.0
Methacrylonitrile	Ave	0.3229	0.3243		0.100	0.100	0.4	50.0
Tert-amyl methyl ether	Ave	0.6235	0.7494		0.0120	0.0100	20.2	50.0
n-Butanol	Ave	0.0201	0.0181		0.225	0.250	-9.9	50.0
Ethyl acrylate	Ave	0.6971	0.7057		0.0101	0.0100	1.2	50.0
Methyl methacrylate	Ave	0.4689	0.4649		0.0198	0.0200	-0.9	50.0
2-Nitropropane	Ave	0.1239	0.1260		0.0203	0.0200	1.7	50.0
n-Butyl acetate	Ave	0.4913	0.4957		0.0101	0.0100	0.9	50.0
1-Chlorohexane	Ave	0.3989	0.4152		0.0104	0.0100	4.1	50.0
Cyclohexanone	Ave	0.0453	0.0389		0.0858	0.100	-14.2	50.0
Pentachloroethane	Ave	0.2123	0.2540		0.0239	0.0200	19.6	50.0
1,2,3-Trimethylbenzene	Ave	2.831	2.967		0.0105	0.0100	4.8	50.0
Benzyl chloride	Ave	0.2767	0.3681		0.0133	0.0100	33.0	50.0
1,3,5-Trichlorobenzene	Ave	0.9021	0.9177		0.0102	0.0100	1.7	50.0
2-Methylnaphthalene	Ave	1.889	1.569		0.0166	0.0200	-17.0	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\240-0085913-005.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 08-Apr-2019 11:54:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085913-005
Operator ID: 002808 Instrument ID: A3UX10
Sublist:

Method: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Apr-2019 09:14:44 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0311

First Level Reviewer: macenczaks Date: 08-Apr-2019 12:14:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.965	4.976	-0.011	97	521634	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.640	7.638	0.002	93	400037	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.864	9.863	0.002	97	222248	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.397	4.396	0.001	93	122566	10.0	9.41	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.681	4.692	-0.011	95	186349	10.0	9.10	
$ 6 Toluene-d8 (Surr)	98	6.338	6.336	0.002	96	486592	10.0	9.57	
$ 7 4-Bromofluorobenzene (Surr	95	8.740	8.738	0.002	86	206568	10.0	9.92	
25 Acetonitrile	41	2.788	2.785	0.003	98	307863	100.0	108.0	
36 Isopropyl ether	87	3.569	3.566	0.003	98	146660	10.0	10.7	
37 2-Chloro-1,3-butadiene	53	3.581	3.578	0.003	91	414759	10.0	10.4	
38 Tert-butyl ethyl ether	59	3.877	3.874	0.003	96	574755	10.0	11.3	
42 Ethyl acetate	43	4.066	4.063	0.003	99	529479	20.0	20.1	
43 Propionitrile	54	4.066	4.063	0.003	79	388297	100.0	105.1	
44 Methacrylonitrile	41	4.196	4.193	0.003	97	1691415	100.0	100.4	
55 Tert-amyl methyl ether	73	4.835	4.832	0.003	92	390916	10.0	12.0	
57 n-Butanol	56	5.226	5.223	0.003	82	180841	250.0	225.1	
59 Ethyl acrylate	55	5.368	5.377	-0.009	97	368131	10.0	10.1	
62 Methyl methacrylate	41	5.569	5.566	0.003	91	485015	20.0	19.8	
66 2-Nitropropane	41	5.912	5.909	0.003	97	131408	20.0	20.3	
77 n-Butyl acetate	56	7.095	7.092	0.003	97	198285	10.0	10.1	
81 1-Chlorohexane	91	7.640	7.649	-0.009	81	166082	10.0	10.4	
91 Cyclohexanone	55	8.693	8.690	0.003	94	86459	100.0	85.8	
101 Pentachloroethane	167	9.497	9.494	0.003	94	203186	20.0	23.9	
107 1,2,3-Trimethylbenzene	105	9.935	9.944	-0.009	99	659343	10.0	10.5	
108 Benzyl chloride	126	10.018	10.027	-0.009	99	81803	10.0	13.3	
112 1,3,5-Trichlorobenzene	180	11.225	11.234	-0.009	95	203963	10.0	10.2	
117 2-Methylnaphthalene	142	13.237	13.245	-0.008	99	697373	20.0	16.6	

Reagents:

VMFASA9W_00226	Amount Added:	8.00	Units: uL	
vm50ss_stk_00080	Amount Added:	1.00	Units: uL	Run Reagent
vmDist_H2o_00142	Amount Added:	0.00	Units:	Run Reagent
VM50IS_00075	Amount Added:	1.00	Units: uL	Run Reagent

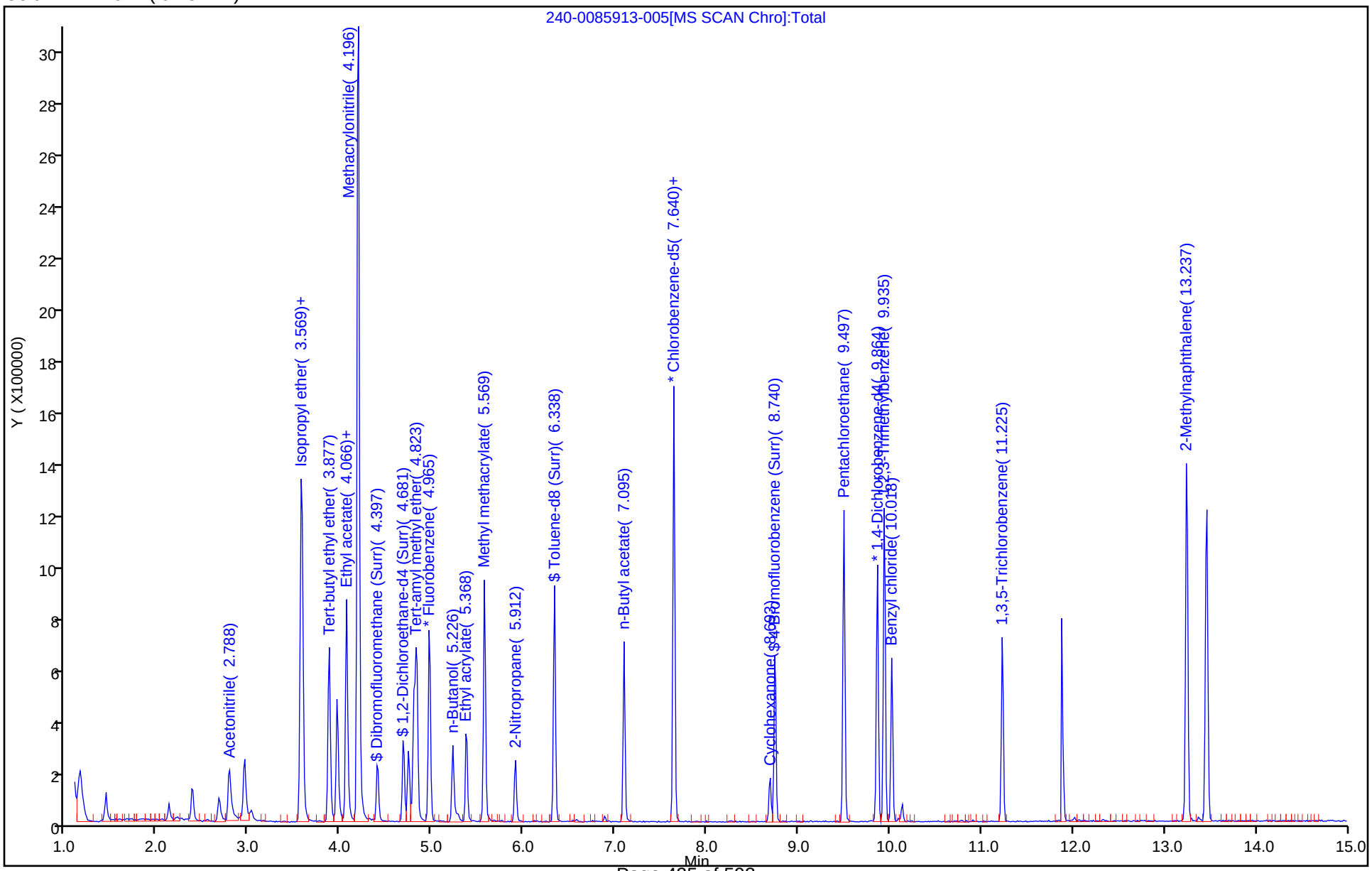
Report Date: 09-Apr-2019 09:14:46 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\240-0085913-005.D

Injection Date:	08-Apr-2019 11:54:30	Instrument ID:	A3UX10	Operator ID:	002808
Lims ID:	ICV A9			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386760/2 Calibration Date: 06/18/2019 11:29

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 20:30

Lab File ID: UXX1999.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2688	0.3281		0.0122	0.0100	22.0	50.0
Chloromethane	Ave	0.6408	0.8708	0.1000	0.0136	0.0100	35.9	50.0
Vinyl chloride	Ave	0.4160	0.4407		0.0106	0.0100	6.0	20.0
Butadiene	Ave	0.5101	0.4723		0.00926	0.0100	-7.4	50.0
Bromomethane	Ave	0.1713	0.1854		0.0108	0.0100	8.2	50.0
Chloroethane	Ave	0.2369	0.1961		0.00828	0.0100	-17.2	50.0
Dichlorofluoromethane	Ave	0.4871	0.5381		0.0110	0.0100	10.5	50.0
Trichlorofluoromethane	Ave	0.3392	0.4294		0.0127	0.0100	26.6	50.0
Ethyl ether	Ave	0.3261	0.3279		0.0101	0.0100	0.5	50.0
Acrolein	Ave	0.0853	0.0709		0.0415	0.0500	-16.9	50.0
1,1-Dichloroethene	Ave	0.2132	0.2165		0.0102	0.0100	1.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1489	0.1627		0.0109	0.0100	9.3	50.0
Acetone	Lin1		0.1303		0.0162	0.0200	-19.1	50.0
Iodomethane	Ave	0.3946	0.5161		0.0131	0.0100	30.8	50.0
Carbon disulfide	Ave	0.8598	0.7797		0.00907	0.0100	-9.3	50.0
3-Chloro-1-propene	Ave	0.1832	0.1640		0.00895	0.0100	-10.5	50.0
Methyl acetate	Ave	0.3747	0.3526		0.0188	0.0200	-5.9	50.0
Methylene Chloride	Ave	0.3175	0.2922		0.00920	0.0100	-8.0	50.0
2-Methyl-2-propanol	Ave	0.0432	0.0356		0.0825	0.100	-17.5	50.0
Acrylonitrile	Ave	0.1993	0.1840		0.0923	0.100	-7.7	50.0
Methyl tert-butyl ether	Ave	0.6653	0.5868		0.00882	0.0100	-11.8	50.0
trans-1,2-Dichloroethene	Ave	0.2610	0.2285		0.00876	0.0100	-12.4	50.0
Hexane	Ave	0.0440	0.0503		0.0114	0.0100	14.3	20.0
1,1-Dichloroethane	Ave	0.7029	0.6977	0.1000	0.00993	0.0100	-0.7	50.0
Vinyl acetate	Ave	1.022	0.9684		0.00948	0.0100	-5.2	50.0
2,2-Dichloropropane	Ave	0.0704	0.0762		0.0108	0.0100	8.2	50.0
cis-1,2-Dichloroethene	Ave	0.3004	0.2898		0.00965	0.0100	-3.5	50.0
2-Butanone (MEK)	Ave	0.2409	0.2124		0.0176	0.0200	-11.8	50.0
Chlorobromomethane	Ave	0.1353	0.1345		0.00994	0.0100	-0.6	50.0
Tetrahydrofuran	Ave	0.1513	0.1420		0.0188	0.0200	-6.1	50.0
Chloroform	Ave	0.4859	0.4942		0.0102	0.0100	1.7	20.0
1,1,1-Trichloroethane	Ave	0.3417	0.4239		0.0124	0.0100	24.0	50.0
Cyclohexane	Ave	0.6555	0.6534		0.00997	0.0100	-0.3	50.0
1,1-Dichloropropene	Ave	0.3727	0.3779		0.0101	0.0100	1.4	50.0
Carbon tetrachloride	Ave	0.3031	0.4143		0.0137	0.0100	36.7	50.0
Isobutyl alcohol	Ave	0.0196	0.0180		0.231	0.250	-7.8	50.0
Benzene	Ave	1.200	1.105		0.00920	0.0100	-8.0	50.0
1,2-Dichloroethane	Ave	0.5278	0.5891		0.0112	0.0100	11.6	50.0
n-Heptane	Ave	0.0365	0.0374		0.0103	0.0100	2.6	50.0
Trichloroethene	Ave	0.2631	0.3049		0.0116	0.0100	15.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386760/2 Calibration Date: 06/18/2019 11:29

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 20:30

Lab File ID: UXX1999.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3247	0.3055		0.00941	0.0100	-5.9	50.0
1,2-Dichloropropane	Ave	0.3962	0.3644		0.00920	0.0100	-8.0	20.0
Dibromomethane	Ave	0.1676	0.1721		0.0103	0.0100	2.6	50.0
1,4-Dioxane	Ave	0.0032	0.0022		0.133	0.200	-33.5	50.0
Dichlorobromomethane	Ave	0.3721	0.4082		0.0110	0.0100	9.7	50.0
2-Chloroethyl vinyl ether	Ave	0.1815	0.1931		0.0213	0.0200	6.3	50.0
cis-1,3-Dichloropropene	Ave	0.4701	0.4818		0.0102	0.0100	2.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5296	0.4539		0.0171	0.0200	-14.3	50.0
Toluene	Ave	1.513	1.303		0.00861	0.0100	-13.9	20.0
trans-1,3-Dichloropropene	Ave	0.5497	0.4583		0.00834	0.0100	-16.6	50.0
Ethyl methacrylate	Ave	0.5683	0.3908		0.00688	0.0100	-31.2	50.0
1,1,2-Trichloroethane	Ave	0.2925	0.3107		0.0106	0.0100	6.2	50.0
Tetrachloroethene	Ave	0.2630	0.3102		0.0118	0.0100	18.0	50.0
1,3-Dichloropropane	Ave	0.5916	0.5659		0.00957	0.0100	-4.3	50.0
2-Hexanone	Ave	0.4900	0.3831		0.0156	0.0200	-21.8	50.0
Chlorodibromomethane	Ave	0.3208	0.3659		0.0114	0.0100	14.1	50.0
Ethylene Dibromide	Ave	0.3394	0.3216		0.00947	0.0100	-5.3	50.0
Chlorobenzene	Ave	0.9865	1.017	0.3000	0.0103	0.0100	3.1	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3314	0.3727		0.0112	0.0100	12.5	50.0
Ethylbenzene	Ave	0.5517	0.5595		0.0101	0.0100	1.4	20.0
m-Xylene & p-Xylene	Ave	0.6692	0.6466		0.00966	0.0100	-3.4	50.0
o-Xylene	Ave	0.6940	0.6585		0.00949	0.0100	-5.1	50.0
Styrene	Ave	1.155	1.189		0.0103	0.0100	2.9	50.0
Bromoform	Ave	0.2342	0.2704	0.1000	0.0115	0.0100	15.4	50.0
Isopropylbenzene	Ave	1.634	1.579		0.00967	0.0100	-3.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8746	0.5266	0.3000	0.00602	0.0100	-39.8	50.0
Bromobenzene	Ave	0.7269	0.7112		0.00978	0.0100	-2.2	50.0
1,2,3-Trichloropropane	Ave	0.2667	0.1761		0.00660	0.0100	-34.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.4460	0.2837		0.00636	0.0100	-36.4	50.0
N-Propylbenzene	Ave	0.7759	0.6849		0.00883	0.0100	-11.7	50.0
2-Chlorotoluene	Ave	0.6728	0.5869		0.00872	0.0100	-12.8	50.0
1,3,5-Trimethylbenzene	Ave	2.536	2.024		0.00798	0.0100	-20.2	50.0
4-Chlorotoluene	Ave	0.7095	0.6276		0.00885	0.0100	-11.5	50.0
tert-Butylbenzene	Ave	1.798	1.631		0.00907	0.0100	-9.3	50.0
1,2,4-Trimethylbenzene	Ave	2.652	2.181		0.00822	0.0100	-17.8	50.0
sec-Butylbenzene	Ave	2.600	1.996		0.00768	0.0100	-23.2	50.0
1,3-Dichlorobenzene	Ave	1.390	1.359		0.00978	0.0100	-2.2	50.0
4-Isopropyltoluene	Ave	2.138	1.714		0.00802	0.0100	-19.8	50.0
1,4-Dichlorobenzene	Ave	1.463	1.422		0.00972	0.0100	-2.8	50.0
n-Butylbenzene	Ave	1.879	1.365		0.00727	0.0100	-27.3	50.0
1,2-Dichlorobenzene	Ave	1.401	1.339		0.00956	0.0100	-4.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386760/2 Calibration Date: 06/18/2019 11:29

Instrument ID: A3UX10 Calib Start Date: 04/05/2019 18:02

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/05/2019 20:30

Lab File ID: UXX1999.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1412		0.00798	0.0100	-20.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9371	0.7598		0.00811	0.0100	-18.9	50.0
Hexachlorobutadiene	Ave	0.3468	0.3235		0.00933	0.0100	-6.7	50.0
Naphthalene	Ave	2.609	1.770		0.00679	0.0100	-32.1	50.0
1,2,3-Trichlorobenzene	Ave	0.9323	0.6705		0.00719	0.0100	-28.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2498	0.2724		0.0109	0.0100	9.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3925	0.4186		0.0107	0.0100	6.6	50.0
Toluene-d8 (Surr)	Ave	1.271	1.143		0.00899	0.0100	-10.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5205	0.4658		0.00895	0.0100	-10.5	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX1999.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 18-Jun-2019 11:29:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-002
Operator ID: 001644 Instrument ID: A3UX10
Sublist: chrom-8260_10*sub79

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:29 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.974	4.974	0.000	97	364512	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.637	7.637	0.000	89	311031	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.861	9.861	0.000	95	211894	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.406	4.406	0.000	94	99293	10.0	10.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.690	4.690	0.000	92	152587	10.0	10.7	
$ 6 Toluene-d8 (Surr)	98	6.335	6.335	0.000	94	355462	10.0	8.99	
$ 7 4-Bromofluorobenzene (Surr	95	8.749	8.749	0.000	92	144878	10.0	8.95	
9 Dichlorodifluoromethane	85	1.259	1.259	0.000	98	119593	10.0	12.2	
10 Chloromethane	50	1.401	1.401	0.000	98	317420	10.0	13.6	
11 Vinyl chloride	62	1.495	1.495	0.000	96	160650	10.0	10.6	
12 Butadiene	54	1.531	1.531	0.000	94	172171	10.0	9.26	
13 Bromomethane	94	1.779	1.779	0.000	90	67574	10.0	10.8	
14 Chloroethane	64	1.862	1.862	0.000	94	71487	10.0	8.28	
15 Dichlorofluoromethane	67	2.052	2.052	0.000	91	196127	10.0	11.0	
16 Trichlorofluoromethane	101	2.063	2.063	0.000	96	156519	10.0	12.7	
17 Ethyl ether	59	2.300	2.300	0.000	93	119505	10.0	10.1	
18 Acrolein	56	2.418	2.418	0.000	97	129144	50.0	41.5	
19 1,1-Dichloroethene	96	2.501	2.501	0.000	86	78904	10.0	10.2	
20 1,1,2-Trichloro-1,2,2-trif	151	2.513	2.513	0.000	45	59313	10.0	10.9	
21 Acetone	43	2.549	2.549	0.000	97	94954	20.0	16.2	
22 Iodomethane	142	2.631	2.631	0.000	96	188114	10.0	13.1	
24 Carbon disulfide	76	2.679	2.679	0.000	99	284217	10.0	9.07	
26 3-Chloro-1-propene	76	2.809	2.809	0.000	89	59772	10.0	8.95	
27 Methyl acetate	43	2.833	2.833	0.000	99	257075	20.0	18.8	
28 Methylene Chloride	84	2.915	2.915	0.000	87	106520	10.0	9.20	
29 2-Methyl-2-propanol	59	3.034	3.034	0.000	96	129907	100.0	82.5	
31 Acrylonitrile	53	3.128	3.128	0.000	100	670726	100.0	92.3	
30 trans-1,2-Dichloroethene	96	3.152	3.152	0.000	89	83305	10.0	8.76	
32 Methyl tert-butyl ether	73	3.152	3.152	0.000	89	213889	10.0	8.82	
33 Hexane	86	3.389	3.389	0.000	93	18320	10.0	11.4	
34 1,1-Dichloroethane	63	3.519	3.519	0.000	96	254313	10.0	9.93	
35 Vinyl acetate	43	3.554	3.554	0.000	96	352991	10.0	9.48	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2,2-Dichloropropane	97	4.004	4.004	0.000	59	27767	10.0	10.8	
40 cis-1,2-Dichloroethene	96	4.004	4.004	0.000	89	105639	10.0	9.65	
41 2-Butanone (MEK)	43	4.016	4.016	0.000	96	154847	20.0	17.6	
45 Chlorobromomethane	128	4.205	4.205	0.000	82	49035	10.0	9.94	
46 Tetrahydrofuran	42	4.253	4.253	0.000	84	103551	20.0	18.8	
47 Chloroform	83	4.276	4.276	0.000	97	180129	10.0	10.2	
48 1,1,1-Trichloroethane	97	4.430	4.430	0.000	92	154518	10.0	12.4	
49 Cyclohexane	56	4.477	4.477	0.000	89	238154	10.0	9.97	
50 1,1-Dichloropropene	75	4.572	4.572	0.000	83	137740	10.0	10.1	
51 Carbon tetrachloride	117	4.572	4.572	0.000	91	151012	10.0	13.7	
52 Isobutyl alcohol	41	4.667	4.667	0.000	95	140271	250.0	230.5	
53 Benzene	78	4.738	4.738	0.000	93	402606	10.0	9.20	
54 1,2-Dichloroethane	62	4.761	4.761	0.000	94	214735	10.0	11.2	
56 n-Heptane	100	4.962	4.962	0.000	94	13649	10.0	10.3	
58 Trichloroethene	130	5.282	5.282	0.000	87	111132	10.0	11.6	
60 Methylcyclohexane	83	5.448	5.448	0.000	86	111368	10.0	9.41	
61 1,2-Dichloropropane	63	5.483	5.483	0.000	93	132828	10.0	9.20	
63 Dibromomethane	93	5.578	5.578	0.000	87	62714	10.0	10.3	
64 1,4-Dioxane	88	5.601	5.601	0.000	75	15679	200.0	133.0	
65 Dichlorobromomethane	83	5.708	5.708	0.000	96	148800	10.0	11.0	
67 2-Chloroethyl vinyl ether	63	5.968	5.968	0.000	81	140738	20.0	21.3	
68 cis-1,3-Dichloropropene	75	6.098	6.098	0.000	86	175606	10.0	10.2	
69 4-Methyl-2-pentanone (MIBK	43	6.240	6.240	0.000	98	330929	20.0	17.1	
70 Toluene	91	6.394	6.394	0.000	95	405258	10.0	8.61	
71 trans-1,3-Dichloropropene	75	6.595	6.595	0.000	92	142540	10.0	8.34	
72 Ethyl methacrylate	69	6.678	6.678	0.000	87	121546	10.0	6.88	
73 1,1,2-Trichloroethane	97	6.749	6.749	0.000	92	96630	10.0	10.6	
74 Tetrachloroethene	164	6.891	6.891	0.000	90	96488	10.0	11.8	
75 1,3-Dichloropropane	76	6.903	6.903	0.000	93	176012	10.0	9.57	
76 2-Hexanone	43	6.986	6.986	0.000	96	238299	20.0	15.6	
78 Chlorodibromomethane	129	7.116	7.116	0.000	91	113790	10.0	11.4	
80 Ethylene Dibromide	107	7.223	7.223	0.000	96	100016	10.0	9.47	
82 Chlorobenzene	112	7.672	7.672	0.000	93	316281	10.0	10.3	
83 1,1,1,2-Tetrachloroethane	131	7.743	7.743	0.000	91	115915	10.0	11.2	
84 Ethylbenzene	106	7.767	7.767	0.000	97	174032	10.0	10.1	
85 m-Xylene & p-Xylene	106	7.873	7.873	0.000	97	201122	10.0	9.66	
86 o-Xylene	106	8.252	8.252	0.000	93	204798	10.0	9.49	
87 Styrene	104	8.264	8.264	0.000	91	369675	10.0	10.3	
88 Bromoform	173	8.441	8.441	0.000	96	84100	10.0	11.5	
89 Isopropylbenzene	105	8.595	8.595	0.000	96	491258	10.0	9.67	
92 1,1,2,2-Tetrachloroethane	83	8.891	8.891	0.000	71	111582	10.0	6.02	
93 Bromobenzene	156	8.891	8.891	0.000	83	150692	10.0	9.78	
94 1,2,3-Trichloropropane	110	8.926	8.926	0.000	92	37308	10.0	6.60	
95 trans-1,4-Dichloro-2-buten	53	8.938	8.938	0.000	77	60104	10.0	6.36	
96 N-Propylbenzene	120	8.997	8.997	0.000	98	145128	10.0	8.83	
97 2-Chlorotoluene	126	9.080	9.080	0.000	95	124367	10.0	8.72	
98 1,3,5-Trimethylbenzene	105	9.163	9.163	0.000	94	428842	10.0	7.98	
99 4-Chlorotoluene	126	9.187	9.187	0.000	98	132987	10.0	8.85	
100 tert-Butylbenzene	119	9.483	9.483	0.000	92	345665	10.0	9.07	
102 1,2,4-Trimethylbenzene	105	9.530	9.530	0.000	97	462236	10.0	8.22	
103 sec-Butylbenzene	105	9.696	9.696	0.000	94	422985	10.0	7.68	
104 1,3-Dichlorobenzene	146	9.802	9.802	0.000	96	288002	10.0	9.78	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 4-Isopropyltoluene	119	9.838	9.838	0.000	96	363225	10.0	8.02	
106 1,4-Dichlorobenzene	146	9.885	9.885	0.000	94	301328	10.0	9.72	
109 n-Butylbenzene	91	10.240	10.240	0.000	97	289261	10.0	7.27	
110 1,2-Dichlorobenzene	146	10.252	10.252	0.000	95	283777	10.0	9.56	
111 1,2-Dibromo-3-Chloropropan	157	11.021	11.021	0.000	79	29928	10.0	7.98	
113 1,2,4-Trichlorobenzene	180	11.837	11.837	0.000	93	161002	10.0	8.11	
114 Hexachlorobutadiene	225	12.015	12.015	0.000	91	68544	10.0	9.33	
115 Naphthalene	128	12.086	12.086	0.000	99	375057	10.0	6.79	
116 1,2,3-Trichlorobenzene	180	12.322	12.322	0.000	98	142067	10.0	7.19	
S 130 Xylenes, Total	106				0		20.0	19.2	
S 131 Trihalomethanes, Total	1				0		40.0	44.1	

Reagents:

VMRPRIMW_00341	Amount Added:	8.00	Units: uL	
VMRGAS_00297	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00301	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

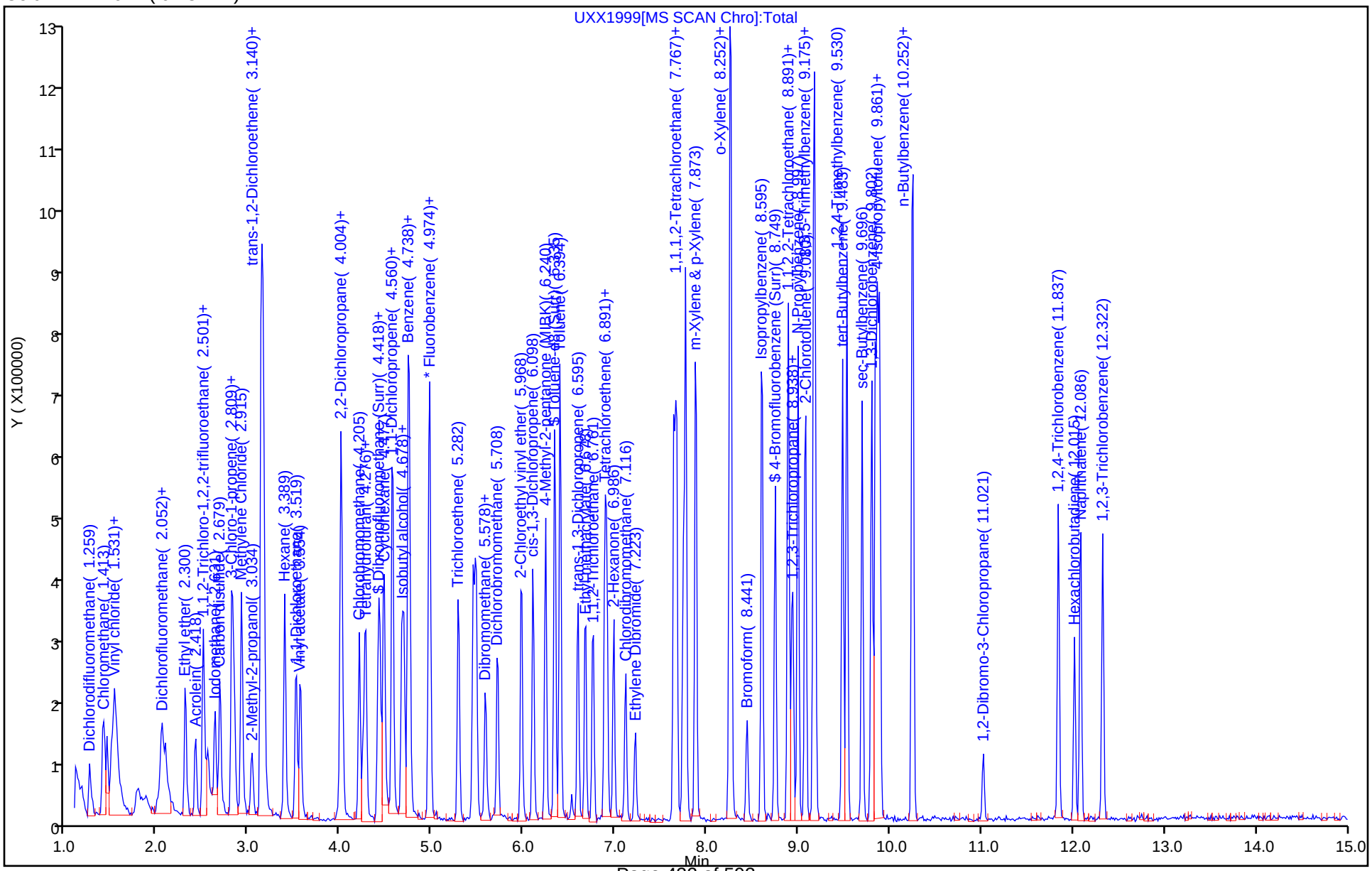
Report Date: 19-Jun-2019 10:25:30 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX1999.D

Injection Date:	18-Jun-2019 11:29:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-367104/14 Calibration Date: 02/07/2019 15:22

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 13:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 15:00

Lab File ID: UXJ8027.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2965	0.2155		0.00727	0.0100	-27.3	50.0
Chloromethane	Ave	0.2437	0.1916	0.1000	0.00786	0.0100	-21.4	50.0
Butadiene	Ave	0.2273	0.1923		0.00846	0.0100	-15.4	50.0
Vinyl chloride	Ave	0.2648	0.2502		0.00945	0.0100	-5.5	20.0
Bromomethane	Ave	0.1749	0.1599		0.00914	0.0100	-8.6	50.0
Chloroethane	Ave	0.1395	0.1398		0.0100	0.0100	0.3	50.0
Dichlorofluoromethane	Ave	0.3514	0.3586		0.0102	0.0100	2.0	50.0
Trichlorofluoromethane	Ave	0.3720	0.3714		0.00998	0.0100	-0.2	50.0
Ethyl ether	Ave	0.1858	0.1927		0.0104	0.0100	3.7	50.0
Acrolein	Ave	0.0478	0.0476		0.0498	0.0500	-0.3	50.0
1,1-Dichloroethene	Ave	0.2297	0.2301		0.0100	0.0100	0.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1930	0.1932		0.0100	0.0100	0.1	50.0
Acetone	Ave	0.1072	0.1040		0.0194	0.0200	-3.0	50.0
Iodomethane	Ave	0.4080	0.4225		0.0104	0.0100	3.5	50.0
Carbon disulfide	Ave	0.7535	0.7034		0.00934	0.0100	-6.6	50.0
3-Chloro-1-propene	Ave	0.1694	0.1694		0.0100	0.0100	-0.0	50.0
Methyl acetate	Ave	0.2292	0.2239		0.0195	0.0200	-2.3	50.0
Methylene Chloride	Lin1		0.2589		0.00975	0.0100	-2.5	50.0
2-Methyl-2-propanol	Ave	0.0387	0.0366		0.0946	0.100	-5.4	50.0
Acrylonitrile	Ave	0.1197	0.1160		0.0969	0.100	-3.1	50.0
trans-1,2-Dichloroethene	Ave	0.2733	0.2926		0.0107	0.0100	7.1	50.0
Methyl tert-butyl ether	Ave	0.6104	0.6251		0.0102	0.0100	2.4	50.0
Hexane	Lin1		0.0663		0.0101	0.0100	0.8	20.0
1,1-Dichloroethane	Ave	0.4478	0.4612	0.1000	0.0103	0.0100	3.0	50.0
Vinyl acetate	Ave	0.4212	0.4555		0.0108	0.0100	8.1	50.0
2,2-Dichloropropane	Ave	0.0660	0.0608		0.00921	0.0100	-7.9	50.0
cis-1,2-Dichloroethene	Ave	0.2845	0.2960		0.0104	0.0100	4.0	50.0
2-Butanone (MEK)	Ave	0.1351	0.1368		0.0203	0.0200	1.3	50.0
Chlorobromomethane	Ave	0.1457	0.1446		0.00993	0.0100	-0.7	50.0
Tetrahydrofuran	Ave	0.0906	0.0830		0.0183	0.0200	-8.4	50.0
Chloroform	Ave	0.4338	0.4439		0.0102	0.0100	2.3	20.0
1,1,1-Trichloroethane	Ave	0.3774	0.3805		0.0101	0.0100	0.8	50.0
Cyclohexane	Ave	0.3509	0.3668		0.0105	0.0100	4.5	50.0
1,1-Dichloropropene	Ave	0.3456	0.3570		0.0103	0.0100	3.3	50.0
Carbon tetrachloride	Ave	0.3572	0.3548		0.00993	0.0100	-0.7	50.0
Isobutyl alcohol	Ave	0.0197	0.0199		0.254	0.250	1.4	50.0
Benzene	Ave	1.001	1.000		0.00998	0.0100	-0.2	50.0
1,2-Dichloroethane	Ave	0.3480	0.3422		0.00983	0.0100	-1.7	50.0
n-Heptane	Lin1		0.0515		0.00896	0.0100	-10.4	50.0
Trichloroethene	Ave	0.2978	0.2982		0.0100	0.0100	0.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-367104/14 Calibration Date: 02/07/2019 15:22

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 13:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 15:00

Lab File ID: UXJ8027.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3885	0.3731		0.00960	0.0100	-4.0	50.0
1,2-Dichloropropane	Ave	0.2100	0.2111		0.0101	0.0100	0.5	20.0
Dibromomethane	Ave	0.1475	0.1557		0.0106	0.0100	5.6	50.0
1,4-Dioxane	Lin1		0.0027		0.163	0.200	-18.4	50.0
Dichlorobromomethane	Ave	0.3202	0.3096		0.00967	0.0100	-3.3	50.0
2-Chloroethyl vinyl ether	Ave	0.1287	0.1154			0.0100	-10.4	50.0
cis-1,3-Dichloropropene	Ave	0.3323	0.3447		0.0104	0.0100	3.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2408	0.2395		0.0199	0.0200	-0.5	50.0
Toluene	Ave	1.444	1.486		0.0103	0.0100	2.9	20.0
trans-1,3-Dichloropropene	Ave	0.4702	0.4369		0.00929	0.0100	-7.1	50.0
Ethyl methacrylate	Ave	0.3915	0.3637		0.00929	0.0100	-7.1	50.0
1,1,2-Trichloroethane	Ave	0.3033	0.2899		0.00956	0.0100	-4.4	50.0
Tetrachloroethene	Ave	0.3229	0.3283		0.0102	0.0100	1.7	50.0
1,3-Dichloropropane	Ave	0.4858	0.4860		0.0100	0.0100	0.0	50.0
2-Hexanone	Ave	0.2590	0.2563		0.0198	0.0200	-1.0	50.0
Chlorodibromomethane	Ave	0.3521	0.3693		0.0105	0.0100	4.9	50.0
Ethylene Dibromide	Ave	0.3126	0.2892		0.00925	0.0100	-7.5	50.0
Chlorobenzene	Ave	0.9680	0.9501	0.3000	0.00982	0.0100	-1.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3713	0.3714		0.0100	0.0100	0.0	50.0
Ethylbenzene	Ave	0.4859	0.4717		0.00971	0.0100	-2.9	20.0
m-Xylene & p-Xylene	Ave	0.5666	0.5960		0.0105	0.0100	5.2	50.0
o-Xylene	Ave	0.5483	0.5526		0.0101	0.0100	0.8	50.0
Styrene	Ave	0.9241	0.9199		0.00995	0.0100	-0.5	50.0
Bromoform	Ave	0.2804	0.2771	0.1000	0.00988	0.0100	-1.2	50.0
Isopropylbenzene	Ave	1.410	1.425		0.0101	0.0100	1.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8110	0.7825	0.3000	0.00965	0.0100	-3.5	50.0
Bromobenzene	Ave	0.7495	0.7090		0.00946	0.0100	-5.4	50.0
1,2,3-Trichloropropane	Ave	0.2816	0.2766		0.00982	0.0100	-1.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2588	0.2519		0.00973	0.0100	-2.7	50.0
N-Propylbenzene	Ave	0.7593	0.7548		0.00994	0.0100	-0.6	50.0
2-Chlorotoluene	Ave	0.6805	0.7074		0.0104	0.0100	4.0	50.0
1,3,5-Trimethylbenzene	Ave	2.068	2.065		0.00999	0.0100	-0.1	50.0
4-Chlorotoluene	Ave	0.6970	0.7266		0.0104	0.0100	4.2	50.0
tert-Butylbenzene	Ave	1.769	1.706		0.00965	0.0100	-3.5	50.0
1,2,4-Trimethylbenzene	Ave	2.086	2.075		0.00995	0.0100	-0.5	50.0
sec-Butylbenzene	Ave	2.519	2.561		0.0102	0.0100	1.7	50.0
1,3-Dichlorobenzene	Ave	1.363	1.309		0.00961	0.0100	-3.9	50.0
4-Isopropyltoluene	Ave	2.229	2.248		0.0101	0.0100	0.9	50.0
1,4-Dichlorobenzene	Ave	1.462	1.373		0.00939	0.0100	-6.1	50.0
1,2-Dichlorobenzene	Ave	1.275	1.209		0.00948	0.0100	-5.2	50.0
n-Butylbenzene	Ave	1.818	1.699		0.00935	0.0100	-6.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-367104/14 Calibration Date: 02/07/2019 15:22

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 13:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 15:00

Lab File ID: UXJ8027.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.2374		0.00979	0.0100	-2.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8021	0.7506		0.00936	0.0100	-6.4	50.0
Hexachlorobutadiene	Ave	0.3705	0.2825		0.00762	0.0100	-23.8	50.0
Naphthalene	Ave	2.134	1.995		0.00935	0.0100	-6.5	50.0
1,2,3-Trichlorobenzene	Ave	0.7522	0.7514		0.00999	0.0100	-0.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2333	0.2347		0.0201	0.0200	0.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2824	0.2726		0.0193	0.0200	-3.5	50.0
Toluene-d8 (Surr)	Ave	1.187	1.203		0.0203	0.0200	1.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3796	0.3597		0.0190	0.0200	-5.2	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8027.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Feb-2019 15:22:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-014
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist:

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:15:38 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 08:15:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	98	1136874	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	83	742699	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	94	406319	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	98	266836	20.0	20.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	97	309934	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	893512	20.0	20.3	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	86	267153	20.0	19.0	
9 Dichlorodifluoromethane	85	1.156	1.168	-0.012	99	122492	10.0	7.27	
10 Chloromethane	50	1.322	1.310	0.012	98	108930	10.0	7.86	
13 Butadiene	54	1.369	1.369	0.000	95	109324	10.0	8.46	
12 Vinyl chloride	62	1.393	1.393	0.000	98	142219	10.0	9.45	
15 Bromomethane	94	1.594	1.606	-0.012	92	90908	10.0	9.14	
16 Chloroethane	64	1.653	1.665	-0.012	98	79487	10.0	10.0	
17 Dichlorofluoromethane	67	1.807	1.807	0.000	98	203824	10.0	10.2	
18 Trichlorofluoromethane	101	1.854	1.831	0.023	95	211117	10.0	9.98	
19 Ethyl ether	59	2.055	2.067	-0.012	89	109517	10.0	10.4	
20 Acrolein	56	2.162	2.162	0.000	98	135366	50.0	49.8	
21 1,1-Dichloroethene	96	2.245	2.245	0.000	98	130822	10.0	10.0	
22 1,1,2-Trichloro-1,2,2-trif	151	2.280	2.280	0.000	91	109807	10.0	10.0	
23 Acetone	43	2.292	2.292	0.000	100	118234	20.0	19.4	
25 Iodomethane	142	2.363	2.363	0.000	95	240134	10.0	10.4	
26 Carbon disulfide	76	2.410	2.411	0.000	99	399812	10.0	9.34	
28 3-Chloro-1-propene	76	2.541	2.541	0.000	88	96291	10.0	10.0	
29 Methyl acetate	43	2.564	2.564	0.000	97	254495	20.0	19.5	
30 Methylene Chloride	84	2.635	2.647	-0.012	87	147143	10.0	9.75	
31 2-Methyl-2-propanol	59	2.754	2.754	0.000	96	208181	100.0	94.6	
32 Acrylonitrile	53	2.848	2.848	0.000	98	659215	100.0	96.9	
34 trans-1,2-Dichloroethene	96	2.872	2.872	0.000	98	166333	10.0	10.7	
33 Methyl tert-butyl ether	73	2.884	2.884	0.000	95	355339	10.0	10.2	
35 Hexane	86	3.097	3.109	-0.012	92	37666	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.215	3.215	0.000	97	262156	10.0	10.3	
37 Vinyl acetate	43	3.262	3.274	-0.012	97	258898	10.0	10.8	
41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	80	168258	10.0	10.4	
43 2,2-Dichloropropane	97	3.700	3.700	0.000	63	34552	10.0	9.21	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	99	155571	20.0	20.3	
47 Chlorobromomethane	128	3.890	3.890	0.000	88	82193	10.0	9.93	
48 Tetrahydrofuran	42	3.937	3.937	0.000	80	94338	20.0	18.3	
49 Chloroform	83	3.961	3.961	0.000	94	252351	10.0	10.2	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	98	216310	10.0	10.1	
51 Cyclohexane	56	4.162	4.162	0.000	87	208525	10.0	10.5	
53 Carbon tetrachloride	117	4.256	4.256	0.000	93	201657	10.0	9.93	
52 1,1-Dichloropropene	75	4.245	4.256	-0.011	95	202920	10.0	10.3	
54 Isobutyl alcohol	41	4.363	4.363	0.000	87	185080	250.0	253.6	
55 Benzene	78	4.422	4.422	0.000	95	568169	10.0	9.98	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	97	194510	10.0	9.83	
58 n-Heptane	100	4.659	4.659	0.000	44	29291	10.0	8.96	
60 Trichloroethene	130	4.966	4.966	0.000	93	169532	10.0	10.0	
62 Methylcyclohexane	83	5.132	5.132	0.000	89	212078	10.0	9.60	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	95	119996	10.0	10.1	
65 Dibromomethane	93	5.250	5.250	0.000	90	88497	10.0	10.6	
66 1,4-Dioxane	88	5.274	5.274	0.000	94	31141	200.0	163.1	
67 Dichlorobromomethane	83	5.392	5.392	0.000	100	175974	10.0	9.67	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	91	65573	10.0	8.96	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	97	195960	10.0	10.4	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	95	272309	20.0	19.9	
72 Toluene	91	6.067	6.067	0.000	97	551967	10.0	10.3	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	92	162243	10.0	9.29	
74 Ethyl methacrylate	69	6.363	6.363	0.000	87	135071	10.0	9.29	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	90	107634	10.0	9.56	
76 Tetrachloroethene	164	6.552	6.552	0.000	97	121909	10.0	10.2	
77 1,3-Dichloropropane	76	6.576	6.576	0.000	89	180490	10.0	10.0	
78 2-Hexanone	43	6.658	6.659	-0.001	95	190355	20.0	19.8	
80 Chlorodibromomethane	129	6.777	6.777	0.000	88	137141	10.0	10.5	
82 Ethylene Dibromide	107	6.871	6.872	-0.001	99	107383	10.0	9.25	
84 Chlorobenzene	112	7.333	7.333	0.000	98	352832	10.0	9.82	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	93	137909	10.0	10.0	
86 Ethylbenzene	106	7.439	7.439	0.000	98	175181	10.0	9.71	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	98	221333	10.0	10.5	
88 o-Xylene	106	7.913	7.913	0.000	96	205210	10.0	10.1	
89 Styrene	104	7.925	7.925	0.000	92	341620	10.0	9.95	
90 Bromoform	173	8.090	8.090	0.000	98	102912	10.0	9.88	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	529237	10.0	10.1	
95 Bromobenzene	156	8.552	8.540	0.012	88	144029	10.0	9.46	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	97	158969	10.0	9.65	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	85	56194	10.0	9.82	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	82	51170	10.0	9.73	
98 N-Propylbenzene	120	8.658	8.658	0.000	99	153347	10.0	9.94	
99 2-Chlorotoluene	126	8.741	8.741	0.000	98	143712	10.0	10.4	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	95	419613	10.0	9.99	
101 4-Chlorotoluene	126	8.836	8.848	-0.012	97	147608	10.0	10.4	
102 tert-Butylbenzene	119	9.143	9.155	-0.012	91	346660	10.0	9.65	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	97	421589	10.0	9.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.356	9.356	0.000	93	520257	10.0	10.2	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	99	266004	10.0	9.61	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	97	456786	10.0	10.1	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	97	279004	10.0	9.39	
111 n-Butylbenzene	91	9.901	9.901	0.000	97	345182	10.0	9.35	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	96	245592	10.0	9.48	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	93	48232	10.0	9.79	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	91	152496	10.0	9.36	
117 Hexachlorobutadiene	225	11.676	11.676	0.000	97	57388	10.0	7.62	
118 Naphthalene	128	11.723	11.723	0.000	96	405313	10.0	9.35	
119 1,2,3-Trichlorobenzene	180	11.971	11.960	0.011	97	152661	10.0	9.99	
S 133 Trihalomethanes, Total	1				0		40.0	40.3	
S 159 Total BTEX	1				0		50.0	50.6	
S 132 Xylenes, Total	106				0		20.0	20.6	

Reagents:

VMFASPW_00287	Amount Added:	8.00	Units: uL	
VMFASAW_00266	Amount Added:	8.00	Units: uL	
VMFASGW_00295	Amount Added:	8.00	Units: uL	
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00079	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00138	Amount Added:	0.00	Units:	Run Reagent

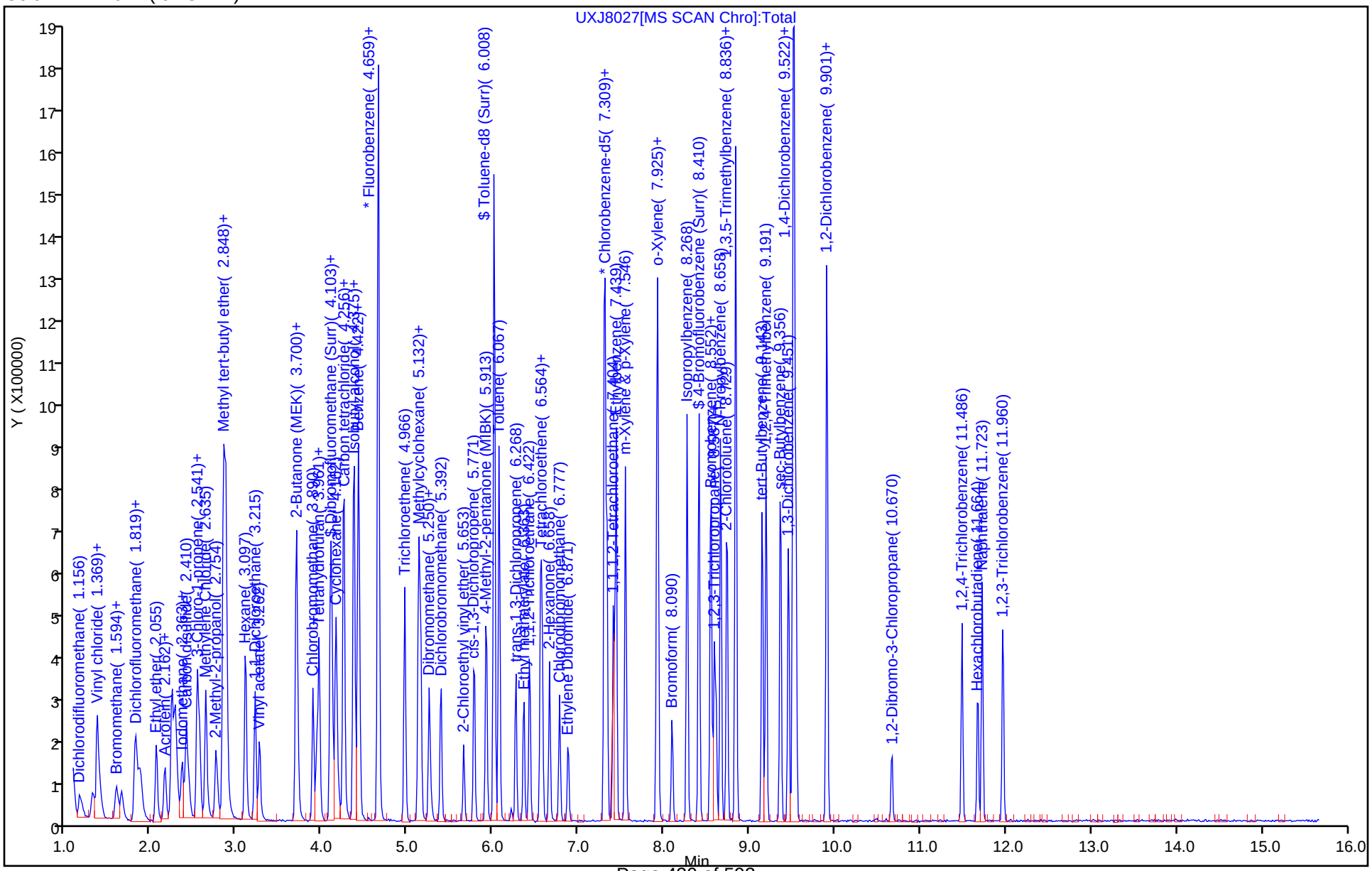
Report Date: 08-Feb-2019 09:15:45 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8027.D

Injection Date:	07-Feb-2019 15:22:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	ICV			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-367104/15 Calibration Date: 02/07/2019 17:58

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 13:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 15:00

Lab File ID: UXJ8034.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2333	0.2472		0.0212	0.0200	5.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2824	0.2744		0.0194	0.0200	-2.8	50.0
Toluene-d8 (Surr)	Ave	1.187	1.173		0.0198	0.0200	-1.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3796	0.3662		0.0193	0.0200	-3.5	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8034.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 07-Feb-2019 17:58:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-015
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist:

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:15:38 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 08:53:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	100	1095747	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	77	685491	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	91	350426	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	95	270885	20.0	21.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	94	300650	20.0	19.4	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	803880	20.0	19.8	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	87	251011	20.0	19.3	
27 Acetonitrile	41	2.517	2.517	0.000	99	186717	100.0	105.4	
39 2-Chloro-1,3-butadiene	53	3.298	3.286	0.012	85	215755	10.0	10.4	
38 Isopropyl ether	87	3.286	3.286	0.000	90	108209	10.0	10.5	
40 Tert-butyl ethyl ether	59	3.594	3.582	0.012	94	315929	10.0	10.5	
44 Propionitrile	54	3.759	3.759	0.000	23	241667	100.0	101.0	
45 Ethyl acetate	43	3.771	3.771	0.000	96	247987	20.0	18.8	
46 Methacrylonitrile	41	3.889	3.890	-0.001	91	907357	100.0	99.8	
57 Tert-amyl methyl ether	73	4.528	4.529	-0.001	92	321983	10.0	10.6	
59 n-Butanol	56	4.919	4.919	0.000	88	130328	250.0	237.6	
61 Ethyl acrylate	55	5.061	5.061	0.000	97	135427	10.0	9.07	
64 Methyl methacrylate	41	5.262	5.262	0.000	85	188872	20.0	19.6	
68 2-Nitropropane	41	5.582	5.582	0.000	94	84065	20.0	18.9	
79 n-Butyl acetate	43	6.777	6.789	-0.012	97	141764	10.0	9.48	
83 1-Chlorohexane	91	7.321	7.321	0.000	94	150288	10.0	10.3	
92 Cyclohexanone	55	8.339	8.339	0.000	82	43960	100.0	91.9	
103 Pentachloroethane	167	9.155	9.155	0.000	92	126476	20.0	14.8	
109 1,2,3-Trimethylbenzene	105	9.605	9.605	0.000	94	388080	10.0	10.3	
110 Benzyl chloride	126	9.676	9.676	0.000	99	59598	10.0	9.03	
115 1,3,5-Trichlorobenzene	180	10.883	10.883	0.000	93	168026	10.0	10.1	
120 2-Methylnaphthalene	142	13.048	13.048	0.000	67	198099	20.0	12.0	

Reagents:

VMFASA9W_00218	Amount Added:	8.00	Units: uL	
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00079	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00138	Amount Added:	0.00	Units:	Run Reagent

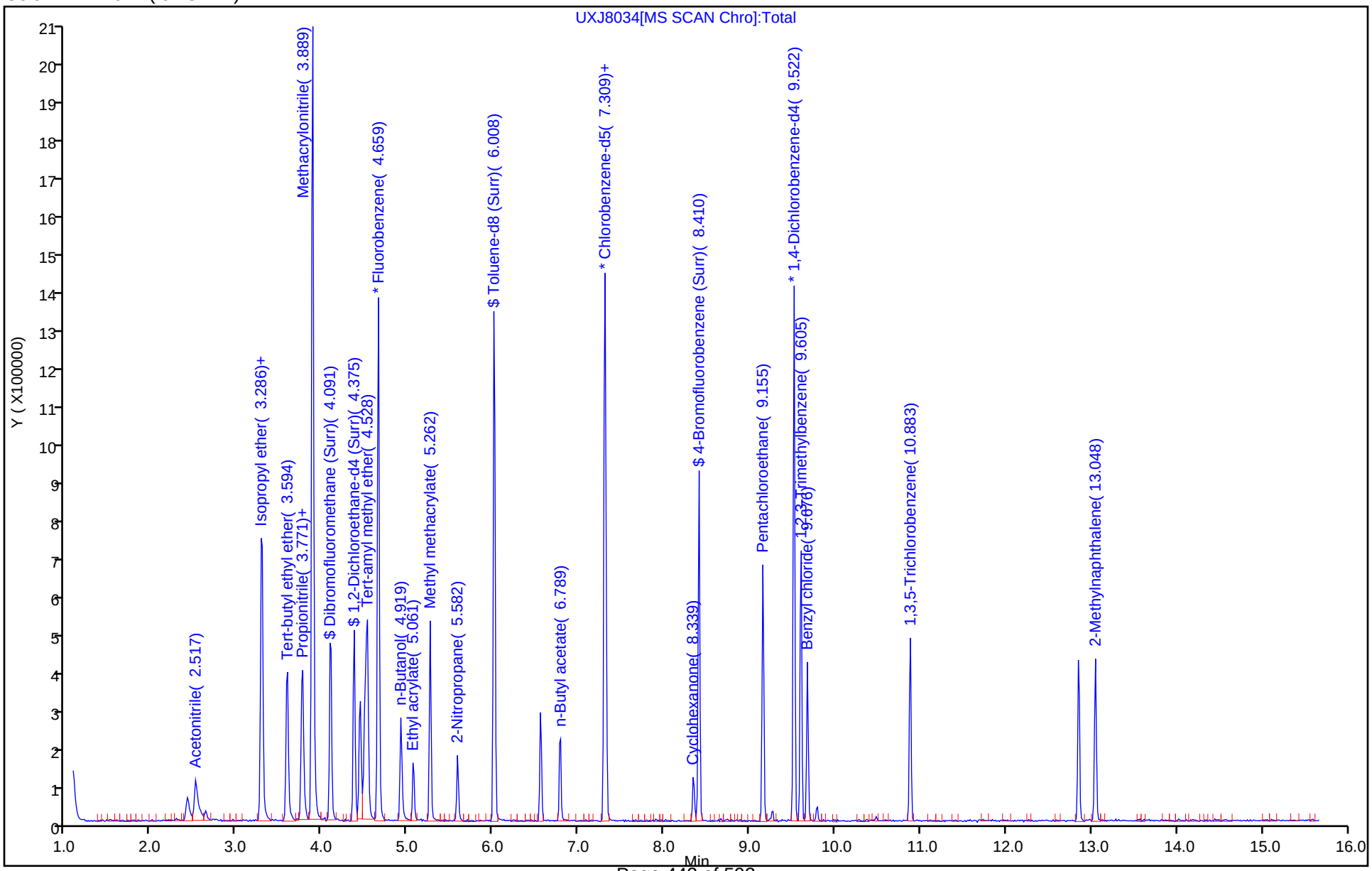
Report Date: 08-Feb-2019 09:15:50 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8034.D

Injection Date:	07-Feb-2019 17:58:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-367104/15 Calibration Date: 02/07/2019 17:58

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 15:44

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 17:35

Lab File ID: UXJ8034.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0323	0.0341		0.105	0.100	5.4	50.0
Isopropyl ether	Ave	0.1872	0.1975		0.0105	0.0100	5.5	50.0
2-Chloro-1,3-butadiene	Ave	0.3783	0.3938		0.0104	0.0100	4.1	50.0
Tert-butyl ethyl ether	Ave	0.5509	0.5767		0.0105	0.0100	4.7	50.0
Propionitrile	Ave	0.0437	0.0441		0.101	0.100	1.0	50.0
Ethyl acetate	Ave	0.2406	0.2263		0.0188	0.0200	-5.9	50.0
Methacrylonitrile	Ave	0.1660	0.1656		0.0998	0.100	-0.2	50.0
Tert-amyl methyl ether	Ave	0.5547	0.5877		0.0106	0.0100	5.9	50.0
n-Butanol	Ave	0.0160	0.0152		0.238	0.250	-5.0	50.0
Ethyl acrylate	Ave	0.2725	0.2472		0.00907	0.0100	-9.3	50.0
Methyl methacrylate	Ave	0.1760	0.1724		0.0196	0.0200	-2.1	50.0
2-Nitropropane	Ave	0.0812	0.0767		0.0189	0.0200	-5.6	50.0
n-Butyl acetate	Ave	0.2731	0.2588		0.00948	0.0100	-5.2	50.0
1-Chlorohexane	Ave	0.4268	0.4385		0.0103	0.0100	2.7	50.0
Cyclohexanone	Lin1		0.0251		0.0919	0.100	-8.1	50.0
Pentachloroethane	Ave	0.2485	0.1845		0.0148	0.0200	-25.8	50.0
1,2,3-Trimethylbenzene	Ave	2.159	2.215		0.0103	0.0100	2.6	50.0
Benzyl chloride	Ave	0.3768	0.3402		0.00903	0.0100	-9.7	50.0
1,3,5-Trichlorobenzene	Ave	0.9457	0.9590		0.0101	0.0100	1.4	50.0
2-Methylnaphthalene	Lin		0.5653		0.0120	0.0200	-40.0	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8034.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 07-Feb-2019 17:58:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0084305-015
Misc. Info.: J90207A-IC,8260LLUX11,,43582
Operator ID: 43582 Instrument ID: A3UX11
Sublist:

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:15:38 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

First Level Reviewer: evansle Date: 08-Feb-2019 08:53:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	100	1095747	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	77	685491	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	91	350426	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.103	-0.012	95	270885	20.0	21.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	94	300650	20.0	19.4	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	803880	20.0	19.8	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	87	251011	20.0	19.3	
27 Acetonitrile	41	2.517	2.517	0.000	99	186717	100.0	105.4	
39 2-Chloro-1,3-butadiene	53	3.298	3.286	0.012	85	215755	10.0	10.4	
38 Isopropyl ether	87	3.286	3.286	0.000	90	108209	10.0	10.5	
40 Tert-butyl ethyl ether	59	3.594	3.582	0.012	94	315929	10.0	10.5	
44 Propionitrile	54	3.759	3.759	0.000	23	241667	100.0	101.0	
45 Ethyl acetate	43	3.771	3.771	0.000	96	247987	20.0	18.8	
46 Methacrylonitrile	41	3.889	3.890	-0.001	91	907357	100.0	99.8	
57 Tert-amyl methyl ether	73	4.528	4.529	-0.001	92	321983	10.0	10.6	
59 n-Butanol	56	4.919	4.919	0.000	88	130328	250.0	237.6	
61 Ethyl acrylate	55	5.061	5.061	0.000	97	135427	10.0	9.07	
64 Methyl methacrylate	41	5.262	5.262	0.000	85	188872	20.0	19.6	
68 2-Nitropropane	41	5.582	5.582	0.000	94	84065	20.0	18.9	
79 n-Butyl acetate	43	6.777	6.789	-0.012	97	141764	10.0	9.48	
83 1-Chlorohexane	91	7.321	7.321	0.000	94	150288	10.0	10.3	
92 Cyclohexanone	55	8.339	8.339	0.000	82	43960	100.0	91.9	
103 Pentachloroethane	167	9.155	9.155	0.000	92	126476	20.0	14.8	
109 1,2,3-Trimethylbenzene	105	9.605	9.605	0.000	94	388080	10.0	10.3	
110 Benzyl chloride	126	9.676	9.676	0.000	99	59598	10.0	9.03	
115 1,3,5-Trichlorobenzene	180	10.883	10.883	0.000	93	168026	10.0	10.1	
120 2-Methylnaphthalene	142	13.048	13.048	0.000	67	198099	20.0	12.0	

Reagents:

VMFASA9W_00218	Amount Added:	8.00	Units: uL	
vm50is_stk_A_00002	Amount Added:	2.00	Units: uL	Run Reagent
vm50ss_stk_00079	Amount Added:	2.00	Units: uL	Run Reagent
vmDist_H2o_00138	Amount Added:	0.00	Units:	Run Reagent

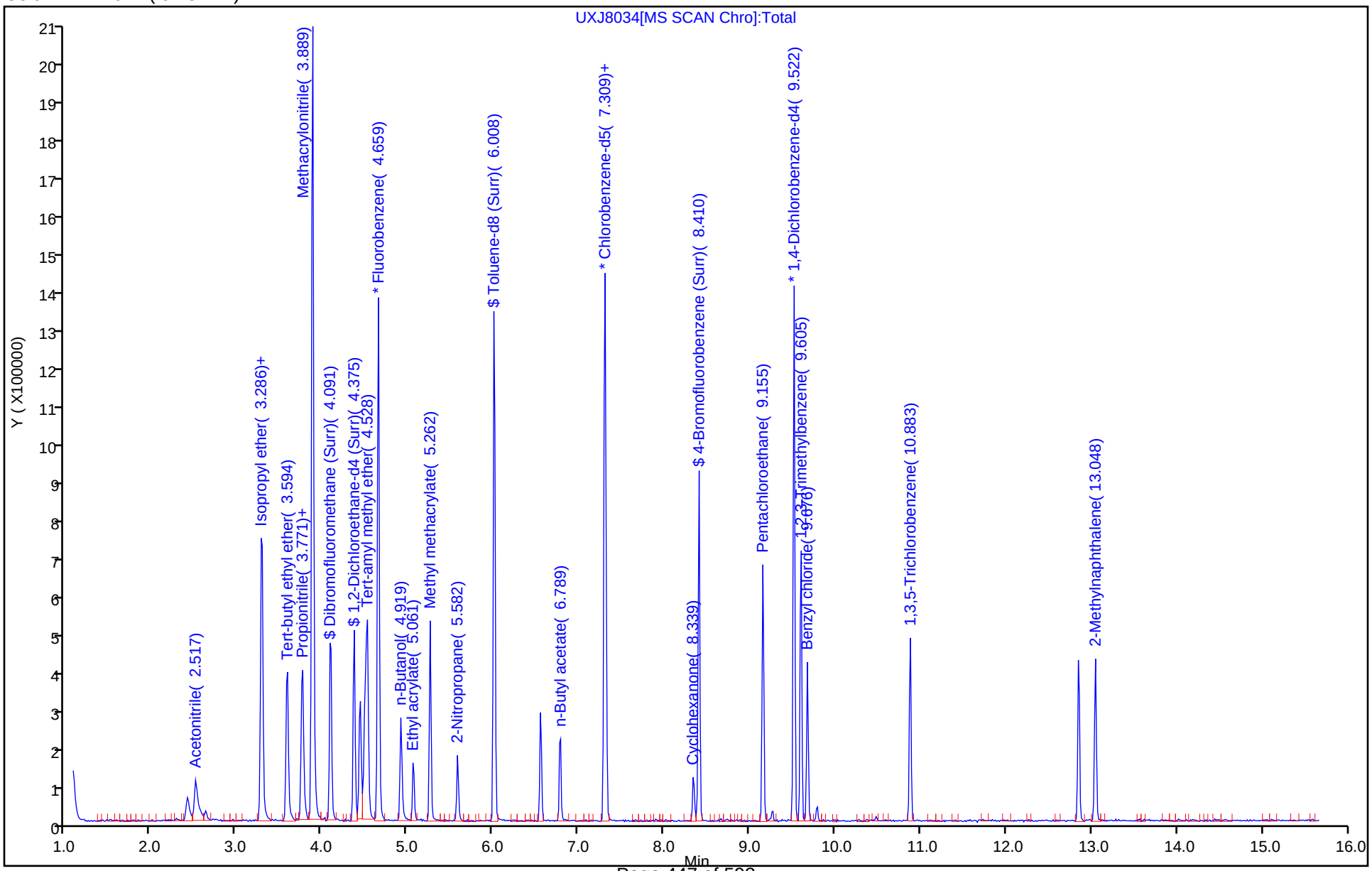
Report Date: 08-Feb-2019 09:15:50 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8034.D

Injection Date:	07-Feb-2019 17:58:30	Instrument ID:	A3UX11	Operator ID:	43582
Lims ID:	ICV A9			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386483/2 Calibration Date: 06/17/2019 07:57

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 13:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 15:00

Lab File ID: UXJ1404.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2965	0.2386		0.00805	0.0100	-19.5	50.0
Chloromethane	Ave	0.2437	0.2526	0.1000	0.0104	0.0100	3.7	50.0
Butadiene	Ave	0.2273	0.2055		0.00904	0.0100	-9.6	50.0
Vinyl chloride	Ave	0.2648	0.2567		0.00970	0.0100	-3.0	20.0
Bromomethane	Ave	0.1749	0.1793		0.0103	0.0100	2.5	50.0
Chloroethane	Ave	0.1395	0.1596		0.0114	0.0100	14.4	50.0
Dichlorofluoromethane	Ave	0.3514	0.3581		0.0102	0.0100	1.9	50.0
Trichlorofluoromethane	Ave	0.3720	0.3433		0.00923	0.0100	-7.7	50.0
Ethyl ether	Ave	0.1858	0.2073		0.0112	0.0100	11.5	50.0
Acrolein	Ave	0.0478	0.0593		0.0621	0.0500	24.2	50.0
1,1-Dichloroethene	Ave	0.2297	0.2474		0.0108	0.0100	7.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1930	0.1369		0.00710	0.0100	-29.0	50.0
Acetone	Ave	0.1072	0.1136		0.0212	0.0200	5.9	50.0
Iodomethane	Ave	0.4080	0.4491		0.0110	0.0100	10.1	50.0
Carbon disulfide	Ave	0.7535	0.8035		0.0107	0.0100	6.6	50.0
3-Chloro-1-propene	Ave	0.1694	0.1811		0.0107	0.0100	6.9	50.0
Methyl acetate	Ave	0.2292	0.2571		0.0224	0.0200	12.2	50.0
Methylene Chloride	Lin1		0.2925		0.0112	0.0100	11.7	50.0
2-Methyl-2-propanol	Ave	0.0387	0.0420		0.108	0.100	8.4	50.0
Acrylonitrile	Ave	0.1197	0.1462		0.122	0.100	22.1	50.0
trans-1,2-Dichloroethene	Ave	0.2733	0.2910		0.0106	0.0100	6.5	50.0
Methyl tert-butyl ether	Ave	0.6104	0.5927		0.00971	0.0100	-2.9	50.0
Hexane	Lin1		0.0610		0.00933	0.0100	-6.7	20.0
1,1-Dichloroethane	Ave	0.4478	0.4772	0.1000	0.0107	0.0100	6.5	50.0
Vinyl acetate	Ave	0.4212	0.4840		0.0115	0.0100	14.9	50.0
2,2-Dichloropropane	Ave	0.0660	0.0682		0.0103	0.0100	3.3	50.0
cis-1,2-Dichloroethene	Ave	0.2845	0.3228		0.0113	0.0100	13.4	50.0
2-Butanone (MEK)	Ave	0.1351	0.1761		0.0261	0.0200	30.4	50.0
Chlorobromomethane	Ave	0.1457	0.1468		0.0101	0.0100	0.8	50.0
Tetrahydrofuran	Ave	0.0906	0.1076		0.0237	0.0200	18.7	50.0
Chloroform	Ave	0.4338	0.4600		0.0106	0.0100	6.1	20.0
1,1,1-Trichloroethane	Ave	0.3774	0.3534		0.00936	0.0100	-6.4	50.0
Cyclohexane	Ave	0.3509	0.3025		0.00862	0.0100	-13.8	50.0
1,1-Dichloropropene	Ave	0.3456	0.3516		0.0102	0.0100	1.7	50.0
Carbon tetrachloride	Ave	0.3572	0.3231		0.00905	0.0100	-9.5	50.0
Isobutyl alcohol	Ave	0.0197	0.0212		0.269	0.250	7.7	50.0
Benzene	Ave	1.001	1.116		0.0111	0.0100	11.5	50.0
1,2-Dichloroethane	Ave	0.3480	0.3438		0.00988	0.0100	-1.2	50.0
n-Heptane	Lin1		0.0513		0.00892	0.0100	-10.8	50.0
Trichloroethene	Ave	0.2978	0.2990		0.0100	0.0100	0.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386483/2 Calibration Date: 06/17/2019 07:57

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 13:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 15:00

Lab File ID: UXJ1404.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3885	0.3116		0.00802	0.0100	-19.8	50.0
1,2-Dichloropropane	Ave	0.2100	0.2409		0.0115	0.0100	14.7	20.0
Dibromomethane	Ave	0.1475	0.1681		0.0114	0.0100	14.0	50.0
1,4-Dioxane	Lin1		0.0035		0.207	0.200	3.5	50.0
Dichlorobromomethane	Ave	0.3202	0.3380		0.0106	0.0100	5.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1287	0.1538		0.0239	0.0200	19.5	50.0
cis-1,3-Dichloropropene	Ave	0.3323	0.3749		0.0113	0.0100	12.8	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2408	0.2771		0.0230	0.0200	15.1	50.0
Toluene	Ave	1.444	1.637		0.0113	0.0100	13.4	20.0
trans-1,3-Dichloropropene	Ave	0.4702	0.4878		0.0104	0.0100	3.7	50.0
Ethyl methacrylate	Ave	0.3915	0.4524		0.0116	0.0100	15.6	50.0
1,1,2-Trichloroethane	Ave	0.3033	0.3302		0.0109	0.0100	8.9	50.0
Tetrachloroethene	Ave	0.3229	0.3089		0.00957	0.0100	-4.3	50.0
1,3-Dichloropropane	Ave	0.4858	0.5496		0.0113	0.0100	13.1	50.0
2-Hexanone	Ave	0.2590	0.2914		0.0225	0.0200	12.5	50.0
Chlorodibromomethane	Ave	0.3521	0.3759		0.0107	0.0100	6.8	50.0
Ethylene Dibromide	Ave	0.3126	0.3311		0.0106	0.0100	5.9	50.0
Chlorobenzene	Ave	0.9680	0.9796	0.3000	0.0101	0.0100	1.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3713	0.3523		0.00949	0.0100	-5.1	50.0
Ethylbenzene	Ave	0.4859	0.5124		0.0105	0.0100	5.4	20.0
m-Xylene & p-Xylene	Ave	0.5666	0.6067		0.0107	0.0100	7.1	50.0
o-Xylene	Ave	0.5483	0.5745		0.0105	0.0100	4.8	50.0
Styrene	Ave	0.9241	1.041		0.0113	0.0100	12.7	50.0
Bromoform	Ave	0.2804	0.2655	0.1000	0.00947	0.0100	-5.3	50.0
Isopropylbenzene	Ave	1.410	1.411		0.0100	0.0100	0.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8110	0.9934	0.3000	0.0122	0.0100	22.5	50.0
Bromobenzene	Ave	0.7495	0.8039		0.0107	0.0100	7.3	50.0
1,2,3-Trichloropropane	Ave	0.2816	0.3294		0.0117	0.0100	17.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2588	0.2612		0.0101	0.0100	0.9	50.0
N-Propylbenzene	Ave	0.7593	0.8641		0.0114	0.0100	13.8	50.0
2-Chlorotoluene	Ave	0.6805	0.7518		0.0110	0.0100	10.5	50.0
1,3,5-Trimethylbenzene	Ave	2.068	2.370		0.0115	0.0100	14.6	50.0
4-Chlorotoluene	Ave	0.6970	0.7607		0.0109	0.0100	9.1	50.0
tert-Butylbenzene	Ave	1.769	1.907		0.0108	0.0100	7.8	50.0
1,2,4-Trimethylbenzene	Ave	2.086	2.429		0.0116	0.0100	16.4	50.0
sec-Butylbenzene	Ave	2.519	2.751		0.0109	0.0100	9.2	50.0
1,3-Dichlorobenzene	Ave	1.363	1.394		0.0102	0.0100	2.2	50.0
4-Isopropyltoluene	Ave	2.229	2.328		0.0104	0.0100	4.4	50.0
1,4-Dichlorobenzene	Ave	1.462	1.461		0.00999	0.0100	-0.0	50.0
1,2-Dichlorobenzene	Ave	1.275	1.283		0.0101	0.0100	0.7	50.0
n-Butylbenzene	Ave	1.818	1.827		0.0100	0.0100	0.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386483/2 Calibration Date: 06/17/2019 07:57

Instrument ID: A3UX11 Calib Start Date: 02/07/2019 13:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2019 15:00

Lab File ID: UXJ1404.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.2326		0.00959	0.0100	-4.1	50.0
1,2,4-Trichlorobenzene	Ave	0.8021	0.5998		0.00748	0.0100	-25.2	50.0
Hexachlorobutadiene	Ave	0.3705	0.2710		0.00731	0.0100	-26.9	50.0
Naphthalene	Ave	2.134	1.791		0.00839	0.0100	-16.1	50.0
1,2,3-Trichlorobenzene	Ave	0.7522	0.5855		0.00778	0.0100	-22.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2333	0.2485		0.0213	0.0200	6.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2824	0.2719		0.0193	0.0200	-3.7	50.0
Toluene-d8 (Surr)	Ave	1.187	1.391		0.0234	0.0200	17.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3796	0.4075		0.0215	0.0200	7.4	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1404.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 17-Jun-2019 07:57:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-002
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11
Sublist: chrom-8260_11*sub86

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:04 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: evansle Date: 17-Jun-2019 10:02:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	98	952995	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	84	635700	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	94	304755	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.091	0.000	98	236787	20.0	21.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	97	259159	20.0	19.3	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	884156	20.0	23.4	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	90	259044	20.0	21.5	
9 Dichlorodifluoromethane	85	1.156	1.156	0.000	97	113672	10.0	8.05	
10 Chloromethane	50	1.310	1.310	0.000	98	120349	10.0	10.4	
13 Butadiene	54	1.369	1.369	0.000	96	97923	10.0	9.04	
12 Vinyl chloride	62	1.381	1.381	0.000	97	122324	10.0	9.70	
15 Bromomethane	94	1.594	1.594	0.000	88	85441	10.0	10.3	
16 Chloroethane	64	1.665	1.665	0.000	98	76057	10.0	11.4	
17 Dichlorofluoromethane	67	1.807	1.807	0.000	96	170630	10.0	10.2	
18 Trichlorofluoromethane	101	1.831	1.831	0.000	97	163575	10.0	9.23	
19 Ethyl ether	59	2.067	2.067	0.000	89	98752	10.0	11.2	
20 Acrolein	56	2.162	2.162	0.000	98	141386	50.0	62.1	
21 1,1-Dichloroethene	96	2.245	2.245	0.000	95	117885	10.0	10.8	
22 1,1,2-Trichloro-1,2,2-trif	151	2.280	2.280	0.000	90	65246	10.0	7.10	
23 Acetone	43	2.292	2.292	0.000	99	108259	20.0	21.2	
25 Iodomethane	142	2.363	2.363	0.000	97	213988	10.0	11.0	
26 Carbon disulfide	76	2.410	2.410	0.000	98	382853	10.0	10.7	
28 3-Chloro-1-propene	76	2.541	2.541	0.000	92	86282	10.0	10.7	
29 Methyl acetate	43	2.564	2.564	0.000	97	244976	20.0	22.4	
30 Methylene Chloride	84	2.647	2.647	0.000	87	139356	10.0	11.2	
31 2-Methyl-2-propanol	59	2.754	2.754	0.000	96	199909	100.0	108.4	
32 Acrylonitrile	53	2.848	2.848	0.000	99	696617	100.0	122.1	
34 trans-1,2-Dichloroethene	96	2.872	2.872	0.000	98	138642	10.0	10.6	
33 Methyl tert-butyl ether	73	2.884	2.884	0.000	94	282420	10.0	9.71	
35 Hexane	86	3.109	3.109	0.000	88	29059	10.0	9.33	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 1,1-Dichloroethane	63	3.215	3.215	0.000	96	227360	10.0	10.7	
37 Vinyl acetate	43	3.262	3.262	0.000	97	230629	10.0	11.5	
41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	78	153797	10.0	11.3	
43 2,2-Dichloropropane	97	3.700	3.700	0.000	82	32495	10.0	10.3	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	98	167858	20.0	26.1	
47 Chlorobromomethane	128	3.890	3.890	0.000	90	69935	10.0	10.1	
48 Tetrahydrofuran	42	3.937	3.937	0.000	88	102548	20.0	23.7	
49 Chloroform	83	3.961	3.961	0.000	91	219201	10.0	10.6	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	97	168391	10.0	9.36	
51 Cyclohexane	56	4.162	4.162	0.000	86	144148	10.0	8.62	
53 Carbon tetrachloride	117	4.256	4.256	0.000	83	153947	10.0	9.05	
52 1,1-Dichloropropene	75	4.256	4.256	0.000	98	167553	10.0	10.2	
54 Isobutyl alcohol	41	4.363	4.363	0.000	93	168240	250.0	269.3	
55 Benzene	78	4.422	4.422	0.000	94	531870	10.0	11.1	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	98	163825	10.0	9.88	
58 n-Heptane	100	4.659	4.659	0.000	44	24446	10.0	8.92	
60 Trichloroethene	130	4.966	4.966	0.000	95	142476	10.0	10.0	
62 Methylcyclohexane	83	5.132	5.132	0.000	88	148496	10.0	8.02	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	97	114792	10.0	11.5	
65 Dibromomethane	93	5.250	5.250	0.000	92	80114	10.0	11.4	
66 1,4-Dioxane	88	5.274	5.274	0.000	90	33620	200.0	206.9	
67 Dichlorobromomethane	83	5.392	5.392	0.000	98	161043	10.0	10.6	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	91	146564	20.0	23.9	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	97	178635	10.0	11.3	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	94	264079	20.0	23.0	
72 Toluene	91	6.067	6.067	0.000	98	520444	10.0	11.3	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	89	155061	10.0	10.4	
74 Ethyl methacrylate	69	6.363	6.363	0.000	87	143780	10.0	11.6	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	88	104940	10.0	10.9	
76 Tetrachloroethene	164	6.552	6.552	0.000	97	98173	10.0	9.57	
77 1,3-Dichloropropane	76	6.576	6.576	0.000	86	174675	10.0	11.3	
78 2-Hexanone	43	6.658	6.658	0.000	93	185216	20.0	22.5	
80 Chlorodibromomethane	129	6.777	6.777	0.000	88	119480	10.0	10.7	
82 Ethylene Dibromide	107	6.871	6.871	0.000	100	105248	10.0	10.6	
84 Chlorobenzene	112	7.333	7.333	0.000	97	311370	10.0	10.1	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	94	111983	10.0	9.49	
86 Ethylbenzene	106	7.439	7.439	0.000	97	162856	10.0	10.5	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	98	192837	10.0	10.7	
88 o-Xylene	106	7.913	7.913	0.000	96	182599	10.0	10.5	
89 Styrene	104	7.925	7.925	0.000	94	330900	10.0	11.3	
90 Bromoform	173	8.090	8.090	0.000	96	84401	10.0	9.47	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	448460	10.0	10.0	
95 Bromobenzene	156	8.552	8.552	0.000	94	122497	10.0	10.7	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	94	151373	10.0	12.2	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	84	50197	10.0	11.7	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	81	39798	10.0	10.1	
98 N-Propylbenzene	120	8.658	8.658	0.000	99	131663	10.0	11.4	
99 2-Chlorotoluene	126	8.741	8.741	0.000	98	114561	10.0	11.0	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	94	361205	10.0	11.5	
101 4-Chlorotoluene	126	8.848	8.848	0.000	98	115917	10.0	10.9	
102 tert-Butylbenzene	119	9.143	9.143	0.000	91	290619	10.0	10.8	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	96	370147	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.356	9.356	0.000	93	419177	10.0	10.9	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	98	212338	10.0	10.2	
107 4-Isopropyltoluene	119	9.510	9.510	0.000	96	354700	10.0	10.4	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	96	222622	10.0	10.0	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	97	195552	10.0	10.1	
111 n-Butylbenzene	91	9.901	9.901	0.000	98	278360	10.0	10.0	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	89	35435	10.0	9.59	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	94	91399	10.0	7.48	
117 Hexachlorobutadiene	225	11.676	11.676	0.000	95	41291	10.0	7.31	
118 Naphthalene	128	11.723	11.723	0.000	96	272882	10.0	8.39	
119 1,2,3-Trichlorobenzene	180	11.971	11.971	0.000	96	89223	10.0	7.78	
S 133 Trihalomethanes, Total	1				0		40.0	41.3	
S 159 Total BTEX	1				0		50.0	54.2	
S 132 Xylenes, Total	106				0		20.0	21.2	

Reagents:

VMRPRIMW_00341	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00301	Amount Added:	8.00	Units: uL	
VMRGAS_00297	Amount Added:	8.00	Units: uL	
vm50ss_stk_00080	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00076	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent

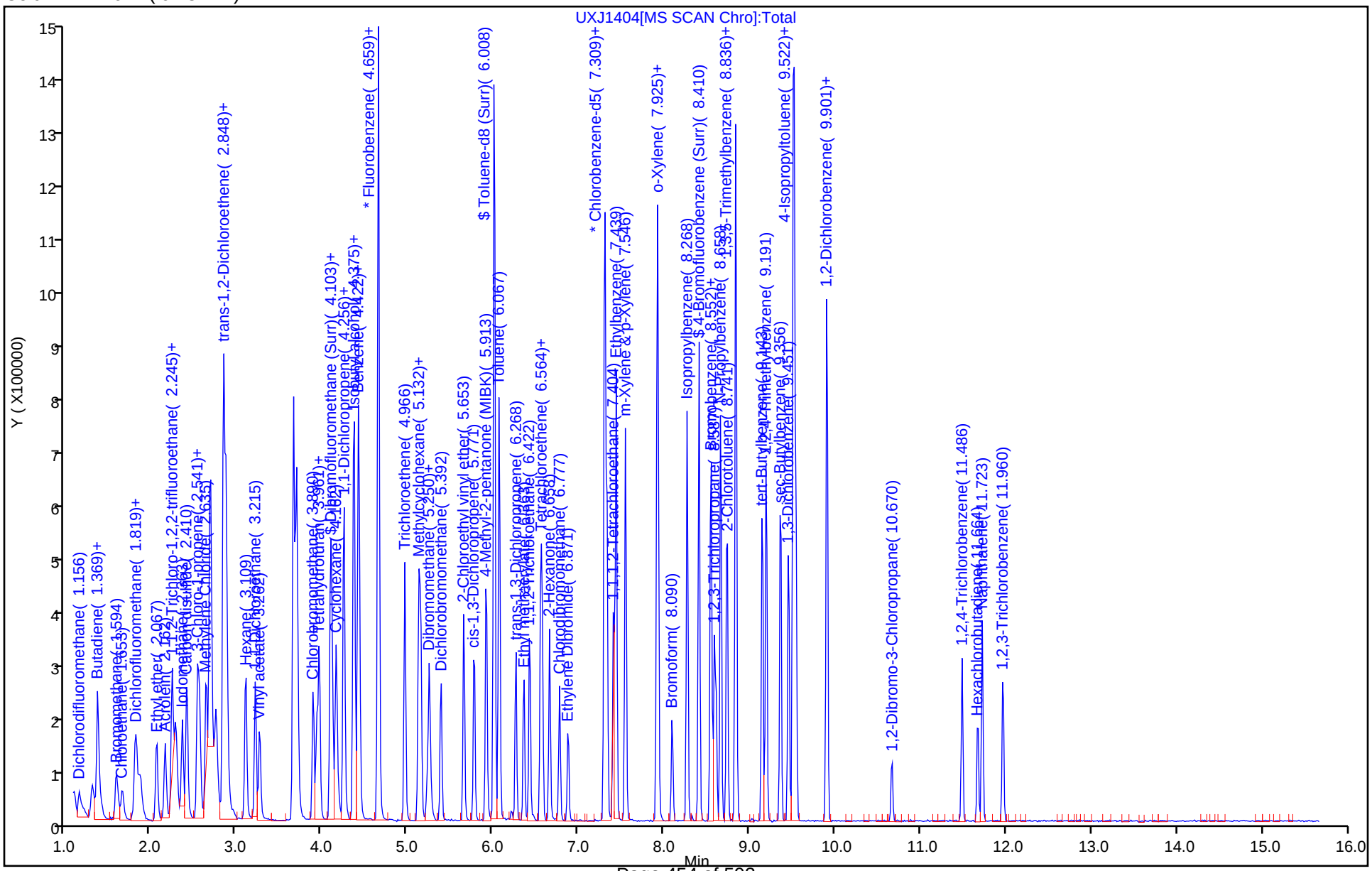
Report Date: 18-Jun-2019 09:17:05 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1404.D

Injection Date:	17-Jun-2019 07:57:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-385628/9 Calibration Date: 06/11/2019 20:24

Instrument ID: A3UX17 Calib Start Date: 06/11/2019 17:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/11/2019 20:00

Lab File ID: UXR8417.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3495	0.3547		0.0102	0.0100	1.5	50.0
Chloromethane	Ave	0.4031	0.4098	0.1000	0.0102	0.0100	1.6	50.0
Vinyl chloride	Ave	0.3419	0.3533		0.0103	0.0100	3.3	20.0
Butadiene	Ave	0.3797	0.3552		0.00935	0.0100	-6.5	50.0
Bromomethane	Ave	0.1934	0.1842		0.00952	0.0100	-4.8	50.0
Chloroethane	Ave	0.1967	0.1930		0.00981	0.0100	-1.9	50.0
Dichlorofluoromethane	Ave	0.4687	0.5041		0.0108	0.0100	7.5	50.0
Trichlorofluoromethane	Ave	0.4696	0.4652		0.00991	0.0100	-0.9	50.0
Ethyl ether	Ave	0.2301	0.2453		0.0107	0.0100	6.6	50.0
Acrolein	Ave	0.0364	0.0387		0.0532	0.0500	6.3	50.0
1,1-Dichloroethene	Ave	0.2456	0.2522		0.0103	0.0100	2.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1824	0.1976		0.0108	0.0100	8.3	50.0
Acetone	Lin1		0.0533		0.0181	0.0200	-9.5	50.0
Iodomethane	Ave	0.3475	0.3468		0.00998	0.0100	-0.2	50.0
Carbon disulfide	Ave	0.6846	0.6942		0.0101	0.0100	1.4	50.0
3-Chloro-1-propene	Ave	0.1355	0.1403		0.0103	0.0100	3.5	50.0
Methyl acetate	Ave	0.1649	0.1605		0.0195	0.0200	-2.7	50.0
Methylene Chloride	Lin1		0.2746		0.0106	0.0100	5.8	50.0
2-Methyl-2-propanol	Ave	0.0099	0.0076		0.0768	0.100	-23.2	50.0
Acrylonitrile	Ave	0.0856	0.0867		0.101	0.100	1.2	50.0
Methyl tert-butyl ether	Ave	0.5287	0.5353		0.0101	0.0100	1.2	50.0
trans-1,2-Dichloroethene	Ave	0.2569	0.2695		0.0105	0.0100	4.9	50.0
Hexane	Ave	0.0659	0.0730		0.0111	0.0100	10.7	20.0
1,1-Dichloroethane	Ave	0.4825	0.4795	0.1000	0.00994	0.0100	-0.6	50.0
Vinyl acetate	Ave	0.3658	0.4519		0.0124	0.0100	23.5	50.0
2,2-Dichloropropane	Ave	0.0500	0.0482		0.00964	0.0100	-3.6	50.0
cis-1,2-Dichloroethene	Ave	0.2826	0.2779		0.00983	0.0100	-1.7	50.0
2-Butanone (MEK)	Ave	0.0869	0.0816		0.0188	0.0200	-6.1	50.0
Chlorobromomethane	Ave	0.1210	0.1198		0.00990	0.0100	-1.0	50.0
Tetrahydrofuran	Ave	0.0512	0.0507		0.0198	0.0200	-0.8	50.0
Chloroform	Ave	0.4740	0.4816		0.0102	0.0100	1.6	20.0
1,1,1-Trichloroethane	Ave	0.3469	0.3637		0.0105	0.0100	4.8	50.0
Cyclohexane	Ave	0.4794	0.5317		0.0111	0.0100	10.9	50.0
1,1-Dichloropropene	Ave	0.3468	0.3599		0.0104	0.0100	3.8	50.0
Carbon tetrachloride	Ave	0.3064	0.3238		0.0106	0.0100	5.7	50.0
Isobutyl alcohol	Qua		0.0052		0.170	0.250	-32.0	50.0
Benzene	Ave	1.091	1.084		0.00994	0.0100	-0.6	50.0
1,2-Dichloroethane	Ave	0.4067	0.4029		0.00991	0.0100	-0.9	50.0
n-Heptane	Ave	0.0617	0.0624		0.0101	0.0100	1.0	50.0
Trichloroethene	Ave	0.2668	0.2651		0.00994	0.0100	-0.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-385628/9 Calibration Date: 06/11/2019 20:24

Instrument ID: A3UX17 Calib Start Date: 06/11/2019 17:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/11/2019 20:00

Lab File ID: UXR8417.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3898	0.4044		0.0104	0.0100	3.7	50.0
1,2-Dichloropropane	Ave	0.2700	0.2796		0.0104	0.0100	3.5	20.0
Dibromomethane	Ave	0.1423	0.1397		0.00982	0.0100	-1.8	50.0
1,4-Dioxane	Ave	0.0023	0.0010		0.0814	0.200	-59.3*	50.0
Dichlorobromomethane	Ave	0.3104	0.3197		0.0103	0.0100	3.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1210	0.1163			0.0100	-3.9	50.0
cis-1,3-Dichloropropene	Ave	0.3180	0.3442		0.0108	0.0100	8.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1609	0.1778		0.0221	0.0200	10.5	50.0
Toluene	Ave	1.581	1.676		0.0106	0.0100	6.0	20.0
trans-1,3-Dichloropropene	Ave	0.3887	0.3917		0.0101	0.0100	0.8	50.0
Ethyl methacrylate	Ave	0.2983	0.3179		0.0107	0.0100	6.6	50.0
1,1,2-Trichloroethane	Ave	0.2936	0.3029		0.0103	0.0100	3.2	50.0
Tetrachloroethene	Ave	0.3154	0.3091		0.00980	0.0100	-2.0	50.0
1,3-Dichloropropane	Ave	0.5316	0.5444		0.0102	0.0100	2.4	50.0
2-Hexanone	Ave	0.1450	0.1623		0.0224	0.0200	11.9	50.0
Chlorodibromomethane	Ave	0.2745	0.2934		0.0107	0.0100	6.9	50.0
Ethylene Dibromide	Ave	0.2663	0.2753		0.0103	0.0100	3.4	50.0
Chlorobenzene	Ave	1.018	1.012	0.3000	0.00994	0.0100	-0.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3227	0.3243		0.0101	0.0100	0.5	50.0
Ethylbenzene	Ave	0.5108	0.5366		0.0105	0.0100	5.1	20.0
m-Xylene & p-Xylene	Ave	0.6374	0.6721		0.0105	0.0100	5.5	50.0
o-Xylene	Ave	0.5836	0.6400		0.0110	0.0100	9.6	50.0
Styrene	Ave	1.012	1.072		0.0106	0.0100	5.9	50.0
Bromoform	Ave	0.1521	0.1573	0.1000	0.0103	0.0100	3.4	50.0
Isopropylbenzene	Ave	1.559	1.700		0.0109	0.0100	9.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5816	0.6040	0.3000	0.0104	0.0100	3.8	50.0
Bromobenzene	Ave	0.7404	0.7593		0.0103	0.0100	2.6	50.0
1,2,3-Trichloropropane	Ave	0.1994	0.2111		0.0106	0.0100	5.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1811	0.1846		0.0102	0.0100	2.0	50.0
N-Propylbenzene	Ave	0.7726	0.8578		0.0111	0.0100	11.0	50.0
2-Chlorotoluene	Ave	0.6868	0.7290		0.0106	0.0100	6.2	50.0
1,3,5-Trimethylbenzene	Lin1		2.686		0.00999	0.0100	-0.1	50.0
4-Chlorotoluene	Ave	0.7368	0.7713		0.0105	0.0100	4.7	50.0
tert-Butylbenzene	Ave	2.007	2.158		0.0108	0.0100	7.5	50.0
1,2,4-Trimethylbenzene	Lin1		2.836		0.0101	0.0100	1.1	50.0
sec-Butylbenzene	Ave	2.902	3.095		0.0107	0.0100	6.6	50.0
1,3-Dichlorobenzene	Ave	1.493	1.523		0.0102	0.0100	2.0	50.0
4-Isopropyltoluene	Ave	2.443	2.705		0.0111	0.0100	10.7	50.0
1,4-Dichlorobenzene	Ave	1.590	1.591		0.0100	0.0100	0.0	50.0
n-Butylbenzene	Ave	2.072	2.182		0.0105	0.0100	5.3	50.0
1,2-Dichlorobenzene	Ave	1.423	1.457		0.0102	0.0100	2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-385628/9 Calibration Date: 06/11/2019 20:24

Instrument ID: A3UX17 Calib Start Date: 06/11/2019 17:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/11/2019 20:00

Lab File ID: UXR8417.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0783	0.0832		0.0106	0.0100	6.3	50.0
1,2,4-Trichlorobenzene	Ave	0.7340	0.7230		0.00985	0.0100	-1.5	50.0
Hexachlorobutadiene	Ave	0.4403	0.3975		0.00903	0.0100	-9.7	50.0
Naphthalene	Lin1		1.402		0.00873	0.0100	-12.7	50.0
1,2,3-Trichlorobenzene	Ave	0.7203	0.7725		0.0107	0.0100	7.3	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8417.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 11-Jun-2019 20:24:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-009
Operator ID: 001644 Instrument ID: A3UX17
Sublist:

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:08:22 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: williamsla Date: 12-Jun-2019 12:07:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	93	1780030	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	90	1242464	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	87	669972	10.0	10.0	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	87	631415	10.0	10.2	
10 Chloromethane	50	1.886	1.885	0.001	89	729391	10.0	10.2	
11 Vinyl chloride	62	2.004	2.004	0.000	83	628799	10.0	10.3	
119 Butadiene	54	2.040	2.040	0.000	91	632267	10.0	9.35	
12 Bromomethane	94	2.360	2.360	0.000	92	327846	10.0	9.52	
13 Chloroethane	64	2.467	2.467	0.000	94	343493	10.0	9.81	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	83	897233	10.0	10.8	
15 Trichlorofluoromethane	101	2.716	2.704	0.012	87	828122	10.0	9.91	
16 Ethyl ether	59	2.988	2.988	0.000	91	436571	10.0	10.7	
18 Acrolein	56	3.119	3.119	0.000	91	344700	50.0	53.2	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	89	448883	10.0	10.3	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.225	0.001	87	351734	10.0	10.8	
21 Acetone	43	3.273	3.273	0.000	93	189600	20.0	18.1	
22 Iodomethane	142	3.356	3.356	0.000	97	617391	10.0	9.98	
23 Carbon disulfide	76	3.415	3.415	0.000	99	1235657	10.0	10.1	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	80	249651	10.0	10.3	
26 Methyl acetate	43	3.569	3.569	0.000	99	571391	20.0	19.5	
27 Methylene Chloride	84	3.664	3.664	0.000	99	488702	10.0	10.6	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	64	135514	100.0	76.8	
29 Acrylonitrile	53	3.901	3.901	0.000	99	1542489	100.0	101.2	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	91	952763	10.0	10.1	a
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	80	479712	10.0	10.5	
32 Hexane	86	4.139	4.139	0.000	92	129931	10.0	11.1	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	86	853431	10.0	9.94	
34 Vinyl acetate	43	4.317	4.328	-0.011	97	804445	10.0	12.4	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	56	85800	10.0	9.64	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	73	494696	10.0	9.83	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	60	290399	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Chlorobromomethane	128	5.004	5.004	0.000	93	213227	10.0	9.90	
45 Tetrahydrofuran	42	5.040	5.040	0.000	65	180574	20.0	19.8	
46 Chloroform	83	5.064	5.064	0.000	68	857260	10.0	10.2	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	85	647353	10.0	10.5	
48 Cyclohexane	56	5.265	5.265	0.000	93	946501	10.0	11.1	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	88	640709	10.0	10.4	
50 Carbon tetrachloride	117	5.360	5.360	0.000	70	576401	10.0	10.6	
51 Isobutyl alcohol	41	5.443	5.443	0.000	53	160641	250.0	170.0	
52 Benzene	78	5.538	5.538	0.000	97	1929556	10.0	9.94	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	82	717157	10.0	9.91	
55 n-Heptane	100	5.728	5.728	0.000	94	111063	10.0	10.1	
57 Trichloroethene	130	6.083	6.083	0.000	92	471962	10.0	9.94	
59 Methylcyclohexane	83	6.249	6.249	0.000	94	719767	10.0	10.4	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	89	497716	10.0	10.4	
62 Dibromomethane	93	6.392	6.392	0.000	93	248733	10.0	9.82	
63 1,4-Dioxane	88	6.404	6.404	0.000	12	33847	200.0	81.4	
64 Dichlorobromomethane	83	6.522	6.522	0.000	92	569000	10.0	10.3	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	90	207075	10.0	9.61	
67 cis-1,3-Dichloropropene	75	6.914	6.913	0.001	88	612754	10.0	10.8	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	92	632824	20.0	22.1	
69 Toluene	91	7.210	7.210	0.000	95	2082198	10.0	10.6	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	92	486704	10.0	10.1	
71 Ethyl methacrylate	69	7.459	7.459	0.000	82	395029	10.0	10.7	
72 1,1,2-Trichloroethane	97	7.566	7.578	-0.012	88	376276	10.0	10.3	
73 Tetrachloroethene	164	7.696	7.696	0.000	90	383980	10.0	9.80	
75 1,3-Dichloropropane	76	7.732	7.720	0.012	92	676435	10.0	10.2	
76 2-Hexanone	43	7.779	7.779	0.000	70	403327	20.0	22.4	
78 Chlorodibromomethane	129	7.933	7.933	0.000	88	364594	10.0	10.7	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	342086	10.0	10.3	
81 Chlorobenzene	112	8.503	8.503	0.001	93	1257316	10.0	9.94	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	41	402965	10.0	10.1	
83 Ethylbenzene	106	8.586	8.586	0.000	99	666704	10.0	10.5	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	835091	10.0	10.5	
85 o-Xylene	106	9.072	9.072	0.000	95	795113	10.0	11.0	
86 Styrene	104	9.084	9.084	0.000	87	1331696	10.0	10.6	
87 Bromoform	173	9.285	9.285	0.000	96	195392	10.0	10.3	
89 Isopropylbenzene	105	9.416	9.427	-0.011	96	2111757	10.0	10.9	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	74	404650	10.0	10.4	
92 Bromobenzene	156	9.736	9.736	0.000	98	508726	10.0	10.3	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	65	141401	10.0	10.6	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	39	123674	10.0	10.2	
95 N-Propylbenzene	120	9.819	9.819	0.000	90	574674	10.0	11.1	
96 2-Chlorotoluene	126	9.914	9.914	0.000	94	488414	10.0	10.6	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	77	1799483	10.0	9.99	
98 4-Chlorotoluene	126	10.020	10.020	0.000	99	516720	10.0	10.5	
99 tert-Butylbenzene	119	10.317	10.317	0.000	76	1445762	10.0	10.8	
101 1,2,4-Trimethylbenzene	105	10.353	10.364	-0.011	69	1900003	10.0	10.1	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	2073362	10.0	10.7	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	84	1020053	10.0	10.2	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	86	1812062	10.0	11.1	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	1066140	10.0	10.0	
108 n-Butylbenzene	91	11.076	11.076	0.000	97	1461615	10.0	10.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	95	976416	10.0	10.2	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	69	55718	10.0	10.6	
113 1,2,4-Trichlorobenzene	180	12.724	12.712	0.012	93	484376	10.0	9.85	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	92	266287	10.0	9.03	
115 Naphthalene	128	12.985	12.985	0.000	99	939283	10.0	8.73	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	95	517563	10.0	10.7	
S 130 Xylenes, Total	106				0		20.0	21.5	
S 131 Trihalomethanes, Total	1				0		40.0	41.5	
S 158 Total BTEX	1		0.000				50.0	ND	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VMFASAW_00284	Amount Added:	8.00	Units: uL
VMFASPW_00303	Amount Added:	8.00	Units: uL
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL
VMFASGW_00312	Amount Added:	8.00	Units: uL

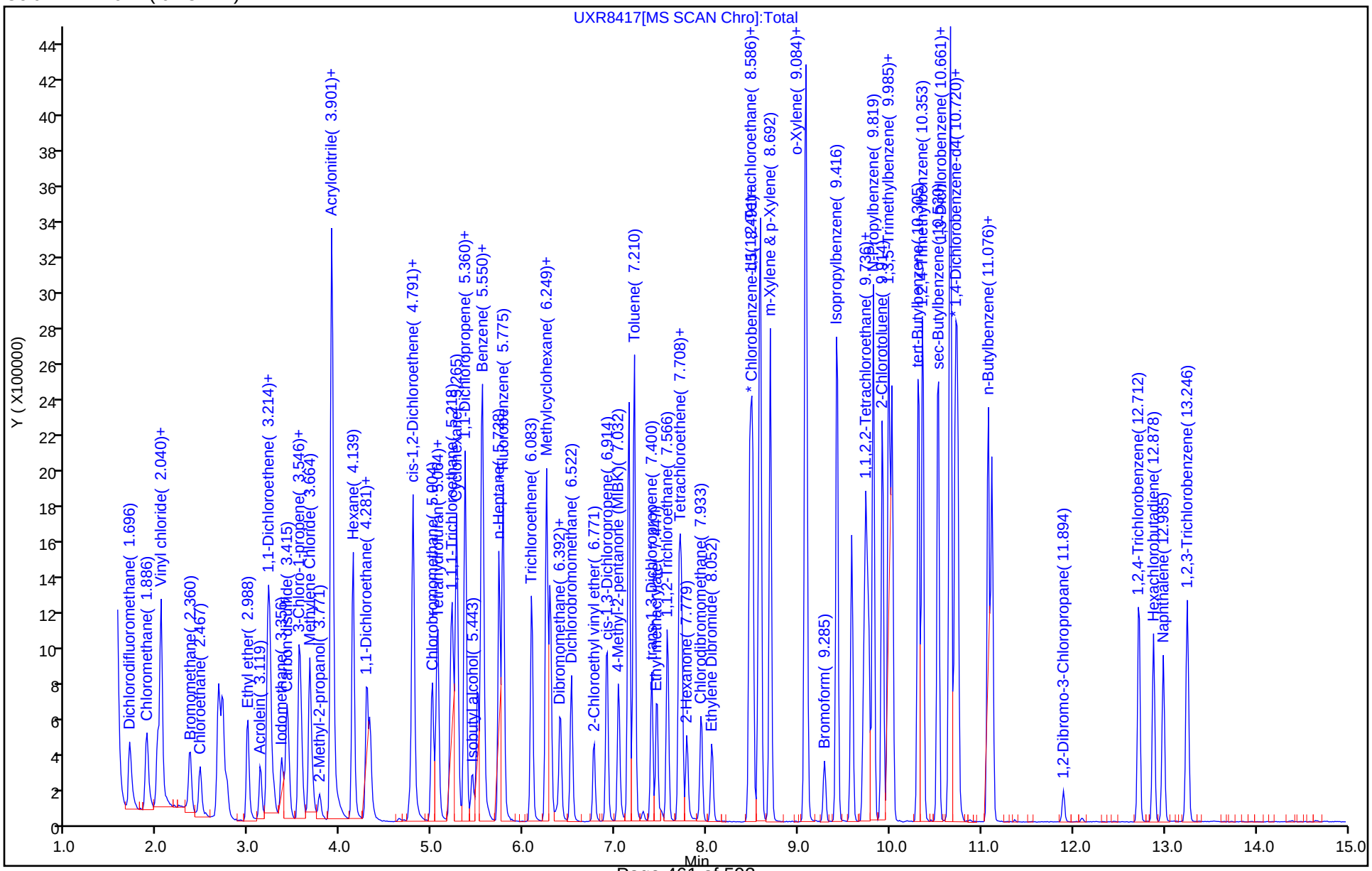
Report Date: 12-Jun-2019 13:08:35 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8417.D

Injection Date:	11-Jun-2019 20:24:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	ICV			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

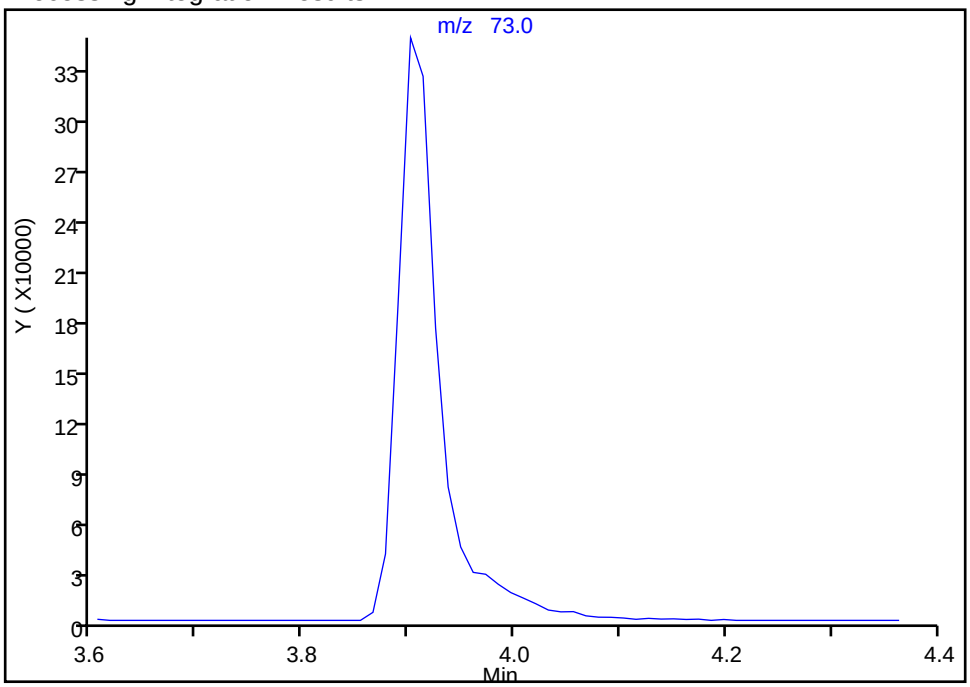
Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8417.D
Injection Date: 11-Jun-2019 20:24:30 Instrument ID: A3UX17
Lims ID: ICV
Client ID:
Operator ID: 001644 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_17 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

30 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

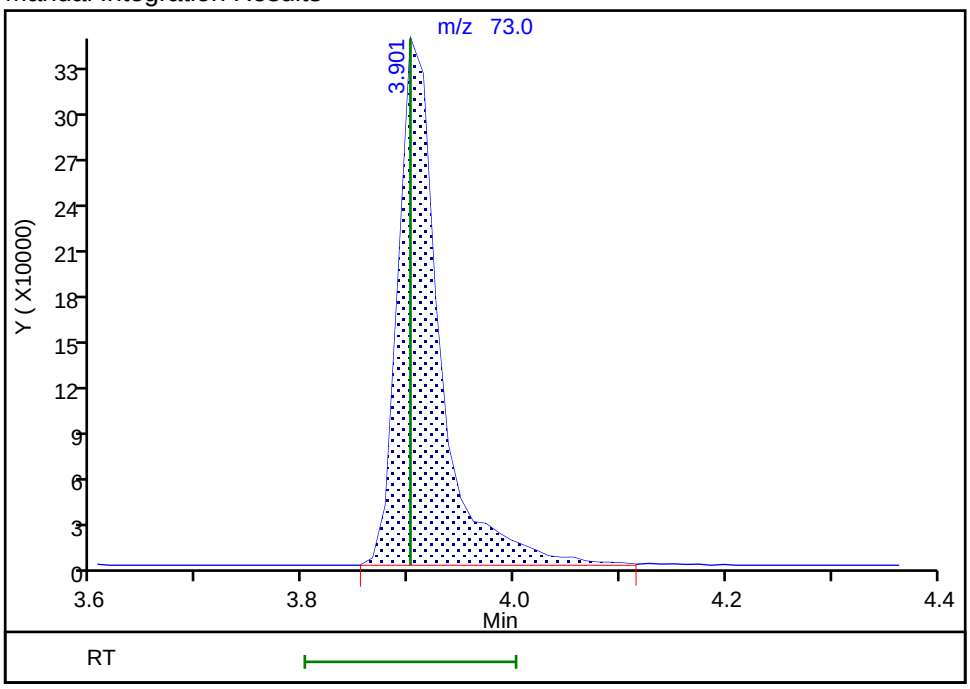
Not Detected
Expected RT: 3.90

Processing Integration Results



Manual Integration Results

RT: 3.90
Area: 952763
Amount: 10.124275
Amount Units: ug/l



Reviewer: williamsla, 12-Jun-2019 12:27:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: ICV 240-385628/17 Calibration Date: 06/11/2019 23:34

Instrument ID: A3UX17 Calib Start Date: 06/11/2019 20:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/11/2019 23:10

Lab File ID: UXR8425.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0274	0.0250		0.0910	0.100	-9.0	50.0
Isopropyl ether	Ave	0.2025	0.2011			0.0100	-0.7	50.0
2-Chloro-1,3-butadiene	Ave	0.4721	0.5106		0.0108	0.0100	8.2	50.0
Tert-butyl ethyl ether	Ave	0.6749	0.6843		0.0101	0.0100	1.4	50.0
Ethyl acetate	Ave	0.2100	0.2039		0.0194	0.0200	-2.9	50.0
Propionitrile	Ave	0.0319	0.0295		0.0923	0.100	-7.7	50.0
Methacrylonitrile	Ave	0.1551	0.1531		0.0987	0.100	-1.3	50.0
Tert-amyl methyl ether	Ave	0.4972	0.5186		0.0104	0.0100	4.3	50.0
n-Butanol	Qua		0.0023		0.113	0.250	-54.7*	50.0
Ethyl acrylate	Lin1		0.2444		0.00847	0.0100	-15.3	50.0
Methyl methacrylate	Lin1		0.1972		0.0179	0.0200	-10.5	50.0
2-Nitropropane	Ave	0.0425	0.0375		0.0176	0.0200	-11.8	50.0
n-Butyl acetate	Lin1		0.1198		0.00739	0.0100	-26.1	50.0
1-Chlorohexane	Lin1		0.3718		0.00880	0.0100	-12.0	50.0
Cyclohexanone	Qua		0.0066		0.0498	0.100	-50.2*	50.0
Pentachloroethane	Ave	0.1811	0.1693		0.0187	0.0200	-6.5	50.0
1,2,3-Trimethylbenzene	Lin1		3.187		0.0101	0.0100	1.1	50.0
Benzyl chloride	Lin1		0.1585		0.00821	0.0100	-17.9	50.0
1,3,5-Trichlorobenzene	Ave	1.061	1.088		0.0102	0.0100	2.5	50.0
2-Methylnaphthalene	Qua		0.6371		0.0159	0.0200	-20.4	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8425.D
Lims ID: ICV A9
Client ID:
Sample Type: ICV
Inject. Date: 11-Jun-2019 23:34:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-017
Operator ID: 001644 Instrument ID: A3UX17
Sublist:

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:08:57 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

First Level Reviewer: williamsla Date: 12-Jun-2019 12:13:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	99	1718303	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	89	1341962	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	97	516289	10.0	10.0	
24 Acetonitrile	41	3.546	3.546	0.000	98	428656	100.0	91.0	
35 Isopropyl ether	87	4.328	4.328	0.000	94	345535	10.0	9.93	
36 2-Chloro-1,3-butadiene	53	4.364	4.364	0.000	93	877330	10.0	10.8	
37 Tert-butyl ethyl ether	59	4.637	4.637	0.000	97	1175894	10.0	10.1	
41 Ethyl acetate	43	4.838	4.838	0.000	99	700673	20.0	19.4	
42 Propionitrile	54	4.862	4.874	-0.012	99	506163	100.0	92.3	
43 Methacrylonitrile	41	4.993	4.992	0.001	94	2630659	100.0	98.7	
54 Tert-amyl methyl ether	73	5.609	5.609	0.000	90	891117	10.0	10.4	
56 n-Butanol	56	6.001	6.000	0.001	88	77800	250.0	113.3	
58 Ethyl acrylate	55	6.155	6.155	0.001	99	419957	10.0	8.47	
61 Methyl methacrylate	41	6.356	6.356	0.000	95	677818	20.0	17.9	
65 2-Nitropropane	41	6.724	6.724	0.000	99	128758	20.0	17.6	
77 n-Butyl acetate	56	7.874	7.874	0.000	99	160773	10.0	7.39	
80 1-Chlorohexane	91	8.443	8.443	0.000	88	498909	10.0	8.80	
90 Cyclohexanone	55	9.534	9.546	-0.012	93	33898	100.0	49.8	
100 Pentachloroethane	167	10.341	10.341	0.000	93	454285	20.0	18.7	
106 1,2,3-Trimethylbenzene	105	10.780	10.779	0.001	99	1645272	10.0	10.1	
107 Benzyl chloride	126	10.874	10.874	0.000	98	81823	10.0	8.21	
112 1,3,5-Trichlorobenzene	180	12.096	12.096	0.000	97	561507	10.0	10.2	
117 2-Methylnaphthalene	142	14.384	14.372	0.012	99	657886	20.0	15.9	

Reagents:

vm50is_stk_A_00004 Amount Added: 1.00 Units: uL
VMFASA9W_00234 Amount Added: 8.00 Units: uL

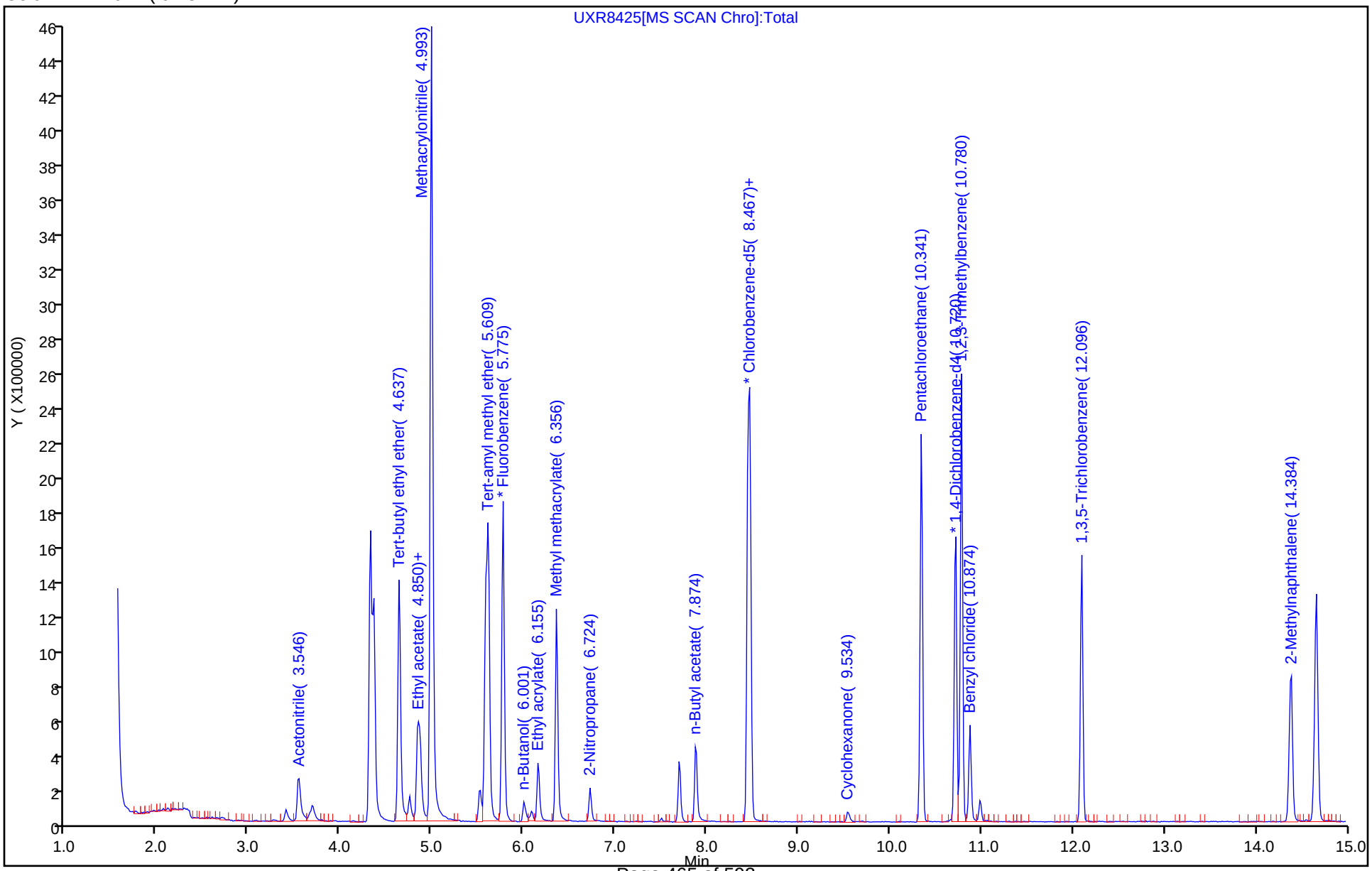
Report Date: 12-Jun-2019 13:09:01 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8425.D

Injection Date:	11-Jun-2019 23:34:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	ICV A9			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386999/2 Calibration Date: 06/19/2019 10:46

Instrument ID: A3UX17 Calib Start Date: 06/11/2019 17:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/11/2019 20:00

Lab File ID: UXR8594.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3495	0.3538		0.0101	0.0100	1.2	50.0
Chloromethane	Ave	0.4031	0.4224	0.1000	0.0105	0.0100	4.8	50.0
Vinyl chloride	Ave	0.3419	0.3646		0.0107	0.0100	6.6	20.0
Butadiene	Ave	0.3797	0.3799		0.0100	0.0100	0.0	50.0
Bromomethane	Ave	0.1934	0.1114		0.00576	0.0100	-42.4	50.0
Chloroethane	Ave	0.1967	0.1015		0.00516	0.0100	-48.4	50.0
Dichlorofluoromethane	Ave	0.4687	0.3516		0.00750	0.0100	-25.0	50.0
Trichlorofluoromethane	Ave	0.4696	0.4406		0.00938	0.0100	-6.2	50.0
Ethyl ether	Ave	0.2301	0.2390		0.0104	0.0100	3.9	50.0
Acrolein	Ave	0.0364	0.0373		0.0512	0.0500	2.5	50.0
1,1-Dichloroethene	Ave	0.2456	0.2362		0.00962	0.0100	-3.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1824	0.2020		0.0111	0.0100	10.7	50.0
Acetone	Lin1		0.0616		0.0213	0.0200	6.3	50.0
Iodomethane	Ave	0.3475	0.3551		0.0102	0.0100	2.2	50.0
Carbon disulfide	Ave	0.6846	0.6975		0.0102	0.0100	1.9	50.0
3-Chloro-1-propene	Ave	0.1355	0.1394		0.0103	0.0100	2.9	50.0
Methyl acetate	Ave	0.1649	0.1738		0.0211	0.0200	5.4	50.0
Methylene Chloride	Lin1		0.2906		0.0112	0.0100	12.4	50.0
2-Methyl-2-propanol	Ave	0.0099	0.0082		0.0829	0.100	-17.1	50.0
Acrylonitrile	Ave	0.0856	0.0928		0.108	0.100	8.4	50.0
Methyl tert-butyl ether	Ave	0.5287	0.5537		0.0105	0.0100	4.7	50.0
trans-1,2-Dichloroethene	Ave	0.2569	0.2687		0.0105	0.0100	4.6	50.0
Hexane	Ave	0.0659	0.0719		0.0109	0.0100	9.0	20.0
1,1-Dichloroethane	Ave	0.4825	0.4902	0.1000	0.0102	0.0100	1.6	50.0
Vinyl acetate	Ave	0.3658	0.3975		0.0109	0.0100	8.6	50.0
2,2-Dichloropropane	Ave	0.0500	0.0510		0.0102	0.0100	2.0	50.0
cis-1,2-Dichloroethene	Ave	0.2826	0.2791		0.00988	0.0100	-1.2	50.0
2-Butanone (MEK)	Ave	0.0869	0.0923		0.0213	0.0200	6.3	50.0
Chlorobromomethane	Ave	0.1210	0.1288		0.0106	0.0100	6.5	50.0
Tetrahydrofuran	Ave	0.0512	0.0517		0.0202	0.0200	1.1	50.0
Chloroform	Ave	0.4740	0.4914		0.0104	0.0100	3.7	20.0
1,1,1-Trichloroethane	Ave	0.3469	0.3805		0.0110	0.0100	9.7	50.0
Cyclohexane	Ave	0.4794	0.5148		0.0107	0.0100	7.4	50.0
1,1-Dichloropropene	Ave	0.3468	0.3701		0.0107	0.0100	6.7	50.0
Carbon tetrachloride	Ave	0.3064	0.3767		0.0123	0.0100	22.9	50.0
Isobutyl alcohol	Qua		0.0064		0.210	0.250	-15.9	50.0
Benzene	Ave	1.091	1.120		0.0103	0.0100	2.7	50.0
1,2-Dichloroethane	Ave	0.4067	0.4373		0.0108	0.0100	7.5	50.0
n-Heptane	Ave	0.0617	0.0662		0.0107	0.0100	7.2	50.0
Trichloroethene	Ave	0.2668	0.2697		0.0101	0.0100	1.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386999/2 Calibration Date: 06/19/2019 10:46

Instrument ID: A3UX17 Calib Start Date: 06/11/2019 17:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/11/2019 20:00

Lab File ID: UXR8594.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3898	0.4214		0.0108	0.0100	8.1	50.0
1,2-Dichloropropane	Ave	0.2700	0.2751		0.0102	0.0100	1.9	20.0
1,4-Dioxane	Ave	0.0023	0.0009		0.0791	0.200	-60.5*	50.0
Dibromomethane	Ave	0.1423	0.1518		0.0107	0.0100	6.7	50.0
Dichlorobromomethane	Ave	0.3104	0.3415		0.0110	0.0100	10.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1210	0.1294		0.0214	0.0200	7.0	50.0
cis-1,3-Dichloropropene	Ave	0.3180	0.3601		0.0113	0.0100	13.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1609	0.1774		0.0220	0.0200	10.2	50.0
Toluene	Ave	1.581	1.689		0.0107	0.0100	6.9	20.0
trans-1,3-Dichloropropene	Ave	0.3887	0.4299		0.0111	0.0100	10.6	50.0
Ethyl methacrylate	Ave	0.2983	0.3359		0.0113	0.0100	12.6	50.0
1,1,2-Trichloroethane	Ave	0.2936	0.3083		0.0105	0.0100	5.0	50.0
Tetrachloroethene	Ave	0.3154	0.3303		0.0105	0.0100	4.8	50.0
1,3-Dichloropropane	Ave	0.5316	0.5370		0.0101	0.0100	1.0	50.0
2-Hexanone	Ave	0.1450	0.1652		0.0228	0.0200	13.9	50.0
Chlorodibromomethane	Ave	0.2745	0.3196		0.0116	0.0100	16.4	50.0
Ethylene Dibromide	Ave	0.2663	0.2876		0.0108	0.0100	8.0	50.0
Chlorobenzene	Ave	1.018	1.031	0.3000	0.0101	0.0100	1.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3227	0.3431		0.0106	0.0100	6.3	50.0
Ethylbenzene	Ave	0.5108	0.5639		0.0110	0.0100	10.4	20.0
m-Xylene & p-Xylene	Ave	0.6374	0.7085		0.0111	0.0100	11.2	50.0
o-Xylene	Ave	0.5836	0.6597		0.0113	0.0100	13.0	50.0
Styrene	Ave	1.012	1.149		0.0114	0.0100	13.5	50.0
Bromoform	Ave	0.1521	0.1763	0.1000	0.0116	0.0100	16.0	50.0
Isopropylbenzene	Ave	1.559	1.730		0.0111	0.0100	11.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5816	0.5982	0.3000	0.0103	0.0100	2.9	50.0
Bromobenzene	Ave	0.7404	0.7584		0.0102	0.0100	2.4	50.0
1,2,3-Trichloropropane	Ave	0.1994	0.2086		0.0105	0.0100	4.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1811	0.2021		0.0112	0.0100	11.6	50.0
N-Propylbenzene	Ave	0.7726	0.8291		0.0107	0.0100	7.3	50.0
2-Chlorotoluene	Ave	0.6868	0.7165		0.0104	0.0100	4.3	50.0
1,3,5-Trimethylbenzene	Lin1		2.639		0.00982	0.0100	-1.8	50.0
4-Chlorotoluene	Ave	0.7368	0.7617		0.0103	0.0100	3.4	50.0
tert-Butylbenzene	Ave	2.007	2.043		0.0102	0.0100	1.8	50.0
1,2,4-Trimethylbenzene	Lin1		2.796		0.00997	0.0100	-0.3	50.0
sec-Butylbenzene	Ave	2.902	3.001		0.0103	0.0100	3.4	50.0
1,3-Dichlorobenzene	Ave	1.493	1.507		0.0101	0.0100	1.0	50.0
4-Isopropyltoluene	Ave	2.443	2.621		0.0107	0.0100	7.3	50.0
1,4-Dichlorobenzene	Ave	1.590	1.543		0.00970	0.0100	-3.0	50.0
n-Butylbenzene	Ave	2.072	2.122		0.0102	0.0100	2.4	50.0
1,2-Dichlorobenzene	Ave	1.423	1.419		0.00997	0.0100	-0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Lab Sample ID: CCVIS 240-386999/2 Calibration Date: 06/19/2019 10:46

Instrument ID: A3UX17 Calib Start Date: 06/11/2019 17:37

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/11/2019 20:00

Lab File ID: UXR8594.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0783	0.0811		0.0104	0.0100	3.6	50.0
1,2,4-Trichlorobenzene	Ave	0.7340	0.6949		0.00947	0.0100	-5.3	50.0
Hexachlorobutadiene	Ave	0.4403	0.4029		0.00915	0.0100	-8.5	50.0
Naphthalene	Lin1		1.280		0.00805	0.0100	-19.5	50.0
1,2,3-Trichlorobenzene	Ave	0.7203	0.7192		0.00999	0.0100	-0.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2342	0.1951		0.00833	0.0100	-16.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3355	0.2709		0.00808	0.0100	-19.2	50.0
Toluene-d8 (Surr)	Ave	1.296	1.077		0.00831	0.0100	-16.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4799	0.3972		0.00828	0.0100	-17.2	50.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8594.D
Lims ID: CCVIS L4 8260
Client ID:
Sample Type: CCVIS
Inject. Date: 19-Jun-2019 10:46:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-002
Operator ID: 001644 Instrument ID: A3UX17
Sublist: chrom-8260_17*sub42

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:42 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1574515	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1125550	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	646610	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.194	5.194	0.000	93	307114	10.0	8.33	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	97	426598	10.0	8.08	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	1212585	10.0	8.31	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	87	447085	10.0	8.28	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	100	557045	10.0	10.1	
10 Chloromethane	50	1.885	1.885	0.000	99	665087	10.0	10.5	
11 Vinyl chloride	62	2.004	2.004	0.000	96	574108	10.0	10.7	
119 Butadiene	54	2.040	2.040	0.000	89	598090	10.0	10.0	
12 Bromomethane	94	2.360	2.360	0.000	92	175395	10.0	5.76	
13 Chloroethane	64	2.467	2.467	0.000	98	159859	10.0	5.16	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	96	553514	10.0	7.50	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	97	693731	10.0	9.38	
16 Ethyl ether	59	2.988	2.988	0.000	96	376363	10.0	10.4	
18 Acrolein	56	3.119	3.119	0.000	97	293836	50.0	51.2	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	97	371951	10.0	9.62	
20 1,1,2-Trichloro-1,2,2-trif	151	3.237	3.237	0.000	94	318030	10.0	11.1	
21 Acetone	43	3.273	3.273	0.000	100	193901	20.0	21.3	
22 Iodomethane	142	3.356	3.356	0.000	99	559140	10.0	10.2	
23 Carbon disulfide	76	3.427	3.427	0.000	100	1098185	10.0	10.2	
25 3-Chloro-1-propene	76	3.546	3.546	0.000	90	219502	10.0	10.3	
26 Methyl acetate	43	3.569	3.569	0.000	98	547412	20.0	21.1	
27 Methylene Chloride	84	3.664	3.664	0.000	98	457489	10.0	11.2	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	86	129318	100.0	82.9	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	87	871814	10.0	10.5	
29 Acrylonitrile	53	3.901	3.901	0.000	99	1461306	100.0	108.4	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	96	423096	10.0	10.5	
32 Hexane	86	4.139	4.139	0.000	93	113143	10.0	10.9	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	96	771785	10.0	10.2	
34 Vinyl acetate	43	4.316	4.316	0.000	97	625823	10.0	10.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	439490	10.0	9.88	
38 2,2-Dichloropropane	97	4.791	4.791	0.000	55	80289	10.0	10.2	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	98	290779	20.0	21.3	
44 Chlorobromomethane	128	5.004	5.004	0.000	94	202785	10.0	10.6	
45 Tetrahydrofuran	42	5.040	5.040	0.000	97	162899	20.0	20.2	
46 Chloroform	83	5.064	5.064	0.000	93	773708	10.0	10.4	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	97	599114	10.0	11.0	
48 Cyclohexane	56	5.265	5.265	0.000	93	810605	10.0	10.7	
50 Carbon tetrachloride	117	5.360	5.360	0.000	94	593067	10.0	12.3	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	92	582783	10.0	10.7	
51 Isobutyl alcohol	41	5.431	5.431	0.000	91	180030	250.0	210.2	
52 Benzene	78	5.538	5.538	0.000	97	1763971	10.0	10.3	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	688550	10.0	10.8	
55 n-Heptane	100	5.728	5.728	0.000	95	104258	10.0	10.7	
57 Trichloroethene	130	6.083	6.083	0.000	97	424578	10.0	10.1	
59 Methylcyclohexane	83	6.249	6.249	0.000	94	663471	10.0	10.8	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	94	433111	10.0	10.2	
63 1,4-Dioxane	88	6.392	6.392	0.000	33	29080	200.0	79.1	
62 Dibromomethane	93	6.392	6.392	0.000	92	238938	10.0	10.7	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	537750	10.0	11.0	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	93	407558	20.0	21.4	
67 cis-1,3-Dichloropropene	75	6.913	6.913	0.000	93	566932	10.0	11.3	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	96	558549	20.0	22.0	
69 Toluene	91	7.210	7.210	0.000	98	1901290	10.0	10.7	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	95	483893	10.0	11.1	
71 Ethyl methacrylate	69	7.447	7.447	0.000	92	378016	10.0	11.3	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	92	346961	10.0	10.5	
73 Tetrachloroethene	164	7.708	7.708	0.000	97	371810	10.0	10.5	
75 1,3-Dichloropropane	76	7.720	7.720	0.000	96	604413	10.0	10.1	
76 2-Hexanone	43	7.779	7.779	0.000	98	371758	20.0	22.8	
78 Chlorodibromomethane	129	7.933	7.933	0.000	91	359707	10.0	11.6	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	323669	10.0	10.8	
81 Chlorobenzene	112	8.502	8.502	0.000	93	1160604	10.0	10.1	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	91	386195	10.0	10.6	
83 Ethylbenzene	106	8.585	8.585	0.000	99	634656	10.0	11.0	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	797479	10.0	11.1	
85 o-Xylene	106	9.072	9.072	0.000	95	742465	10.0	11.3	
86 Styrene	104	9.084	9.084	0.000	91	1293400	10.0	11.4	
87 Bromoform	173	9.285	9.285	0.000	97	198450	10.0	11.6	
89 Isopropylbenzene	105	9.416	9.416	0.000	96	1947728	10.0	11.1	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	386787	10.0	10.3	
92 Bromobenzene	156	9.736	9.736	0.000	96	490401	10.0	10.2	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	69	130649	10.0	11.2	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	87	134855	10.0	10.5	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	536071	10.0	10.7	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	463270	10.0	10.4	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	1706129	10.0	9.82	
98 4-Chlorotoluene	126	10.020	10.020	0.000	99	492551	10.0	10.3	
99 tert-Butylbenzene	119	10.317	10.317	0.000	92	1320837	10.0	10.2	
101 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	96	1808102	10.0	9.97	
102 sec-Butylbenzene	105	10.530	10.530	0.000	95	1940184	10.0	10.3	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	974690	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	1694446	10.0	10.7	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	997445	10.0	9.70	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	1372376	10.0	10.2	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	97	917499	10.0	9.97	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	78	52420	10.0	10.4	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	449331	10.0	9.47	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	95	260546	10.0	9.15	
115 Naphthalene	128	12.985	12.985	0.000	99	827979	10.0	8.05	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	97	465036	10.0	9.99	
S 130 Xylenes, Total	106				0		20.0	22.4	
S 158 Total BTEX	1		0.000				50.0	ND	
S 131 Trihalomethanes, Total	1				0		40.0	44.6	

Reagents:

VMRPRIMW_00341	Amount Added:	8.00	Units: uL	
VMRGAS_00297	Amount Added:	8.00	Units: uL	
VMAROLISTDW_00301	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

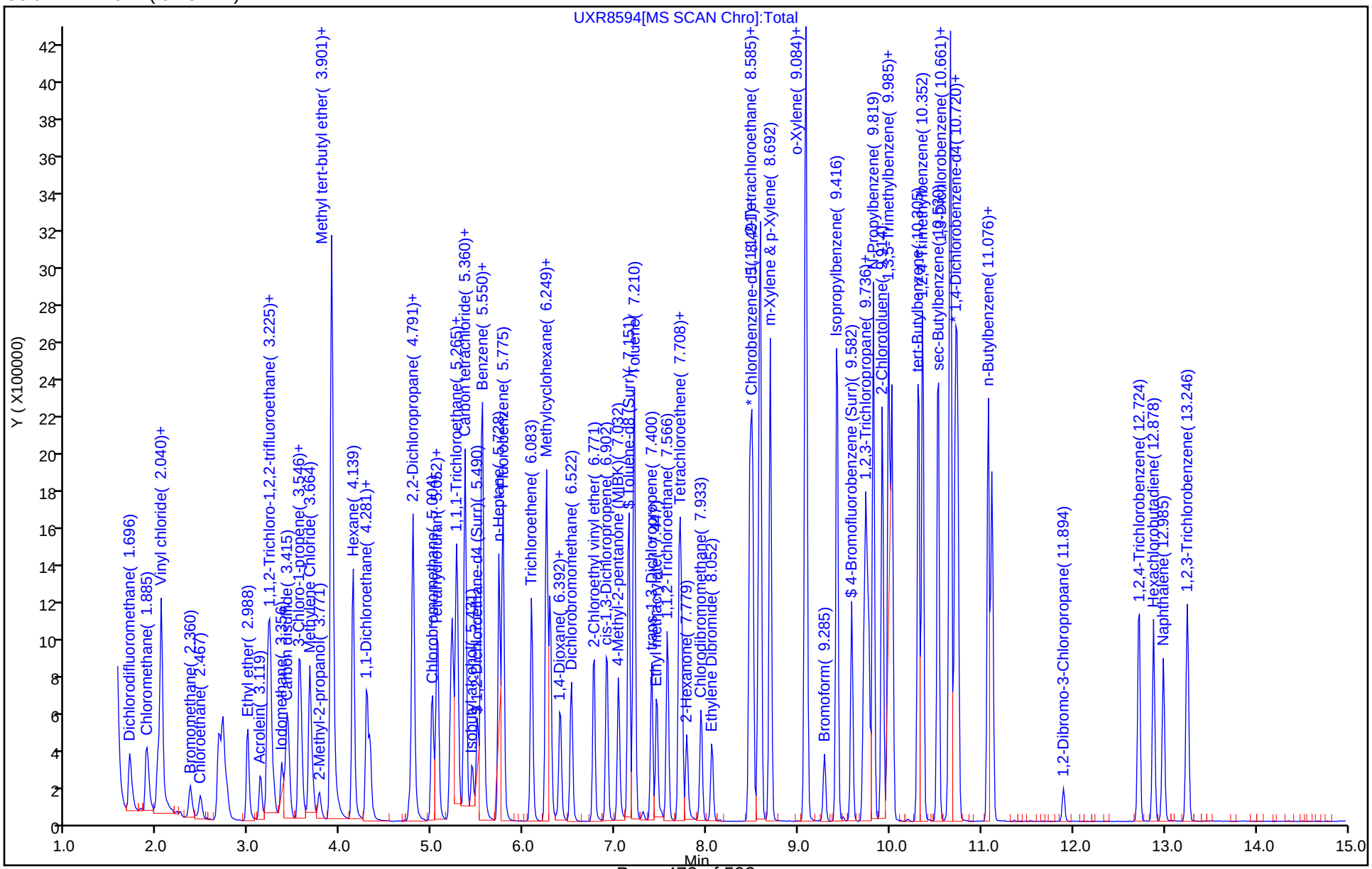
Report Date: 20-Jun-2019 11:32:45 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8594.D

Injection Date:	19-Jun-2019 10:46:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	CCVIS L4 8260			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\BFB1278.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Apr-2019 17:14:30 ALS Bottle#: 1 Worklist Smp#: 23
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0085857-023
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Apr-2019 12:12:05 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0340

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.209	3.209	0.000	0	265044	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

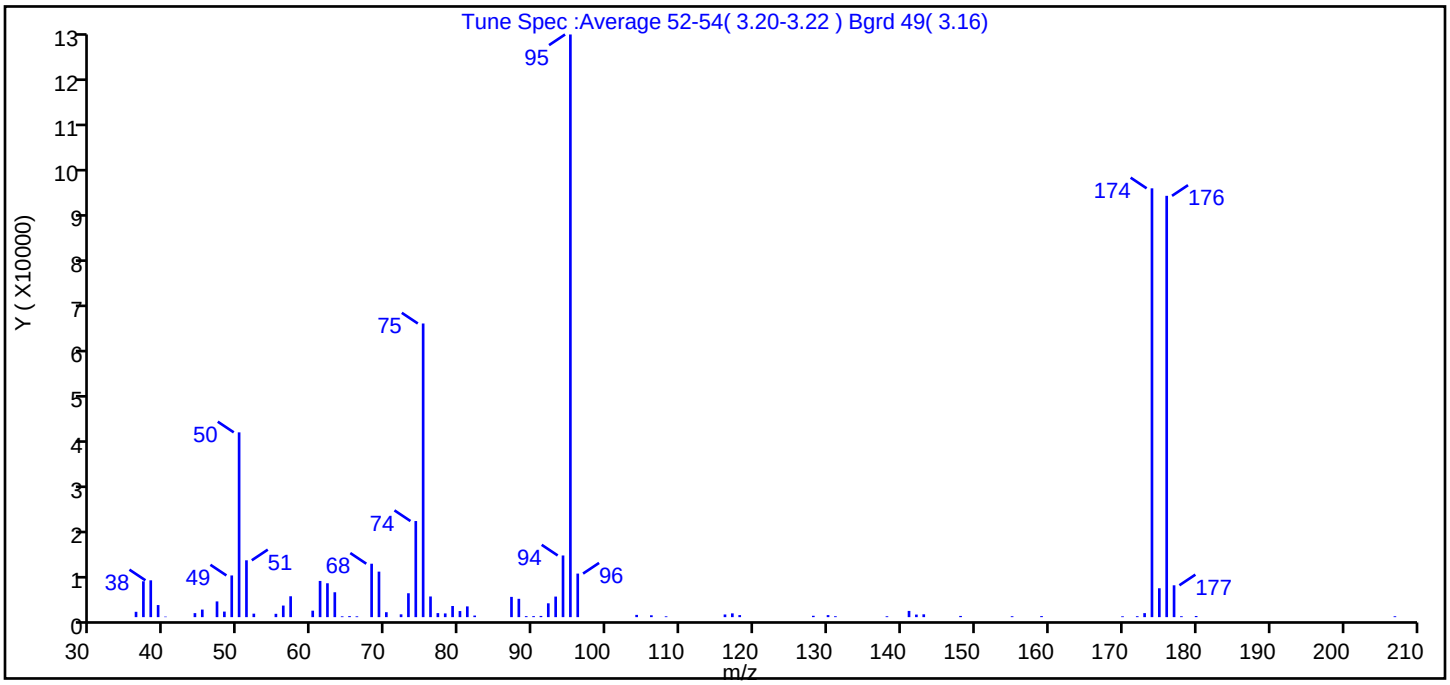
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\BFB1278.D
Injection Date: 05-Apr-2019 17:14:30 Instrument ID: A3UX10
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 23
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	31.7
75	30 to 60% of m/z 95	50.4
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.7 (0.9)
174	50 to 120% of m/z 95	73.6
175	5 to 9% of m/z 174	5.0 (6.7)
176	Greater than 95% but less than 101% of m/z 174	72.3 (98.3)
177	5 to 9% of m/z 176	5.5 (7.6)

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\BFB1278.D\8260_10.rslt\spectra.d
Injection Date: 05-Apr-2019 17:14:30
Spectrum: Tune Spec :Average 52-54(3.20-3.22) Bgrd 49(3.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1106	63.00	5149	88.00	3794	141.00	1287
37.00	7417	64.00	168	89.00	206	142.00	531
38.00	7617	65.00	212	90.00	209	143.00	585
39.00	2500	66.00	169	91.00	251	148.00	250
40.00	106	68.00	11052	92.00	2864	155.00	188
44.00	830	69.00	9415	93.00	4253	159.00	214
45.00	1566	70.00	1023	94.00	12756	170.00	172
47.00	3254	72.00	581	95.00	120528	172.00	193
48.00	1149	73.00	4944	96.00	9011	173.00	831
49.00	8625	74.00	19880	104.00	469	174.00	88704
50.00	38224	75.00	60744	106.00	384	175.00	5976
51.00	11759	76.00	4276	108.00	171	176.00	87152
52.00	723	77.00	836	116.00	552	177.00	6588
55.00	690	78.00	768	117.00	779	178.00	186
56.00	2395	79.00	2304	118.00	425	180.00	237
57.00	4318	80.00	1261	128.00	281	207.00	184
60.00	1338	81.00	2225	130.00	419		
61.00	7490	82.00	326	131.00	190		
62.00	7008	87.00	4192	138.00	183		

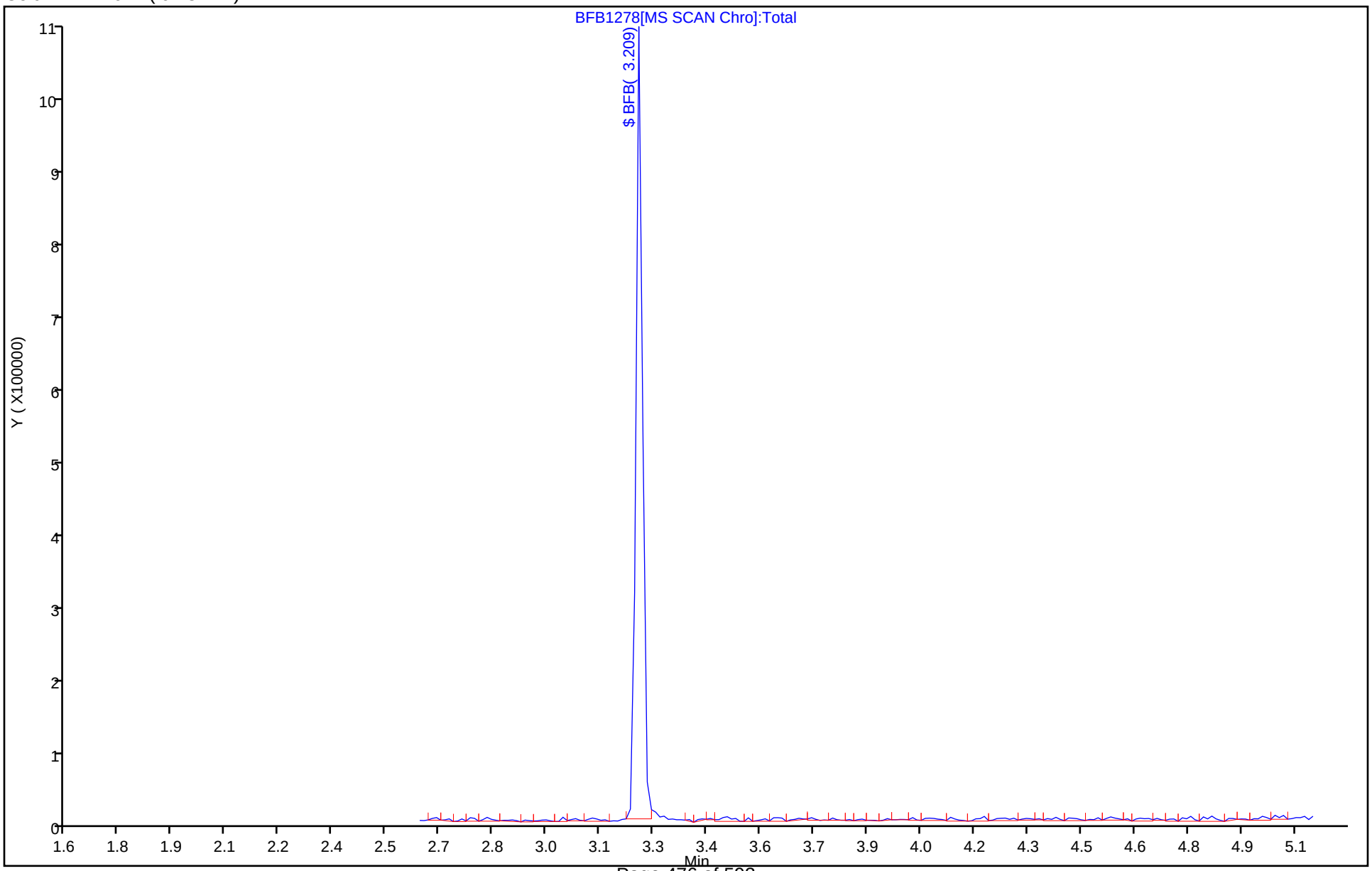
Report Date: 08-Apr-2019 12:12:06 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\BFB1278.D

Injection Date:	05-Apr-2019 17:14:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	23
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\BFB1279.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Apr-2019 10:16:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0085913-001
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 09-Apr-2019 09:14:38 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0311

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.210	3.210	0.000	0	285249	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

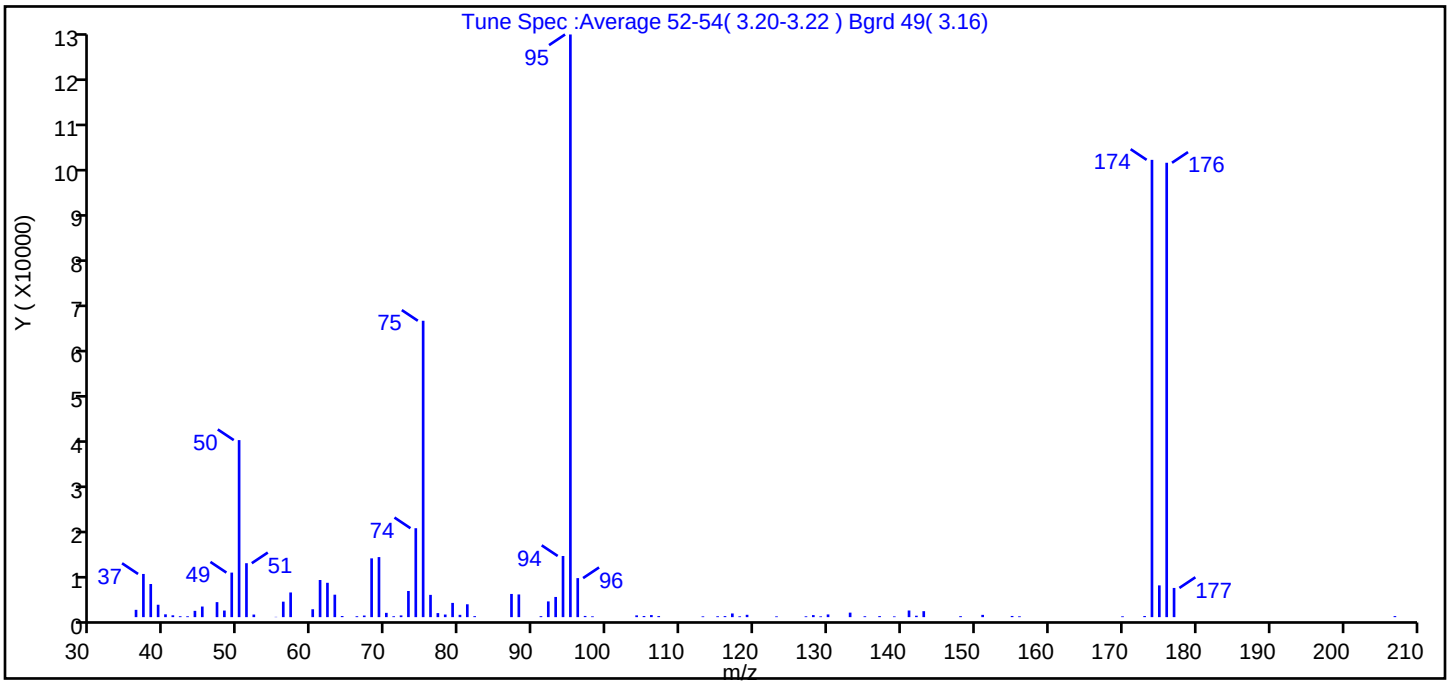
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\BFB1279.D
Injection Date: 08-Apr-2019 10:16:30 Instrument ID: A3UX10
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	30.4
75	30 to 60% of m/z 95	50.9
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	78.5
175	5 to 9% of m/z 174	5.5 (6.9)
176	Greater than 95% but less than 101% of m/z 174	78.0 (99.4)
177	5 to 9% of m/z 176	5.0 (6.4)

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\BFB1279.D\8260_10.rslt\spectra.d
Injection Date: 08-Apr-2019 10:16:30
Spectrum: Tune Spec :Average 52-54(3.20-3.22) Bgrd 49(3.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1630	62.00	7660	88.00	5062	128.00	455
37.00	9632	63.00	5008	91.00	220	129.00	173
38.00	7389	64.00	250	92.00	3511	130.00	602
39.00	2765	66.00	206	93.00	4501	133.00	1007
40.00	628	67.00	359	94.00	13637	135.00	201
41.00	411	68.00	13109	95.00	129936	137.00	229
42.00	201	69.00	13393	96.00	8706	139.00	168
43.00	194	70.00	958	97.00	269	141.00	1481
44.00	1405	71.00	198	98.00	179	142.00	318
45.00	2366	72.00	385	104.00	396	143.00	1333
47.00	3349	73.00	5833	105.00	249	148.00	215
48.00	1471	74.00	19832	106.00	461	151.00	508
49.00	9935	75.00	66096	107.00	237	155.00	263
50.00	39480	76.00	4966	113.00	172	156.00	185
51.00	12028	77.00	904	115.00	198	170.00	184
52.00	578	78.00	582	116.00	235	173.00	250
55.00	60	79.00	3176	117.00	820	174.00	101976
56.00	3453	80.00	513	118.00	176	175.00	7083
57.00	5504	81.00	2869	119.00	523	176.00	101328
60.00	1759	82.00	223	123.00	175	177.00	6512
61.00	8283	87.00	5172	127.00	186	207.00	237

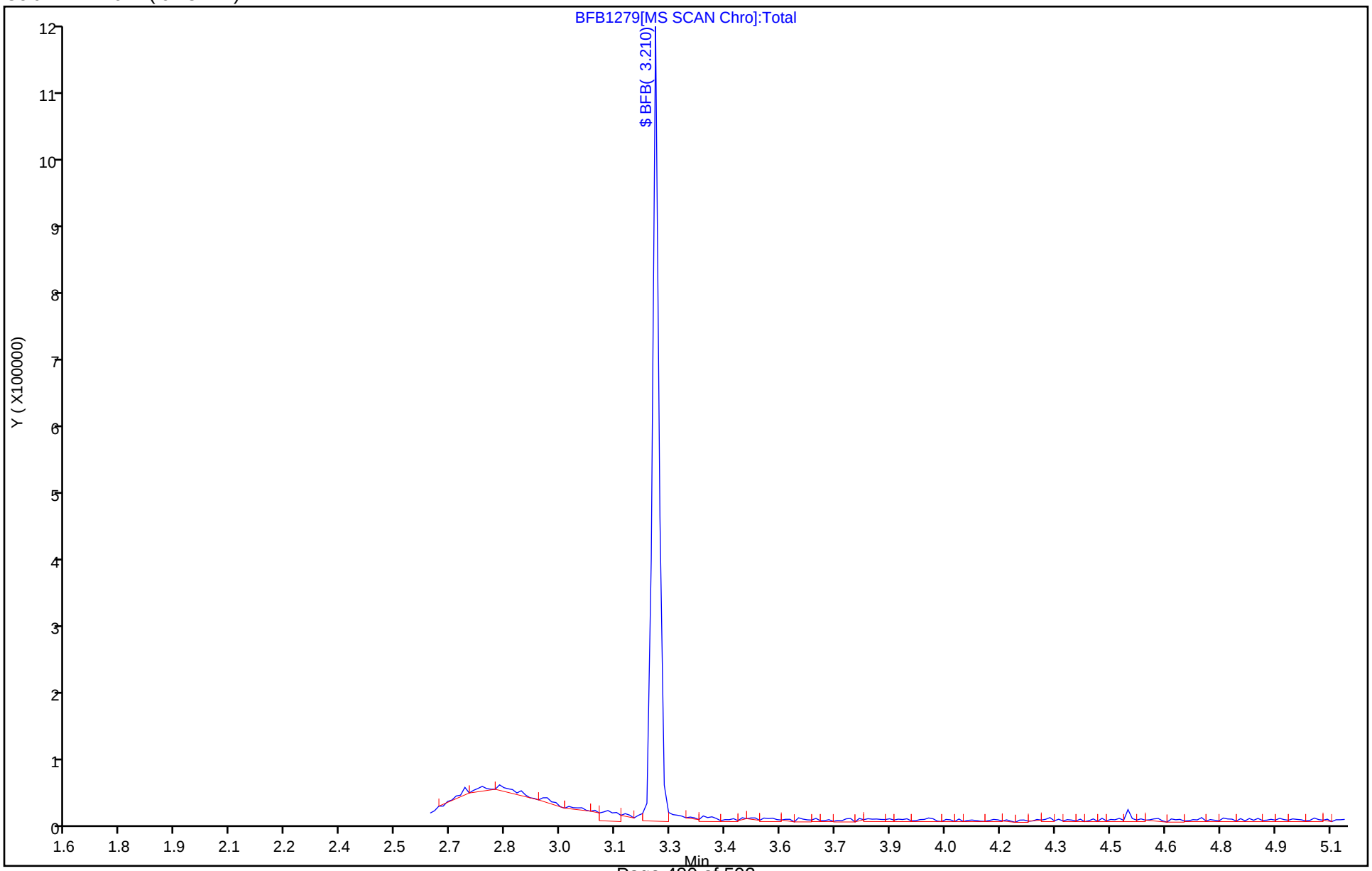
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190408-85913.b\BFB1279.D

Injection Date:	08-Apr-2019 10:16:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\BFB1362.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 18-Jun-2019 11:04:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-001
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:28 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.198	3.198	0.000	0	232458	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

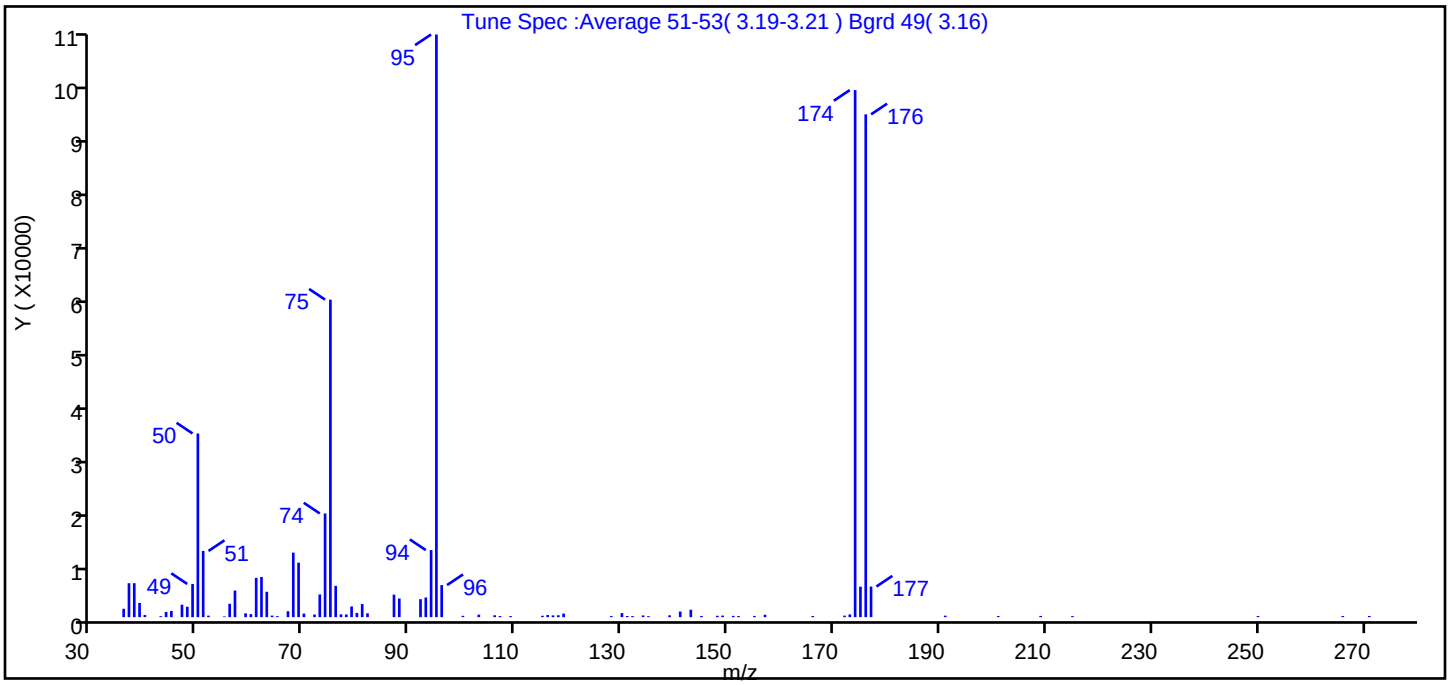
VMBFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\BFB1362.D
Injection Date: 18-Jun-2019 11:04:30 Instrument ID: A3UX10
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_10 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	31.5
75	30 to 60% of m/z 95	54.5
96	5 to 9% of m/z 95	5.5
173	Less than 2% of m/z 174	0.5 (0.5)
174	50 to 120% of m/z 95	90.5
175	5 to 9% of m/z 174	5.2 (5.8)
176	Greater than 95% but less than 101% of m/z 174	86.3 (95.4)
177	5 to 9% of m/z 176	5.2 (6.1)

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\BFB1362.D\8260_10.rslt\spectra.d
Injection Date: 18-Jun-2019 11:04:30
Spectrum: Tune Spec :Average 51-53(3.19-3.21) Bgrd 49(3.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1449	64.00	271	95.00	101088	148.00	239
37.00	5885	65.00	172	96.00	5563	149.00	273
38.00	5891	67.00	1027	100.00	231	151.00	220
39.00	2472	68.00	11193	103.00	427	152.00	192
40.00	375	69.00	9445	106.00	322	155.00	209
43.00	168	70.00	617	107.00	193	157.00	416
44.00	907	72.00	456	109.00	182	166.00	204
45.00	1084	73.00	3932	115.00	242	172.00	259
47.00	2163	74.00	17992	116.00	368	173.00	473
48.00	1805	75.00	55088	117.00	303	174.00	91440
49.00	5758	76.00	5428	118.00	329	175.00	5279
50.00	31864	77.00	487	119.00	617	176.00	87232
51.00	11483	78.00	462	128.00	191	177.00	5307
52.00	263	79.00	1851	130.00	702	191.00	255
55.00	121	80.00	734	131.00	194	201.00	187
56.00	2323	81.00	2271	132.00	181	209.00	210
57.00	4618	82.00	665	134.00	294	215.00	181
59.00	670	87.00	3906	135.00	167	250.00	191
60.00	519	88.00	3230	139.00	319	266.00	195
61.00	6817	92.00	3117	141.00	973	271.00	202
62.00	6967	93.00	3407	143.00	1283		
63.00	4400	94.00	11636	145.00	212		

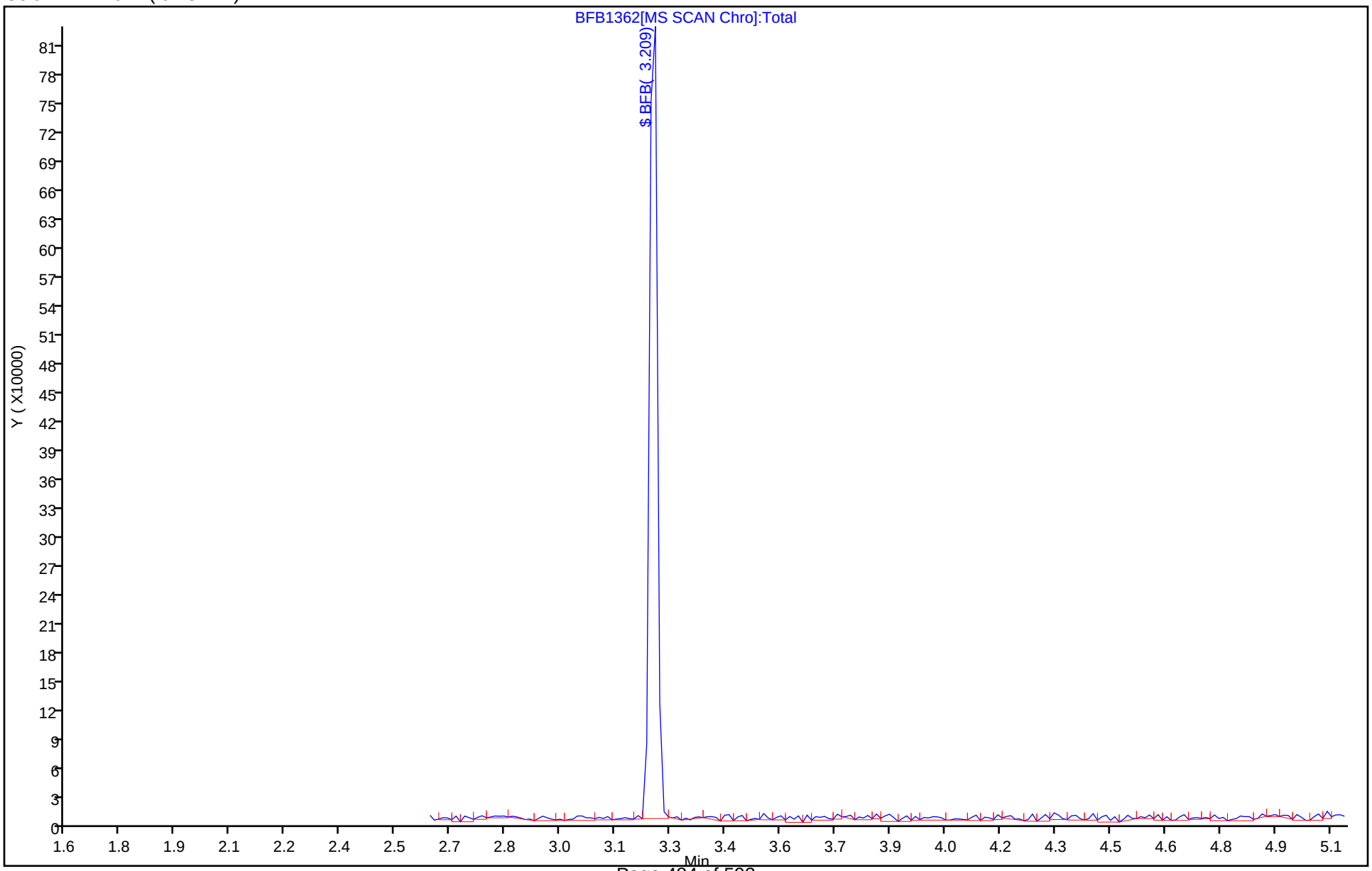
Report Date: 19-Jun-2019 10:25:28 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\BFB1362.D

Injection Date:	18-Jun-2019 11:04:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\BFB0207A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 07-Feb-2019 12:42:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: J90207A-IC,BFBUX11,,43582
Operator ID: Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 08-Feb-2019 09:14:28 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0324

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.331	4.331	0.000	0	773306	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

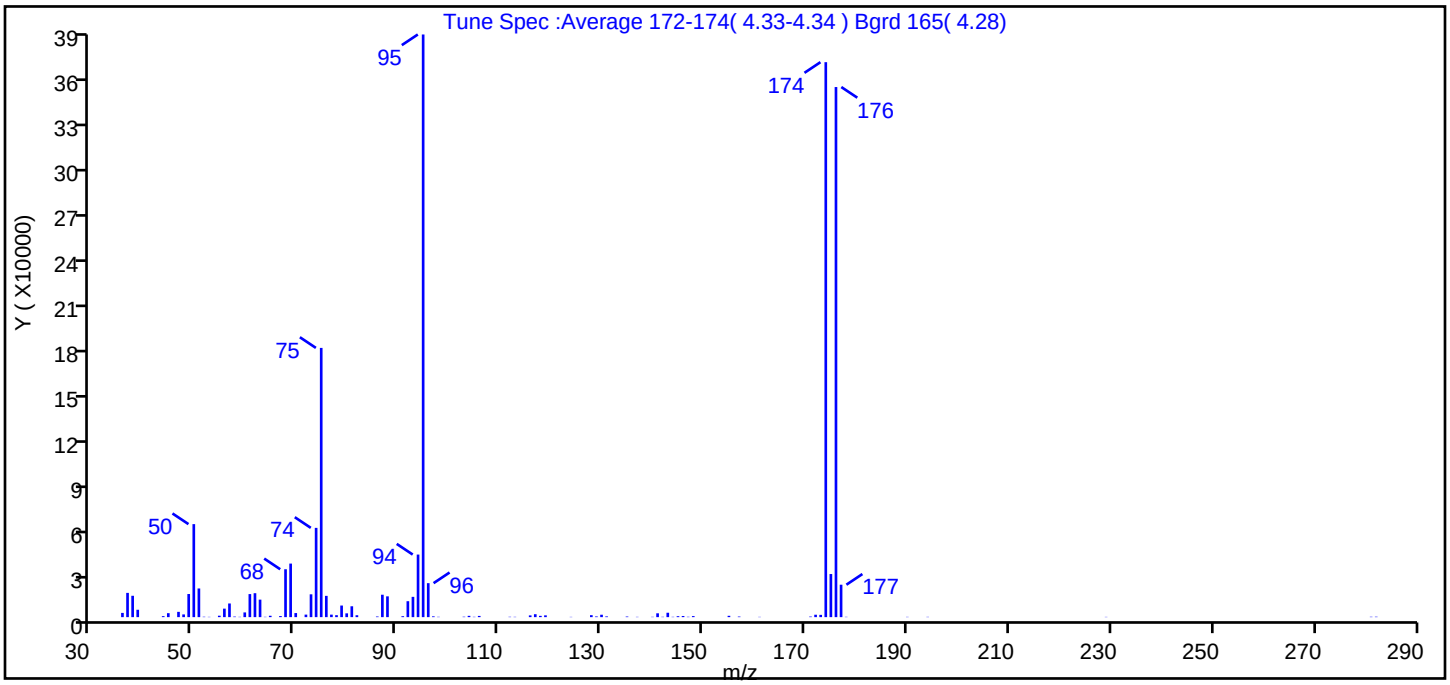
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\BFB0207A.D
Injection Date: 07-Feb-2019 12:42:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.0
75	30 to 60% of m/z 95	46.2
96	5 to 9% of m/z 95	5.8
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	95.2
175	5 to 9% of m/z 174	7.4 (7.8)
176	Greater than 95% but less than 101% of m/z 174	91.0 (95.5)
177	5 to 9% of m/z 176	5.6 (6.1)

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\BFB0207A.D\8260_11.rslt\spectra.d
Injection Date: 07-Feb-2019 12:42:30
Spectrum: Tune Spec :Average 172-174(4.33-4.34) Bgrd 165(4.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2784	65.00	904	95.00	382400	142.00	228
37.00	15917	67.00	706	96.00	22304	143.00	2886
38.00	14021	68.00	31432	97.00	510	144.00	211
39.00	4841	69.00	35152	98.00	219	145.00	619
44.00	654	70.00	2681	103.00	285	146.00	737
45.00	2604	72.00	1663	104.00	858	147.00	242
47.00	3477	73.00	14979	105.00	220	148.00	680
48.00	1789	74.00	58592	106.00	807	155.00	878
49.00	15178	75.00	176704	112.00	239	157.00	387
50.00	61048	76.00	13966	113.00	203	161.00	181
51.00	18816	77.00	1651	116.00	1138	171.00	377
52.00	267	78.00	1296	117.00	1927	172.00	1586
53.00	186	79.00	7617	118.00	850	173.00	1497
55.00	938	80.00	2489	119.00	1173	174.00	364224
56.00	5581	81.00	7135	124.00	173	175.00	28296
57.00	8969	82.00	1254	128.00	1292	176.00	347904
58.00	369	86.00	423	129.00	454	177.00	21288
59.00	198	87.00	14713	130.00	1582	178.00	207
60.00	3103	88.00	13650	131.00	477	190.00	180
61.00	15136	91.00	611	135.00	403	194.00	188
62.00	15714	92.00	10464	137.00	187	229.00	169
63.00	11491	93.00	13318	140.00	211	281.00	250
64.00	206	94.00	41072	141.00	2521	282.00	283

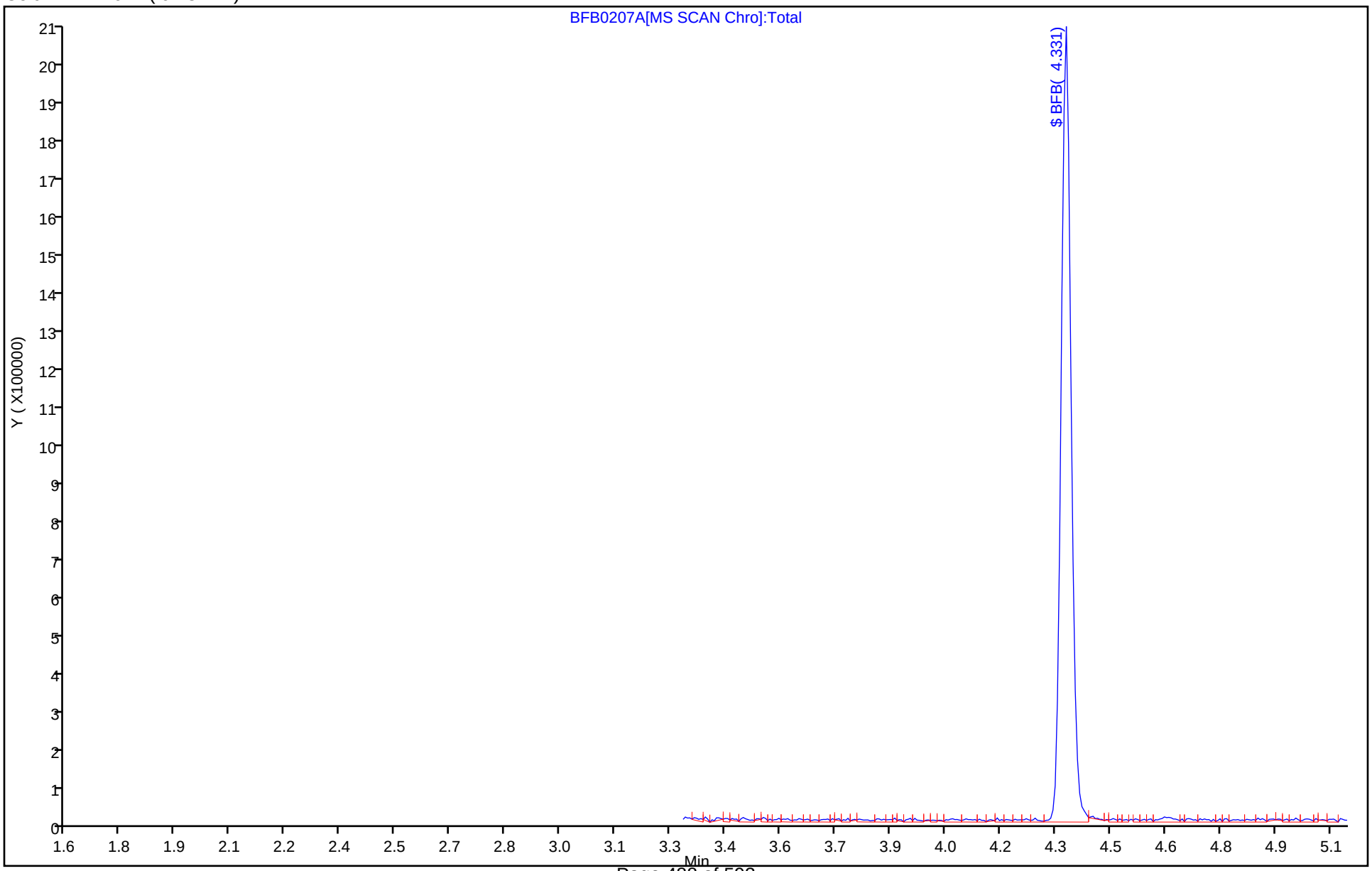
Report Date: 08-Feb-2019 09:14:29 Chrom Revision: 2.3 15-Jan-2019 08:51:34

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\BFB0207A.D

Injection Date:	07-Feb-2019 12:42:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\BFB0617B.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 17-Jun-2019 07:28:30 ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: J90617A,BFBUX11,,43582
Operator ID: Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:16:58 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: evansle Date: 17-Jun-2019 08:43:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	4.332	4.332	0.000	0	459238	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

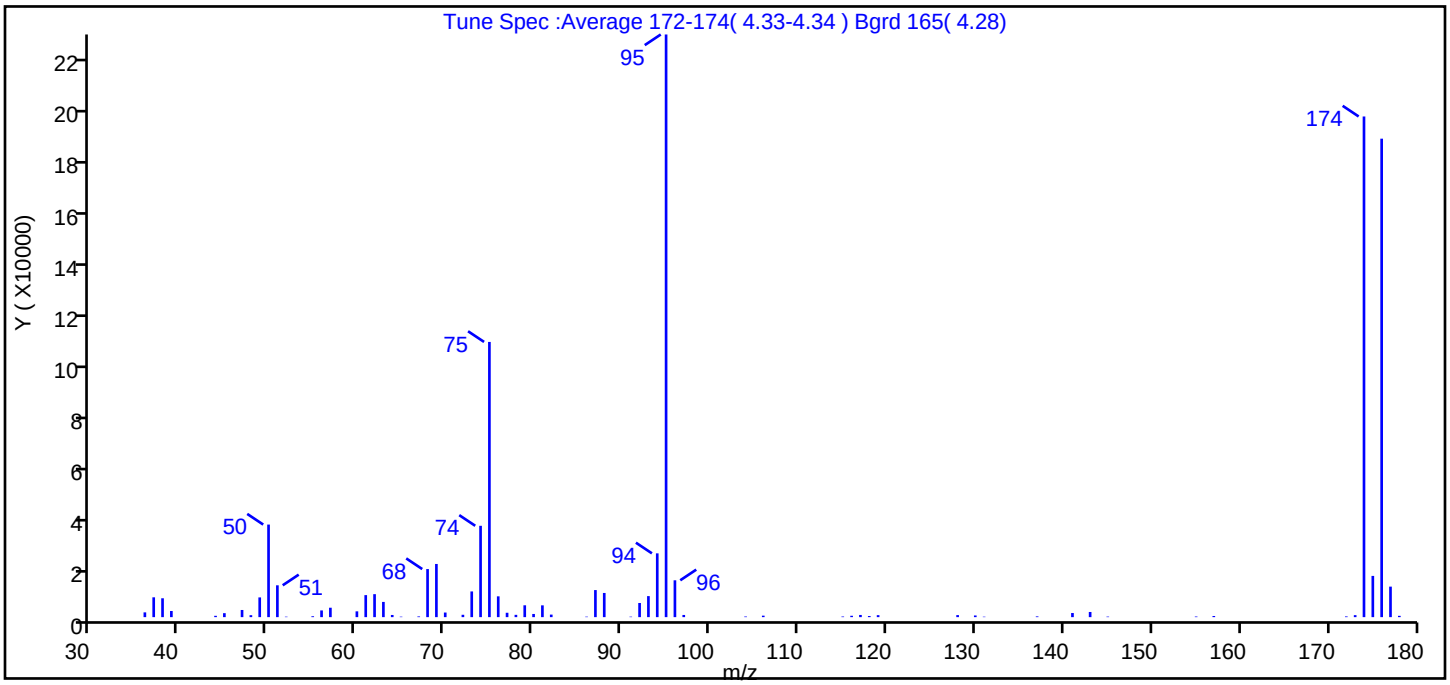
vmbfb_00023 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\BFB0617B.D
Injection Date: 17-Jun-2019 07:28:30 Instrument ID: A3UX11
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 30 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_11 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.9
75	30 to 60% of m/z 95	47.2
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	85.9
175	5 to 9% of m/z 174	7.1 (8.2)
176	Greater than 95% but less than 101% of m/z 174	82.1 (95.6)
177	5 to 9% of m/z 176	5.2 (6.4)

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\BFB0617B.D\8260_11.rslt\spectra.d
Injection Date: 17-Jun-2019 07:28:30
Spectrum: Tune Spec :Average 172-174(4.33-4.34) Bgrd 165(4.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1803	63.00	5751	86.00	185	130.00	629
37.00	7490	64.00	820	87.00	10224	131.00	169
38.00	7129	65.00	181	88.00	9135	137.00	285
39.00	2325	67.00	269	91.00	181	141.00	1557
44.00	506	68.00	18160	92.00	5345	143.00	1950
45.00	1504	69.00	20088	93.00	7945	145.00	203
47.00	2706	70.00	1741	94.00	24096	155.00	235
48.00	739	72.00	894	95.00	220096	157.00	421
49.00	7454	73.00	9712	96.00	13920	172.00	273
50.00	34968	74.00	34504	97.00	825	173.00	751
51.00	12028	75.00	103960	104.00	239	174.00	189120
52.00	177	76.00	7861	106.00	558	175.00	15575
55.00	334	77.00	1653	115.00	239	176.00	180736
56.00	2539	78.00	869	116.00	520	177.00	11528
57.00	3558	79.00	4477	117.00	825	178.00	496
60.00	2193	80.00	1201	118.00	419		
61.00	8321	81.00	4456	119.00	749		
62.00	8681	82.00	963	128.00	773		

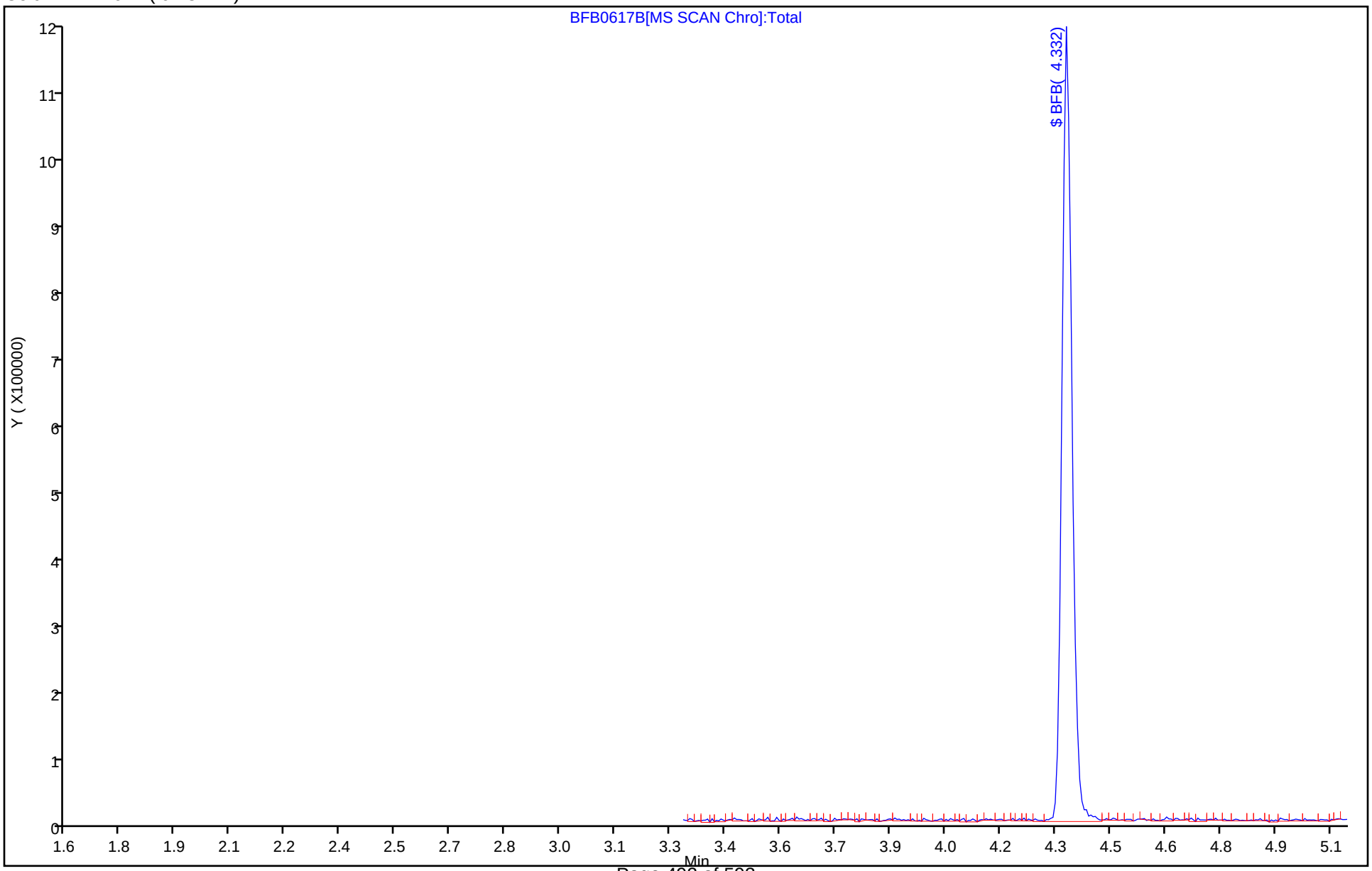
Report Date: 18-Jun-2019 09:16:59 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\BFB0617B.D

Injection Date:	17-Jun-2019 07:28:30	Instrument ID:	A3UX11	Operator ID:	
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\BFB2536.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 11-Jun-2019 17:04:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0088015-001
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 12-Jun-2019 13:07:02 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0319

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.893	3.893	0.000	0	505164	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

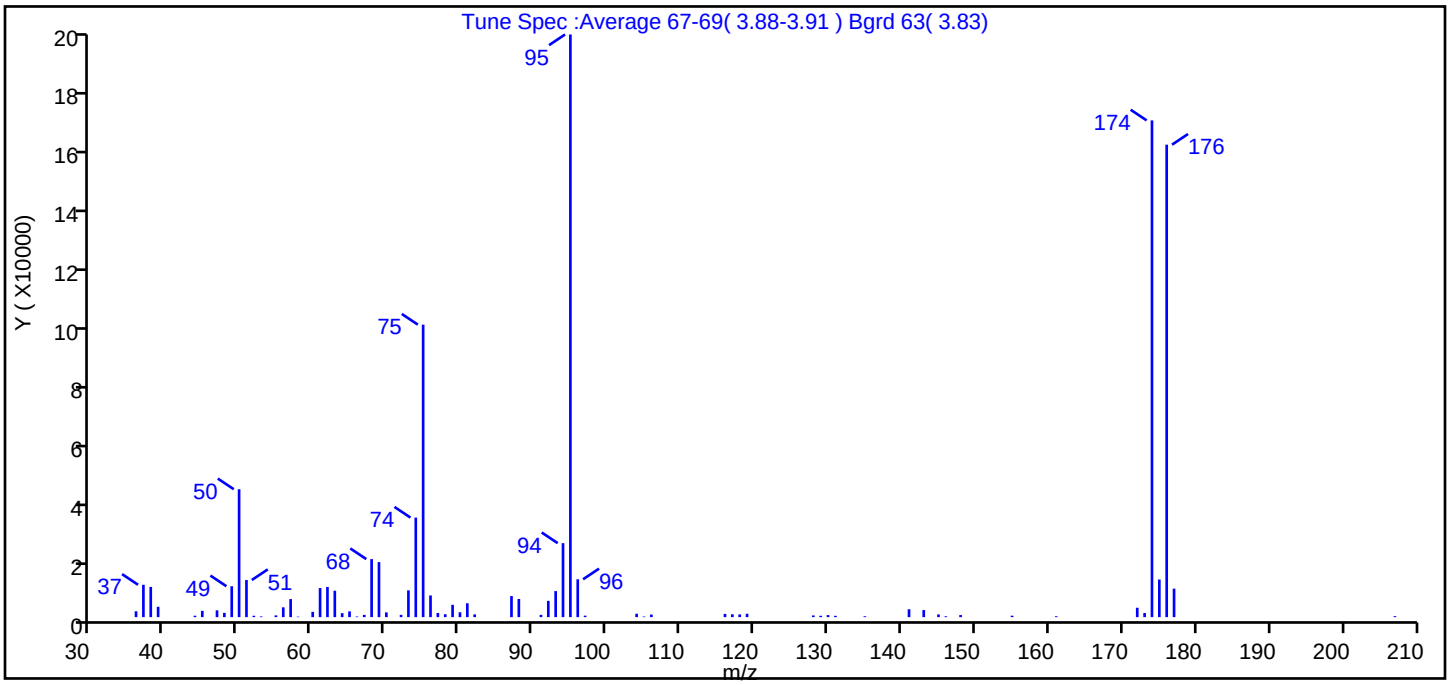
vmbfb_00023 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\BFB2536.D
Injection Date: 11-Jun-2019 17:04:30 Instrument ID: A3UX17
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_17 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.0
75	30 to 60% of m/z 95	50.2
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	85.3
175	5 to 9% of m/z 174	6.5 (7.6)
176	Greater than 95% but less than 101% of m/z 174	81.1 (95.1)
177	5 to 9% of m/z 176	4.9 (6.0)

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\BFB2536.D\8260_17.rslt\spectra.d
Injection Date: 11-Jun-2019 17:04:30
Spectrum: Tune Spec :Average 67-69(3.88-3.91) Bgrd 63(3.83)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1984	62.00	10185	82.00	931	130.00	696
37.00	10923	63.00	8915	87.00	7112	131.00	450
38.00	10203	64.00	1338	88.00	6123	135.00	299
39.00	3500	65.00	1946	91.00	774	141.00	2661
44.00	484	66.00	212	92.00	5498	143.00	2388
45.00	2118	67.00	771	93.00	8789	145.00	917
47.00	2302	68.00	19584	94.00	24968	146.00	291
48.00	1442	69.00	18568	95.00	196608	148.00	707
49.00	10427	70.00	1607	96.00	12776	155.00	492
50.00	43160	72.00	770	97.00	506	161.00	303
51.00	12523	73.00	9036	104.00	1147	172.00	3173
52.00	473	74.00	33592	105.00	207	173.00	1396
53.00	242	75.00	98704	106.00	873	174.00	167616
55.00	596	76.00	7326	116.00	1102	175.00	12696
56.00	3310	77.00	1397	117.00	960	176.00	159424
57.00	6096	78.00	981	118.00	926	177.00	9622
58.00	167	79.00	4152	119.00	1148	207.00	337
60.00	1789	80.00	1647	128.00	576		
61.00	9809	81.00	4685	129.00	466		

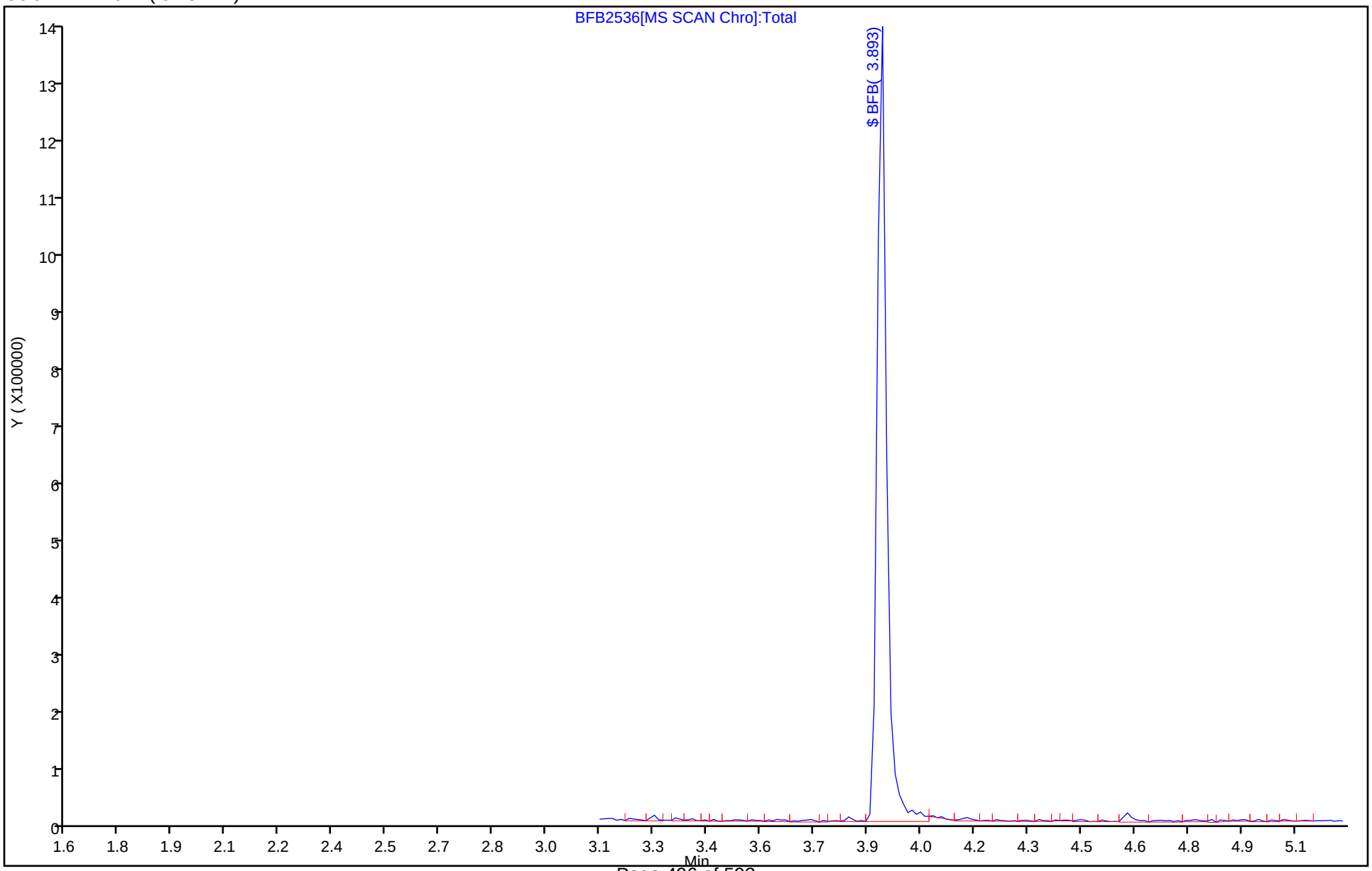
Report Date: 12-Jun-2019 13:07:03 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\BFB2536.D

Injection Date:	11-Jun-2019 17:04:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\BFB2546.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 19-Jun-2019 10:22:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-001
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:37 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 8 BFB	95	3.834	3.834	0.000	0	355065	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

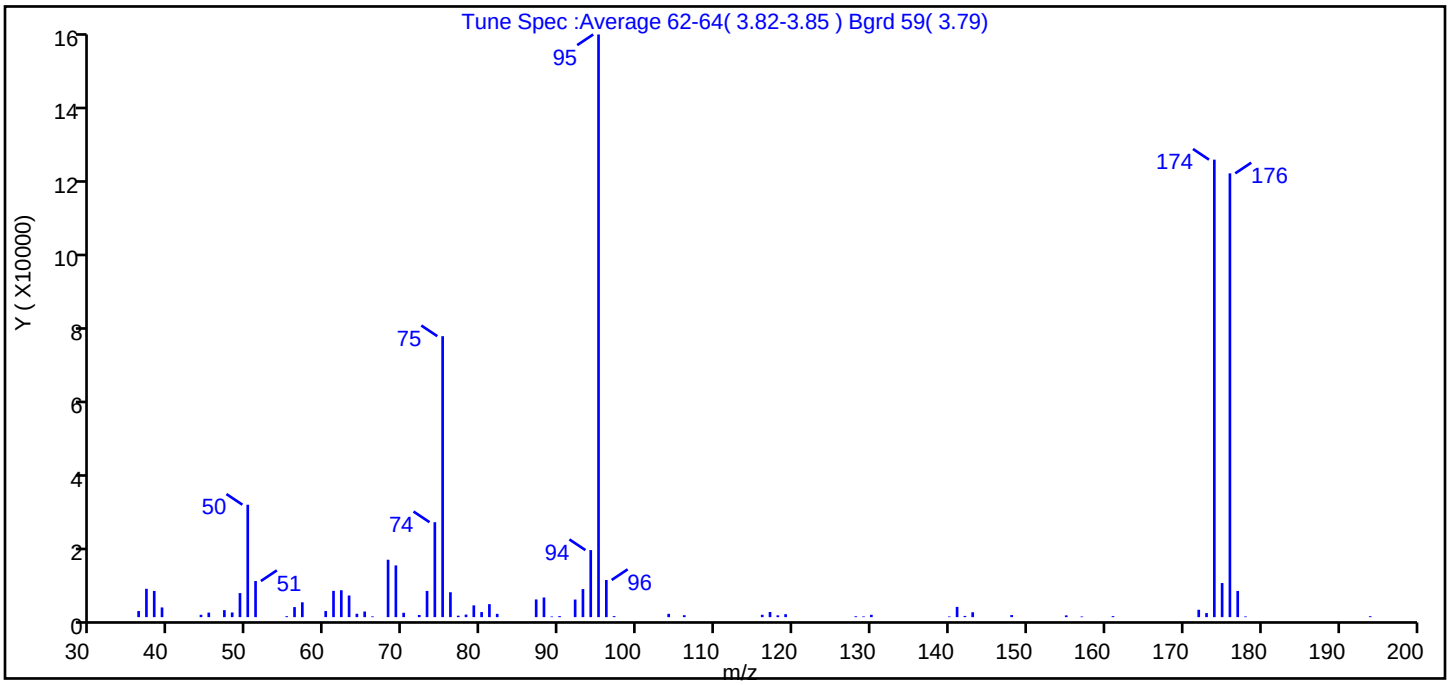
VMBFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\BFB2546.D
Injection Date: 19-Jun-2019 10:22:30 Instrument ID: A3UX17
Lims ID: BFB
Client ID:
Operator ID: 001644 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_17 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.3
75	30 to 60% of m/z 95	48.2
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.7 (0.9)
174	50 to 120% of m/z 95	78.5
175	5 to 9% of m/z 174	5.9 (7.5)
176	Greater than 95% but less than 101% of m/z 174	76.2 (97.0)
177	5 to 9% of m/z 176	4.5 (5.9)

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\BFB2546.D\8260_17.rslt\spectra.d
Injection Date: 19-Jun-2019 10:22:30
Spectrum: Tune Spec :Average 62-64(3.82-3.85) Bgrd 59(3.79)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1628	64.00	907	88.00	5225	140.00	175
37.00	7531	65.00	1496	89.00	169	141.00	2727
38.00	6967	66.00	201	90.00	268	142.00	326
39.00	2578	68.00	15259	92.00	4677	143.00	1306
44.00	627	69.00	13749	93.00	7463	148.00	552
45.00	1208	70.00	1150	94.00	17824	155.00	467
47.00	1869	72.00	578	95.00	154880	157.00	177
48.00	1246	73.00	6966	96.00	9876	161.00	270
49.00	6393	74.00	25240	97.00	270	172.00	1959
50.00	29880	75.00	74688	104.00	883	173.00	1085
51.00	9600	76.00	6624	106.00	517	174.00	121608
55.00	256	77.00	391	116.00	625	175.00	9067
56.00	2676	78.00	678	117.00	1364	176.00	117968
57.00	3947	79.00	3127	118.00	486	177.00	6960
60.00	1622	80.00	1352	119.00	789	178.00	189
61.00	6991	81.00	3458	128.00	235	194.00	239
62.00	7153	82.00	876	129.00	182		
63.00	5751	87.00	4701	130.00	625		

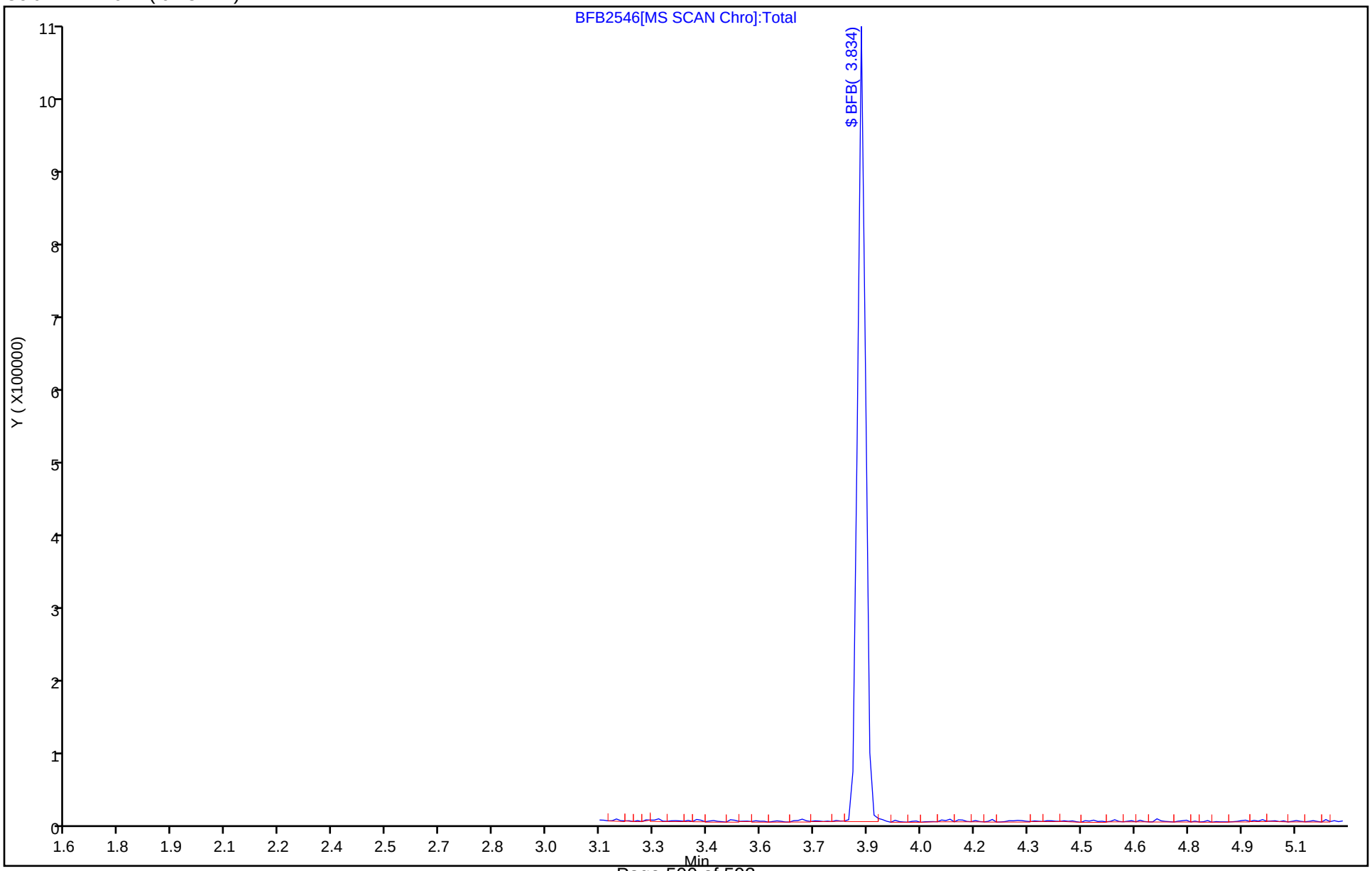
Report Date: 20-Jun-2019 11:32:38 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\BFB2546.D

Injection Date:	19-Jun-2019 10:22:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-386483/6

Matrix: Water Lab File ID: UXJ1409.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 09:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-386483/6

Matrix: Water Lab File ID: UXJ1409.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 09:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	111		70-123
1868-53-7	Dibromofluoromethane (Surr)	116		75-128
460-00-4	4-Bromofluorobenzene (Surr)	100		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1409.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-Jun-2019 09:47:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-006
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:09 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: evansle Date: 17-Jun-2019 11:25:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	100	684337	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	83	464769	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	94	193051	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.091	0.000	99	185691	20.0	23.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	97	199674	20.0	20.7	
$ 6 Toluene-d8 (Surr)	98	6.007	6.008	-0.001	92	610068	20.0	22.1	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	91	175851	20.0	19.9	
122 Chlorodifluoromethane TIC	51		0.975					ND	
9 Dichlorodifluoromethane	85		1.156					ND	
11 Isobutylene TIC	1		1.250					ND	
10 Chloromethane	50		1.310					ND	
13 Butadiene	54		1.369					ND	
12 Vinyl chloride	62		1.381					ND	
15 Bromomethane	94		1.594					ND	
16 Chloroethane	64		1.665					ND	
17 Dichlorofluoromethane	67		1.807					ND	
18 Trichlorofluoromethane	101		1.831					ND	
19 Ethyl ether	59		2.067					ND	
20 Acrolein	56		2.162					ND	
21 1,1-Dichloroethene	96		2.245					ND	
22 1,1,2-Trichloro-1,2,2-trif	151		2.280					ND	
23 Acetone	43	2.292	2.292	0.000	91	4153		1.13	
24 Methylal	45		2.308					ND	
25 Iodomethane	142		2.363					ND	
26 Carbon disulfide	76		2.410					ND	
27 Acetonitrile	41		2.505					ND	
28 3-Chloro-1-propene	76		2.541					ND	
29 Methyl acetate	43		2.564					ND	
30 Methylene Chloride	84		2.647					ND	
31 2-Methyl-2-propanol	59		2.754					ND	
32 Acrylonitrile	53		2.848					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		2.872					ND	
33 Methyl tert-butyl ether	73		2.884					ND	
35 Hexane	86		3.109					ND	
36 1,1-Dichloroethane	63		3.215					ND	
37 Vinyl acetate	43		3.262					ND	
39 2-Chloro-1,3-butadiene	53		3.286					ND	
38 Isopropyl ether	87		3.286					ND	
40 Tert-butyl ethyl ether	59		3.582					ND	
41 cis-1,2-Dichloroethene	96		3.700					ND	
43 2,2-Dichloropropane	97		3.700					ND	
42 2-Butanone (MEK)	43		3.712					ND	
44 Propionitrile	54		3.759					ND	U
45 Ethyl acetate	43		3.771					ND	
46 Methacrylonitrile	41		3.878					ND	
47 Chlorobromomethane	128		3.890					ND	
48 Tetrahydrofuran	42		3.937					ND	
49 Chloroform	83		3.961					ND	
50 1,1,1-Trichloroethane	97		4.114					ND	
51 Cyclohexane	56		4.162					ND	
53 Carbon tetrachloride	117		4.256					ND	
52 1,1-Dichloropropene	75		4.256					ND	
54 Isobutyl alcohol	41		4.363					ND	
55 Benzene	78		4.422					ND	
56 1,2-Dichloroethane	62		4.434					ND	
57 Tert-amyl methyl ether	73		4.528					ND	
58 n-Heptane	100		4.659					ND	
59 n-Butanol	56		4.919					ND	
60 Trichloroethene	130		4.966					ND	
61 Ethyl acrylate	55		5.061					ND	
62 Methylcyclohexane	83		5.132					ND	
63 1,2-Dichloropropane	63		5.156					ND	
65 Dibromomethane	93		5.250					ND	
64 Methyl methacrylate	41		5.262					ND	
66 1,4-Dioxane	88		5.274					ND	
67 Dichlorobromomethane	83		5.392					ND	
68 2-Nitropropane	41		5.582					ND	
69 2-Chloroethyl vinyl ether	63		5.653					ND	
70 cis-1,3-Dichloropropene	75		5.771					ND	
71 4-Methyl-2-pentanone (MIBK	43		5.913					ND	
72 Toluene	91		6.067					ND	
73 trans-1,3-Dichloropropene	75		6.268					ND	
74 Ethyl methacrylate	69		6.363					ND	
75 1,1,2-Trichloroethane	97		6.422					ND	
76 Tetrachloroethene	164		6.552					ND	
77 1,3-Dichloropropane	76		6.576					ND	
78 2-Hexanone	43		6.658					ND	
81 Tetrahydrothiophene	60		6.765					ND	
80 Chlorodibromomethane	129		6.777					ND	
79 n-Butyl acetate	43		6.788					ND	
82 Ethylene Dibromide	107		6.871					ND	
83 1-Chlorohexane	91		7.321					ND	
84 Chlorobenzene	112		7.333					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 1,1,1,2-Tetrachloroethane	131		7.404					ND	
86 Ethylbenzene	106		7.439					ND	
87 m-Xylene & p-Xylene	106		7.546					ND	
88 o-Xylene	106		7.913					ND	
89 Styrene	104		7.925					ND	
90 Bromoform	173		8.090					ND	
91 Isopropylbenzene	105		8.268					ND	
92 Cyclohexanone	55		8.339					ND	
93 1,4-Dichlorobutane	55		8.362					ND	
95 Bromobenzene	156		8.552					ND	
94 1,1,2,2-Tetrachloroethane	83		8.552					ND	
96 1,2,3-Trichloropropane	110		8.587					ND	
97 trans-1,4-Dichloro-2-buten	53		8.611					ND	
98 N-Propylbenzene	120		8.658					ND	
99 2-Chlorotoluene	126		8.741					ND	
100 1,3,5-Trimethylbenzene	105		8.836					ND	
101 4-Chlorotoluene	126		8.848					ND	
102 tert-Butylbenzene	119		9.143					ND	
103 Pentachloroethane	167		9.155					ND	
104 1,2,4-Trimethylbenzene	105		9.191					ND	
105 sec-Butylbenzene	105		9.356					ND	
106 1,3-Dichlorobenzene	146		9.451					ND	
107 4-Isopropyltoluene	119		9.510					ND	
108 1,4-Dichlorobenzene	146		9.546					ND	
109 1,2,3-Trimethylbenzene	105		9.605					ND	
110 Benzyl chloride	126		9.676					ND	
112 1,2-Dichlorobenzene	146		9.901					ND	
111 n-Butylbenzene	91		9.901					ND	
113 1,3-Diethylbenzene TIC	1		10.000					ND	
114 1,2-Dibromo-3-Chloropropan	157		10.670					ND	
115 1,3,5-Trichlorobenzene	180		10.883					ND	
116 1,2,4-Trichlorobenzene	180		11.486					ND	
117 Hexachlorobutadiene	225		11.676					ND	
118 Naphthalene	128		11.723					ND	
119 1,2,3-Trichlorobenzene	180		11.971					ND	
120 2-Methylnaphthalene	142	13.048	13.048	0.000	94	5500		2.49	
126 Ethylene oxide	1		-0.500					ND	
123 2-Ethyltoluene	1		-0.500					ND	
128 Propene oxide	1		-0.500					ND	
127 Epichlorohydrin	1		-0.500					ND	
121 3-Ethyltoluene	1		-0.500					ND	
S 133 Trihalomethanes, Total	1		-0.500					ND	
S 159 Total BTEX	1		-0.500					ND	
S 130 1,2-Dichloroethene, Total	96		0.640					ND	
S 131 1,3-Dichloropropene, Total	75		6.260					ND	
S 132 Xylenes, Total	106		16.030					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm50ss_stk_00080	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00076	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent

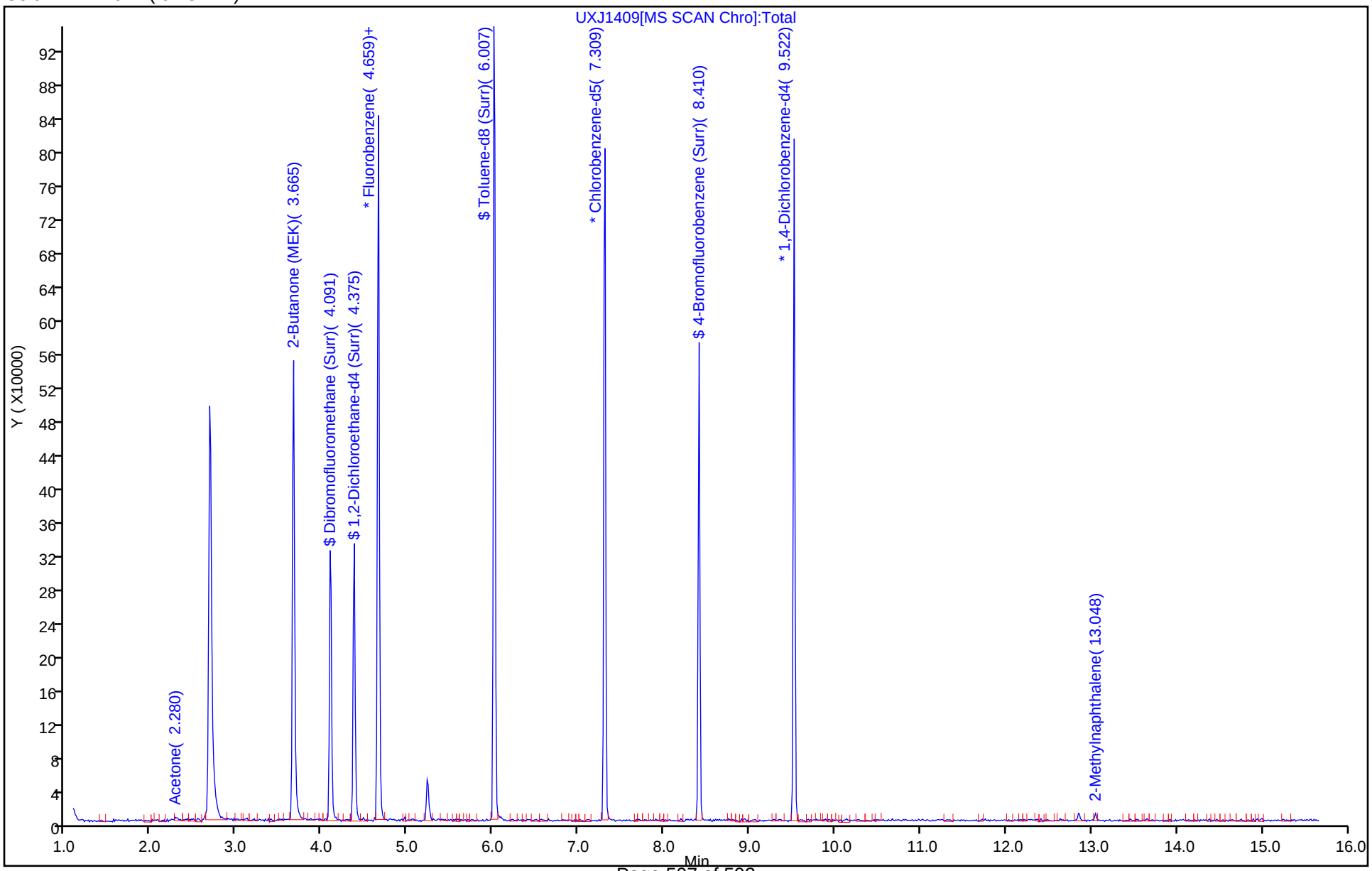
Report Date: 18-Jun-2019 09:17:25 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1409.D

Injection Date:	17-Jun-2019 09:47:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1409.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-Jun-2019 09:47:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-006
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:09 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: evansle Date: 17-Jun-2019 11:25:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	23.3	116.29
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	20.7	103.33
$ 6 Toluene-d8 (Surr)	20.0	22.1	110.61
$ 7 4-Bromofluorobenzene (Surr)	20.0	19.9	99.69

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-386760/7

Matrix: Water Lab File ID: UXX2004.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 13:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-386760/7

Matrix: Water Lab File ID: UXX2004.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 13:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	84		70-123
1868-53-7	Dibromofluoromethane (Surr)	103		75-128
460-00-4	4-Bromofluorobenzene (Surr)	88		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jun-2019 13:34:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-007
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 18-Jun-2019 14:31:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.975	4.974	0.001	96	350747	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.638	7.637	0.001	90	311233	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.862	9.861	0.001	96	175228	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.407	4.406	0.001	91	90627	10.0	10.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.691	4.690	0.001	92	150967	10.0	11.0	
$ 6 Toluene-d8 (Surr)	98	6.336	6.335	0.001	96	332390	10.0	8.40	
$ 7 4-Bromofluorobenzene (Surr	95	8.750	8.749	0.001	90	141804	10.0	8.75	
9 Dichlorodifluoromethane	85		1.259					ND	
10 Chloromethane	50		1.401					ND	
11 Vinyl chloride	62		1.495					ND	
12 Butadiene	54		1.531					ND	
13 Bromomethane	94		1.779					ND	
14 Chloroethane	64		1.862					ND	
15 Dichlorofluoromethane	67		2.052					ND	
16 Trichlorofluoromethane	101		2.063					ND	
17 Ethyl ether	59		2.300					ND	
18 Acrolein	56		2.418					ND	
19 1,1-Dichloroethene	96		2.501					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.513					ND	
21 Acetone	43		2.549					ND	
22 Iodomethane	142		2.631					ND	
24 Carbon disulfide	76		2.679					ND	
25 Acetonitrile	41		2.785					ND	
26 3-Chloro-1-propene	76		2.809					ND	
27 Methyl acetate	43		2.833					ND	
120 Propene oxide	58		2.856					ND	
28 Methylene Chloride	84	2.916	2.915	0.001	92	5220		0.4687	
29 2-Methyl-2-propanol	59		3.034					ND	
23 Methylal	45		3.057					ND	
31 Acrylonitrile	53		3.128					ND	
30 trans-1,2-Dichloroethene	96		3.152					ND	
32 Methyl tert-butyl ether	73		3.152					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	86		3.389					ND	
34 1,1-Dichloroethane	63		3.519					ND	
35 Vinyl acetate	43		3.554					ND	
36 Isopropyl ether	87		3.578					ND	
37 2-Chloro-1,3-butadiene	53		3.590					ND	
38 Tert-butyl ethyl ether	59		3.874					ND	
39 2,2-Dichloropropane	97		4.004					ND	
40 cis-1,2-Dichloroethene	96		4.004					ND	
41 2-Butanone (MEK)	43		4.016					ND	
43 Propionitrile	54		4.063					ND	
42 Ethyl acetate	43		4.075					ND	
44 Methacrylonitrile	41		4.193					ND	
45 Chlorobromomethane	128		4.205					ND	
46 Tetrahydrofuran	42		4.253					ND	
47 Chloroform	83		4.276					ND	
48 1,1,1-Trichloroethane	97		4.430					ND	
49 Cyclohexane	56		4.477					ND	
50 1,1-Dichloropropene	75		4.572					ND	
51 Carbon tetrachloride	117		4.572					ND	
52 Isobutyl alcohol	41		4.667					ND	
53 Benzene	78		4.738					ND	
54 1,2-Dichloroethane	62		4.761					ND	
55 Tert-amyl methyl ether	73		4.832					ND	
56 n-Heptane	100		4.962					ND	
57 n-Butanol	56		5.234					ND	
58 Trichloroethene	130		5.282					ND	
59 Ethyl acrylate	55		5.376					ND	
60 Methylcyclohexane	83		5.448					ND	
61 1,2-Dichloropropane	63		5.483					ND	
62 Methyl methacrylate	41		5.578					ND	
63 Dibromomethane	93		5.578					ND	
64 1,4-Dioxane	88		5.601					ND	
65 Dichlorobromomethane	83		5.708					ND	
66 2-Nitropropane	41		5.909					ND	
67 2-Chloroethyl vinyl ether	63		5.968					ND	
68 cis-1,3-Dichloropropene	75		6.098					ND	
69 4-Methyl-2-pentanone (MIBK	43		6.240					ND	
70 Toluene	91		6.394					ND	
71 trans-1,3-Dichloropropene	75		6.595					ND	
72 Ethyl methacrylate	69		6.678					ND	
73 1,1,2-Trichloroethane	97		6.749					ND	
74 Tetrachloroethene	164		6.891					ND	
75 1,3-Dichloropropane	76		6.903					ND	
76 2-Hexanone	43		6.986					ND	
77 n-Butyl acetate	56		7.092					ND	
78 Chlorodibromomethane	129		7.116					ND	
80 Ethylene Dibromide	107		7.223					ND	
81 1-Chlorohexane	91		7.648					ND	
82 Chlorobenzene	112		7.672					ND	
79 Tetrahydrothiophene	60		7.696					ND	
83 1,1,1,2-Tetrachloroethane	131		7.743					ND	
84 Ethylbenzene	106		7.767					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 m-Xylene & p-Xylene	106		7.873					ND	
86 o-Xylene	106		8.252					ND	
87 Styrene	104		8.264					ND	
88 Bromoform	173		8.441					ND	
89 Isopropylbenzene	105		8.595					ND	
91 Cyclohexanone	55		8.690					ND	
92 1,1,2,2-Tetrachloroethane	83		8.891					ND	
93 Bromobenzene	156		8.891					ND	
94 1,2,3-Trichloropropane	110		8.926					ND	
95 trans-1,4-Dichloro-2-buten	53		8.938					ND	
96 N-Propylbenzene	120		8.997					ND	
97 2-Chlorotoluene	126		9.080					ND	
98 1,3,5-Trimethylbenzene	105		9.163					ND	
99 4-Chlorotoluene	126		9.187					ND	
90 1,4-Dichlorobutane	55		9.294					ND	
100 tert-Butylbenzene	119		9.483					ND	
101 Pentachloroethane	167		9.506					ND	
102 1,2,4-Trimethylbenzene	105		9.530					ND	
126 3-Ethyltoluene	105		9.662					ND	
103 sec-Butylbenzene	105		9.696					ND	
104 1,3-Dichlorobenzene	146		9.802					ND	
105 4-Isopropyltoluene	119		9.838					ND	
106 1,4-Dichlorobenzene	146		9.885					ND	
107 1,2,3-Trimethylbenzene	105		9.944					ND	
119 2-Ethyltoluene	105		9.946					ND	
108 Benzyl chloride	126		10.027					ND	
109 n-Butylbenzene	91		10.240					ND	
110 1,2-Dichlorobenzene	146		10.252					ND	
111 1,2-Dibromo-3-Chloropropan	157		11.021					ND	
112 1,3,5-Trichlorobenzene	180		11.234					ND	
113 1,2,4-Trichlorobenzene	180		11.837					ND	
114 Hexachlorobutadiene	225		12.015					ND	
115 Naphthalene	128		12.086					ND	
116 1,2,3-Trichlorobenzene	180		12.322					ND	
117 2-Methylnaphthalene	142		13.245					ND	
118 1,3-Diethylbenzene TIC	1		0.000					ND	
122 Epichlorohydrin	1		0.000					ND	
124 Ethylene oxide	1		0.000					ND	
S 128 1,2-Dichloroethene, Total	96		1.140					ND	
S 129 1,3-Dichloropropene, Total	75		6.760					ND	
S 130 Xylenes, Total	106		16.530					ND	
S 131 Trihalomethanes, Total	1		0.000					ND	

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

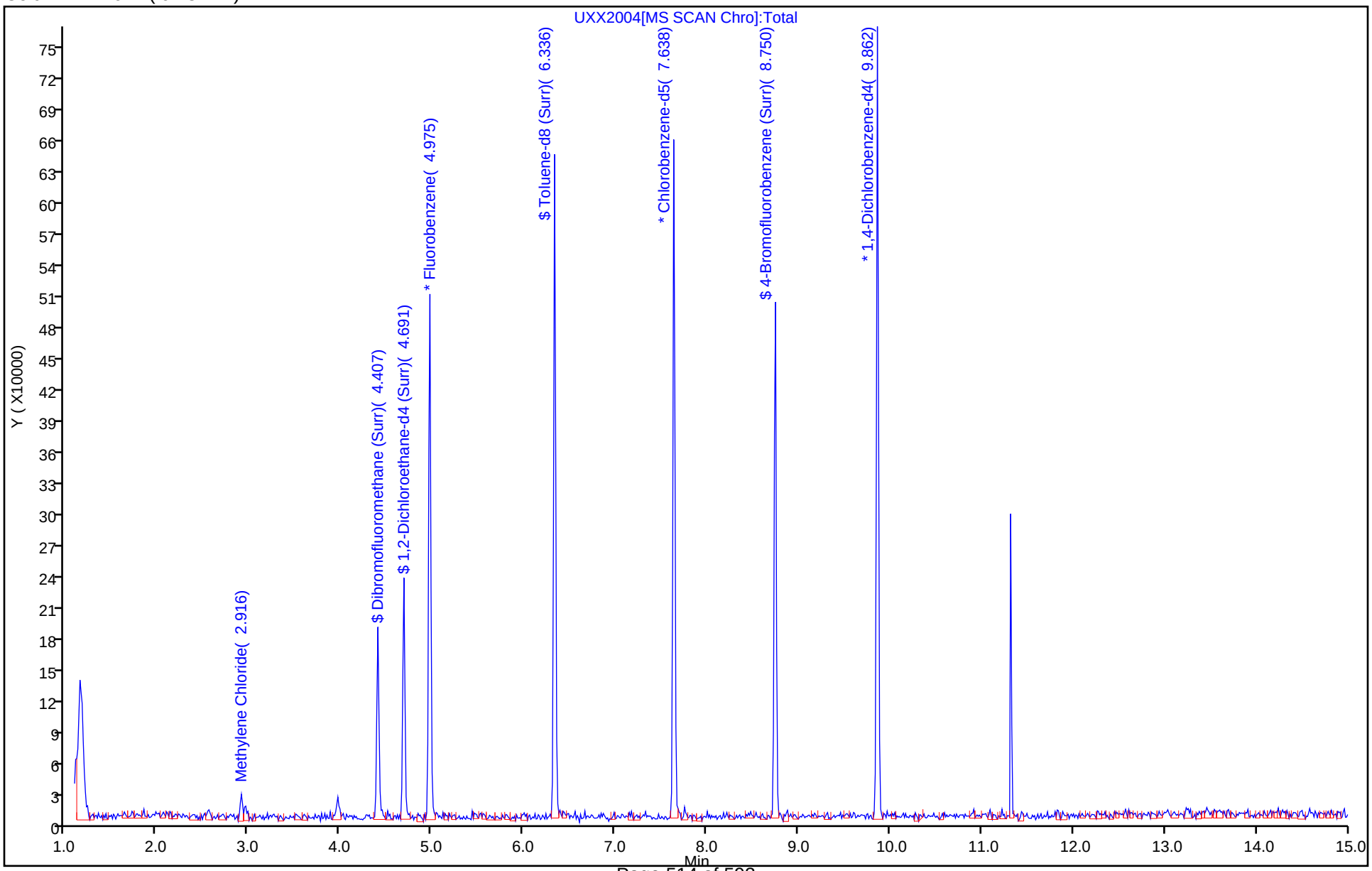
Report Date: 19-Jun-2019 10:25:37 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2004.D

Injection Date:	18-Jun-2019 13:34:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Jun-2019 13:34:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-007
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: williamsla Date: 18-Jun-2019 14:31:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.3	103.43
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.66
$ 6 Toluene-d8 (Surr)	10.0	8.40	84.04
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.75	87.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-386999/7

Matrix: Water Lab File ID: UXR8599.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 12:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	ND		1.0
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0
79-00-5	1,1,2-Trichloroethane	ND		1.0
75-34-3	1,1-Dichloroethane	ND		1.0
75-35-4	1,1-Dichloroethene	ND		1.0
120-82-1	1,2,4-Trichlorobenzene	ND		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0
95-50-1	1,2-Dichlorobenzene	ND		1.0
107-06-2	1,2-Dichloroethane	ND		1.0
78-87-5	1,2-Dichloropropane	ND		1.0
541-73-1	1,3-Dichlorobenzene	ND		1.0
106-46-7	1,4-Dichlorobenzene	ND		1.0
78-93-3	2-Butanone (MEK)	ND		10
591-78-6	2-Hexanone	ND		10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10
67-64-1	Acetone	ND		10
71-43-2	Benzene	ND		1.0
75-25-2	Bromoform	ND		1.0
74-83-9	Bromomethane	ND		1.0
75-15-0	Carbon disulfide	ND		1.0
56-23-5	Carbon tetrachloride	ND		1.0
108-90-7	Chlorobenzene	ND		1.0
124-48-1	Chlorodibromomethane	ND		1.0
75-00-3	Chloroethane	ND		1.0
67-66-3	Chloroform	ND		1.0
74-87-3	Chloromethane	ND		1.0
156-59-2	cis-1,2-Dichloroethene	ND		1.0
10061-01-5	cis-1,3-Dichloropropene	ND		1.0
110-82-7	Cyclohexane	ND		1.0
75-71-8	Dichlorodifluoromethane	ND		1.0
75-27-4	Dichlorobromomethane	ND		1.0
100-41-4	Ethylbenzene	ND		1.0
98-82-8	Isopropylbenzene	ND		1.0
79-20-9	Methyl acetate	ND		10
108-87-2	Methylcyclohexane	ND		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-386999/7

Matrix: Water Lab File ID: UXR8599.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 12:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	ND		1.0
75-09-2	Methylene Chloride	ND		5.0
100-42-5	Styrene	ND		1.0
127-18-4	Tetrachloroethene	ND		1.0
108-88-3	Toluene	ND		1.0
156-60-5	trans-1,2-Dichloroethene	ND		1.0
10061-02-6	trans-1,3-Dichloropropene	ND		1.0
79-01-6	Trichloroethene	ND		1.0
75-69-4	Trichlorofluoromethane	ND		1.0
75-01-4	Vinyl chloride	ND		1.0
1330-20-7	Xylenes, Total	ND		2.0
106-93-4	Ethylene Dibromide	ND		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	74		70-123
1868-53-7	Dibromofluoromethane (Surr)	93		75-128
460-00-4	4-Bromofluorobenzene (Surr)	63		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8599.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Jun-2019 12:45:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-007
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 13:11:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1298283	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	89	1005117	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	97	449853	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	92	281377	10.0	9.26	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.490	5.490	0.000	95	409928	10.0	9.41	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	95	969231	10.0	7.44	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	88	303584	10.0	6.29	
9 Dichlorodifluoromethane	85		1.696					ND	
10 Chloromethane	50		1.885					ND	
11 Vinyl chloride	62		2.004					ND	
119 Butadiene	54		2.040					ND	
12 Bromomethane	94		2.360					ND	
13 Chloroethane	64		2.467					ND	
14 Dichlorofluoromethane	67		2.668					ND	
15 Trichlorofluoromethane	101		2.716					ND	
16 Ethyl ether	59		2.988					ND	
18 Acrolein	56		3.119					ND	
19 1,1-Dichloroethene	96		3.214					ND	
17 Methylal	45		3.226					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		3.237					ND	
21 Acetone	43		3.273					ND	
22 Iodomethane	142		3.356					ND	
23 Carbon disulfide	76		3.427					ND	
25 3-Chloro-1-propene	76		3.546					ND	
24 Acetonitrile	41		3.546					ND	U
26 Methyl acetate	43		3.569					ND	
27 Methylene Chloride	84		3.664					ND	
28 2-Methyl-2-propanol	59		3.771					ND	U
30 Methyl tert-butyl ether	73		3.901					ND	
29 Acrylonitrile	53		3.901					ND	
31 trans-1,2-Dichloroethene	96		3.913					ND	
32 Hexane	86		4.139					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 1,1-Dichloroethane	63		4.281					ND	
34 Vinyl acetate	43		4.316					ND	
35 Isopropyl ether	87		4.328					ND	
36 2-Chloro-1,3-butadiene	53		4.364					ND	
37 Tert-butyl ethyl ether	59		4.637					ND	
39 cis-1,2-Dichloroethene	96		4.791					ND	
38 2,2-Dichloropropane	97		4.791					ND	
40 2-Butanone (MEK)	43		4.803					ND	U
41 Ethyl acetate	43		4.838					ND	
42 Propionitrile	54		4.874					ND	
43 Methacrylonitrile	41		4.993					ND	
44 Chlorobromomethane	128		5.004					ND	
45 Tetrahydrofuran	42		5.040					ND	
46 Chloroform	83		5.064					ND	
47 1,1,1-Trichloroethane	97		5.218					ND	
48 Cyclohexane	56		5.265					ND	
50 Carbon tetrachloride	117		5.360					ND	
49 1,1-Dichloropropene	75		5.360					ND	
51 Isobutyl alcohol	41		5.431					ND	
52 Benzene	78		5.538					ND	
53 1,2-Dichloroethane	62		5.562					ND	
54 Tert-amyl methyl ether	73		5.609					ND	
55 n-Heptane	100		5.728					ND	
56 n-Butanol	56		6.001					ND	
57 Trichloroethene	130		6.083					ND	
58 Ethyl acrylate	55		6.155					ND	
59 Methylcyclohexane	83		6.249					ND	
60 1,2-Dichloropropane	63		6.285					ND	
61 Methyl methacrylate	41		6.356					ND	
63 1,4-Dioxane	88	6.404	6.392	0.012	12	1218		4.02	
62 Dibromomethane	93		6.392					ND	
64 Dichlorobromomethane	83		6.522					ND	
65 2-Nitropropane	41		6.724					ND	
66 2-Chloroethyl vinyl ether	63		6.771					ND	
67 cis-1,3-Dichloropropene	75		6.913					ND	
68 4-Methyl-2-pentanone (MIBK	43		7.032					ND	
69 Toluene	91		7.210					ND	
70 trans-1,3-Dichloropropene	75		7.400					ND	
71 Ethyl methacrylate	69		7.447					ND	
72 1,1,2-Trichloroethane	97		7.566					ND	
73 Tetrachloroethene	164		7.708					ND	
75 1,3-Dichloropropane	76		7.720					ND	
76 2-Hexanone	43		7.779					ND	
77 n-Butyl acetate	56		7.886					ND	
78 Chlorodibromomethane	129		7.933					ND	
74 Tetrahydrothiophene	60		7.933					ND	
79 Ethylene Dibromide	107		8.052					ND	
80 1-Chlorohexane	91		8.443					ND	
81 Chlorobenzene	112		8.502					ND	
82 1,1,1,2-Tetrachloroethane	131		8.574					ND	
83 Ethylbenzene	106		8.585					ND	
84 m-Xylene & p-Xylene	106		8.692					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 o-Xylene	106		9.072					ND	
86 Styrene	104		9.084					ND	
87 Bromoform	173		9.285					ND	
89 Isopropylbenzene	105		9.416					ND	
88 1,4-Dichlorobutane	55		9.534					ND	
90 Cyclohexanone	55		9.546					ND	
91 1,1,2,2-Tetrachloroethane	83		9.712					ND	
92 Bromobenzene	156		9.736					ND	
93 trans-1,4-Dichloro-2-buten	53		9.771					ND	
94 1,2,3-Trichloropropane	110		9.771					ND	
95 N-Propylbenzene	120		9.819					ND	
126 3-Ethyltoluene	105		9.850					ND	
96 2-Chlorotoluene	126		9.914					ND	
97 1,3,5-Trimethylbenzene	105		9.985					ND	
98 4-Chlorotoluene	126		10.020					ND	
120 2-Ethyltoluene	105		10.140					ND	
99 tert-Butylbenzene	119		10.317					ND	
100 Pentachloroethane	167		10.341					ND	
101 1,2,4-Trimethylbenzene	105		10.352					ND	
102 sec-Butylbenzene	105		10.530					ND	
103 1,3-Dichlorobenzene	146		10.649					ND	
104 4-Isopropyltoluene	119		10.661					ND	
105 1,4-Dichlorobenzene	146		10.744					ND	
106 1,2,3-Trimethylbenzene	105		10.780					ND	
107 Benzyl chloride	126		10.874					ND	
108 n-Butylbenzene	91		11.076					ND	
109 1,2-Dichlorobenzene	146		11.111					ND	
110 1,3-Diethylbenzene TIC	1		11.200					ND	
111 1,2-Dibromo-3-Chloropropan	157		11.894					ND	
112 1,3,5-Trichlorobenzene	180		12.096					ND	
113 1,2,4-Trichlorobenzene	180		12.724					ND	
114 Hexachlorobutadiene	225		12.878					ND	
115 Naphthalene	128		12.985					ND	
116 1,2,3-Trichlorobenzene	180		13.246					ND	
117 2-Methylnaphthalene	142		14.384					ND	
125 Ethylene oxide	1		0.000					ND	
122 Epichlorohydrin	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
S 128 1,2-Dichloroethene, Total	96		1.140					ND	
S 129 1,3-Dichloropropene, Total	75		6.760					ND	
S 130 Xylenes, Total	106		16.530					ND	
S 158 Total BTEX	1		0.000					ND	
S 131 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

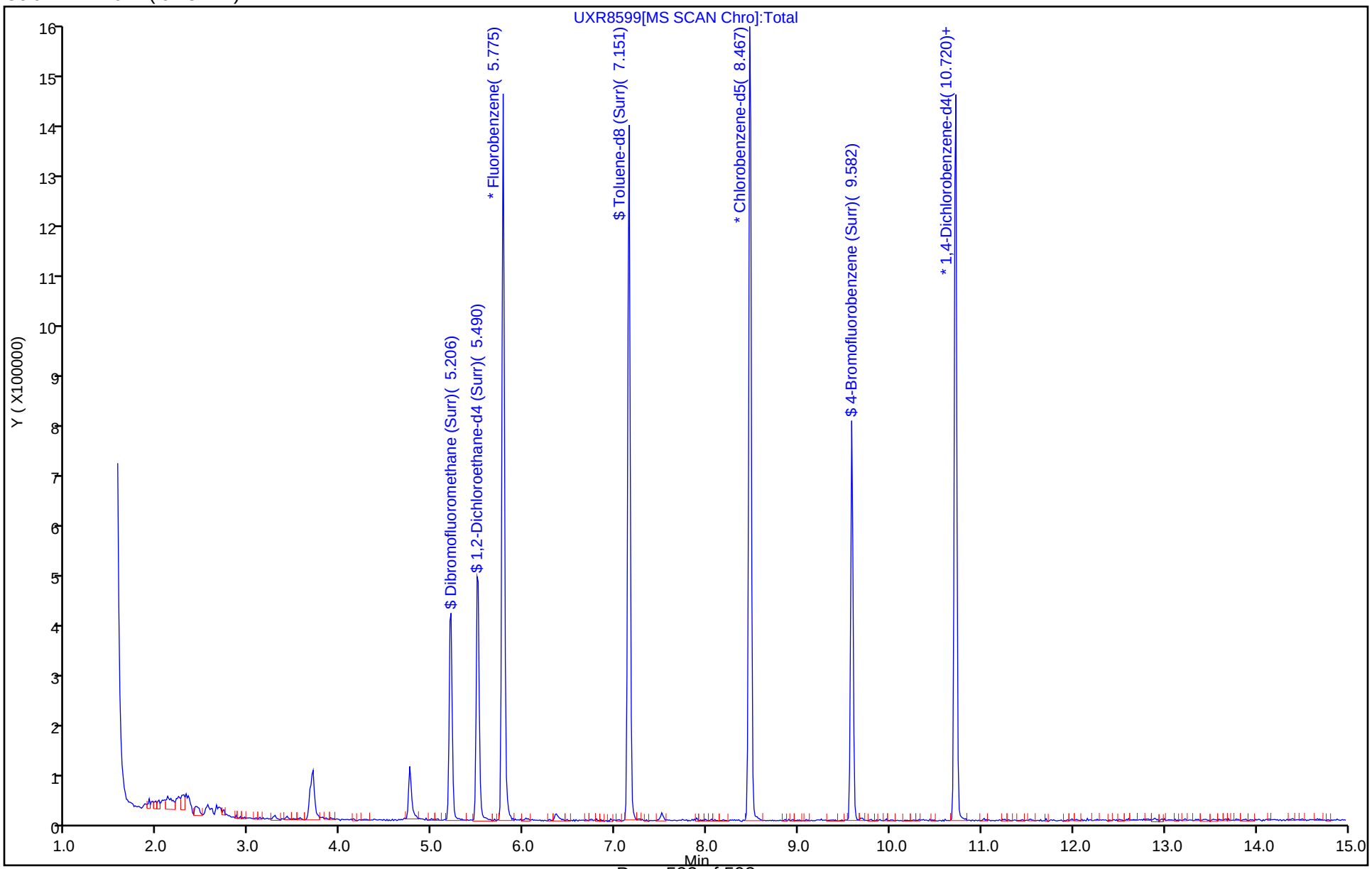
Report Date: 20-Jun-2019 11:33:13 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8599.D

Injection Date:	19-Jun-2019 12:45:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8599.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 19-Jun-2019 12:45:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-007
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: williamsla Date: 19-Jun-2019 13:11:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	9.26	92.55
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	9.41	94.12
$ 6 Toluene-d8 (Surr)	10.0	7.44	74.41
$ 7 4-Bromofluorobenzene (Surr)	10.0	6.29	62.93

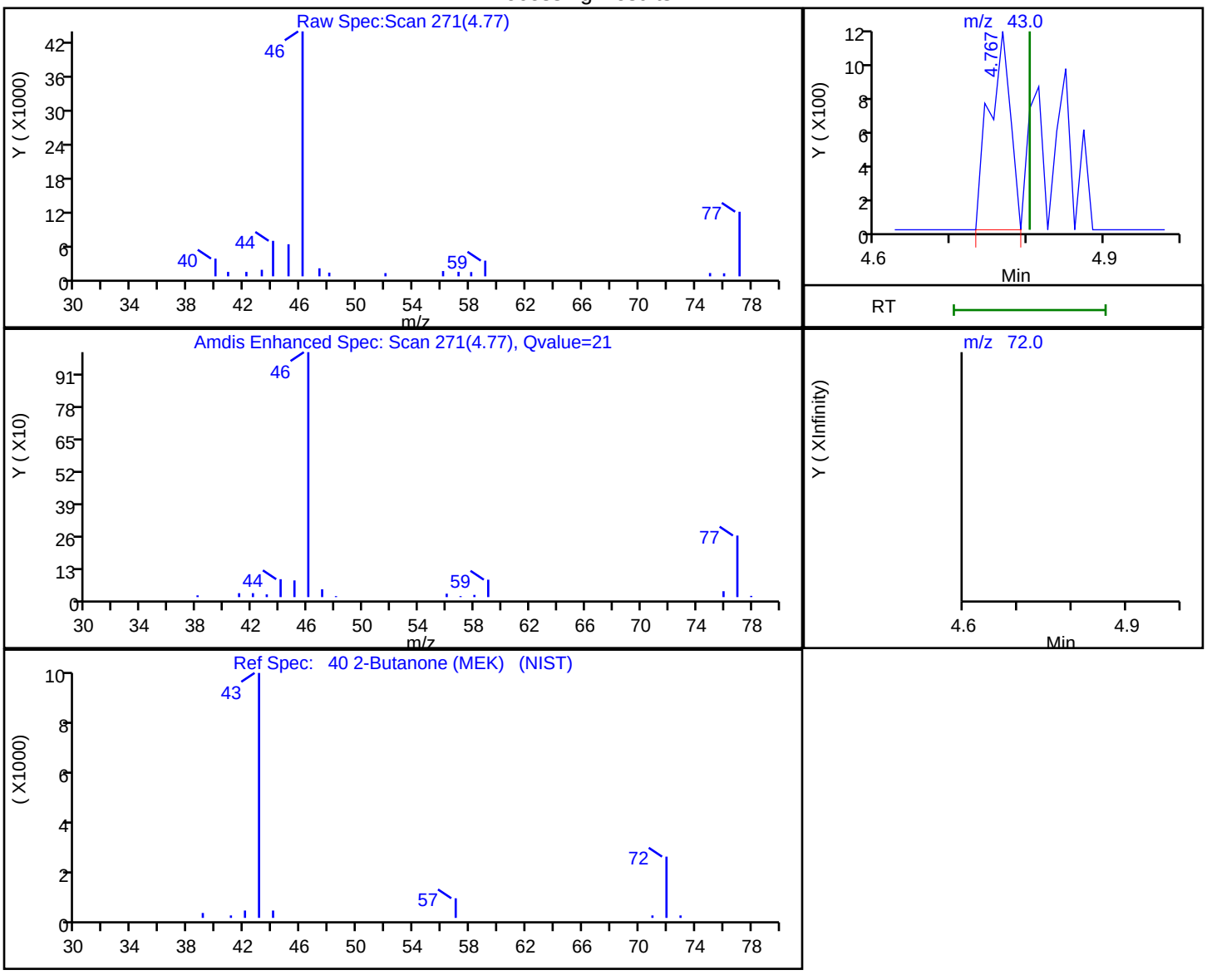
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8599.D
Injection Date: 19-Jun-2019 12:45:30 Instrument ID: A3UX17
Lims ID: MB
Client ID:
Operator ID: 001644 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_17 Limit Group: MSV 8260B ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

40 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
4.77	43.00	2223	0.197081
4.80	72.00	0	

Reviewer: williamsla, 19-Jun-2019 13:11:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-386483/4

Matrix: Water Lab File ID: UXJ1405.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 08:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	9.90		1.0
79-34-5	1,1,2,2-Tetrachloroethane	13.1		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	8.62		1.0
79-00-5	1,1,2-Trichloroethane	11.6		1.0
75-34-3	1,1-Dichloroethane	10.8		1.0
75-35-4	1,1-Dichloroethene	11.4		1.0
120-82-1	1,2,4-Trichlorobenzene	8.14		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	10.4		2.0
95-50-1	1,2-Dichlorobenzene	10.4		1.0
107-06-2	1,2-Dichloroethane	9.35		1.0
78-87-5	1,2-Dichloropropane	11.6		1.0
541-73-1	1,3-Dichlorobenzene	10.8		1.0
106-46-7	1,4-Dichlorobenzene	10.4		1.0
78-93-3	2-Butanone (MEK)	23.4		10
591-78-6	2-Hexanone	21.3		10
108-10-1	4-Methyl-2-pentanone (MIBK)	20.8		10
67-64-1	Acetone	21.0		10
71-43-2	Benzene	11.2		1.0
75-25-2	Bromoform	9.54		1.0
74-83-9	Bromomethane	10.9		1.0
75-15-0	Carbon disulfide	11.2		1.0
56-23-5	Carbon tetrachloride	9.32		1.0
108-90-7	Chlorobenzene	10.2		1.0
124-48-1	Chlorodibromomethane	10.7		1.0
75-00-3	Chloroethane	12.1		1.0
67-66-3	Chloroform	10.9		1.0
74-87-3	Chloromethane	9.75		1.0
156-59-2	cis-1,2-Dichloroethene	11.0		1.0
10061-01-5	cis-1,3-Dichloropropene	11.4		1.0
110-82-7	Cyclohexane	9.90		1.0
75-71-8	Dichlorodifluoromethane	7.86		1.0
75-27-4	Dichlorobromomethane	10.5		1.0
100-41-4	Ethylbenzene	10.7		1.0
98-82-8	Isopropylbenzene	10.5		1.0
79-20-9	Methyl acetate	22.7		10
108-87-2	Methylcyclohexane	8.73		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-386483/4

Matrix: Water Lab File ID: UXJ1405.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/17/2019 08:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386483 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	10.5		1.0
75-09-2	Methylene Chloride	11.5		5.0
100-42-5	Styrene	10.7		1.0
127-18-4	Tetrachloroethene	9.57		1.0
108-88-3	Toluene	11.4		1.0
156-60-5	trans-1,2-Dichloroethene	11.2		1.0
10061-02-6	trans-1,3-Dichloropropene	10.3		1.0
79-01-6	Trichloroethene	9.88		1.0
75-69-4	Trichlorofluoromethane	9.39		1.0
75-01-4	Vinyl chloride	10.0		1.0
1330-20-7	Xylenes, Total	21.8		2.0
106-93-4	Ethylene Dibromide	10.8		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	113		70-123
1868-53-7	Dibromofluoromethane (Surr)	106		75-128
460-00-4	4-Bromofluorobenzene (Surr)	110		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1405.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-Jun-2019 08:19:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-004
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:09 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.659	4.659	0.000	98	826569	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.309	7.309	0.000	83	545595	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	9.522	9.522	0.000	95	257052	20.0	20.0	
$ 4 Dibromofluoromethane (Surr	113	4.091	4.091	0.000	98	203896	20.0	21.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.375	4.375	0.000	97	230315	20.0	19.7	
$ 6 Toluene-d8 (Surr)	98	6.008	6.008	0.000	92	731299	20.0	22.6	
$ 7 4-Bromofluorobenzene (Surr	95	8.410	8.410	0.000	91	228436	20.0	22.1	
9 Dichlorodifluoromethane	85	1.156	1.156	0.000	97	96309	10.0	7.86	
10 Chloromethane	50	1.298	1.310	-0.012	99	98226	10.0	9.75	
13 Butadiene	54	1.357	1.369	-0.012	94	81985	10.0	8.73	
12 Vinyl chloride	62	1.369	1.381	-0.012	63	109790	10.0	10.0	
15 Bromomethane	94	1.582	1.594	-0.012	90	79131	10.0	10.9	
16 Chloroethane	64	1.653	1.665	-0.012	98	69818	10.0	12.1	
17 Dichlorofluoromethane	67	1.807	1.807	0.000	96	159836	10.0	11.0	
18 Trichlorofluoromethane	101	1.819	1.831	-0.012	98	144302	10.0	9.39	
19 Ethyl ether	59	2.055	2.067	-0.012	89	91110	10.0	11.9	
20 Acrolein	56	2.150	2.162	-0.012	98	120618	50.0	61.1	
21 1,1-Dichloroethene	96	2.233	2.245	-0.012	96	108569	10.0	11.4	
22 1,1,2-Trichloro-1,2,2-trif	151	2.268	2.280	-0.012	92	68780	10.0	8.62	
23 Acetone	43	2.280	2.292	-0.012	100	93281	20.0	21.0	
25 Iodomethane	142	2.363	2.363	0.000	96	186367	10.0	11.1	
26 Carbon disulfide	76	2.410	2.410	0.000	98	347555	10.0	11.2	
28 3-Chloro-1-propene	76	2.540	2.541	-0.001	93	74272	10.0	10.6	
29 Methyl acetate	43	2.564	2.564	0.000	96	214686	20.0	22.7	
30 Methylene Chloride	84	2.635	2.647	-0.012	89	123999	10.0	11.5	
31 2-Methyl-2-propanol	59	2.753	2.754	-0.001	97	179883	100.0	112.4	
32 Acrylonitrile	53	2.836	2.848	-0.012	99	584427	100.0	118.1	
34 trans-1,2-Dichloroethene	96	2.872	2.872	0.000	98	126095	10.0	11.2	
33 Methyl tert-butyl ether	73	2.872	2.884	-0.012	94	264123	10.0	10.5	
35 Hexane	86	3.097	3.109	-0.012	87	25495	10.0	9.43	
36 1,1-Dichloroethane	63	3.215	3.215	0.000	96	199014	10.0	10.8	
37 Vinyl acetate	43	3.262	3.262	0.000	97	202015	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 cis-1,2-Dichloroethene	96	3.700	3.700	0.000	78	129752	10.0	11.0	
43 2,2-Dichloropropane	97	3.700	3.700	0.000	55	30118	10.0	11.0	
42 2-Butanone (MEK)	43	3.712	3.712	0.000	97	130504	20.0	23.4	
47 Chlorobromomethane	128	3.889	3.890	-0.001	91	58529	10.0	9.72	
48 Tetrahydrofuran	42	3.937	3.937	0.000	88	86669	20.0	23.1	
49 Chloroform	83	3.960	3.961	-0.001	92	195014	10.0	10.9	
50 1,1,1-Trichloroethane	97	4.114	4.114	0.000	98	154420	10.0	9.90	
51 Cyclohexane	56	4.162	4.162	0.000	86	143629	10.0	9.90	
53 Carbon tetrachloride	117	4.256	4.256	0.000	87	137647	10.0	9.32	
52 1,1-Dichloropropene	75	4.244	4.256	-0.012	98	147487	10.0	10.3	
54 Isobutyl alcohol	41	4.363	4.363	0.000	96	141357	250.0	263.7	
55 Benzene	78	4.422	4.422	0.000	94	464610	10.0	11.2	
56 1,2-Dichloroethane	62	4.434	4.434	0.000	96	134462	10.0	9.35	
58 n-Heptane	100	4.659	4.659	0.000	44	21526	10.0	9.05	
60 Trichloroethene	130	4.966	4.966	0.000	97	121590	10.0	9.88	
62 Methylcyclohexane	83	5.132	5.132	0.000	88	140110	10.0	8.73	
63 1,2-Dichloropropane	63	5.156	5.156	0.000	96	100436	10.0	11.6	
65 Dibromomethane	93	5.250	5.250	0.000	95	67841	10.0	11.1	
66 1,4-Dioxane	88	5.274	5.274	0.000	86	24369	200.0	174.7	
67 Dichlorobromomethane	83	5.392	5.392	0.000	99	139407	10.0	10.5	
69 2-Chloroethyl vinyl ether	63	5.653	5.653	0.000	91	56327	10.0	10.6	
70 cis-1,3-Dichloropropene	75	5.771	5.771	0.000	98	156992	10.0	11.4	
71 4-Methyl-2-pentanone (MIBK	43	5.913	5.913	0.000	95	207453	20.0	20.8	
72 Toluene	91	6.067	6.067	0.000	99	449204	10.0	11.4	
73 trans-1,3-Dichloropropene	75	6.268	6.268	0.000	89	132514	10.0	10.3	
74 Ethyl methacrylate	69	6.362	6.363	-0.001	86	113464	10.0	10.6	
75 1,1,2-Trichloroethane	97	6.422	6.422	0.000	89	96079	10.0	11.6	
76 Tetrachloroethene	164	6.552	6.552	0.000	97	84293	10.0	9.57	
77 1,3-Dichloropropane	76	6.575	6.576	-0.001	85	155609	10.0	11.7	
78 2-Hexanone	43	6.658	6.658	0.000	92	150631	20.0	21.3	
80 Chlorodibromomethane	129	6.777	6.777	0.000	88	102736	10.0	10.7	
82 Ethylene Dibromide	107	6.871	6.871	0.000	98	91730	10.0	10.8	
84 Chlorobenzene	112	7.333	7.333	0.000	97	269872	10.0	10.2	
85 1,1,1,2-Tetrachloroethane	131	7.404	7.404	0.000	95	99449	10.0	9.82	
86 Ethylbenzene	106	7.439	7.439	0.000	97	141224	10.0	10.7	
87 m-Xylene & p-Xylene	106	7.546	7.546	0.000	98	169679	10.0	11.0	
88 o-Xylene	106	7.913	7.913	0.000	96	160885	10.0	10.8	
89 Styrene	104	7.924	7.925	-0.001	93	269360	10.0	10.7	
90 Bromoform	173	8.090	8.090	0.000	96	72980	10.0	9.54	
91 Isopropylbenzene	105	8.268	8.268	0.000	95	402115	10.0	10.5	
95 Bromobenzene	156	8.552	8.552	0.000	91	103390	10.0	10.7	
94 1,1,2,2-Tetrachloroethane	83	8.552	8.552	0.000	95	137053	10.0	13.1	
96 1,2,3-Trichloropropane	110	8.587	8.587	0.000	84	44467	10.0	12.3	
97 trans-1,4-Dichloro-2-buten	53	8.611	8.611	0.000	84	38048	10.0	11.4	
98 N-Propylbenzene	120	8.658	8.658	0.000	99	115442	10.0	11.8	
99 2-Chlorotoluene	126	8.741	8.741	0.000	97	100650	10.0	11.5	
100 1,3,5-Trimethylbenzene	105	8.836	8.836	0.000	95	326074	10.0	12.3	
101 4-Chlorotoluene	126	8.847	8.848	-0.001	98	108724	10.0	12.1	
102 tert-Butylbenzene	119	9.143	9.143	0.000	91	257262	10.0	11.3	
104 1,2,4-Trimethylbenzene	105	9.191	9.191	0.000	96	329347	10.0	12.3	
105 sec-Butylbenzene	105	9.356	9.356	0.000	93	390514	10.0	12.1	
106 1,3-Dichlorobenzene	146	9.451	9.451	0.000	98	189879	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.510	9.510	0.000	97	322252	10.0	11.2	
108 1,4-Dichlorobenzene	146	9.546	9.546	0.000	97	195294	10.0	10.4	
112 1,2-Dichlorobenzene	146	9.901	9.901	0.000	96	170503	10.0	10.4	
111 n-Butylbenzene	91	9.912	9.901	0.011	97	259989	10.0	11.1	
114 1,2-Dibromo-3-Chloropropan	157	10.670	10.670	0.000	91	32361	10.0	10.4	
116 1,2,4-Trichlorobenzene	180	11.486	11.486	0.000	93	83900	10.0	8.14	
117 Hexachlorobutadiene	225	11.675	11.676	-0.001	98	34160	10.0	7.17	
118 Naphthalene	128	11.723	11.723	0.000	96	259155	10.0	9.45	
119 1,2,3-Trichlorobenzene	180	11.971	11.971	0.000	93	81998	10.0	8.48	
S 133 Trihalomethanes, Total	1				0		40.0	41.7	
S 159 Total BTEX	1				0		50.0	55.0	
S 132 Xylenes, Total	106				0		20.0	21.7	

Reagents:

VMFASGW_00313	Amount Added:	8.00	Units: uL	
VMFASAW_00285	Amount Added:	8.00	Units: uL	
VMFASPW_00303	Amount Added:	8.00	Units: uL	
vm50ss_stk_00080	Amount Added:	2.00	Units: uL	Run Reagent
VM50IS_00076	Amount Added:	2.00	Units: uL	Run Reagent
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent

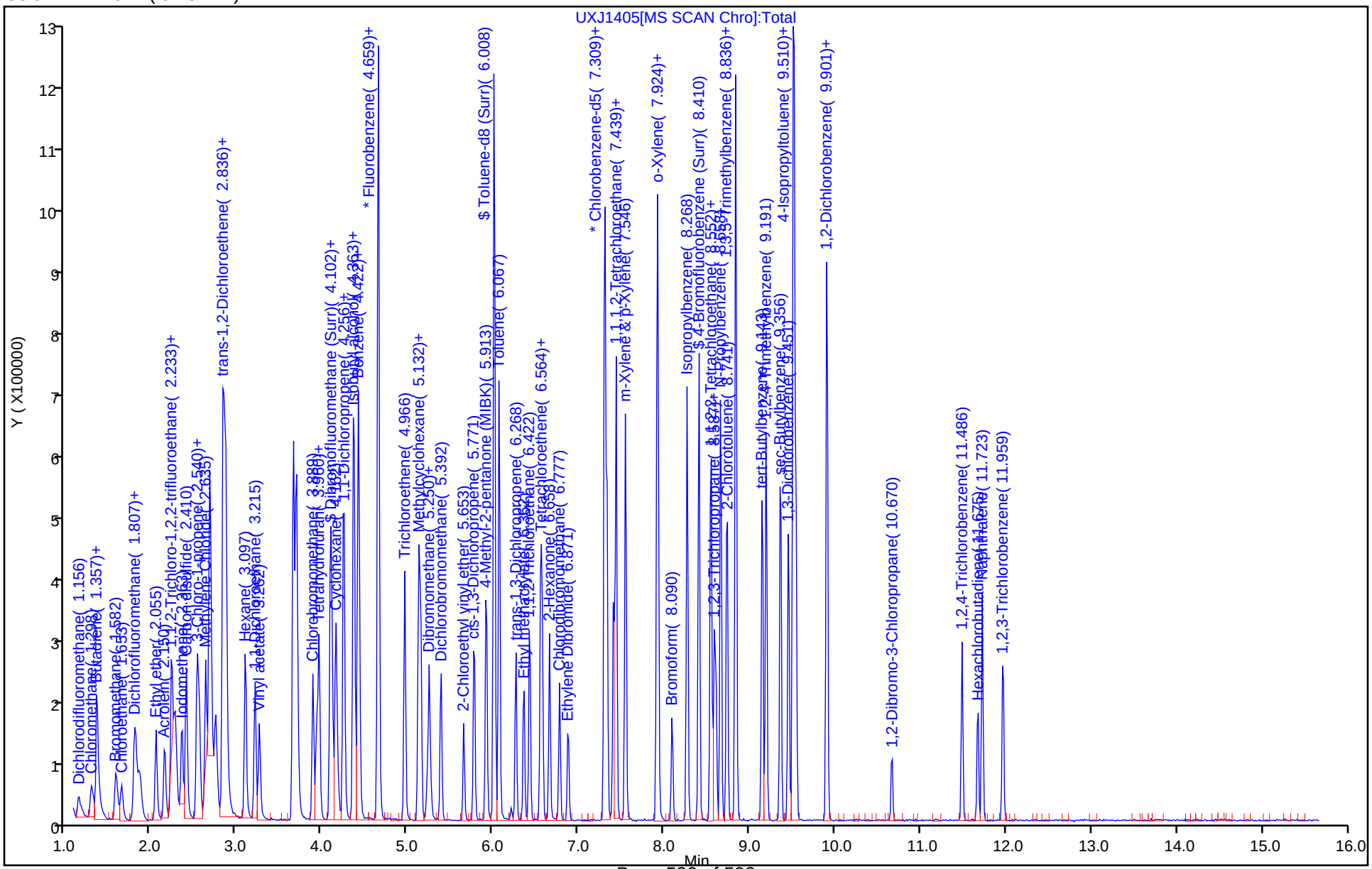
Report Date: 18-Jun-2019 09:17:14 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1405.D

Injection Date:	17-Jun-2019 08:19:30	Instrument ID:	A3UX11	Operator ID:	043582
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260_11	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\UXJ1405.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-Jun-2019 08:19:30 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088184-004
Misc. Info.: J90617A,8260LLUX11,,43582
Operator ID: 043582 Instrument ID: A3UX11

Method: \\chromna\Canton\ChromData\A3UX11\20190617-88184.b\8260_11.m
Limit Group: MSV 8260B ICAL
Last Update: 18-Jun-2019 09:17:09 Calib Date: 07-Feb-2019 20:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX11\20190207-84305.b\UXJ8040.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	20.0	21.1	105.72
$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.7	98.68
$ 6 Toluene-d8 (Surr)	20.0	22.6	112.95
$ 7 4-Bromofluorobenzene (Surr)	20.0	22.1	110.31

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-386760/4

Matrix: Water Lab File ID: UXX2001.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 12:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	12.5		1.0
79-34-5	1,1,2,2-Tetrachloroethane	7.67		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.92		1.0
79-00-5	1,1,2-Trichloroethane	9.33		1.0
75-34-3	1,1-Dichloroethane	9.48		1.0
75-35-4	1,1-Dichloroethene	11.1		1.0
120-82-1	1,2,4-Trichlorobenzene	7.85		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	7.97		2.0
95-50-1	1,2-Dichlorobenzene	10.0		1.0
107-06-2	1,2-Dichloroethane	11.0		1.0
78-87-5	1,2-Dichloropropane	9.85		1.0
541-73-1	1,3-Dichlorobenzene	9.75		1.0
106-46-7	1,4-Dichlorobenzene	10.3		1.0
78-93-3	2-Butanone (MEK)	19.2		10
591-78-6	2-Hexanone	16.1		10
108-10-1	4-Methyl-2-pentanone (MIBK)	18.2		10
67-64-1	Acetone	19.3		10
71-43-2	Benzene	8.91		1.0
75-25-2	Bromoform	11.2		1.0
74-83-9	Bromomethane	10.6		1.0
75-15-0	Carbon disulfide	8.90		1.0
56-23-5	Carbon tetrachloride	12.0		1.0
108-90-7	Chlorobenzene	10.0		1.0
124-48-1	Chlorodibromomethane	10.2		1.0
75-00-3	Chloroethane	3.69		1.0
67-66-3	Chloroform	11.1		1.0
74-87-3	Chloromethane	12.5		1.0
156-59-2	cis-1,2-Dichloroethene	9.29		1.0
10061-01-5	cis-1,3-Dichloropropene	9.17		1.0
110-82-7	Cyclohexane	8.87		1.0
75-71-8	Dichlorodifluoromethane	9.29		1.0
75-27-4	Dichlorobromomethane	11.8		1.0
100-41-4	Ethylbenzene	9.02		1.0
98-82-8	Isopropylbenzene	9.17		1.0
79-20-9	Methyl acetate	20.7		10
108-87-2	Methylcyclohexane	7.72		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-386760/4

Matrix: Water Lab File ID: UXX2001.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 12:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	9.55		1.0
75-09-2	Methylene Chloride	8.30		5.0
100-42-5	Styrene	9.33		1.0
127-18-4	Tetrachloroethene	11.1		1.0
108-88-3	Toluene	8.21		1.0
156-60-5	trans-1,2-Dichloroethene	10.1		1.0
10061-02-6	trans-1,3-Dichloropropene	8.22		1.0
79-01-6	Trichloroethene	12.5		1.0
75-69-4	Trichlorofluoromethane	11.9		1.0
75-01-4	Vinyl chloride	10.0		1.0
1330-20-7	Xylenes, Total	18.5		2.0
106-93-4	Ethylene Dibromide	8.52		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	87		70-123
1868-53-7	Dibromofluoromethane (Surr)	119		75-128
460-00-4	4-Bromofluorobenzene (Surr)	98		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2001.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Jun-2019 12:19:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-004
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	4.977	4.974	0.003	95	346643	10.0	10.0	
*	2 Chlorobenzene-d5	117	7.639	7.637	0.002	90	313155	10.0	10.0	
*	3 1,4-Dichlorobenzene-d4	152	9.864	9.861	0.003	94	191863	10.0	10.0	
$	4 Dibromofluoromethane (Surr	113	4.409	4.406	0.003	91	103216	10.0	11.9	
$	5 1,2-Dichloroethane-d4 (Sur	65	4.693	4.690	0.003	91	150282	10.0	11.0	
$	6 Toluene-d8 (Surr)	98	6.337	6.335	0.002	93	345077	10.0	8.67	
$	7 4-Bromofluorobenzene (Surr	95	8.751	8.749	0.002	91	160133	10.0	9.82	
	9 Dichlorodifluoromethane	85	1.261	1.259	0.002	96	86585	10.0	9.29	
	10 Chloromethane	50	1.403	1.401	0.002	98	277453	10.0	12.5	
	11 Vinyl chloride	62	1.498	1.495	0.003	97	144189	10.0	10.0	
	12 Butadiene	54	1.533	1.531	0.002	92	117420	10.0	6.64	
	13 Bromomethane	94	1.806	1.779	0.027	84	62943	10.0	10.6	
	14 Chloroethane	64	1.900	1.862	0.038	59	30345	10.0	3.69	
	15 Dichlorofluoromethane	67	2.030	2.052	-0.022	91	204944	10.0	12.1	
	16 Trichlorofluoromethane	101	2.054	2.063	-0.009	96	140155	10.0	11.9	
	17 Ethyl ether	59	2.303	2.300	0.002	88	119237	10.0	10.5	
	18 Acrolein	56	2.409	2.418	-0.009	93	126148	50.0	42.7	
	19 1,1-Dichloroethene	96	2.492	2.501	-0.009	89	82163	10.0	11.1	
	20 1,1,2-Trichloro-1,2,2-trif	151	2.515	2.513	0.002	41	40903	10.0	7.92	
	21 Acetone	43	2.551	2.549	0.002	97	105048	20.0	19.3	
	22 Iodomethane	142	2.622	2.631	-0.009	99	173962	10.0	12.7	
	24 Carbon disulfide	76	2.681	2.679	0.002	99	265219	10.0	8.90	
	26 3-Chloro-1-propene	76	2.811	2.809	0.002	91	59347	10.0	9.35	
	27 Methyl acetate	43	2.835	2.833	0.002	99	268892	20.0	20.7	
	28 Methylene Chloride	84	2.918	2.915	0.003	85	91387	10.0	8.30	
	29 2-Methyl-2-propanol	59	3.024	3.034	-0.010	96	142551	100.0	95.2	
	31 Acrylonitrile	53	3.131	3.128	0.003	97	662464	100.0	95.9	
	30 trans-1,2-Dichloroethene	96	3.154	3.152	0.002	87	91555	10.0	10.1	
	32 Methyl tert-butyl ether	73	3.154	3.152	0.002	91	220287	10.0	9.55	
	33 Hexane	86	3.391	3.389	0.002	94	10303	10.0	6.76	
	34 1,1-Dichloroethane	63	3.509	3.519	-0.010	97	230954	10.0	9.48	
	35 Vinyl acetate	43	3.557	3.554	0.003	96	356440	10.0	10.1	
	39 2,2-Dichloropropane	97	4.006	4.004	0.002	57	26028	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 cis-1,2-Dichloroethene	96	4.006	4.004	0.002	91	96794	10.0	9.29	
41 2-Butanone (MEK)	43	4.018	4.016	0.002	94	160461	20.0	19.2	
45 Chlorobromomethane	128	4.208	4.205	0.003	83	47816	10.0	10.2	
46 Tetrahydrofuran	42	4.243	4.253	-0.009	85	99767	20.0	19.0	
47 Chloroform	83	4.267	4.276	-0.009	98	186142	10.0	11.1	
48 1,1,1-Trichloroethane	97	4.421	4.430	-0.009	96	147585	10.0	12.5	
49 Cyclohexane	56	4.468	4.477	-0.009	87	201448	10.0	8.87	
50 1,1-Dichloropropene	75	4.563	4.572	-0.009	82	119748	10.0	9.27	
51 Carbon tetrachloride	117	4.563	4.572	-0.009	93	125581	10.0	12.0	
52 Isobutyl alcohol	41	4.669	4.667	0.002	97	136929	250.0	223.5	
53 Benzene	78	4.740	4.738	0.002	90	370793	10.0	8.91	
54 1,2-Dichloroethane	62	4.752	4.761	-0.009	94	202113	10.0	11.0	
56 n-Heptane	100	4.965	4.962	0.003	92	11426	10.0	9.03	
58 Trichloroethene	130	5.284	5.282	0.002	93	113679	10.0	12.5	
60 Methylcyclohexane	83	5.450	5.448	0.002	89	86939	10.0	7.72	
61 1,2-Dichloropropane	63	5.474	5.483	-0.009	95	135244	10.0	9.85	
63 Dibromomethane	93	5.580	5.578	0.002	85	55193	10.0	9.50	
64 1,4-Dioxane	88	5.592	5.601	-0.009	49	19008	200.0	169.6	
65 Dichlorobromomethane	83	5.710	5.708	0.002	95	151629	10.0	11.8	
67 2-Chloroethyl vinyl ether	63	5.971	5.968	0.003	84	64772	10.0	10.3	
68 cis-1,3-Dichloropropene	75	6.101	6.098	0.003	83	149404	10.0	9.17	
69 4-Methyl-2-pentanone (MIBK	43	6.243	6.240	0.003	98	333270	20.0	18.2	
70 Toluene	91	6.397	6.394	0.003	97	389198	10.0	8.21	
71 trans-1,3-Dichloropropene	75	6.586	6.595	-0.009	93	141425	10.0	8.22	
72 Ethyl methacrylate	69	6.669	6.678	-0.009	86	126275	10.0	7.10	
73 1,1,2-Trichloroethane	97	6.752	6.749	0.003	93	85505	10.0	9.33	
74 Tetrachloroethene	164	6.882	6.891	-0.009	93	91297	10.0	11.1	
75 1,3-Dichloropropane	76	6.905	6.903	0.002	91	145590	10.0	7.86	
76 2-Hexanone	43	6.976	6.986	-0.010	97	246949	20.0	16.1	
78 Chlorodibromomethane	129	7.107	7.116	-0.009	90	102572	10.0	10.2	
80 Ethylene Dibromide	107	7.213	7.223	-0.010	99	90576	10.0	8.52	
82 Chlorobenzene	112	7.675	7.672	0.003	93	308966	10.0	10.0	
83 1,1,1,2-Tetrachloroethane	131	7.746	7.743	0.003	89	102218	10.0	9.85	
84 Ethylbenzene	106	7.769	7.767	0.002	98	155835	10.0	9.02	
85 m-Xylene & p-Xylene	106	7.876	7.873	0.003	97	201110	10.0	9.60	
86 o-Xylene	106	8.254	8.252	0.002	96	193793	10.0	8.92	
87 Styrene	104	8.266	8.264	0.002	92	337658	10.0	9.33	
88 Bromoform	173	8.444	8.441	0.003	96	81918	10.0	11.2	
89 Isopropylbenzene	105	8.598	8.595	0.003	96	469435	10.0	9.17	
92 1,1,2,2-Tetrachloroethane	83	8.882	8.891	-0.009	73	128615	10.0	7.67	
93 Bromobenzene	156	8.893	8.891	0.002	85	147160	10.0	10.6	
94 1,2,3-Trichloropropane	110	8.929	8.926	0.003	88	43595	10.0	8.52	
95 trans-1,4-Dichloro-2-buten	53	8.941	8.938	0.003	73	65477	10.0	7.65	
96 N-Propylbenzene	120	9.000	8.997	0.003	98	124055	10.0	8.33	
97 2-Chlorotoluene	126	9.071	9.080	-0.009	95	107218	10.0	8.31	
98 1,3,5-Trimethylbenzene	105	9.166	9.163	0.003	93	391327	10.0	8.04	
99 4-Chlorotoluene	126	9.177	9.187	-0.010	98	129427	10.0	9.51	
100 tert-Butylbenzene	119	9.485	9.483	0.002	94	294916	10.0	8.55	
102 1,2,4-Trimethylbenzene	105	9.532	9.530	0.002	97	439360	10.0	8.63	
103 sec-Butylbenzene	105	9.698	9.696	0.002	95	379644	10.0	7.61	
104 1,3-Dichlorobenzene	146	9.805	9.802	0.002	97	260177	10.0	9.75	
105 4-Isopropyltoluene	119	9.840	9.838	0.002	96	343324	10.0	8.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,4-Dichlorobenzene	146	9.887	9.885	0.002	94	289928	10.0	10.3	
109 n-Butylbenzene	91	10.242	10.240	0.002	96	246324	10.0	6.83	
110 1,2-Dichlorobenzene	146	10.254	10.252	0.002	95	269220	10.0	10.0	
111 1,2-Dibromo-3-Chloropropan	157	11.011	11.021	-0.010	75	27084	10.0	7.97	
113 1,2,4-Trichlorobenzene	180	11.840	11.837	0.003	93	141083	10.0	7.85	
114 Hexachlorobutadiene	225	12.017	12.015	0.002	91	55634	10.0	8.36	
115 Naphthalene	128	12.076	12.086	-0.010	98	368801	10.0	7.37	
116 1,2,3-Trichlorobenzene	180	12.325	12.322	0.003	97	146336	10.0	8.18	
S 130 Xylenes, Total	106				0		20.0	18.5	
S 131 Trihalomethanes, Total	1				0		40.0	44.2	

Reagents:

VMFASPW_00303	Amount Added:	8.00	Units: uL	
VMFASAW_00285	Amount Added:	8.00	Units: uL	
VMFASGW_00313	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

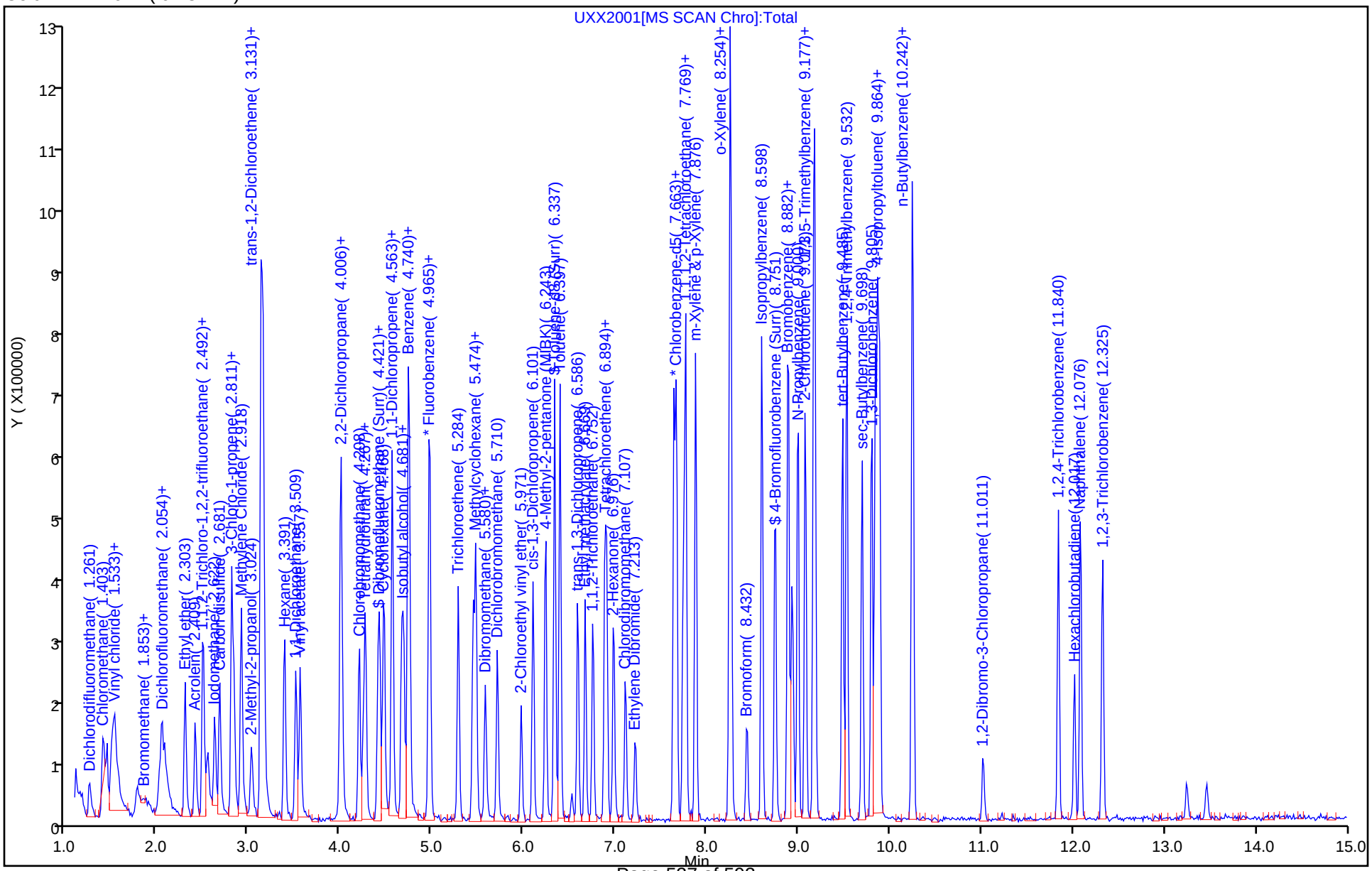
Report Date: 19-Jun-2019 10:25:33 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2001.D

Injection Date:	18-Jun-2019 12:19:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2001.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Jun-2019 12:19:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088238-004
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	11.9	119.19
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	110.45
$ 6 Toluene-d8 (Surr)	10.0	8.67	86.72
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.82	98.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-386999/4

Matrix: Water Lab File ID: UXR8596.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 11:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	11.2		1.0
79-34-5	1,1,2,2-Tetrachloroethane	10.3		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11.0		1.0
79-00-5	1,1,2-Trichloroethane	10.2		1.0
75-34-3	1,1-Dichloroethane	9.73		1.0
75-35-4	1,1-Dichloroethene	10.3		1.0
120-82-1	1,2,4-Trichlorobenzene	9.72		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	9.88		2.0
95-50-1	1,2-Dichlorobenzene	10.0		1.0
107-06-2	1,2-Dichloroethane	10.2		1.0
78-87-5	1,2-Dichloropropane	10.6		1.0
541-73-1	1,3-Dichlorobenzene	9.98		1.0
106-46-7	1,4-Dichlorobenzene	9.69		1.0
78-93-3	2-Butanone (MEK)	20.8		10
591-78-6	2-Hexanone	21.1		10
108-10-1	4-Methyl-2-pentanone (MIBK)	21.3		10
67-64-1	Acetone	18.1		10
71-43-2	Benzene	9.73		1.0
75-25-2	Bromoform	11.7		1.0
74-83-9	Bromomethane	8.26		1.0
75-15-0	Carbon disulfide	10.1		1.0
56-23-5	Carbon tetrachloride	11.5		1.0
108-90-7	Chlorobenzene	9.84		1.0
124-48-1	Chlorodibromomethane	11.3		1.0
75-00-3	Chloroethane	7.48		1.0
67-66-3	Chloroform	10.1		1.0
74-87-3	Chloromethane	9.99		1.0
156-59-2	cis-1,2-Dichloroethene	9.88		1.0
10061-01-5	cis-1,3-Dichloropropene	11.0		1.0
110-82-7	Cyclohexane	10.8		1.0
75-71-8	Dichlorodifluoromethane	8.22		1.0
75-27-4	Dichlorobromomethane	10.4		1.0
100-41-4	Ethylbenzene	10.6		1.0
98-82-8	Isopropylbenzene	10.8		1.0
79-20-9	Methyl acetate	19.4		10
108-87-2	Methylcyclohexane	10.3		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-386999/4

Matrix: Water Lab File ID: UXR8596.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 11:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	10.4		1.0
75-09-2	Methylene Chloride	10.5		5.0
100-42-5	Styrene	10.5		1.0
127-18-4	Tetrachloroethene	10.1		1.0
108-88-3	Toluene	10.5		1.0
156-60-5	trans-1,2-Dichloroethene	10.8		1.0
10061-02-6	trans-1,3-Dichloropropene	10.5		1.0
79-01-6	Trichloroethene	9.99		1.0
75-69-4	Trichlorofluoromethane	9.84		1.0
75-01-4	Vinyl chloride	9.97		1.0
1330-20-7	Xylenes, Total	21.5		2.0
106-93-4	Ethylene Dibromide	10.4		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	83		70-123
1868-53-7	Dibromofluoromethane (Surr)	81		75-128
460-00-4	4-Bromofluorobenzene (Surr)	81		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8596.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Jun-2019 11:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-004
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1636599	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	88	1154703	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	96	649356	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	93	309387	10.0	8.07	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.502	5.490	0.012	98	426758	10.0	7.77	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	1245847	10.0	8.33	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	88	449467	10.0	8.11	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	98	470238	10.0	8.22	
10 Chloromethane	50	1.885	1.885	0.000	99	658776	10.0	9.99	
11 Vinyl chloride	62	2.004	2.004	0.000	98	557673	10.0	9.97	
119 Butadiene	54	2.040	2.040	0.000	90	552846	10.0	8.90	
12 Bromomethane	94	2.360	2.360	0.000	88	261283	10.0	8.26	
13 Chloroethane	64	2.466	2.467	0.000	99	240752	10.0	7.48	
14 Dichlorofluoromethane	67	2.668	2.668	0.000	97	804376	10.0	10.5	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	756406	10.0	9.84	
16 Ethyl ether	59	2.988	2.988	0.000	93	413804	10.0	11.0	
18 Acrolein	56	3.131	3.119	0.012	98	316759	50.0	53.1	
19 1,1-Dichloroethene	96	3.214	3.214	0.000	94	415059	10.0	10.3	
20 1,1,2-Trichloro-1,2,2-trif	151	3.225	3.237	-0.012	93	328801	10.0	11.0	
21 Acetone	43	3.273	3.273	0.000	100	174687	20.0	18.1	
22 Iodomethane	142	3.356	3.356	0.000	98	567770	10.0	9.98	
23 Carbon disulfide	76	3.415	3.427	-0.012	100	1131748	10.0	10.1	
25 3-Chloro-1-propene	76	3.557	3.546	0.011	91	232000	10.0	10.5	
26 Methyl acetate	43	3.569	3.569	0.000	99	524213	20.0	19.4	
27 Methylene Chloride	84	3.664	3.664	0.000	98	447479	10.0	10.5	
28 2-Methyl-2-propanol	59	3.771	3.771	0.000	87	129424	100.0	79.8	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	92	901035	10.0	10.4	
29 Acrylonitrile	53	3.901	3.901	0.000	98	1449098	100.0	103.4	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	96	452094	10.0	10.8	
32 Hexane	86	4.139	4.139	0.000	93	123951	10.0	11.5	
33 1,1-Dichloroethane	63	4.293	4.281	0.012	97	768065	10.0	9.73	
34 Vinyl acetate	43	4.328	4.316	0.012	97	737269	10.0	12.3	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	84	457234	10.0	9.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	97	4.791	4.791	0.000	57	82727	10.0	10.1	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	296324	20.0	20.8	
44 Chlorobromomethane	128	5.004	5.004	0.000	95	205238	10.0	10.4	
45 Tetrahydrofuran	42	5.040	5.040	0.000	95	164281	20.0	19.6	
46 Chloroform	83	5.063	5.064	-0.001	93	780312	10.0	10.1	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	634795	10.0	11.2	
48 Cyclohexane	56	5.265	5.265	0.000	93	846589	10.0	10.8	
50 Carbon tetrachloride	117	5.360	5.360	0.000	90	577128	10.0	11.5	
49 1,1-Dichloropropene	75	5.360	5.360	0.000	91	590198	10.0	10.4	
51 Isobutyl alcohol	41	5.443	5.431	0.012	90	166085	250.0	188.9	
52 Benzene	78	5.538	5.538	0.000	98	1737936	10.0	9.73	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	675577	10.0	10.2	
55 n-Heptane	100	5.739	5.728	0.011	92	102153	10.0	10.1	
57 Trichloroethene	130	6.083	6.083	0.000	96	436145	10.0	9.99	
59 Methylcyclohexane	83	6.249	6.249	0.000	94	660123	10.0	10.3	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	468708	10.0	10.6	
63 1,4-Dioxane	88	6.404	6.392	0.012	33	32791	200.0	85.8	
62 Dibromomethane	93	6.392	6.392	0.000	94	228436	10.0	9.81	
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	529148	10.0	10.4	
66 2-Chloroethyl vinyl ether	63	6.771	6.771	0.000	91	187579	10.0	9.47	
67 cis-1,3-Dichloropropene	75	6.913	6.913	0.000	93	574495	10.0	11.0	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	97	561717	20.0	21.3	
69 Toluene	91	7.210	7.210	0.000	98	1917784	10.0	10.5	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	95	470051	10.0	10.5	
71 Ethyl methacrylate	69	7.459	7.447	0.012	92	373052	10.0	10.8	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	93	346591	10.0	10.2	
73 Tetrachloroethene	164	7.708	7.708	0.000	97	369267	10.0	10.1	
75 1,3-Dichloropropane	76	7.732	7.720	0.012	95	604659	10.0	9.85	
76 2-Hexanone	43	7.779	7.779	0.000	95	353566	20.0	21.1	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	357995	10.0	11.3	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	320497	10.0	10.4	
81 Chlorobenzene	112	8.502	8.502	0.000	94	1156479	10.0	9.84	
82 1,1,1,2-Tetrachloroethane	131	8.574	8.574	0.000	92	393236	10.0	10.6	
83 Ethylbenzene	106	8.585	8.585	0.000	99	627673	10.0	10.6	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	784978	10.0	10.7	
85 o-Xylene	106	9.072	9.072	0.000	96	727061	10.0	10.8	
86 Styrene	104	9.084	9.084	0.000	95	1223981	10.0	10.5	
87 Bromoform	173	9.285	9.285	0.000	96	204861	10.0	11.7	
89 Isopropylbenzene	105	9.427	9.416	0.011	96	1936660	10.0	10.8	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	387385	10.0	10.3	
92 Bromobenzene	156	9.736	9.736	0.000	98	484980	10.0	10.1	
93 trans-1,4-Dichloro-2-buten	53	9.771	9.771	0.000	67	132247	10.0	11.2	
94 1,2,3-Trichloropropane	110	9.771	9.771	0.000	84	132711	10.0	10.3	
95 N-Propylbenzene	120	9.819	9.819	0.000	99	544937	10.0	10.9	
96 2-Chlorotoluene	126	9.914	9.914	0.000	95	467782	10.0	10.5	
97 1,3,5-Trimethylbenzene	105	9.985	9.985	0.000	93	1714303	10.0	9.82	
98 4-Chlorotoluene	126	10.020	10.020	0.000	98	499104	10.0	10.4	
99 tert-Butylbenzene	119	10.317	10.317	0.000	92	1375989	10.0	10.6	
101 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	96	1788611	10.0	9.83	
102 sec-Butylbenzene	105	10.530	10.530	0.000	94	1981333	10.0	10.5	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	967177	10.0	9.98	
104 4-Isopropyltoluene	119	10.661	10.661	0.000	97	1701770	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	93	1000222	10.0	9.69	
108 n-Butylbenzene	91	11.076	11.076	0.000	98	1360520	10.0	10.1	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	96	925826	10.0	10.0	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	78	50197	10.0	9.88	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	463145	10.0	9.72	
114 Hexachlorobutadiene	225	12.878	12.878	0.000	94	269980	10.0	9.44	
115 Naphthalene	128	12.985	12.985	0.000	99	850098	10.0	8.21	
116 1,2,3-Trichlorobenzene	180	13.246	13.246	0.000	96	506787	10.0	10.8	
S 130 Xylenes, Total	106				0		20.0	21.5	
S 158 Total BTEX	1		0.000				50.0	ND	
S 131 Trihalomethanes, Total	1				0		40.0	43.4	

Reagents:

VMFASPW_00304	Amount Added:	8.00	Units: uL	
VMFASAW_00285	Amount Added:	8.00	Units: uL	
VMFASGW_00313	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

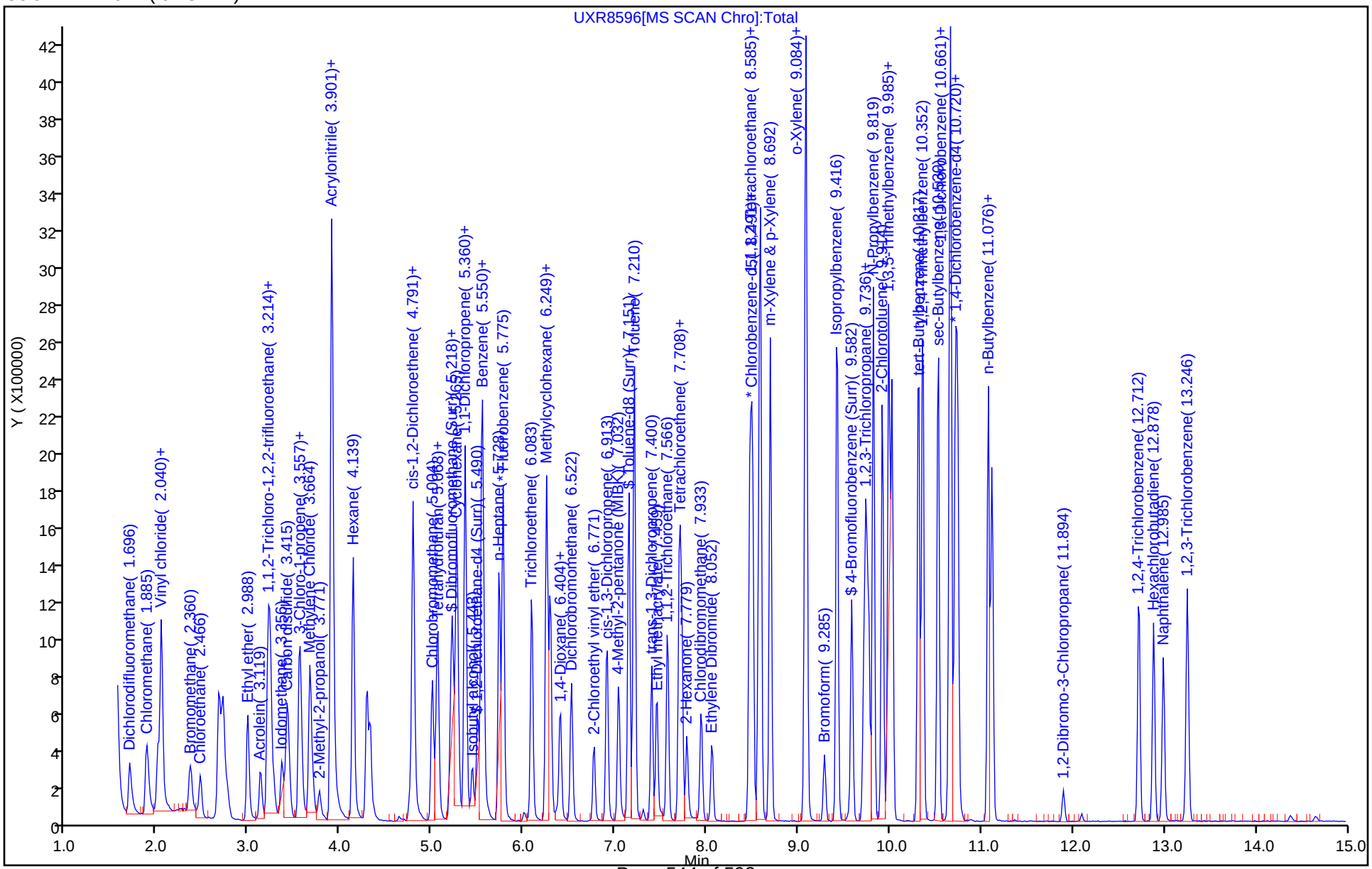
Report Date: 20-Jun-2019 11:32:57 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8596.D

Injection Date:	19-Jun-2019 11:34:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8596.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 19-Jun-2019 11:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-004
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.07	80.73
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	7.77	77.73
$ 6 Toluene-d8 (Surr)	10.0	8.33	83.25
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.11	81.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-6 MS Lab Sample ID: 240-113949-5 MS

Matrix: Water Lab File ID: UXX2023.D

Analysis Method: 8260B Date Collected: 06/05/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 21:30

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	25.5		2.0
79-34-5	1,1,2,2-Tetrachloroethane	13.2		2.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12.0		2.0
79-00-5	1,1,2-Trichloroethane	18.3		2.0
75-34-3	1,1-Dichloroethane	18.8		2.0
75-35-4	1,1-Dichloroethene	18.2		2.0
120-82-1	1,2,4-Trichlorobenzene	14.8		2.0
96-12-8	1,2-Dibromo-3-Chloropropane	16.2		4.0
95-50-1	1,2-Dichlorobenzene	19.0		2.0
107-06-2	1,2-Dichloroethane	24.2		2.0
78-87-5	1,2-Dichloropropane	18.8		2.0
541-73-1	1,3-Dichlorobenzene	18.9		2.0
106-46-7	1,4-Dichlorobenzene	18.4		2.0
78-93-3	2-Butanone (MEK)	38.4		20
591-78-6	2-Hexanone	31.3		20
108-10-1	4-Methyl-2-pentanone (MIBK)	37.9		20
67-64-1	Acetone	38.0		20
71-43-2	Benzene	18.6		2.0
75-25-2	Bromoform	20.8		2.0
74-83-9	Bromomethane	18.8		2.0
75-15-0	Carbon disulfide	16.4		2.0
56-23-5	Carbon tetrachloride	27.2		2.0
108-90-7	Chlorobenzene	20.4		2.0
124-48-1	Chlorodibromomethane	21.5		2.0
75-00-3	Chloroethane	6.96		2.0
67-66-3	Chloroform	20.8		2.0
74-87-3	Chloromethane	26.0		2.0
156-59-2	cis-1,2-Dichloroethene	33.1		2.0
10061-01-5	cis-1,3-Dichloropropene	19.6		2.0
110-82-7	Cyclohexane	19.7		2.0
75-71-8	Dichlorodifluoromethane	18.6		2.0
75-27-4	Dichlorobromomethane	21.7		2.0
100-41-4	Ethylbenzene	19.7		2.0
98-82-8	Isopropylbenzene	18.4		2.0
79-20-9	Methyl acetate	41.5		20
108-87-2	Methylcyclohexane	16.9		2.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-6 MS Lab Sample ID: 240-113949-5 MS

Matrix: Water Lab File ID: UXX2023.D

Analysis Method: 8260B Date Collected: 06/05/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 21:30

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	19.3		2.0
75-09-2	Methylene Chloride	18.0		10
100-42-5	Styrene	18.9		2.0
127-18-4	Tetrachloroethene	71.8		2.0
108-88-3	Toluene	16.8		2.0
156-60-5	trans-1,2-Dichloroethene	19.7		2.0
10061-02-6	trans-1,3-Dichloropropene	16.6		2.0
79-01-6	Trichloroethene	32.3		2.0
75-69-4	Trichlorofluoromethane	24.4		2.0
75-01-4	Vinyl chloride	21.3		2.0
1330-20-7	Xylenes, Total	37.3		4.0
106-93-4	Ethylene Dibromide	18.7		2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		70-123
1868-53-7	Dibromofluoromethane (Surr)	127		75-128
460-00-4	4-Bromofluorobenzene (Surr)	94		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2023.D
Lims ID: 240-113949-E-5 MS
Client ID: OW-6
Sample Type: MS
Inject. Date: 18-Jun-2019 21:30:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0088238-026
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.978	4.974	0.004	95	326921	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.640	7.637	0.003	91	292531	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.865	9.861	0.004	93	192938	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.410	4.406	0.004	88	103787	10.0	12.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.694	4.690	0.004	98	132330	10.0	10.3	
$ 6 Toluene-d8 (Surr)	98	6.339	6.335	0.004	96	334874	10.0	9.01	
$ 7 4-Bromofluorobenzene (Surr	95	8.741	8.749	-0.008	93	142419	10.0	9.35	
9 Dichlorodifluoromethane	85	1.262	1.259	0.003	98	81864	10.0	9.31	
10 Chloromethane	50	1.404	1.401	0.003	99	272525	10.0	13.0	
11 Vinyl chloride	62	1.499	1.495	0.004	98	144525	10.0	10.6	
13 Bromomethane	94	1.771	1.779	-0.008	86	52763	10.0	9.42	
14 Chloroethane	64	1.854	1.862	-0.008	42	26953	10.0	3.48	
16 Trichlorofluoromethane	101	2.055	2.063	-0.008	97	135225	10.0	12.2	
19 1,1-Dichloroethene	96	2.493	2.501	-0.008	87	63565	10.0	9.12	
20 1,1,2-Trichloro-1,2,2-trif	151	2.517	2.513	0.004	42	29240	10.0	6.01	
21 Acetone	43	2.552	2.549	0.003	97	97713	20.0	19.0	
24 Carbon disulfide	76	2.682	2.679	0.003	98	230801	10.0	8.21	
27 Methyl acetate	43	2.836	2.833	0.003	99	254147	20.0	20.7	
28 Methylene Chloride	84	2.919	2.915	0.004	87	93462	10.0	9.00	
30 trans-1,2-Dichloroethene	96	3.156	3.152	0.004	86	84079	10.0	9.86	
32 Methyl tert-butyl ether	73	3.156	3.152	0.004	93	210088	10.0	9.66	
34 1,1-Dichloroethane	63	3.510	3.519	-0.009	96	215753	10.0	9.39	
40 cis-1,2-Dichloroethene	96	4.007	4.004	0.003	90	162610	10.0	16.6	
41 2-Butanone (MEK)	43	4.019	4.016	0.003	96	151268	20.0	19.2	
47 Chloroform	83	4.268	4.276	-0.008	95	165152	10.0	10.4	
48 1,1,1-Trichloroethane	97	4.433	4.430	0.003	94	142670	10.0	12.8	
49 Cyclohexane	56	4.469	4.477	-0.008	91	211543	10.0	9.87	
51 Carbon tetrachloride	117	4.564	4.572	-0.008	90	134652	10.0	13.6	
53 Benzene	78	4.741	4.738	0.003	92	365567	10.0	9.32	
54 1,2-Dichloroethane	62	4.753	4.761	-0.008	96	209144	10.0	12.1	
58 Trichloroethene	130	5.285	5.282	0.003	87	139044	10.0	16.2	
60 Methylcyclohexane	83	5.451	5.448	0.003	88	89811	10.0	8.46	
61 1,2-Dichloropropane	63	5.475	5.483	-0.008	96	121697	10.0	9.39	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Dichlorobromomethane	83	5.711	5.708	0.003	94	132211	10.0	10.9	
68 cis-1,3-Dichloropropene	75	6.102	6.098	0.004	84	150373	10.0	9.78	
69 4-Methyl-2-pentanone (MIBK	43	6.244	6.240	0.004	97	327818	20.0	18.9	
70 Toluene	91	6.398	6.394	0.004	97	372140	10.0	8.41	
71 trans-1,3-Dichloropropene	75	6.587	6.595	-0.008	92	133657	10.0	8.31	
73 1,1,2-Trichloroethane	97	6.753	6.749	0.004	88	78314	10.0	9.15	
74 Tetrachloroethene	164	6.883	6.891	-0.008	95	276135	10.0	35.9	
76 2-Hexanone	43	6.978	6.986	-0.008	97	224029	20.0	15.6	
78 Chlorodibromomethane	129	7.108	7.116	-0.008	92	100706	10.0	10.7	
80 Ethylene Dibromide	107	7.214	7.223	-0.009	99	92987	10.0	9.37	
82 Chlorobenzene	112	7.664	7.672	-0.008	91	293816	10.0	10.2	
84 Ethylbenzene	106	7.770	7.767	0.003	96	159319	10.0	9.87	
85 m-Xylene & p-Xylene	106	7.877	7.873	0.004	98	180331	10.0	9.21	
86 o-Xylene	106	8.255	8.252	0.003	97	192091	10.0	9.46	
87 Styrene	104	8.267	8.264	0.003	94	318574	10.0	9.43	
88 Bromoform	173	8.445	8.441	0.004	98	71394	10.0	10.4	
89 Isopropylbenzene	105	8.599	8.595	0.004	97	440417	10.0	9.21	
92 1,1,2,2-Tetrachloroethane	83	8.883	8.891	-0.008	93	111762	10.0	6.62	
104 1,3-Dichlorobenzene	146	9.806	9.802	0.004	98	253199	10.0	9.44	
106 1,4-Dichlorobenzene	146	9.888	9.885	0.003	91	259346	10.0	9.19	
110 1,2-Dichlorobenzene	146	10.255	10.252	0.003	96	256556	10.0	9.49	
111 1,2-Dibromo-3-Chloropropan	157	11.024	11.021	0.003	83	27710	10.0	8.11	
113 1,2,4-Trichlorobenzene	180	11.841	11.837	0.004	93	133792	10.0	7.40	
S 130 Xylenes, Total	106				0		20.0	18.7	

Reagents:

VMFASPW_00303	Amount Added:	8.00	Units: uL	
VMFASAW_00285	Amount Added:	8.00	Units: uL	
VMFASGW_00313	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

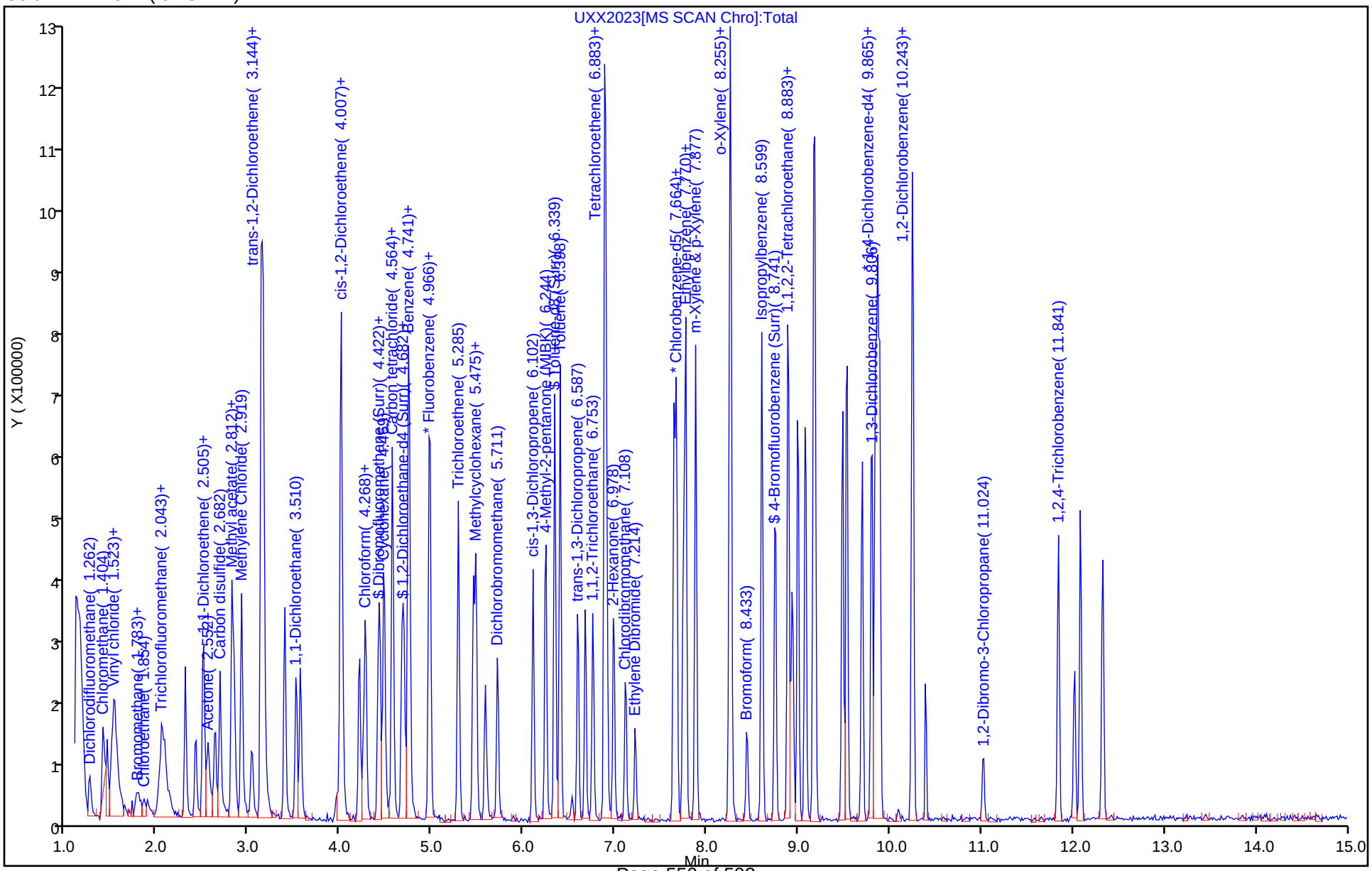
Report Date: 19-Jun-2019 10:25:52 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2023.D

Injection Date:	18-Jun-2019 21:30:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-113949-E-5 MS			Worklist Smp#:	26
Client ID:	OW-6				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	25
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2023.D
Lims ID: 240-113949-E-5 MS
Client ID: OW-6
Sample Type: MS
Inject. Date: 18-Jun-2019 21:30:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0088238-026
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	12.7	127.08
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.13
$ 6 Toluene-d8 (Surr)	10.0	9.01	90.09
$ 7 4-Bromofluorobenzene (Surr)	10.0	9.35	93.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-18 MS Lab Sample ID: 240-113949-8 MS

Matrix: Water Lab File ID: UXR8620.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 21:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	10.6		1.0
79-34-5	1,1,2,2-Tetrachloroethane	9.65		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.94		1.0
79-00-5	1,1,2-Trichloroethane	9.80		1.0
75-34-3	1,1-Dichloroethane	10.2		1.0
75-35-4	1,1-Dichloroethene	9.87		1.0
120-82-1	1,2,4-Trichlorobenzene	9.02		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	8.92		2.0
95-50-1	1,2-Dichlorobenzene	9.48		1.0
107-06-2	1,2-Dichloroethane	9.89		1.0
78-87-5	1,2-Dichloropropane	9.78		1.0
541-73-1	1,3-Dichlorobenzene	9.02		1.0
106-46-7	1,4-Dichlorobenzene	9.58		1.0
78-93-3	2-Butanone (MEK)	17.1		10
591-78-6	2-Hexanone	19.4		10
108-10-1	4-Methyl-2-pentanone (MIBK)	19.5		10
67-64-1	Acetone	20.2		10
71-43-2	Benzene	11.4		1.0
75-25-2	Bromoform	9.42		1.0
74-83-9	Bromomethane	4.45		1.0
75-15-0	Carbon disulfide	9.76		1.0
56-23-5	Carbon tetrachloride	10.6		1.0
108-90-7	Chlorobenzene	20.8		1.0
124-48-1	Chlorodibromomethane	10.1		1.0
75-00-3	Chloroethane	7.71		1.0
67-66-3	Chloroform	9.60		1.0
74-87-3	Chloromethane	9.84		1.0
156-59-2	cis-1,2-Dichloroethene	9.26		1.0
10061-01-5	cis-1,3-Dichloropropene	8.86		1.0
110-82-7	Cyclohexane	9.73		1.0
75-71-8	Dichlorodifluoromethane	7.63		1.0
75-27-4	Dichlorobromomethane	9.96		1.0
100-41-4	Ethylbenzene	10.5		1.0
98-82-8	Isopropylbenzene	9.83		1.0
79-20-9	Methyl acetate	17.6		10
108-87-2	Methylcyclohexane	8.90		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-18 MS Lab Sample ID: 240-113949-8 MS

Matrix: Water Lab File ID: UXR8620.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 21:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	9.37		1.0
75-09-2	Methylene Chloride	10.0		5.0
100-42-5	Styrene	9.67		1.0
127-18-4	Tetrachloroethene	9.34		1.0
108-88-3	Toluene	9.82		1.0
156-60-5	trans-1,2-Dichloroethene	10.1		1.0
10061-02-6	trans-1,3-Dichloropropene	9.27		1.0
79-01-6	Trichloroethene	9.55		1.0
75-69-4	Trichlorofluoromethane	9.34		1.0
75-01-4	Vinyl chloride	9.27		1.0
1330-20-7	Xylenes, Total	20.5		2.0
106-93-4	Ethylene Dibromide	9.86		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	84		70-123
1868-53-7	Dibromofluoromethane (Surr)	87		75-128
460-00-4	4-Bromofluorobenzene (Surr)	86		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8620.D
Lims ID: 240-113949-C-8 MS
Client ID:
Sample Type: MS
Inject. Date: 19-Jun-2019 21:07:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-028
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1453089	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	89	1028224	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	97	605986	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	94	296384	10.0	8.71	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.491	5.490	0.001	96	417932	10.0	8.57	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	1117420	10.0	8.39	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	87	424789	10.0	8.61	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	387425	10.0	7.63	
10 Chloromethane	50	1.886	1.885	0.001	99	576191	10.0	9.84	
11 Vinyl chloride	62	2.004	2.004	0.000	97	460726	10.0	9.27	
12 Bromomethane	94	2.360	2.360	0.000	94	125087	10.0	4.45	
13 Chloroethane	64	2.467	2.467	0.001	99	220228	10.0	7.71	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	637097	10.0	9.34	
19 1,1-Dichloroethene	96	3.202	3.214	-0.012	94	352244	10.0	9.87	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.237	-0.011	94	263555	10.0	9.94	
21 Acetone	43	3.273	3.273	0.000	98	170786	20.0	20.2	
23 Carbon disulfide	76	3.415	3.427	-0.012	100	970575	10.0	9.76	
26 Methyl acetate	43	3.570	3.569	0.001	99	422464	20.0	17.6	
27 Methylene Chloride	84	3.664	3.664	0.000	97	379105	10.0	10.0	
30 Methyl tert-butyl ether	73	3.902	3.901	0.001	89	719914	10.0	9.37	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	95	378263	10.0	10.1	
33 1,1-Dichloroethane	63	4.281	4.281	0.000	97	712751	10.0	10.2	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	85	380268	10.0	9.26	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	215390	20.0	17.1	
46 Chloroform	83	5.064	5.064	0.000	95	661071	10.0	9.60	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	98	535870	10.0	10.6	
48 Cyclohexane	56	5.265	5.265	0.000	94	677766	10.0	9.73	
50 Carbon tetrachloride	117	5.360	5.360	0.000	91	473009	10.0	10.6	
52 Benzene	78	5.538	5.538	0.000	97	1802116	10.0	11.4	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	98	584325	10.0	9.89	
57 Trichloroethene	130	6.084	6.083	0.001	97	370408	10.0	9.55	
59 Methylcyclohexane	83	6.250	6.249	0.001	95	504115	10.0	8.90	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	93	383710	10.0	9.78	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 Dichlorobromomethane	83	6.522	6.522	0.000	98	449392	10.0	9.96	
67 cis-1,3-Dichloropropene	75	6.914	6.913	0.001	92	409174	10.0	8.86	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	97	456835	20.0	19.5	
69 Toluene	91	7.210	7.210	0.000	98	1596330	10.0	9.82	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	96	370490	10.0	9.27	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	94	295969	10.0	9.80	
73 Tetrachloroethene	164	7.696	7.708	-0.012	96	302756	10.0	9.34	
76 2-Hexanone	43	7.779	7.779	0.000	97	288582	20.0	19.4	
78 Chlorodibromomethane	129	7.933	7.933	0.000	91	285610	10.0	10.1	
79 Ethylene Dibromide	107	8.052	8.052	0.000	97	270146	10.0	9.86	
81 Chlorobenzene	112	8.503	8.502	0.001	94	2178200	10.0	20.8	
83 Ethylbenzene	106	8.586	8.585	0.001	99	549724	10.0	10.5	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	99	682918	10.0	10.4	
85 o-Xylene	106	9.072	9.072	0.000	95	606905	10.0	10.1	
86 Styrene	104	9.084	9.084	0.000	94	1006588	10.0	9.67	
87 Bromoform	173	9.285	9.285	0.000	95	147208	10.0	9.42	
89 Isopropylbenzene	105	9.428	9.416	0.012	96	1575939	10.0	9.83	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	95	340043	10.0	9.65	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	97	815930	10.0	9.02	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	923305	10.0	9.58	
109 1,2-Dichlorobenzene	146	11.112	11.111	0.001	96	817282	10.0	9.48	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	76	42305	10.0	8.92	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	95	401391	10.0	9.02	
S 130 Xylenes, Total	106				0		20.0	20.5	

Reagents:

VMFASPW_00304	Amount Added:	8.00	Units: uL	
VMFASAW_00285	Amount Added:	8.00	Units: uL	
VMFASGW_00313	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

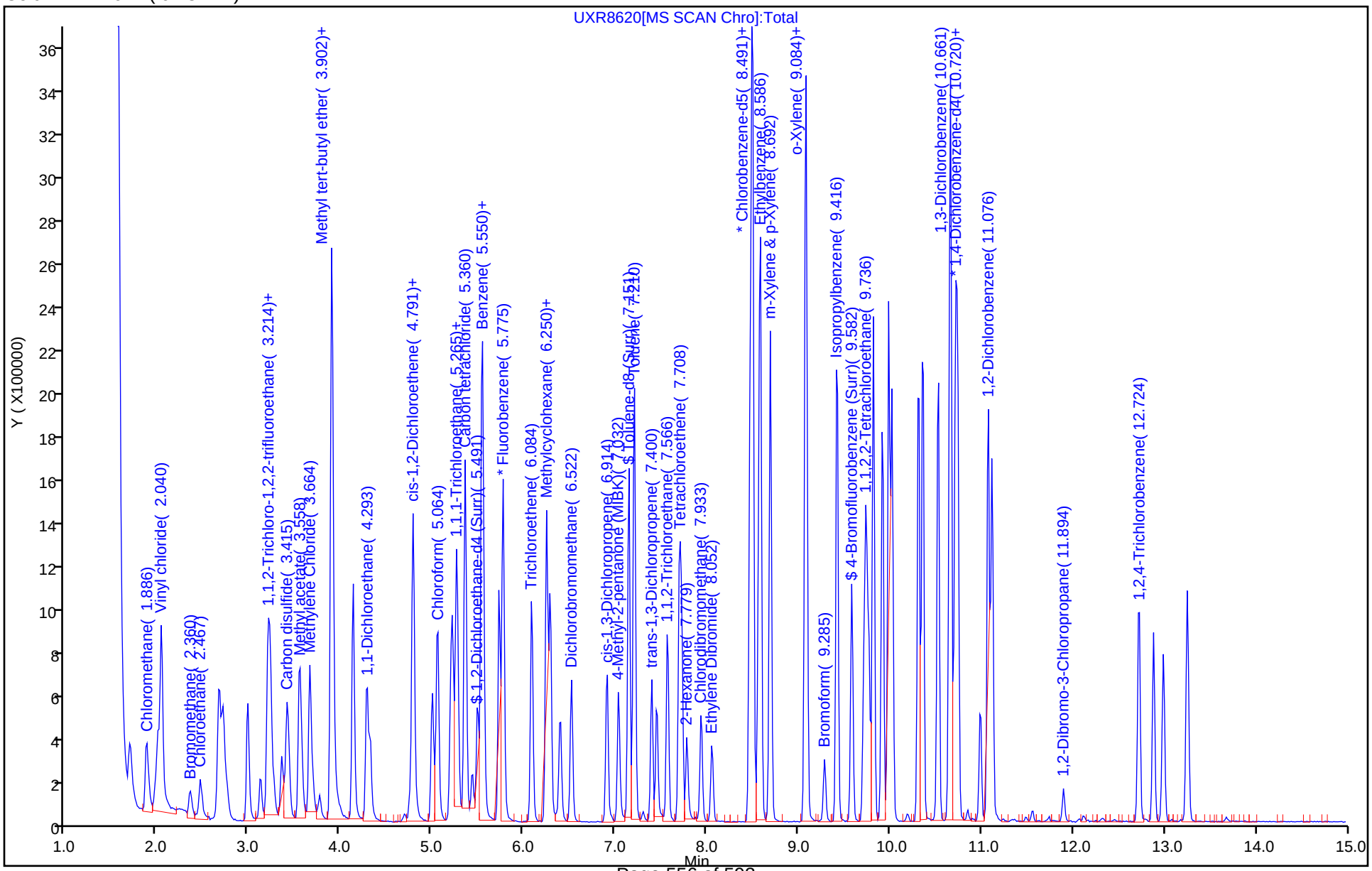
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8620.D

Injection Date:	19-Jun-2019 21:07:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-C-8 MS			Worklist Smp#:	28
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8620.D
Lims ID: 240-113949-C-8 MS
Client ID:
Sample Type: MS
Inject. Date: 19-Jun-2019 21:07:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-028
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.71	87.10
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.57	85.73
$ 6 Toluene-d8 (Surr)	10.0	8.39	83.86
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.61	86.08

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-6 MSD Lab Sample ID: 240-113949-5 MSD

Matrix: Water Lab File ID: UXX2024.D

Analysis Method: 8260B Date Collected: 06/05/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 21:55

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	24.8		2.0
79-34-5	1,1,2,2-Tetrachloroethane	13.9		2.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18.0		2.0
79-00-5	1,1,2-Trichloroethane	18.8		2.0
75-34-3	1,1-Dichloroethane	18.5		2.0
75-35-4	1,1-Dichloroethene	19.1		2.0
120-82-1	1,2,4-Trichlorobenzene	17.1		2.0
96-12-8	1,2-Dibromo-3-Chloropropane	16.5		4.0
95-50-1	1,2-Dichlorobenzene	19.2		2.0
107-06-2	1,2-Dichloroethane	23.7		2.0
78-87-5	1,2-Dichloropropane	20.7		2.0
541-73-1	1,3-Dichlorobenzene	19.8		2.0
106-46-7	1,4-Dichlorobenzene	20.1		2.0
78-93-3	2-Butanone (MEK)	36.1		20
591-78-6	2-Hexanone	31.4		20
108-10-1	4-Methyl-2-pentanone (MIBK)	36.9		20
67-64-1	Acetone	42.2		20
71-43-2	Benzene	17.4		2.0
75-25-2	Bromoform	21.9		2.0
74-83-9	Bromomethane	21.1		2.0
75-15-0	Carbon disulfide	17.3		2.0
56-23-5	Carbon tetrachloride	23.0		2.0
108-90-7	Chlorobenzene	20.4		2.0
124-48-1	Chlorodibromomethane	21.6		2.0
75-00-3	Chloroethane	15.6		2.0
67-66-3	Chloroform	20.2		2.0
74-87-3	Chloromethane	27.2		2.0
156-59-2	cis-1,2-Dichloroethene	33.6		2.0
10061-01-5	cis-1,3-Dichloropropene	19.2		2.0
110-82-7	Cyclohexane	20.4		2.0
75-71-8	Dichlorodifluoromethane	18.8		2.0
75-27-4	Dichlorobromomethane	21.8		2.0
100-41-4	Ethylbenzene	18.9		2.0
98-82-8	Isopropylbenzene	17.9		2.0
79-20-9	Methyl acetate	38.7		20
108-87-2	Methylcyclohexane	17.6		2.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-6 MSD Lab Sample ID: 240-113949-5 MSD

Matrix: Water Lab File ID: UXX2024.D

Analysis Method: 8260B Date Collected: 06/05/2019 16:25

Sample wt/vol: 5(mL) Date Analyzed: 06/18/2019 21:55

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386760 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	19.7		2.0
75-09-2	Methylene Chloride	18.7		10
100-42-5	Styrene	18.2		2.0
127-18-4	Tetrachloroethene	66.4		2.0
108-88-3	Toluene	17.4		2.0
156-60-5	trans-1,2-Dichloroethene	21.2		2.0
10061-02-6	trans-1,3-Dichloropropene	15.8		2.0
79-01-6	Trichloroethene	29.5		2.0
75-69-4	Trichlorofluoromethane	24.7		2.0
75-01-4	Vinyl chloride	22.0		2.0
1330-20-7	Xylenes, Total	37.6		4.0
106-93-4	Ethylene Dibromide	18.7		2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		70-123
1868-53-7	Dibromofluoromethane (Surr)	105		75-128
460-00-4	4-Bromofluorobenzene (Surr)	101		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2024.D
Lims ID: 240-113949-E-5 MSD
Client ID: OW-6
Sample Type: MSD
Inject. Date: 18-Jun-2019 21:55:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0088238-027
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.977	4.974	0.003	96	336641	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.639	7.637	0.002	91	296654	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.864	9.861	0.003	97	186109	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	4.409	4.406	0.003	93	88401	10.0	10.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	4.693	4.690	0.003	93	145000	10.0	11.0	
$ 6 Toluene-d8 (Surr)	98	6.338	6.335	0.003	96	337760	10.0	8.96	
$ 7 4-Bromofluorobenzene (Surr	95	8.740	8.749	-0.009	95	155289	10.0	10.1	
9 Dichlorodifluoromethane	85	1.261	1.259	0.002	96	85265	10.0	9.42	
10 Chloromethane	50	1.403	1.401	0.002	99	293080	10.0	13.6	
11 Vinyl chloride	62	1.498	1.495	0.003	97	154263	10.0	11.0	
13 Bromomethane	94	1.770	1.779	-0.009	86	60921	10.0	10.6	
14 Chloroethane	64	1.865	1.862	0.003	92	62371	10.0	7.82	
16 Trichlorofluoromethane	101	2.054	2.063	-0.009	96	141294	10.0	12.4	
19 1,1-Dichloroethene	96	2.492	2.501	-0.009	89	68451	10.0	9.54	
20 1,1,2-Trichloro-1,2,2-trif	151	2.516	2.513	0.003	45	45103	10.0	9.00	
21 Acetone	43	2.551	2.549	0.002	96	110080	20.0	21.1	
24 Carbon disulfide	76	2.681	2.679	0.002	98	250504	10.0	8.65	
27 Methyl acetate	43	2.835	2.833	0.002	99	244041	20.0	19.3	
28 Methylene Chloride	84	2.918	2.915	0.003	87	100061	10.0	9.36	
30 trans-1,2-Dichloroethene	96	3.155	3.152	0.003	89	92989	10.0	10.6	
32 Methyl tert-butyl ether	73	3.155	3.152	0.003	93	220186	10.0	9.83	
34 1,1-Dichloroethane	63	3.510	3.519	-0.009	96	218327	10.0	9.23	
40 cis-1,2-Dichloroethene	96	4.006	4.004	0.002	90	170108	10.0	16.8	
41 2-Butanone (MEK)	43	4.018	4.016	0.002	95	146230	20.0	18.0	
47 Chloroform	83	4.267	4.276	-0.009	96	165234	10.0	10.1	
48 1,1,1-Trichloroethane	97	4.421	4.430	-0.009	92	142423	10.0	12.4	
49 Cyclohexane	56	4.468	4.477	-0.009	90	225203	10.0	10.2	
51 Carbon tetrachloride	117	4.563	4.572	-0.009	95	117575	10.0	11.5	
53 Benzene	78	4.740	4.738	0.002	92	350998	10.0	8.69	
54 1,2-Dichloroethane	62	4.752	4.761	-0.009	95	210535	10.0	11.9	
58 Trichloroethene	130	5.284	5.282	0.002	88	130841	10.0	14.8	
60 Methylcyclohexane	83	5.450	5.448	0.002	90	96000	10.0	8.78	
61 1,2-Dichloropropane	63	5.474	5.483	-0.009	97	138244	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Dichlorobromomethane	83	5.710	5.708	0.002	93	136251	10.0	10.9	
68 cis-1,3-Dichloropropene	75	6.101	6.098	0.003	85	151865	10.0	9.60	
69 4-Methyl-2-pentanone (MIBK	43	6.243	6.240	0.003	97	329246	20.0	18.5	
70 Toluene	91	6.397	6.394	0.003	94	391608	10.0	8.72	
71 trans-1,3-Dichloropropene	75	6.586	6.595	-0.009	92	128555	10.0	7.88	
73 1,1,2-Trichloroethane	97	6.752	6.749	0.003	94	81417	10.0	9.38	
74 Tetrachloroethene	164	6.882	6.891	-0.009	95	258836	10.0	33.2	
76 2-Hexanone	43	6.977	6.986	-0.009	99	228108	20.0	15.7	
78 Chlorodibromomethane	129	7.119	7.116	0.002	86	102902	10.0	10.8	
80 Ethylene Dibromide	107	7.213	7.223	-0.010	97	94346	10.0	9.37	
82 Chlorobenzene	112	7.663	7.672	-0.009	92	299183	10.0	10.2	
84 Ethylbenzene	106	7.769	7.767	0.002	97	155050	10.0	9.47	
85 m-Xylene & p-Xylene	106	7.876	7.873	0.003	98	186534	10.0	9.40	
86 o-Xylene	106	8.254	8.252	0.002	95	193320	10.0	9.39	
87 Styrene	104	8.266	8.264	0.002	92	312343	10.0	9.11	
88 Bromoform	173	8.444	8.441	0.003	98	76245	10.0	11.0	
89 Isopropylbenzene	105	8.598	8.595	0.003	97	434632	10.0	8.97	
92 1,1,2,2-Tetrachloroethane	83	8.882	8.891	-0.009	92	112869	10.0	6.93	
104 1,3-Dichlorobenzene	146	9.805	9.802	0.003	97	256419	10.0	9.91	
106 1,4-Dichlorobenzene	146	9.887	9.885	0.002	94	273635	10.0	10.0	
110 1,2-Dichlorobenzene	146	10.254	10.252	0.002	97	250734	10.0	9.62	
111 1,2-Dibromo-3-Chloropropan	157	11.023	11.021	0.002	80	27181	10.0	8.24	
113 1,2,4-Trichlorobenzene	180	11.840	11.837	0.003	92	149467	10.0	8.57	
S 130 Xylenes, Total	106				0		20.0	18.8	

Reagents:

VMFASPW_00303	Amount Added:	8.00	Units: uL	
VMFASAW_00285	Amount Added:	8.00	Units: uL	
VMFASGW_00313	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

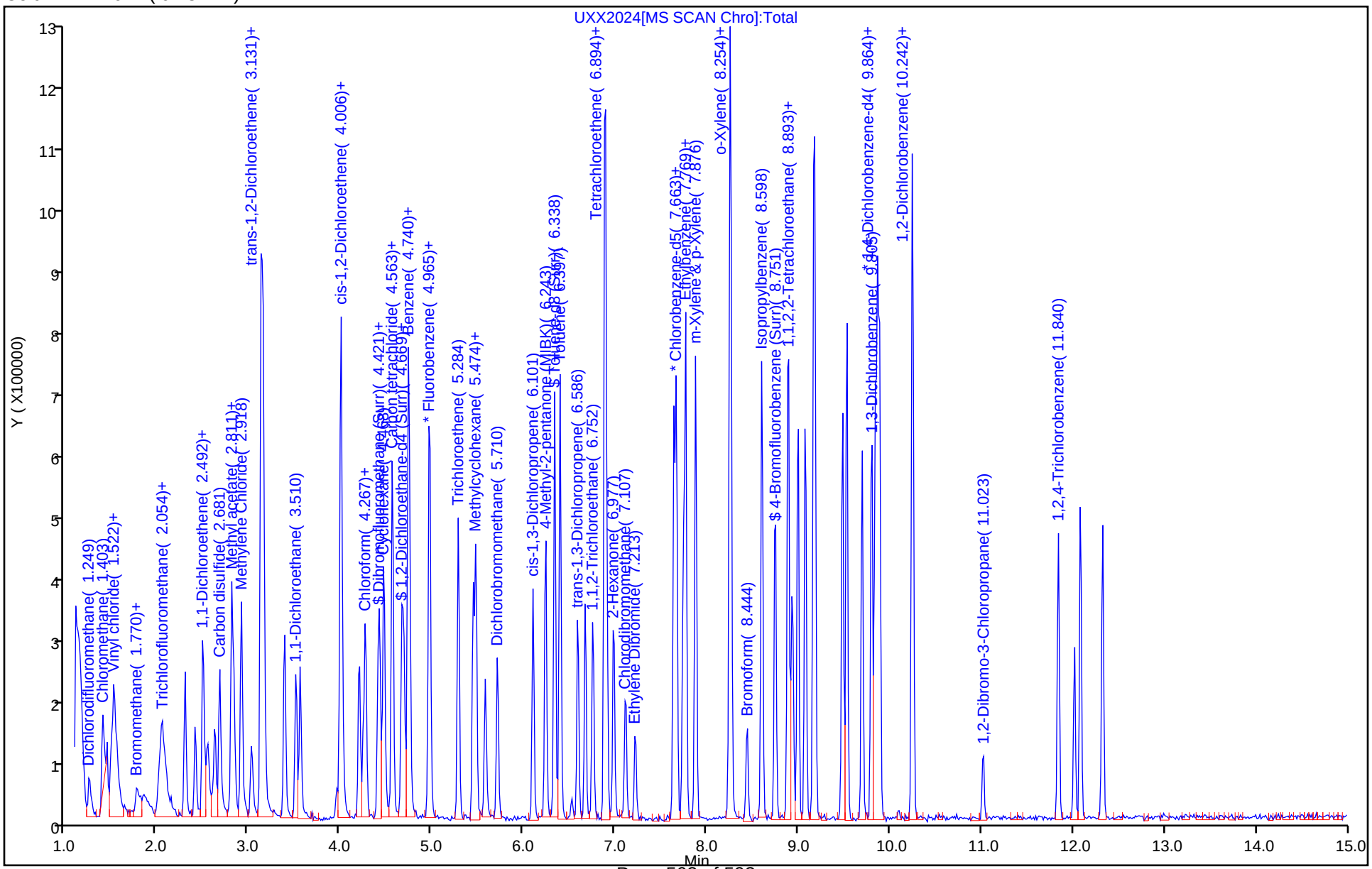
Report Date: 19-Jun-2019 10:25:53 Chrom Revision: 2.3 02-Jun-2019 10:27:32

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2024.D

Injection Date:	18-Jun-2019 21:55:30	Instrument ID:	A3UX10	Operator ID:	001644
Lims ID:	240-113949-E-5 MSD			Worklist Smp#:	27
Client ID:	OW-6				
Purge Vol:	5.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	26
Method:	8260_10	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\UXX2024.D
Lims ID: 240-113949-E-5 MSD
Client ID: OW-6
Sample Type: MSD
Inject. Date: 18-Jun-2019 21:55:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0088238-027
Operator ID: 001644 Instrument ID: A3UX10

Method: \\chromna\Canton\ChromData\A3UX10\20190618-88238.b\8260_10.m
Limit Group: MSV 8260B ICAL
Last Update: 19-Jun-2019 10:25:31 Calib Date: 05-Apr-2019 23:49:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX10\20190405-85857.b\240-0085857-017.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0316

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	10.5	105.12
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	109.74
$ 6 Toluene-d8 (Surr)	10.0	8.96	89.60
$ 7 4-Bromofluorobenzene (Surr)	10.0	10.1	100.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-18 MSD Lab Sample ID: 240-113949-8 MSD

Matrix: Water Lab File ID: UXR8621.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 21:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	10.7		1.0
79-34-5	1,1,2,2-Tetrachloroethane	9.51		1.0
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.84		1.0
79-00-5	1,1,2-Trichloroethane	9.61		1.0
75-34-3	1,1-Dichloroethane	9.86		1.0
75-35-4	1,1-Dichloroethene	9.38		1.0
120-82-1	1,2,4-Trichlorobenzene	9.40		1.0
96-12-8	1,2-Dibromo-3-Chloropropane	9.47		2.0
95-50-1	1,2-Dichlorobenzene	9.52		1.0
107-06-2	1,2-Dichloroethane	10.0		1.0
78-87-5	1,2-Dichloropropane	9.72		1.0
541-73-1	1,3-Dichlorobenzene	9.06		1.0
106-46-7	1,4-Dichlorobenzene	9.74		1.0
78-93-3	2-Butanone (MEK)	17.4		10
591-78-6	2-Hexanone	20.1		10
108-10-1	4-Methyl-2-pentanone (MIBK)	19.7		10
67-64-1	Acetone	21.1		10
71-43-2	Benzene	11.3		1.0
75-25-2	Bromoform	9.77		1.0
74-83-9	Bromomethane	6.46		1.0
75-15-0	Carbon disulfide	9.42		1.0
56-23-5	Carbon tetrachloride	10.9		1.0
108-90-7	Chlorobenzene	21.0		1.0
124-48-1	Chlorodibromomethane	10.2		1.0
75-00-3	Chloroethane	8.16		1.0
67-66-3	Chloroform	9.91		1.0
74-87-3	Chloromethane	10.7		1.0
156-59-2	cis-1,2-Dichloroethene	9.34		1.0
10061-01-5	cis-1,3-Dichloropropene	8.95		1.0
110-82-7	Cyclohexane	9.32		1.0
75-71-8	Dichlorodifluoromethane	7.86		1.0
75-27-4	Dichlorobromomethane	10.2		1.0
100-41-4	Ethylbenzene	10.4		1.0
98-82-8	Isopropylbenzene	9.95		1.0
79-20-9	Methyl acetate	16.7		10
108-87-2	Methylcyclohexane	8.86		1.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Client Sample ID: OW-18 MSD Lab Sample ID: 240-113949-8 MSD

Matrix: Water Lab File ID: UXR8621.D

Analysis Method: 8260B Date Collected: 06/06/2019 10:15

Sample wt/vol: 5(mL) Date Analyzed: 06/19/2019 21:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 386999 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL
1634-04-4	Methyl tert-butyl ether	9.53		1.0
75-09-2	Methylene Chloride	9.76		5.0
100-42-5	Styrene	10.0		1.0
127-18-4	Tetrachloroethene	8.80		1.0
108-88-3	Toluene	9.46		1.0
156-60-5	trans-1,2-Dichloroethene	10.2		1.0
10061-02-6	trans-1,3-Dichloropropene	9.01		1.0
79-01-6	Trichloroethene	9.37		1.0
75-69-4	Trichlorofluoromethane	8.78		1.0
75-01-4	Vinyl chloride	9.73		1.0
1330-20-7	Xylenes, Total	21.2		2.0
106-93-4	Ethylene Dibromide	9.45		1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	81		70-123
1868-53-7	Dibromofluoromethane (Surr)	82		75-128
460-00-4	4-Bromofluorobenzene (Surr)	87		59-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		70-121

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8621.D
Lims ID: 240-113949-A-8 MSD
Client ID:
Sample Type: MSD
Inject. Date: 19-Jun-2019 21:31:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-029
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.775	5.775	0.000	98	1428301	10.0	10.0	
* 2 Chlorobenzene-d5	117	8.467	8.467	0.000	87	1045781	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.000	95	620891	10.0	10.0	
$ 4 Dibromofluoromethane (Surr	113	5.206	5.194	0.012	93	273707	10.0	8.18	
$ 5 1,2-Dichloroethane-d4 (Sur	65	5.502	5.490	0.012	98	403937	10.0	8.43	
$ 6 Toluene-d8 (Surr)	98	7.151	7.151	0.000	94	1095554	10.0	8.08	
$ 7 4-Bromofluorobenzene (Surr	95	9.582	9.582	0.000	87	435405	10.0	8.67	
9 Dichlorodifluoromethane	85	1.696	1.696	0.000	99	392557	10.0	7.86	
10 Chloromethane	50	1.886	1.885	0.001	99	618456	10.0	10.7	
11 Vinyl chloride	62	2.004	2.004	0.000	97	475295	10.0	9.73	
12 Bromomethane	94	2.360	2.360	0.000	91	178414	10.0	6.46	
13 Chloroethane	64	2.467	2.467	0.001	99	229304	10.0	8.16	
15 Trichlorofluoromethane	101	2.716	2.716	0.000	98	588706	10.0	8.78	
19 1,1-Dichloroethene	96	3.202	3.214	-0.012	95	329210	10.0	9.38	
20 1,1,2-Trichloro-1,2,2-trif	151	3.226	3.237	-0.011	93	256416	10.0	9.84	
21 Acetone	43	3.273	3.273	0.000	99	174602	20.0	21.1	
23 Carbon disulfide	76	3.415	3.427	-0.012	100	921306	10.0	9.42	
26 Methyl acetate	43	3.569	3.569	0.000	99	394340	20.0	16.7	
27 Methylene Chloride	84	3.664	3.664	0.000	98	364048	10.0	9.76	
30 Methyl tert-butyl ether	73	3.901	3.901	0.000	88	719428	10.0	9.53	
31 trans-1,2-Dichloroethene	96	3.913	3.913	0.000	96	375410	10.0	10.2	
33 1,1-Dichloroethane	63	4.293	4.281	0.012	97	679163	10.0	9.86	
39 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	87	376841	10.0	9.34	
40 2-Butanone (MEK)	43	4.803	4.803	0.000	99	216471	20.0	17.4	
46 Chloroform	83	5.064	5.064	0.000	93	670922	10.0	9.91	
47 1,1,1-Trichloroethane	97	5.218	5.218	0.000	97	529655	10.0	10.7	
48 Cyclohexane	56	5.265	5.265	0.000	93	637922	10.0	9.32	
50 Carbon tetrachloride	117	5.360	5.360	0.000	90	477478	10.0	10.9	
52 Benzene	78	5.538	5.538	0.000	98	1759332	10.0	11.3	
53 1,2-Dichloroethane	62	5.562	5.562	0.000	97	580990	10.0	10.0	
57 Trichloroethene	130	6.083	6.083	0.000	96	357061	10.0	9.37	
59 Methylcyclohexane	83	6.249	6.249	0.000	95	493135	10.0	8.86	
60 1,2-Dichloropropane	63	6.285	6.285	0.000	94	374840	10.0	9.72	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 Dichlorobromomethane	83	6.522	6.522	0.000	99	452476	10.0	10.2	
67 cis-1,3-Dichloropropene	75	6.914	6.913	0.001	93	406438	10.0	8.95	
68 4-Methyl-2-pentanone (MIBK	43	7.032	7.032	0.000	97	452803	20.0	19.7	
69 Toluene	91	7.210	7.210	0.000	98	1564673	10.0	9.46	
70 trans-1,3-Dichloropropene	75	7.400	7.400	0.000	96	366255	10.0	9.01	
72 1,1,2-Trichloroethane	97	7.566	7.566	0.000	94	295141	10.0	9.61	
73 Tetrachloroethene	164	7.696	7.708	-0.012	95	290190	10.0	8.80	
76 2-Hexanone	43	7.779	7.779	0.000	96	305251	20.0	20.1	
78 Chlorodibromomethane	129	7.933	7.933	0.000	90	293898	10.0	10.2	
79 Ethylene Dibromide	107	8.052	8.052	0.000	99	263201	10.0	9.45	
81 Chlorobenzene	112	8.503	8.502	0.001	94	2238990	10.0	21.0	
83 Ethylbenzene	106	8.586	8.585	0.001	99	556997	10.0	10.4	
84 m-Xylene & p-Xylene	106	8.692	8.692	0.000	100	719409	10.0	10.8	
85 o-Xylene	106	9.072	9.072	0.000	98	636103	10.0	10.4	
86 Styrene	104	9.084	9.084	0.000	94	1063365	10.0	10.0	
87 Bromoform	173	9.285	9.285	0.000	96	155422	10.0	9.77	
89 Isopropylbenzene	105	9.428	9.416	0.012	96	1622969	10.0	9.95	
91 1,1,2,2-Tetrachloroethane	83	9.712	9.712	0.000	96	343398	10.0	9.51	
103 1,3-Dichlorobenzene	146	10.649	10.649	0.000	96	839549	10.0	9.06	
105 1,4-Dichlorobenzene	146	10.744	10.744	0.000	95	961740	10.0	9.74	
109 1,2-Dichlorobenzene	146	11.111	11.111	0.000	96	840875	10.0	9.52	
111 1,2-Dibromo-3-Chloropropan	157	11.894	11.894	0.000	77	46023	10.0	9.47	
113 1,2,4-Trichlorobenzene	180	12.724	12.724	0.000	94	428261	10.0	9.40	
S 130 Xylenes, Total	106				0		20.0	21.2	

Reagents:

VMFASAW_00285	Amount Added:	8.00	Units: uL	
VMFASGW_00313	Amount Added:	8.00	Units: uL	
VMFASPW_00304	Amount Added:	8.00	Units: uL	
vm40ml_vials_00013	Amount Added:	0.00	Units:	Run Reagent
vmDist_H2o_00148	Amount Added:	0.00	Units:	Run Reagent
vm50is_stk_A_00004	Amount Added:	1.00	Units: uL	Run Reagent
vm50ss_stk_00081	Amount Added:	1.00	Units: uL	Run Reagent

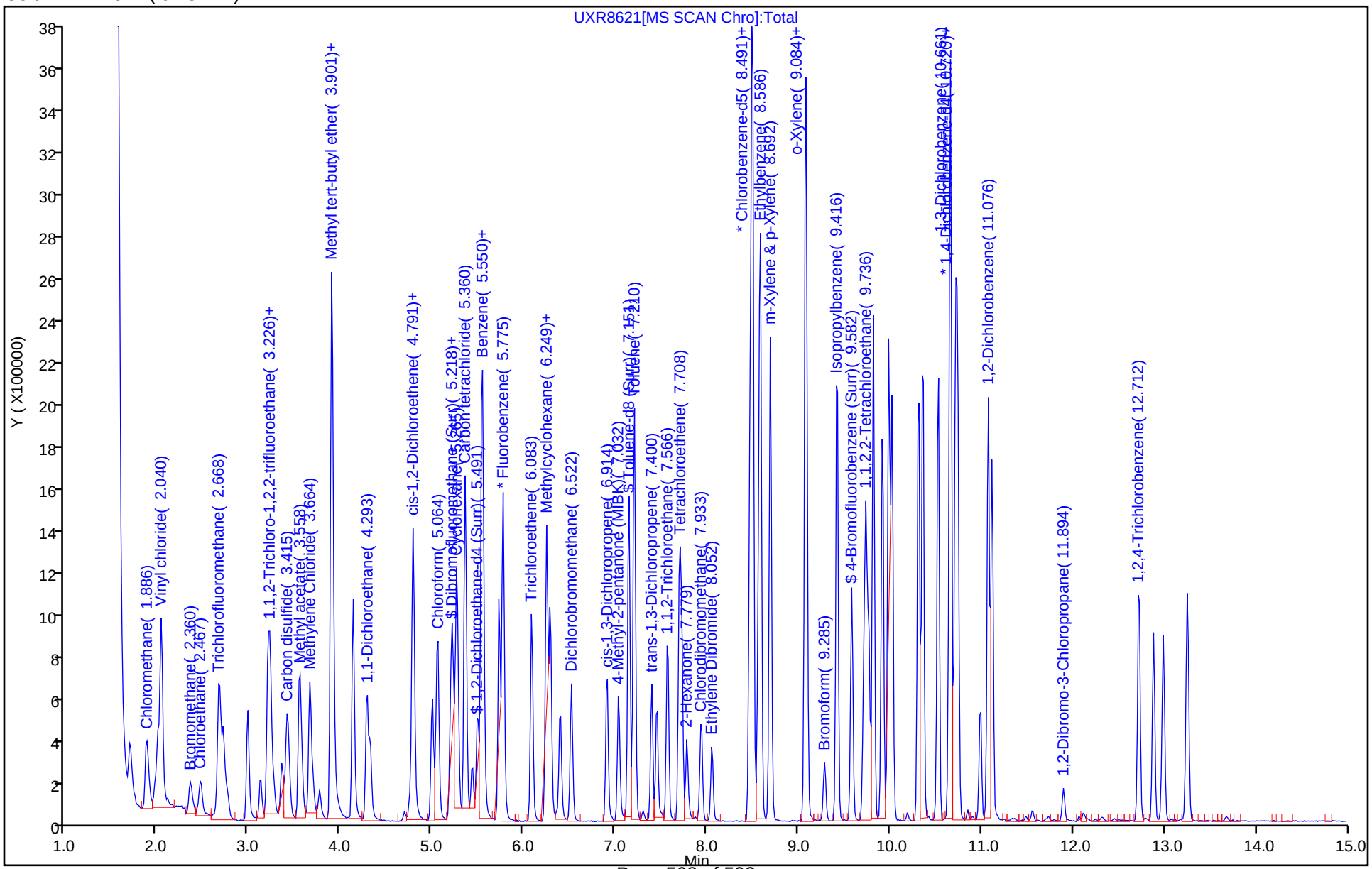
Report Date: 20-Jun-2019 11:34:22 Chrom Revision: 2.3 18-Jun-2019 21:44:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8621.D

Injection Date:	19-Jun-2019 21:31:30	Instrument ID:	A3UX17	Operator ID:	001644
Lims ID:	240-113949-A-8 MSD			Worklist Smp#:	29
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8260_17	Limit Group:	MSV 8260B ICAL		

Column: DB-624 (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\UXR8621.D
Lims ID: 240-113949-A-8 MSD
Client ID:
Sample Type: MSD
Inject. Date: 19-Jun-2019 21:31:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0088286-029
Operator ID: 001644 Instrument ID: A3UX17

Method: \\chromna\Canton\ChromData\A3UX17\20190619-88286.b\8260_17.m
Limit Group: MSV 8260B ICAL
Last Update: 20-Jun-2019 11:32:49 Calib Date: 11-Jun-2019 23:10:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX17\20190611-88015.b\UXR8424.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Dibromofluoromethane (Surr)	10.0	8.18	81.83
$ 5 1,2-Dichloroethane-d4 (Surr)	10.0	8.43	84.30
$ 6 Toluene-d8 (Surr)	10.0	8.08	80.83
$ 7 4-Bromofluorobenzene (Surr)	10.0	8.67	86.75

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX11 Start Date: 02/07/2019 12:42

Analysis Batch Number: 367104 End Date: 02/07/2019 21:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-367104/1		02/07/2019 12:42	1	BFB0207A.D	DB-624 0.18(mm)
STD8260 240-367104/2 IC		02/07/2019 13:09	1	UXJ8021.D	DB-624 0.18(mm)
STD8260 240-367104/3 IC		02/07/2019 13:31	1	UXJ8022.D	DB-624 0.18(mm)
STD8260 240-367104/4 ICIS		02/07/2019 13:53	1	UXJ8023.D	DB-624 0.18(mm)
STD8260 240-367104/5 IC		02/07/2019 14:15	1	UXJ8024.D	DB-624 0.18(mm)
STD8260 240-367104/6 IC		02/07/2019 14:38	1	UXJ8025.D	DB-624 0.18(mm)
STD8260 240-367104/7 IC		02/07/2019 15:00	1	UXJ8026.D	DB-624 0.18(mm)
ICV 240-367104/14		02/07/2019 15:22	1	UXJ8027.D	DB-624 0.18(mm)
STD6 240-367104/8 IC		02/07/2019 15:44	1		DB-624 0.18(mm)
STD5 240-367104/9 IC		02/07/2019 16:06	1		DB-624 0.18(mm)
STD4 240-367104/10 IC		02/07/2019 16:28	1		DB-624 0.18(mm)
STD3 240-367104/11 IC		02/07/2019 16:51	1		DB-624 0.18(mm)
STD2 240-367104/12 IC		02/07/2019 17:13	1		DB-624 0.18(mm)
STD1 240-367104/13 IC		02/07/2019 17:35	1		DB-624 0.18(mm)
ICV 240-367104/15		02/07/2019 17:58	1	UXJ8034.D	DB-624 0.18(mm)
STD 240-367104/16 IC		02/07/2019 18:20	1		DB-624 0.18(mm)
STD 240-367104/17 IC		02/07/2019 18:42	1		DB-624 0.18(mm)
STD 240-367104/18 IC		02/07/2019 19:04	1		DB-624 0.18(mm)
STD 240-367104/19 IC		02/07/2019 19:25	1		DB-624 0.18(mm)
STD 240-367104/20 IC		02/07/2019 19:47	1		DB-624 0.18(mm)
STD 240-367104/21 IC		02/07/2019 20:09	1		DB-624 0.18(mm)
240-106802-A-1 MDLV		02/07/2019 20:32	1		DB-624 0.18(mm)
240-106802-A-1 MDLV		02/07/2019 20:54	1		DB-624 0.18(mm)
MRL 240-367104/24 MDLV		02/07/2019 21:16	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX10 Start Date: 04/05/2019 17:14

Analysis Batch Number: 375006 End Date: 04/05/2019 23:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-375006/23		04/05/2019 17:14	1	BFB1278.D	DB-624 0.18(mm)
STD8260 240-375006/3 IC		04/05/2019 18:02	1	240-0085857-003 .D	DB-624 0.18(mm)
STD8260 240-375006/4 IC		04/05/2019 18:27	1	240-0085857-004 .D	DB-624 0.18(mm)
STD8260 240-375006/5 ICIS		04/05/2019 18:51	1	240-0085857-005 .D	DB-624 0.18(mm)
STD8260 240-375006/6 IC		04/05/2019 19:16	1	240-0085857-006 .D	DB-624 0.18(mm)
STD8260 240-375006/7 IC		04/05/2019 19:41	1	240-0085857-007 .D	DB-624 0.18(mm)
STD8260 240-375006/8 IC		04/05/2019 20:06	1	240-0085857-008 .D	DB-624 0.18(mm)
STD8260 240-375006/9 IC		04/05/2019 20:30	1	240-0085857-009 .D	DB-624 0.18(mm)
ICV 240-375006/10		04/05/2019 20:55	1	240-0085857-010 .D	DB-624 0.18(mm)
STDA9 240-375006/11 IC		04/05/2019 21:20	1		DB-624 0.18(mm)
STDA9 240-375006/12 IC		04/05/2019 21:45	1		DB-624 0.18(mm)
STDA9 240-375006/13 IC		04/05/2019 22:10	1		DB-624 0.18(mm)
STDA9 240-375006/14 IC		04/05/2019 22:35	1		DB-624 0.18(mm)
STDA9 240-375006/15 IC		04/05/2019 23:00	1		DB-624 0.18(mm)
STDA9 240-375006/16 IC		04/05/2019 23:25	1		DB-624 0.18(mm)
STDA9 240-375006/17 IC		04/05/2019 23:49	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX10 Start Date: 04/08/2019 10:16

Analysis Batch Number: 375255 End Date: 04/08/2019 21:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-375255/1		04/08/2019 10:16	1	BFB1279.D	DB-624 0.18(mm)
CCVIS 240-375255/3		04/08/2019 11:04	1		DB-624 0.18(mm)
CCV 240-375255/4		04/08/2019 11:29	1		DB-624 0.18(mm)
ICV 240-375255/5		04/08/2019 11:54	1	240-0085913-005 .D	DB-624 0.18(mm)
ZZZZZ		04/08/2019 12:20	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 12:45	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 13:09	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 13:34	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 13:59	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 14:24	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 14:49	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 15:14	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 15:39	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 16:04	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 16:30	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 16:54	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 17:19	5		DB-624 0.18(mm)
ZZZZZ		04/08/2019 18:09	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 18:34	1		DB-624 0.18(mm)
ZZZZZ		04/08/2019 18:58	50		DB-624 0.18(mm)
ZZZZZ		04/08/2019 19:23	13.333		DB-624 0.18(mm)
ZZZZZ		04/08/2019 19:48	13.333		DB-624 0.18(mm)
ZZZZZ		04/08/2019 20:13	13.333		DB-624 0.18(mm)
ZZZZZ		04/08/2019 21:02	50		DB-624 0.18(mm)
ZZZZZ		04/08/2019 21:27	100		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX17 Start Date: 06/11/2019 17:04

Analysis Batch Number: 385628 End Date: 06/11/2019 23:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-385628/1		06/11/2019 17:04	1	BFB2536.D	DB-624 0.18(mm)
STD8260 240-385628/2 IC		06/11/2019 17:37	1	UXR8410.D	DB-624 0.18(mm)
STD8260 240-385628/3 IC		06/11/2019 18:01	1	UXR8411.D	DB-624 0.18(mm)
STD8260 240-385628/4 ICIS		06/11/2019 18:25	1	UXR8412.D	DB-624 0.18(mm)
STD8260 240-385628/5 IC		06/11/2019 18:49	1	UXR8413.D	DB-624 0.18(mm)
STD8260 240-385628/6 IC		06/11/2019 19:12	1	UXR8414.D	DB-624 0.18(mm)
STD8260 240-385628/7 IC		06/11/2019 19:36	1	UXR8415.D	DB-624 0.18(mm)
STD8260 240-385628/8 IC		06/11/2019 20:00	1	UXR8416.D	DB-624 0.18(mm)
ICV 240-385628/9		06/11/2019 20:24	1	UXR8417.D	DB-624 0.18(mm)
STDA9 240-385628/10 IC		06/11/2019 20:48	1		DB-624 0.18(mm)
STDA9 240-385628/11 IC		06/11/2019 21:11	1		DB-624 0.18(mm)
STDA9 240-385628/12 IC		06/11/2019 21:35	1		DB-624 0.18(mm)
STDA9 240-385628/13 IC		06/11/2019 21:59	1		DB-624 0.18(mm)
STDA9 240-385628/14 IC		06/11/2019 22:23	1		DB-624 0.18(mm)
STDA9 240-385628/15 IC		06/11/2019 22:47	1		DB-624 0.18(mm)
STDA9 240-385628/16 IC		06/11/2019 23:10	1		DB-624 0.18(mm)
ICV 240-385628/17		06/11/2019 23:34	1	UXR8425.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX11 Start Date: 06/17/2019 07:28

Analysis Batch Number: 386483 End Date: 06/17/2019 18:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-386483/1		06/17/2019 07:28	1	BFB0617B.D	DB-624 0.18(mm)
CCVIS 240-386483/2		06/17/2019 07:57	1	UXJ1404.D	DB-624 0.18(mm)
LCS 240-386483/4		06/17/2019 08:19	1	UXJ1405.D	DB-624 0.18(mm)
CCV 240-386483/3		06/17/2019 08:41	1	UXJ1406.D	DB-624 0.18(mm)
MRL 240-386483/5 MDLV		06/17/2019 09:03	1		DB-624 0.18(mm)
MRL 240-386483/7 MDLV		06/17/2019 09:25	1		DB-624 0.18(mm)
MB 240-386483/6		06/17/2019 09:47	1	UXJ1409.D	DB-624 0.18(mm)
ZZZZZ		06/17/2019 10:32	2500		DB-624 0.18(mm)
ZZZZZ		06/17/2019 10:54	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 11:17	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 11:39	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 12:01	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 12:24	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 12:46	33.33		DB-624 0.18(mm)
ZZZZZ		06/17/2019 13:08	33.33		DB-624 0.18(mm)
ZZZZZ		06/17/2019 13:31	33.33		DB-624 0.18(mm)
ZZZZZ		06/17/2019 13:53	50		DB-624 0.18(mm)
ZZZZZ		06/17/2019 14:15	33.33		DB-624 0.18(mm)
ZZZZZ		06/17/2019 14:37	33.33		DB-624 0.18(mm)
ZZZZZ		06/17/2019 15:00	5		DB-624 0.18(mm)
ZZZZZ		06/17/2019 15:22	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 15:44	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 16:06	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 16:29	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 16:51	1		DB-624 0.18(mm)
ZZZZZ		06/17/2019 17:13	1		DB-624 0.18(mm)
240-113949-1		06/17/2019 17:36	1	UXJ1430.D	DB-624 0.18(mm)
240-113949-2		06/17/2019 17:58	1	UXJ1431.D	DB-624 0.18(mm)
240-113949-14		06/17/2019 18:20	1	UXJ1432.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX10 Start Date: 06/18/2019 11:04

Analysis Batch Number: 386760 End Date: 06/18/2019 22:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-386760/1		06/18/2019 11:04	1	BFB1362.D	DB-624 0.18(mm)
CCVIS 240-386760/2		06/18/2019 11:29	1	UXX1999.D	DB-624 0.18(mm)
CCV 240-386760/3		06/18/2019 11:54	1	UXX2000.D	DB-624 0.18(mm)
LCS 240-386760/4		06/18/2019 12:19	1	UXX2001.D	DB-624 0.18(mm)
MRL 240-386760/5 MDLV		06/18/2019 12:43	1		DB-624 0.18(mm)
MRL 240-386760/6 MDLV		06/18/2019 13:09	1		DB-624 0.18(mm)
MB 240-386760/7		06/18/2019 13:34	1	UXX2004.D	DB-624 0.18(mm)
ZZZZZ		06/18/2019 13:58	2.5		DB-624 0.18(mm)
ZZZZZ		06/18/2019 14:23	20		DB-624 0.18(mm)
ZZZZZ		06/18/2019 14:48	33.33		DB-624 0.18(mm)
ZZZZZ		06/18/2019 15:13	13.33		DB-624 0.18(mm)
ZZZZZ		06/18/2019 15:38	142.86		DB-624 0.18(mm)
ZZZZZ		06/18/2019 16:03	200		DB-624 0.18(mm)
ZZZZZ		06/18/2019 16:27	200		DB-624 0.18(mm)
240-113949-5		06/18/2019 16:55	2	UXX2012.D	DB-624 0.18(mm)
ZZZZZ		06/18/2019 17:20	1		DB-624 0.18(mm)
ZZZZZ		06/18/2019 17:47	1		DB-624 0.18(mm)
ZZZZZ		06/18/2019 18:12	2		DB-624 0.18(mm)
ZZZZZ		06/18/2019 18:37	3.33		DB-624 0.18(mm)
ZZZZZ		06/18/2019 19:02	1		DB-624 0.18(mm)
ZZZZZ		06/18/2019 19:27	13.33		DB-624 0.18(mm)
ZZZZZ		06/18/2019 19:51	20		DB-624 0.18(mm)
ZZZZZ		06/18/2019 20:16	20		DB-624 0.18(mm)
240-113949-3		06/18/2019 20:41	1	UXX2021.D	DB-624 0.18(mm)
240-113949-4		06/18/2019 21:06	1	UXX2022.D	DB-624 0.18(mm)
240-113949-5 MS		06/18/2019 21:30	2	UXX2023.D	DB-624 0.18(mm)
240-113949-5 MSD		06/18/2019 21:55	2	UXX2024.D	DB-624 0.18(mm)
240-113949-6		06/18/2019 22:19	2.5	UXX2025.D	DB-624 0.18(mm)
240-113949-7		06/18/2019 22:44	1	UXX2026.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Instrument ID: A3UX17 Start Date: 06/19/2019 10:22

Analysis Batch Number: 386999 End Date: 06/19/2019 21:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-386999/1		06/19/2019 10:22	1	BFB2546.D	DB-624 0.18(mm)
CCVIS 240-386999/2		06/19/2019 10:46	1	UXR8594.D	DB-624 0.18(mm)
CCV 240-386999/3		06/19/2019 11:10	1	UXR8595.D	DB-624 0.18(mm)
LCS 240-386999/4		06/19/2019 11:34	1	UXR8596.D	DB-624 0.18(mm)
MRL 240-386999/5 MDLV		06/19/2019 11:58	1		DB-624 0.18(mm)
MRL 240-386999/6 MDLV		06/19/2019 12:21	1		DB-624 0.18(mm)
MB 240-386999/7		06/19/2019 12:45	1	UXR8599.D	DB-624 0.18(mm)
ZZZZZ		06/19/2019 13:09	25		DB-624 0.18(mm)
ZZZZZ		06/19/2019 13:33	1		DB-624 0.18(mm)
240-113949-8		06/19/2019 13:57	1	UXR8602.D	DB-624 0.18(mm)
240-113949-9		06/19/2019 14:21	1	UXR8603.D	DB-624 0.18(mm)
240-113949-10		06/19/2019 14:45	1	UXR8604.D	DB-624 0.18(mm)
240-113949-11		06/19/2019 15:09	1	UXR8605.D	DB-624 0.18(mm)
240-113949-12		06/19/2019 15:33	1	UXR8606.D	DB-624 0.18(mm)
240-113949-13		06/19/2019 15:57	1	UXR8607.D	DB-624 0.18(mm)
ZZZZZ		06/19/2019 16:21	1		DB-624 0.18(mm)
ZZZZZ		06/19/2019 17:32	2.5		DB-624 0.18(mm)
ZZZZZ		06/19/2019 18:44	1		DB-624 0.18(mm)
ZZZZZ		06/19/2019 19:08	50		DB-624 0.18(mm)
ZZZZZ		06/19/2019 19:32	1		DB-624 0.18(mm)
ZZZZZ		06/19/2019 19:56	1		DB-624 0.18(mm)
ZZZZZ		06/19/2019 20:44	250		DB-624 0.18(mm)
240-113949-8 MS		06/19/2019 21:07	1	UXR8620.D	DB-624 0.18(mm)
240-113949-8 MSD		06/19/2019 21:31	1	UXR8621.D	DB-624 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 367104 Batch Start Date: 02/07/19 12:42 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00002	vm50ss_stk 00079	VMAROLISTDW 00283	vmbfb 00021
BFB 240-367104/1		8260B		5 mL	5 mL				1 uL
STD8260 240-367104/2 IC		8260B		5 mL	5 mL	2 uL	32 uL	32 uL	
STD8260 240-367104/3 IC		8260B		5 mL	5 mL	2 uL	16 uL	16 uL	
STD8260 240-367104/4 ICIS		8260B		5 mL	5 mL	2 uL	8 uL	8 uL	
STD8260 240-367104/5 IC		8260B		5 mL	5 mL	2 uL	4 uL	4 uL	
STD8260 240-367104/6 IC		8260B		5 mL	5 mL	2 uL	1.6 uL	1.6 uL	
STD8260 240-367104/7 IC		8260B		5 mL	5 mL	2 uL	0.8 uL	0.8 uL	
ICV 240-367104/14		8260B		5 mL	5 mL	2 uL	2 uL		
ICV 240-367104/15		8260B		5 mL	5 mL	2 uL	2 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00218	VMFASAW 00266	VMFASGW 00295	VMFASPW 00287	VMRGAS 00281	VMRPRIMW 00320
BFB 240-367104/1		8260B							
STD8260 240-367104/2 IC		8260B						32 uL	32 uL
STD8260 240-367104/3 IC		8260B						16 uL	16 uL
STD8260 240-367104/4 ICIS		8260B						8 uL	8 uL
STD8260 240-367104/5 IC		8260B						4 uL	4 uL
STD8260 240-367104/6 IC		8260B						1.6 uL	1.6 uL
STD8260 240-367104/7 IC		8260B						0.8 uL	0.8 uL
ICV 240-367104/14		8260B			8 uL	8 uL	8 uL		
ICV 240-367104/15		8260B		8 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 367104 Batch Start Date: 02/07/19 12:42 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 375006 Batch Start Date: 04/05/19 17:14 Batch Analyst: Macenczak, Steven

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00075	vm50ss 00359	VMAROLISTDW 00291	vmbfb 00021
STD8260 240-375006/3 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-375006/4 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-375006/5 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-375006/6 IC		8260B		5 mL	5 mL	1 uL	6 uL	6 uL	
STD8260 240-375006/7 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-375006/8 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-375006/9 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-375006/10		8260B		5 mL	5 mL	1 uL	8 uL		
BFB 240-375006/23		8260B		5 mL	5 mL				1 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASAW 00274	VMFASGW 00303	VMFASPW 00294	VMRGAS 00287	VMRPRIMW 00328	
STD8260 240-375006/3 IC		8260B					32 uL	32 uL	
STD8260 240-375006/4 IC		8260B					16 uL	16 uL	
STD8260 240-375006/5 ICIS		8260B					8 uL	8 uL	
STD8260 240-375006/6 IC		8260B					6 uL	6 uL	
STD8260 240-375006/7 IC		8260B					4 uL	4 uL	
STD8260 240-375006/8 IC		8260B					1.6 uL	1.6 uL	
STD8260 240-375006/9 IC		8260B					0.8 uL	0.8 uL	
ICV 240-375006/10		8260B		8 uL	8 uL	8 uL			
BFB 240-375006/23		8260B							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 375006 Batch Start Date: 04/05/19 17:14 Batch Analyst: Macenczak, Steven

Batch Method: 8260B Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 375255 Batch Start Date: 04/08/19 10:16 Batch Analyst: Macenczak, Steven

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM50IS 00075	vm50ss_stk 00080	vmbfb 00021	VMFASA9W 00226
BFB 240-375255/1		8260B		5 mL	5 mL			1 uL	
ICV 240-375255/5		8260B		5 mL	5 mL	1 uL	1 uL		8 uL

Batch Notes	
pH Indicator ID	HC869997

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 385628 Batch Start Date: 06/11/19 17:04 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00004	vm50ss 00366	VMAROLISTDW 00300	vmbfb 00023
BFB 240-385628/1		8260B		5 mL	5 mL				1 uL
STD8260 240-385628/2 IC		8260B		5 mL	5 mL	1 uL	32 uL	32 uL	
STD8260 240-385628/3 IC		8260B		5 mL	5 mL	1 uL	16 uL	16 uL	
STD8260 240-385628/4 ICIS		8260B		5 mL	5 mL	1 uL	8 uL	8 uL	
STD8260 240-385628/5 IC		8260B		5 mL	5 mL	1 uL	4 uL	4 uL	
STD8260 240-385628/6 IC		8260B		5 mL	5 mL	1 uL	3.2 uL	3.2 uL	
STD8260 240-385628/7 IC		8260B		5 mL	5 mL	1 uL	1.6 uL	1.6 uL	
STD8260 240-385628/8 IC		8260B		5 mL	5 mL	1 uL	0.8 uL	0.8 uL	
ICV 240-385628/9		8260B		5 mL	5 mL	1 uL			
ICV 240-385628/17		8260B		5 mL	5 mL	1 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00234	VMFASAW 00284	VMFASGW 00312	VMFASPW 00303	VMRGAS 00296	VMRPRIMW 00338
BFB 240-385628/1		8260B							
STD8260 240-385628/2 IC		8260B						32 uL	32 uL
STD8260 240-385628/3 IC		8260B						16 uL	16 uL
STD8260 240-385628/4 ICIS		8260B						8 uL	8 uL
STD8260 240-385628/5 IC		8260B						4 uL	4 uL
STD8260 240-385628/6 IC		8260B						3.2 uL	3.2 uL
STD8260 240-385628/7 IC		8260B						1.6 uL	1.6 uL
STD8260 240-385628/8 IC		8260B						0.8 uL	0.8 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 385628 Batch Start Date: 06/11/19 17:04 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASA9W 00234	VMFASAW 00284	VMFASGW 00312	VMFASPW 00303	VMRGAS 00296	VMRPRIMW 00338
ICV 240-385628/9		8260B			8 uL	8 uL	8 uL		
ICV 240-385628/17		8260B		8 uL					

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 386483 Batch Start Date: 06/17/19 07:28 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VM50IS 00076	vm50ss_stk 00080	VMAROLISTDW 00301
BFB 240-386483/1		8260B		5 mL	5 mL				
CCVIS 240-386483/2		8260B		5 mL	5 mL		2 uL	2 uL	8 uL
CCV 240-386483/3		8260B		5 mL	5 mL		2 uL		
LCS 240-386483/4		8260B		5 mL	5 mL		2 uL	2 uL	
MB 240-386483/6		8260B		5 mL	5 mL		2 uL	2 uL	
240-113949-B-1	OW-5	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-113949-B-2	OW-5 DUP	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	
240-113949-A-14	TRIP BLANK	8260B	T	5 mL	5 mL	<2 SU	2 uL	2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00023	VMFASAW 00285	VMFASGW 00313	VMFASPW 00303	VMRA9W 00302	VMRGAS 00297
BFB 240-386483/1		8260B		1 uL					
CCVIS 240-386483/2		8260B							8 uL
CCV 240-386483/3		8260B						8 uL	
LCS 240-386483/4		8260B			8 uL	8 uL	8 uL		
MB 240-386483/6		8260B							
240-113949-B-1	OW-5	8260B	T						
240-113949-B-2	OW-5 DUP	8260B	T						
240-113949-A-14	TRIP BLANK	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00341					
BFB 240-386483/1		8260B							
CCVIS 240-386483/2		8260B		8 uL					
CCV 240-386483/3		8260B							
LCS 240-386483/4		8260B							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 386483 Batch Start Date: 06/17/19 07:28 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00341					
MB 240-386483/6		8260B							
240-113949-B-1	OW-5	8260B	T						
240-113949-B-2	OW-5 DUP	8260B	T						
240-113949-A-14	TRIP BLANK	8260B	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 386760 Batch Start Date: 06/18/19 11:04 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00004	vm50ss_stk 00081	VMAROLISTDW 00301
BFB 240-386760/1		8260B		5 mL	5 mL				
CCVIS 240-386760/2		8260B		5 mL	5 mL		1 uL	1 uL	8 uL
CCV 240-386760/3		8260B		5 mL	5 mL		1 uL		
LCS 240-386760/4		8260B		5 mL	5 mL		1 uL	1 uL	
MB 240-386760/7		8260B		5 mL	5 mL		1 uL	1 uL	
240-113949-B-5	OW-6	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-3	OW-10R	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-4	OW-13R	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-E-5 MS	OW-6	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-E-5 MSD	OW-6	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-6	OW-2	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-7	OW-24	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMBFB 00023	VMFASAW 00285	VMFASGW 00313	VMFASPW 00303	VMRA9W 00302	VMRGAS 00297
BFB 240-386760/1		8260B		1 uL					
CCVIS 240-386760/2		8260B							8 uL
CCV 240-386760/3		8260B						8 uL	
LCS 240-386760/4		8260B			8 uL	8 uL	8 uL		
MB 240-386760/7		8260B							
240-113949-B-5	OW-6	8260B	T						
240-113949-B-3	OW-10R	8260B	T						
240-113949-B-4	OW-13R	8260B	T						
240-113949-E-5 MS	OW-6	8260B	T		8 uL	8 uL	8 uL		
240-113949-E-5 MSD	OW-6	8260B	T		8 uL	8 uL	8 uL		
240-113949-B-6	OW-2	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 386760 Batch Start Date: 06/18/19 11:04 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMBFB 00023	VMFASAW 00285	VMFASGW 00313	VMFASPW 00303	VMRA9W 00302	VMRGAS 00297
240-113949-B-7	OW-24	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00341					
BFB 240-386760/1		8260B							
CCVIS 240-386760/2		8260B		8 uL					
CCV 240-386760/3		8260B							
LCS 240-386760/4		8260B							
MB 240-386760/7		8260B							
240-113949-B-5	OW-6	8260B	T						
240-113949-B-3	OW-10R	8260B	T						
240-113949-B-4	OW-13R	8260B	T						
240-113949-E-5 MS	OW-6	8260B	T						
240-113949-E-5 MSD	OW-6	8260B	T						
240-113949-B-6	OW-2	8260B	T						
240-113949-B-7	OW-24	8260B	T						

Batch Notes	
pH Indicator ID	hc861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 386999 Batch Start Date: 06/19/19 10:22 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	vm50is_stk_A 00004	vm50ss_stk 00081	VMAROLISTDW 00301
BFB 240-386999/1		8260B		5 mL	5 mL				
CCVIS 240-386999/2		8260B		5 mL	5 mL		1 uL	1 uL	8 uL
CCV 240-386999/3		8260B		5 mL	5 mL		1 uL		
LCS 240-386999/4		8260B		5 mL	5 mL		1 uL	1 uL	
MB 240-386999/7		8260B		5 mL	5 mL		1 uL	1 uL	
240-113949-B-8	OW-18	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-9	OW-19	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-10	PUMP BLANK	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-11	OW-22	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-12	OW-21	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-B-13	FIELD BLANK	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-C-8 MS	OW-18	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	
240-113949-A-8 MSD	OW-18	8260B	T	5 mL	5 mL	<2 SU	1 uL	1 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMBFB 00023	VMFASAW 00285	VMFASGW 00313	VMFASPW 00304	VMRA9W 00302	VMRGAS 00297
BFB 240-386999/1		8260B		1 uL					
CCVIS 240-386999/2		8260B							8 uL
CCV 240-386999/3		8260B						8 uL	
LCS 240-386999/4		8260B			8 uL	8 uL	8 uL		
MB 240-386999/7		8260B							
240-113949-B-8	OW-18	8260B	T						
240-113949-B-9	OW-19	8260B	T						
240-113949-B-10	PUMP BLANK	8260B	T						
240-113949-B-11	OW-22	8260B	T						
240-113949-B-12	OW-21	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-113949-1

SDG No.:

Batch Number: 386999 Batch Start Date: 06/19/19 10:22 Batch Analyst: Williams, Larry

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMBFB 00023	VMFASAW 00285	VMFASGW 00313	VMFASPW 00304	VMRA9W 00302	VMRGAS 00297
240-113949-B-13	FIELD BLANK	8260B	T						
240-113949-C-8 MS	OW-18	8260B	T		8 uL	8 uL	8 uL		
240-113949-A-8 MSD	OW-18	8260B	T		8 uL	8 uL	8 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRPRIMW 00341					
BFB 240-386999/1		8260B							
CCVIS 240-386999/2		8260B		8 uL					
CCV 240-386999/3		8260B							
LCS 240-386999/4		8260B							
MB 240-386999/7		8260B							
240-113949-B-8	OW-18	8260B	T						
240-113949-B-9	OW-19	8260B	T						
240-113949-B-10	PUMP BLANK	8260B	T						
240-113949-B-11	OW-22	8260B	T						
240-113949-B-12	OW-21	8260B	T						
240-113949-B-13	FIELD BLANK	8260B	T						
240-113949-C-8 MS	OW-18	8260B	T						
240-113949-A-8 MSD	OW-18	8260B	T						

Batch Notes	
pH Indicator ID	HC861525

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

1.6 | C1.7

Chain of Custody Record

302573

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other:

Client Contact	Project Manager: Barbara Jones	Site Contact:	Date:	COC No:
Company Name: Cardinal Resources	Tel/Fax: 412-374-0989	Lab Contact: Kris Brooks	Carrier:	1 of 2 COCs
Address: 4410 Broadway Blvd.	Analysis Turnaround Time			Sampler:
City/State/Zip: Monroeville PA 15146	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 412-374-0989	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks STANDARD TAT			Lab Sampling:
Project Name: Carroll & Dubies SF	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260B - TCL VOCs	Sample Specific Notes:
OW-5	6-4-19	16:19	G	WT	3	N	N	✓	
OW-5 DUP	6-4-19	16:20	G	WT	3	N	N	✓	
OW-10R	6-5-19	14:02	G	WT	3	N	N	✓	
OW-13R	6-5-19	15:25	G	WT	3	N	N	✓	
OW-6	6-5-19	16:25	G	WT	3	N	N	✓	
OW-6 MS	6-5-19	16:26	G	WT	3	N	N	✓	
OW-6 MSD	6-5-19	16:26	G	WT	3	N	N	✓	
OW-2	6-5-19	17:10	G	WT	3	N	N	✓	
OW-24	6-6-19	8:50	G	WT	3	N	N	✓	
OW-18	6-6-19	10:15	G	WT	3	N	N	✓	
OW-19	6-6-19	~~12:00~~ 11:40	G	WT	3	N	N	✓	
Pump Blank	6-6-19	12:00	G	WT	3	N	N	✓	

240-113949 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____
Relinquished by: Barbara J. Jones	Company: Cardinal Res	Date/Time: 6/6/2019 1 PM	Received by: TO FEDEX	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company: ETAC	Date/Time: 6-7-19 1095
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Chain of Custody Record 302135

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other:

Client Contact	Project Manager: Barbara Jones	Site Contact:	Date:	COC No:
Company Name: Cardinal Resources	Tel/Fax: 412-374-0989	Lab Contact: Kris Brooks	Carrier:	2 of 2 COCs
Address: 4410 Broadway Blvd.	Analysis Turnaround Time			Sampler:
City/State/Zip: Monroeville PA, 15146	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 412-374-0989	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Carroll & Dubois SF	☐ 1 week STANDARD			
Site:	☐ 2 days TAT			Job / SDG No.:
PO #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260B - TIC VOCs	Sample Specific Notes:
OW-22	6-6-19	14:05	G	WT	3	N	N	✓	
OW-21	6-6-19	14:50	G	WT	3	N	N	✓	
Field Blank	6-6-19	13:15	G	WT	3	N	N	✓	
TRIPBLANK (LAB)	—	—	—	—	1			✓	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Barbara N. Jones	Cardinal Res.	6/6/2019 7 PM	TO FEDEX		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
				TAC	6-7-19 1095
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 113949**
Canton Facility

Client Cardinal Resources Site Name _____ Cooler unpacked by: MM

Cooler Received on 6-7-19 Opened on 6-8-19

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 14 Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.1 °C) Observed Cooler Temp. 1.6 °C Corrected Cooler Temp. 1.7 °C
   IR GUN #36 (CF +0.6°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC984738**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B904401VB Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: MS

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

PFAS Laboratory Report

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

www.pacelabs.com

Report Prepared for:

Barbara Jones
Cardinal Resources
4410 Broadway Blvd.
Monroeville PA 15146

REPORT OF LABORATORY ANALYSIS FOR PFAAs

Report Prepared Date:
July 2, 2019

Report Information:

Pace Project #: 10478022
Sample Receipt Date: 06/06/2019
Client Project #: 104-0012
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 4 PFAA Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Kirsten Hogberg, your Pace Project Manager.

This report has been reviewed by:

July 08, 2019

Kirsten Hogberg, Project Manager
(612) 607-6407
(612) 607-6444 (fax)
kirsten.hogberg@pacelabs.com

Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.

DISCUSSION

This report presents the results from the analyses performed on six samples and two matrix spikes submitted by a representative of Cardinal Resources. The samples were analyzed for the presence or absence of twenty-four perfluorinated compounds using an isotope dilution based on DoD QSM 5.1.1. Reporting limits were set to the quantitation limits.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank was free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material.

A Laboratory spike sample was also prepared with the sample batch using clean reference matrix that had been fortified with native standards. With the exception of 8:2 FTS in LCS-71172, flagged "R", the recovery results were within the method limits. Since 8:2 FTS was not detected in the sample material and the recovery was above the method limit, which biases the result high, the results were accepted.

The RPDs (relative percent differences) between one designated Matrix Spike and its duplicate were within the method limits. However, a number of compounds were above the method limit in the MS and MSD. These deviations may be due to the presence of impacting sample matrix or sample inhomogeneity.

13C4 PFOA and 13C4 PFOS are the injection internal standards, of which both passed for each injection in the batch. The passing injection internal standards proves that the instrument detector is working as expected. However, with both elevated and diminished internal surrogate standard (IS) recoveries (outside the suggested limits), the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard.

Sample 1047802005 had elevated recovery standards (IS) recoveries (outside the suggested limits) for 13C2_4:2FTS. While the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard, in the case of the FTS compounds, the recoveries are anomalously high, and are adversely impacted by matrix. The results for these native compounds should be considered estimated only.

Results for selected analytes were taken from secondary dilutions of the sample extracts in order to reduce the impact of matrix effects. The affected values were

DISCUSSION

flagged "D" on the results tables.

It should be noted that Pace Analytical has not yet completed the certification process for all analytes in this method. Therefore, the results have been marked "N2" as qualified.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Minnesota - Pet	1240
Alabama	40770	Mississippi	MN00064
Alaska - DW	MN00064	Missouri - DW	10100
Alaska - UST	17-009	Montana	CERT0092
Arizona	AZ0014	Nebraska	NE-OS-18-06
Arkansas - DW	MN00064	Nevada	MN00064
Arkansas - WW	88-0680	New Hampshire	2081
CNMI Saipan	MP0003	New Jersey (NE	MN002
California	2929	New York	11647
Colorado	MN00064	North Carolina	27700
Connecticut	PH-0256	North Carolina -	27700
EPA Region 8+	via MN 027-053	North Carolina -	530
Florida (NELAP	E87605	North Dakota	R-036
Georgia	959	Ohio - DW	41244
Guam	17-001r	Ohio - VAP	CL101
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon - Primar	MN300001
Illinois	200011	Oregon - Secon	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky - DW	90062	South Dakota	NA
Kentucky - WW	90062	Tennessee	TN02818
Louisiana - DE	03086	Texas	T104704192
Louisiana - DW	MN00064	Utah (NELAP)	MN00064
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Massachusetts	M-MN064	West Virginia -	382
Michigan	9909	West Virginia -	9952C
Minnesota	027-053-137	Wisconsin	999407970
Minnesota - De	via MN 027-053	Wyoming - UST	2926.01

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
OW-24	10478022001	06/06/2019	Water
OW-24 DUP	10478022002	06/06/2019	Water
OW-13R	10478022003	06/06/2019	Water
OW-13R-MS	10478022003-MS	06/06/2019	Water
OW-13R-MSD	10478022003-MSD	06/06/2019	Water
OW-5	10478022005	06/06/2019	Water
Field Reagent Blank	10478022006	06/06/2019	Water
Equipment Blank	10478022007	06/06/2019	Water

REPORT OF LABORATORY ANALYSIS

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Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of 2285478

Section A Required Client Information:

Company: Cardinal Resources
Address: 4410 Broadway Blvd. Monroeville PA 15146
Email To: bjones@cardinalres.com
Phone: 412-374-0989 Fax:
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Barbara Jones
Copy To:
Purchase Order No.:
Project Name: NY Superfund
Project Number: 104-0012

Section C Invoice Information:

Attention: Barbara Jones
Company Name: Cardinal Resources
Address: 4410 Broadway Blvd., Monroeville PA 15146
Pace Quote Reference:
Pace Project Manager: Hogberg, Kirsten
Pace Profile #: 40072

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER ✓

Site Location STATE: NY

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

WO#: 10478022

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Grab COMPOSITE START DATE	COLLECTED Grab COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: PFAS	Residual	Pace Project No./ Lab I.D.
1	OW-24	WT	G	6-4-19	10 AM				2	✓								✓		001
2	OW-24 DUP	WT	G	6-4-19	10AM				2	✓								✓		002
3	OW-13R	WT	G	6-4-19	11:40				2	✓								✓		003
4	OW-13R MS	WT	G	6-4-19	11:42				2	✓								✓		~~004~~ KNH 6/7/19
5	OW-5	WT	G	6-4-19	14:45				2	✓								✓		005
6	Field Reagent Blank	WT	G	6-4-19	11:52				1	✓								✓		006
7	Equipment Blank	W	G	6-4-19	13:05				1	✓								✓		007
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Barbara J. Jones TO FEDEX	6-5-19	10AM	CourierPace	6.6.19	940	3.9	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Barbara Jones
SIGNATURE of SAMPLER: Barbara J. Jones DATE Signed (MM/DD/YY): 06/05/2019

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-C-010-rev.00, 09Nov2017

Pace Analytical	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 09May2019 Page 1 of 1
	Document No.: **F-MN-L-213-rev.28**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Cardinal Resources

Project #: WO#: 10478022

PM: KNH Due Date: 06/27/19

CLIENT: Cardinal Res

Courier: ☒Fed Ex ☐UPS ☐USPS ☐Client ☐Pace ☐SpeeDee ☐Commercial **See Exception** ☐

Tracking Number: 7475 9398 2404

Custody Seal on Cooler/Box Present? ☐Yes ☒No **Seals Intact?** ☐Yes ☒No **Biological Tissue Frozen?** ☐Yes ☐No ☒N/A

Packing Material: ☐Bubble Wrap ☒Bubble Bags ☐None ☒Other: PB **Temp Blank?** ☐Yes ☒No

Thermometer: ☐T1(0461) ☐T2(1336) ☐T3(0459) ☒T4(0254) ☐T5(0489) **Type of Ice:** ☒Wet ☐Blue ☐None ☐Dry ☐Melted

Note: Each West Virginia Sample must have temp taken (no temp blanks)

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** _____ °C **Average Corrected Temp (no temp blank only):** 3.9 °C **See Exceptions** ☒

Correction Factor: _____ **Cooler Temp Corrected w/temp blank :** _____ °C

USDA Regulated Soil: (☒N/A, water sample/Other: _____) **Date/Initials of Person Examining Contents:** GNZ 6.6.19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒Yes	☐No		1.
Chain of Custody Relinquished?	☒Yes	☐No		2.
Sampler Name and/or Signature on COC?	☒Yes	☐No	☐N/A	3.
Samples Arrived within Hold Time?	☒Yes	☐No		4.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No		5. ☐Fecal Coliform ☐HPC ☐Total Coliform/E coli ☐BOD/cBOD ☐Hex Chrome ☐Turbidity ☐Nitrate ☐Nitrite ☐Orthophos ☐Other
Rush Turn Around Time Requested?	☐Yes	☒No		6.
Sufficient Volume?	☒Yes	☐No		7.
Correct Containers Used? -Pace Containers Used?	☒Yes ☒Yes	☐No ☐No		8.
Containers Intact?	☒Yes	☐No		9.
Field Filtered Volume Received for Dissolved Tests?	☐Yes	☐No	☒N/A	10. Is sediment visible in the dissolved container? ☐Yes ☐No
Is sufficient information available to reconcile the samples to the COC? Matrix: ☒Water ☐Soil ☐Oil ☐Other	☒Yes	☐No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐ For sample #3 we recieved triple the volume, aside from differing collection time, it would appear that sample VOW13RMS is MS/MSD for sample VOW-13R: VOC 6/7/19
All containers needing acid/base preservation have been checked?	☐Yes	☐No	☒N/A	12. Sample # ☐NaOH ☐HNO_3 ☐H_2SO_4 ☐Zinc Acetate
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	☐Yes	☐No	☒N/A	
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/801S (water) and Dioxin/PFAS 6/6/19 IJ	☒Yes	☐No	☐N/A	Positive for Res. Chlorine? ☐Yes ☐No **pH Paper Lot#** **See Exception** ☐
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Headspace in VOA Vials (greater than 6mm)?	☐Yes	☐No	☒N/A	13. **See Exception** ☐
Trip Blank Present?	☐Yes	☐No	☒N/A	14.
Trip Blank Custody Seals Present?	☐Yes	☐No	☒N/A	Pace Trip Blank Lot # (if purchased):

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Kristen Hedges **Date:** 6/7/2019

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: GNZ

Pace Analytical	Document Name: **SCUR Exception Form – Coolers Above 6°C**	Document Revised: 08Apr2019 Page 1 of 1
	Document No.: **F-MN-C-298-Rev.02**	Issuing Authority: Pace Minnesota Quality Office

During sample triage, this form is to be placed in each cooler that arrives above 6.0 degrees Celsius

SCUR Exceptions: **Workorder #:**

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank

Read Temp	Corrected Temp	Average Temp
2.9	2.9	3.9
4.5	4.5	
5.0	5.0	
3.1	3.1	

Tracking Number/Temperature	

Other Issues

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

QC Matric lot #: 187814 **TRIZMA Lot #:** N/A **Extract Start:** 06/17/19 00:00
Time of Spiking: 06/17/19 00:00 **Optima H2O Lot #:** 187814 **Extract End:** 06/17/19 00:00
SPE Cartridge: S322-0024 **Methanol Lot #:** 187805 **Setup By:** QL
Balance: 10BALQ

	Lot Number	Amount	Initials	Expiration	Dispenser	Witness
Internal		0				
Surrogate	19206-008	100	QL	12/18/19	Q503	NH
Native Lo						
Native Mid	12332-181	100	QL	08/20/19	Q503	NH
Native Hi						
GenX IS						

#	Sample ID	GenX IS	Surrogate	Natives	Full Bottle Weight	Empty Bottle Weight	Amount Extracted	Comments
1	BLANK-71171		X		277.0	36.6	240.4	
2	LCS-71172		X	X	285.2	36.1	249.1	
3	LCSD-71173		X	X	284.4	36.5	247.8	
4	10478022003-MS		X	X	61.7	13.0	48.8	
5	10478022003-MSD		X	X	62.1	12.8	49.3	
6	92431940001		X		283.6	37.1	246.5	
7	92431940002		X		292.7	37.1	255.6	
8	92431940003		X		287.0	36.9	250.0	
9	50227529001		X		299.3	37.2	262.1	
10	50227529002		X		300.7	36.8	263.9	
11	10478022001		X		308.1	36.9	271.2	
12	10478022002		X		304.2	37.0	267.2	
13	10478022003		X		61.7	12.9	48.8	
14	10478022005		X		302.3	37.2	265.1	
15	10478022006		X		290.6	37.0	253.6	
16	10478022007		X		221.8	37.1	184.7	

EB-24808

Instrument Run Log

Instrument: 10LCMS01
Analysis Sequence: Q190620A
Injection Volume: 5uL

Start: 06/20/2019 16:24
End: 06/20/2019 19:58

Type	Lab Sample ID	Client Sample ID	Datafile	Analyzed	DF	Analyst
CCal	CAL-19206-006-01		Q190620A_004	06/20/2019 16:24	1	QL
CCal	CAL-19206-006-02		Q190620A_005	06/20/2019 16:51	1	QL
CCal	CAL-19206-006-03		Q190620A_006	06/20/2019 17:18	1	QL
CCal	CAL-19206-006-04		Q190620A_007	06/20/2019 17:44	1	QL
CCal	CAL-19206-006-05		Q190620A_008	06/20/2019 18:11	1	QL
CCal	CAL-19206-006-06		Q190620A_009	06/20/2019 18:38	1	QL
CCal	CAL-19206-006-07		Q190620A_010	06/20/2019 19:04	1	QL
ICV	ICV-19206-007		Q190620A_012	06/20/2019 19:58	1	QL

Instrument Run Log

Instrument: 10LCMS01
Analysis Sequence: Q190621C
Injection Volume: 5uL

Start: 06/21/2019 19:12
End: 06/22/2019 11:12

Type	Lab Sample ID	Client Sample ID	Datafile	Analyzed	DF	Analyst
CCal	CAL-19206-006-01		Q190621C_002	06/21/2019 19:12	1	QL
Sample	40188156002	XXXXXXXXXX	Q190621C_003	06/21/2019 19:38	0	QL
Sample	50226517001	XXXXXXXXXX	Q190621C_004	06/21/2019 20:05	10	QL
Sample	50226517002	XXXXXXXXXX	Q190621C_005	06/21/2019 20:32	10	QL
Sample	50226517003	XXXXXXXXXX	Q190621C_006	06/21/2019 20:58	10	QL
Sample	50226517001-DUP	XXXXXXXXXX	Q190621C_007	06/21/2019 21:25	10	QL
Sample	92430962001	XXXXXXXXXX	Q190621C_008	06/21/2019 21:52	10	QL
Sample	92430962002	XXXXXXXXXX	Q190621C_009	06/21/2019 22:18	10	QL
Sample	92431256001	XXXXXXXXXX	Q190621C_010	06/21/2019 22:45	10	QL
Sample	92431256003	XXXXXXXXXX	Q190621C_011	06/21/2019 23:12	10	QL
Sample	92431256004	XXXXXXXXXX	Q190621C_012	06/21/2019 23:38	10	QL
CCal	CAL-19206-006-04		Q190621C_013	06/22/2019 00:05	1	QL
Sample	35472994002	XXXXXXXXXX	Q190621C_014	06/22/2019 00:32	10	QL
Sample	40188156002	XXXXXXXXXX	Q190621C_015	06/22/2019 00:58	0	QL
Sample	50226517001	XXXXXXXXXX	Q190621C_016	06/22/2019 01:25	50	QL
Sample	50226517002	XXXXXXXXXX	Q190621C_017	06/22/2019 01:52	50	QL
Sample	50226517003	XXXXXXXXXX	Q190621C_018	06/22/2019 02:18	50	QL
Sample	50226517001-DUP	XXXXXXXXXX	Q190621C_019	06/22/2019 02:45	50	QL
CCal	CAL-19206-006-01		Q190621C_020	06/22/2019 03:12	1	QL
Method Blan	BLANK-71171	BLKCT	Q190621C_021	06/22/2019 03:39	1	QL
LCS	LCS-71172	LCSOT	Q190621C_022	06/22/2019 04:05	1	QL
Sample	92431940001	XXXXXXXXXX	Q190621C_026	06/22/2019 05:52	1	QL
Sample	92431940002	XXXXXXXXXX	Q190621C_027	06/22/2019 06:19	1	QL
Sample	92431940003	XXXXXXXXXX	Q190621C_028	06/22/2019 06:45	1	QL
Sample	50227529001	XXXXXXXXXX	Q190621C_029	06/22/2019 07:12	1	QL
Sample	50227529002	XXXXXXXXXX	Q190621C_030	06/22/2019 07:39	1	QL
Sample	10478022001	OW-24	Q190621C_031	06/22/2019 08:05	1	QL
Sample	10478022002	OW-24 DUP	Q190621C_032	06/22/2019 08:32	1	QL
CCal	CAL-19206-006-04		Q190621C_033	06/22/2019 08:59	1	QL
Sample	10478022003	OW-13R	Q190621C_034	06/22/2019 09:25	1	QL
Sample	10478022005	OW-5	Q190621C_035	06/22/2019 09:52	1	QL
Sample	10478022006	Field Reagent Blank	Q190621C_036	06/22/2019 10:19	1	QL
Sample	10478022007	EquipmentBlank	Q190621C_037	06/22/2019 10:46	1	QL
CCal	CAL-19206-006-01		Q190621C_038	06/22/2019 11:12	1	QL

Instrument Run Log

Instrument: 10LCMS01
Analysis Sequence: Q190624A
Injection Volume: 5uL

Start: 06/24/2019 11:31
End: 06/25/2019 08:52

Type	Lab Sample ID	Client Sample ID	Datafile	Analyzed	DF	Analyst
CCal	CAL-19206-006-01		Q190624A_003	06/24/2019 11:31	1	QL
Sample	10478022001	OW-24	Q190624A_007	06/24/2019 13:18	10	QL
Sample	10478022002	OW-24 DUP	Q190624A_008	06/24/2019 13:45	10	QL
Sample	10478022005	OW-5	Q190624A_009	06/24/2019 14:11	10	QL
Sample	10478022007	EquipmentBlank	Q190624A_010	06/24/2019 14:38	10	QL
Method Blan	BLANK-71223	BLKDK	Q190624A_011	06/24/2019 15:05	1	QL
LCS	LCS-71224	LCSPQ	Q190624A_012	06/24/2019 15:31	1	QL
LCSD	LCSD-71225	LCSPR	Q190624A_013	06/24/2019 15:58	1	QL
Sample	92432241001	XXXXXXXXXX	Q190624A_014	06/24/2019 16:25	1	QL
Sample	92432241002	XXXXXXXXXX	Q190624A_015	06/24/2019 16:51	1	QL
Sample	92432241003	XXXXXXXXXX	Q190624A_016	06/24/2019 17:18	1	QL
Sample	92432241004	XXXXXXXXXX	Q190624A_017	06/24/2019 17:45	1	QL
CCal	CAL-19206-006-04		Q190624A_018	06/24/2019 18:12	1	QL
Sample	92432241005	XXXXXXXXXX	Q190624A_019	06/24/2019 18:38	1	QL
Sample	92432241006	XXXXXXXXXX	Q190624A_020	06/24/2019 19:05	1	QL
Sample	92432241007	XXXXXXXXXX	Q190624A_021	06/24/2019 19:32	1	QL
Field Blank	92432241008	XXXXXXXXXX	Q190624A_022	06/24/2019 19:58	1	QL
Sample	92432241009	XXXXXXXXXX	Q190624A_023	06/24/2019 20:25	1	QL
Sample	92432241010	XXXXXXXXXX	Q190624A_024	06/24/2019 20:52	1	QL
Sample	92432241011	XXXXXXXXXX	Q190624A_025	06/24/2019 21:18	1	QL
Sample	92432241012	XXXXXXXXXX	Q190624A_026	06/24/2019 21:45	1	QL
Sample	92432241013	XXXXXXXXXX	Q190624A_027	06/24/2019 22:12	1	QL
Sample	92432241014	XXXXXXXXXX	Q190624A_028	06/24/2019 22:38	1	QL
CCal	CAL-19206-006-01		Q190624A_029	06/24/2019 23:05	1	QL
Sample	92432241015	XXXXXXXXXX	Q190624A_030	06/24/2019 23:32	1	QL
Sample	92432241016	XXXXXXXXXX	Q190624A_031	06/24/2019 23:58	1	QL
Sample	92432241017	XXXXXXXXXX	Q190624A_032	06/25/2019 00:25	1	QL
Sample	92432241018	XXXXXXXXXX	Q190624A_033	06/25/2019 00:52	1	QL
Method Blan	BLANK-70932	BLKAM	Q190624A_034	06/25/2019 01:18	1	QL
LCS	LCS-70933	LCSJI	Q190624A_035	06/25/2019 01:45	1	QL
LCSD	LCSD-70934	LCSJJ	Q190624A_036	06/25/2019 02:12	1	QL
Sample	92431256005	XXXXXXXXXX	Q190624A_037	06/25/2019 02:39	1	QL
Sample	92431256006	XXXXXXXXXX	Q190624A_038	06/25/2019 03:05	1	QL
Sample	92431256007	XXXXXXXXXX	Q190624A_039	06/25/2019 03:32	1	QL
Sample	92431256008	XXXXXXXXXX	Q190624A_040	06/25/2019 03:59	1	QL
Sample	92431256009	XXXXXXXXXX	Q190624A_041	06/25/2019 04:25	1	QL
Sample	92431256010	XXXXXXXXXX	Q190624A_042	06/25/2019 04:52	1	QL
CCal	CAL-19206-006-04		Q190624A_043	06/25/2019 05:19	1	QL
Sample	92431256011	XXXXXXXXXX	Q190624A_044	06/25/2019 05:45	1	QL
Sample	92431256012	XXXXXXXXXX	Q190624A_045	06/25/2019 06:12	1	QL
Sample	92431256013	XXXXXXXXXX	Q190624A_046	06/25/2019 06:39	1	QL
Sample	92431256014	XXXXXXXXXX	Q190624A_047	06/25/2019 07:05	1	QL
Sample	92431256015	XXXXXXXXXX	Q190624A_048	06/25/2019 07:32	1	QL
Sample	92431256016	XXXXXXXXXX	Q190624A_049	06/25/2019 07:59	1	QL
Sample	92431256017	XXXXXXXXXX	Q190624A_050	06/25/2019 08:26	1	QL
CCal	CAL-19206-006-01		Q190624A_051	06/25/2019 08:52	1	QL

Instrument Run Log

Instrument: 10LCMS01
Analysis Sequence: Q190625A
Injection Volume: 5uL

Start: 06/25/2019 09:46
End: 06/25/2019 23:06

Type	Lab Sample ID	Client Sample ID	Datafile	Analyzed	DF	Analyst
Sample	92432241001	XXXXXXXXXX	Q190625A_001	06/25/2019 09:46	10	QL
Sample	92432241003	XXXXXXXXXX	Q190625A_002	06/25/2019 10:12	10	QL
Sample	92432241006	XXXXXXXXXX	Q190625A_003	06/25/2019 10:39	10	QL
Sample	92432241009	XXXXXXXXXX	Q190625A_004	06/25/2019 11:06	10	QL
Sample	92432241010	XXXXXXXXXX	Q190625A_005	06/25/2019 11:32	10	QL
Sample	92432241011	XXXXXXXXXX	Q190625A_006	06/25/2019 11:59	10	QL
Sample	92432241012	XXXXXXXXXX	Q190625A_007	06/25/2019 12:26	10	QL
Sample	92432241013	XXXXXXXXXX	Q190625A_008	06/25/2019 12:52	10	QL
MS	10478022003-MS	OW-13R-MS	Q190625A_009	06/25/2019 13:19	1	QL
MSD	10478022003-MSD	OW-13R-MSD	Q190625A_010	06/25/2019 13:46	1	QL
CCal	CAL-19206-006-04		Q190625A_011	06/25/2019 14:12	1	QL
Sample	92432241014	XXXXXXXXXX	Q190625A_012	06/25/2019 14:39	10	QL
Sample	92432241016	XXXXXXXXXX	Q190625A_013	06/25/2019 15:06	10	QL
Sample	92432241017	XXXXXXXXXX	Q190625A_014	06/25/2019 15:32	10	QL
Sample	92432241001	XXXXXXXXXX	Q190625A_015	06/25/2019 15:59	100	QL
Sample	92431256005	XXXXXXXXXX	Q190625A_016	06/25/2019 16:26	10	QL
Sample	92431256006	XXXXXXXXXX	Q190625A_017	06/25/2019 16:52	10	QL
Sample	92431256007	XXXXXXXXXX	Q190625A_018	06/25/2019 17:19	10	QL
Sample	92431256008	XXXXXXXXXX	Q190625A_019	06/25/2019 17:46	10	QL
Sample	92431256009	XXXXXXXXXX	Q190625A_020	06/25/2019 18:12	10	QL
Sample	92431256010	XXXXXXXXXX	Q190625A_021	06/25/2019 18:39	10	QL
CCal	CAL-19206-006-01		Q190625A_022	06/25/2019 19:06	1	QL
Sample	92431256011	XXXXXXXXXX	Q190625A_023	06/25/2019 19:33	10	QL
Sample	92431256012	XXXXXXXXXX	Q190625A_024	06/25/2019 19:59	10	QL
Sample	92431256013	XXXXXXXXXX	Q190625A_025	06/25/2019 20:26	10	QL
Sample	92431256014	XXXXXXXXXX	Q190625A_026	06/25/2019 20:53	10	QL
Sample	92431256015	XXXXXXXXXX	Q190625A_027	06/25/2019 21:19	10	QL
Sample	92431256016	XXXXXXXXXX	Q190625A_028	06/25/2019 21:46	10	QL
Sample	92431256017	XXXXXXXXXX	Q190625A_029	06/25/2019 22:13	10	QL
CCal	CAL-19206-006-04		Q190625A_030	06/25/2019 22:39	1	QL
Sample	92432241017	XXXXXXXXXX	Q190625A_031	06/25/2019 23:06	100	QL

Instrument Run Log

Instrument: 10LCMS01
Analysis Sequence: Q190628A
Injection Volume: 5uL

Start: 06/28/2019 11:21
End: 06/28/2019 14:55

Type	Lab Sample ID	Client Sample ID	Datafile	Analyzed	DF	Analyst
CCal	CAL-19206-006-01		Q190628A_003	06/28/2019 11:21	1	QL
CCal	CAL-19206-006-02		Q190628A_004	06/28/2019 11:48	1	QL
CCal	CAL-19206-006-03		Q190628A_005	06/28/2019 12:15	1	QL
CCal	CAL-19206-006-04		Q190628A_006	06/28/2019 12:42	1	QL
CCal	CAL-19206-006-05		Q190628A_007	06/28/2019 13:08	1	QL
CCal	CAL-19206-006-06		Q190628A_008	06/28/2019 13:35	1	QL
CCal	CAL-19206-006-07		Q190628A_009	06/28/2019 14:02	1	QL
ICV	ICV-19206-007		Q190628A_011	06/28/2019 14:55	1	QL

Instrument Run Log

Instrument: 10LCMS01
Analysis Sequence: Q190701A
Injection Volume: 5uL

Start: 07/01/2019 13:06
End: 07/01/2019 15:46

Type	Lab Sample ID	Client Sample ID	Datafile	Analyzed	DF	Analyst
CCal	CAL-19206-006-01		Q190701A_003	07/01/2019 13:06	1	QL
LCSD	LCSD-71225	LCSPR	Q190701A_004	07/01/2019 13:33	1	QL
Sample	10478022006	Field Reagent Blank	Q190701A_005	07/01/2019 14:00	1	QL
Sample	10478022007	EquipmentBlank	Q190701A_006	07/01/2019 14:26	1	QL
Sample	35474777003	XXXXXXXXXX	Q190701A_007	07/01/2019 14:53	1	QL
Sample	35474777004	XXXXXXXXXX	Q190701A_008	07/01/2019 15:20	1	QL
CCal	CAL-19206-006-04		Q190701A_009	07/01/2019 15:46	1	QL

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	OW-24	Date Extracted	06/17/2019
Lab Sample ID	10478022001	Total Amount Extracted	271 mL
Filename	Q190621C_031	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_020
Collected	06/04/2019	Ending CCal	Q190621C_033
Received	06/06/2019	Method Blank Filename	Q190621C_021

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND		1.8	0.20	1	06/22/2019 08:05	375-22-4	N2
PFPeA	ND		1.8	0.25	1	06/22/2019 08:05	2706-90-3	N2
PFHxA	ND		1.8	0.44	1	06/22/2019 08:05	307-24-4	N2
PFHpA	ND		1.8	0.13	1	06/22/2019 08:05	375-85-9	N2
PFOA	ND		1.8	0.57	1	06/22/2019 08:05	335-67-1	N2
PFNA	ND		1.8	0.59	1	06/22/2019 08:05	375-95-1	N2
PFDA	ND		1.8	0.79	1	06/22/2019 08:05	335-76-2	N2
PFUdA	ND		1.8	0.80	1	06/22/2019 08:05	2058-94-8	N2
PFDoA	ND		1.8	0.67	1	06/22/2019 08:05	307-55-1	N2
PFTrDA	ND		1.8	0.65	1	06/22/2019 08:05	72629-94-8	N2
PFTeDA	ND	D	18	3.5	10	06/24/2019 13:18	376-06-7	N2
PFOSA	ND		1.8	0.37	1	06/22/2019 08:05	754-91-6	N2
N-EtFOSAA	ND		1.8	0.85	1	06/22/2019 08:05	2991-50-6	N2
N-MeFOSAA	ND		1.8	0.45	1	06/22/2019 08:05	2355-31-9	N2
PFBS	ND		1.6	0.17	1	06/22/2019 08:05	375-73-5	N2
PFPeS	ND		1.7	0.17	1	06/22/2019 08:05	2706-91-4	N2
PFHxS	ND		1.7	0.32	1	06/22/2019 08:05	355-46-4	N2
PFHpS	ND		1.8	0.78	1	06/22/2019 08:05	375-92-8	N2
PFOS	ND		1.7	0.30	1	06/22/2019 08:05	1763-23-1	N2
PFNS	ND		1.8	0.61	1	06/22/2019 08:05	68259-12-1	N2
PFDS	ND		1.8	0.49	1	06/22/2019 08:05	335-77-3	N2
4:2FTS	ND		1.8	0.32	1	06/22/2019 08:05	757124-72-4	N2
6:2FTS	ND		1.8	0.86	1	06/22/2019 08:05	27619-97-2	N2
8:2FTS	ND		1.8	0.70	1	06/22/2019 08:05	39108-34-4	N2

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(612) 607-1700

PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	OW-24	Date Extracted	06/17/2019
Lab Sample ID	10478022001	Total Amount Extracted	271 mL
Filename	Q190621C_031	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_020
Collected	06/04/2019	Ending CCal	Q190621C_033
Received	06/06/2019	Method Blank Filename	Q190621C_021

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	18	19	104	50-150	Pass	1288708
13C5_PFPeA	18	20	111	50-150	Pass	977867
13C5_PFHxA	18	21	112	50-150	Pass	970772
13C4_PFHpA	18	21	114	50-150	Pass	1110351
13C8_PFOA	18	21	112	50-150	Pass	798720
13C9_PFNA	18	26	142	50-150	Pass	804823
13C6_PFDA	18	27	145	50-150	Pass	481470
13C7_PFUdA	18	26	142	50-150	Pass	523073
13C2_PFDoA	18	28	149	50-150	Pass	746937
13C2_PFTeDA	18	22	119	50-150	Pass	40646
d5-EtFOSAA	18	24	130	50-150	Pass	86800
d3-MeFOSAA	18	23	125	50-150	Pass	94298
13C3_PFBS	18	21	113	50-150	Pass	727569
13C3_PFHxS	18	23	124	50-150	Pass	678363
13C8_PFOS	18	23	126	50-150	Pass	495157
13C8_FOSA	18	14	74	50-150	Pass	641821
13C2_4:2FTS	18	26	140	50-150	Pass	153622
13C6_6:2FTS	18	23	124	50-150	Pass	129440
13C6_8:2FTS	18	23	125	50-150	Pass	108218

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	937969	457003 - 1371008	513524 - 1540572	Pass
13C4_PFOS	466597	246073 - 738220	267452 - 802356	Pass

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Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	OW-24 DUP	Date Extracted	06/17/2019
Lab Sample ID	10478022002	Total Amount Extracted	267 mL
Filename	Q190621C_032	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_020
Collected	06/04/2019	Ending CCal	Q190621C_033
Received	06/06/2019	Method Blank Filename	Q190621C_021

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND		1.9	0.21	1	06/22/2019 08:32	375-22-4	N2
PFPeA	ND		1.9	0.25	1	06/22/2019 08:32	2706-90-3	N2
PFHxA	ND		1.9	0.44	1	06/22/2019 08:32	307-24-4	N2
PFHpA	ND		1.9	0.13	1	06/22/2019 08:32	375-85-9	N2
PFOA	ND		1.9	0.58	1	06/22/2019 08:32	335-67-1	N2
PFNA	ND		1.9	0.59	1	06/22/2019 08:32	375-95-1	N2
PFDA	ND		1.9	0.80	1	06/22/2019 08:32	335-76-2	N2
PFUdA	ND	D	19	8.2	10	06/24/2019 13:45	2058-94-8	N2
PFDoA	ND	D	19	6.8	10	06/24/2019 13:45	307-55-1	N2
PFTrDA	ND	D	19	6.6	10	06/24/2019 13:45	72629-94-8	N2
PFTeDA	ND	D	19	3.5	10	06/24/2019 13:45	376-06-7	N2
PFOSA	ND		1.9	0.37	1	06/22/2019 08:32	754-91-6	N2
N-EtFOSAA	ND		1.9	0.86	1	06/22/2019 08:32	2991-50-6	N2
N-MeFOSAA	ND		1.9	0.45	1	06/22/2019 08:32	2355-31-9	N2
PFBS	ND		1.7	0.18	1	06/22/2019 08:32	375-73-5	N2
PFPeS	ND		1.8	0.17	1	06/22/2019 08:32	2706-91-4	N2
PFHxS	ND		1.7	0.33	1	06/22/2019 08:32	355-46-4	N2
PFHpS	ND		1.8	0.80	1	06/22/2019 08:32	375-92-8	N2
PFOS	ND		1.7	0.31	1	06/22/2019 08:32	1763-23-1	N2
PFNS	ND		1.9	0.62	1	06/22/2019 08:32	68259-12-1	N2
PFDS	ND		1.9	0.49	1	06/22/2019 08:32	335-77-3	N2
4:2FTS	ND		1.9	0.32	1	06/22/2019 08:32	757124-72-4	N2
6:2FTS	ND		1.9	0.87	1	06/22/2019 08:32	27619-97-2	N2
8:2FTS	ND		1.9	0.71	1	06/22/2019 08:32	39108-34-4	N2

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	OW-24 DUP	Date Extracted	06/17/2019
Lab Sample ID	10478022002	Total Amount Extracted	267 mL
Filename	Q190621C_032	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_020
Collected	06/04/2019	Ending CCal	Q190621C_033
Received	06/06/2019	Method Blank Filename	Q190621C_021

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	19	20	106	50-150	Pass	1274431
13C5_PFPeA	19	21	113	50-150	Pass	978072
13C5_PFHxA	19	21	115	50-150	Pass	967168
13C4_PFHpA	19	22	117	50-150	Pass	1116372
13C8_PFOA	19	22	120	50-150	Pass	838445
13C9_PFNA	19	27	145	50-150	Pass	775509
13C6_PFDA	19	28	150	50-150	Pass	469866
13C7_PFUdA	19	20	108	50-150	Pass	55505
13C2_PFDoA	19	19	99	50-150	Pass	68793
13C2_PFTeDA	19	21	115	50-150	Pass	39470
d5-EtFOSAA	19	25	136	50-150	Pass	85890
d3-MeFOSAA	19	26	138	50-150	Pass	97991
13C3_PFBS	19	21	113	50-150	Pass	710856
13C3_PFHxS	19	24	129	50-150	Pass	666882
13C8_PFOS	19	24	130	50-150	Pass	482964
13C8_FOSA	19	17	90	50-150	Pass	740367
13C2_4:2FTS	19	27	143	50-150	Pass	153492
13C6_6:2FTS	19	23	123	50-150	Pass	125192
13C6_8:2FTS	19	25	135	50-150	Pass	110326

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	917345	457003 - 1371008	513524 - 1540572	Pass
13C4_PFOS	440673	246073 - 738220	267452 - 802356	Pass

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(612) 607-1700

PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	OW-13R	Date Extracted	06/17/2019
Lab Sample ID	10478022003	Total Amount Extracted	49 mL
Filename	Q190621C_034	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_033
Collected	06/04/2019	Ending CCal	Q190621C_038
Received	06/06/2019	Method Blank Filename	Q190621C_021

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	10	1.1	1	06/22/2019 09:25	375-22-4	N2
PFPeA	ND	10	1.4	1	06/22/2019 09:25	2706-90-3	N2
PFHxA	ND	10	2.4	1	06/22/2019 09:25	307-24-4	N2
PFHpA	ND	10	0.70	1	06/22/2019 09:25	375-85-9	N2
PFOA	ND	10	3.2	1	06/22/2019 09:25	335-67-1	N2
PFNA	ND	10	3.3	1	06/22/2019 09:25	375-95-1	N2
PFDA	ND	10	4.4	1	06/22/2019 09:25	335-76-2	N2
PFUdA	ND	10	4.5	1	06/22/2019 09:25	2058-94-8	N2
PFDoA	ND	10	3.7	1	06/22/2019 09:25	307-55-1	N2
PFTrDA	ND	10	3.6	1	06/22/2019 09:25	72629-94-8	N2
PFTeDA	ND	10	1.9	1	06/22/2019 09:25	376-06-7	N2
PFOSA	ND	10	2.1	1	06/22/2019 09:25	754-91-6	N2
N-EtFOSAA	ND	10	4.7	1	06/22/2019 09:25	2991-50-6	N2
N-MeFOSAA	ND	10	2.5	1	06/22/2019 09:25	2355-31-9	N2
PFBS	ND	9.1	0.97	1	06/22/2019 09:25	375-73-5	N2
PFPeS	ND	9.6	0.94	1	06/22/2019 09:25	2706-91-4	N2
PFHxS	ND	9.4	1.8	1	06/22/2019 09:25	355-46-4	N2
PFHpS	ND	9.7	4.4	1	06/22/2019 09:25	375-92-8	N2
PFOS	ND	9.5	1.7	1	06/22/2019 09:25	1763-23-1	N2
PFNS	ND	10	3.4	1	06/22/2019 09:25	68259-12-1	N2
PFDS	ND	10	2.7	1	06/22/2019 09:25	335-77-3	N2
4:2FTS	ND	10	1.8	1	06/22/2019 09:25	757124-72-4	N2
6:2FTS	ND	10	4.8	1	06/22/2019 09:25	27619-97-2	N2
8:2FTS	ND	10	3.9	1	06/22/2019 09:25	39108-34-4	N2

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Minneapolis, MN 55414
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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	OW-13R	Date Extracted	06/17/2019
Lab Sample ID	10478022003	Total Amount Extracted	49 mL
Filename	Q190621C_034	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_033
Collected	06/04/2019	Ending CCal	Q190621C_038
Received	06/06/2019	Method Blank Filename	Q190621C_021

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	100	110	107	50-150	Pass	1249989
13C5_PFPeA	100	110	110	50-150	Pass	917094
13C5_PFHxA	100	120	113	50-150	Pass	919041
13C4_PFHpA	100	120	116	50-150	Pass	1060784
13C8_PFOA	100	110	109	50-150	Pass	737635
13C9_PFNA	100	130	127	50-150	Pass	671428
13C6_PFDA	100	130	129	50-150	Pass	400286
13C7_PFUdA	100	150	145	50-150	Pass	499857
13C2_PFDoA	100	140	133	50-150	Pass	622666
13C2_PFTeDA	100	150	146	50-150	Pass	337292
d5-EtFOSAA	100	140	132	50-150	Pass	82183
d3-MeFOSAA	100	130	129	50-150	Pass	90618
13C3_PFBS	100	120	117	50-150	Pass	711392
13C3_PFHxS	100	130	129	50-150	Pass	662155
13C8_PFOS	100	130	126	50-150	Pass	463585
13C8_FOSA	100	91	89	50-150	Pass	720703
13C2_4:2FTS	100	120	116	50-150	Pass	120214
13C6_6:2FTS	100	120	118	50-150	Pass	115784
13C6_8:2FTS	100	140	137	50-150	Pass	110566

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	885302	457003 - 1371008	462036 - 1386109	Pass
13C4_PFOS	435469	246073 - 738220	256408 - 769225	Pass

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(612) 607-1700

PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	OW-5	Date Extracted	06/17/2019
Lab Sample ID	10478022005	Total Amount Extracted	265 mL
Filename	Q190621C_035	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_033
Collected	06/04/2019	Ending CCal	Q190621C_038
Received	06/06/2019	Method Blank Filename	Q190621C_021

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	2.6		1.9	0.21	1	06/22/2019 09:52	375-22-4	N2
PFPeA	ND		1.9	0.25	1	06/22/2019 09:52	2706-90-3	N2
PFHxA	2.1		1.9	0.45	1	06/22/2019 09:52	307-24-4	N2
PFHpA	2.2		1.9	0.13	1	06/22/2019 09:52	375-85-9	N2
PFOA	9.7		1.9	0.59	1	06/22/2019 09:52	335-67-1	N2
PFNA	ND		1.9	0.60	1	06/22/2019 09:52	375-95-1	N2
PFDA	ND	D	19	8.1	10	06/24/2019 14:11	335-76-2	N2
PFUdA	ND		1.9	0.82	1	06/22/2019 09:52	2058-94-8	N2
PFDoA	ND	D	19	6.9	10	06/24/2019 14:11	307-55-1	N2
PFTrDA	ND	D	19	6.6	10	06/24/2019 14:11	72629-94-8	N2
PFTeDA	ND	D	19	3.6	10	06/24/2019 14:11	376-06-7	N2
PFOSA	ND		1.9	0.38	1	06/22/2019 09:52	754-91-6	N2
N-EtFOSAA	ND	D	19	8.7	10	06/24/2019 14:11	2991-50-6	N2
N-MeFOSAA	ND	D	19	4.6	10	06/24/2019 14:11	2355-31-9	N2
PFBS	ND		1.7	0.18	1	06/22/2019 09:52	375-73-5	N2
PFPeS	ND		1.8	0.17	1	06/22/2019 09:52	2706-91-4	N2
PFHxS	2.5		1.7	0.33	1	06/22/2019 09:52	355-46-4	N2
PFHpS	ND		1.8	0.80	1	06/22/2019 09:52	375-92-8	N2
PFOS	8.4		1.7	0.31	1	06/22/2019 09:52	1763-23-1	N2
PFNS	ND		1.9	0.62	1	06/22/2019 09:52	68259-12-1	N2
PFDS	ND		1.9	0.50	1	06/22/2019 09:52	335-77-3	N2
4:2FTS	ND	D	19	3.3	10	06/24/2019 14:11	757124-72-4	N2
6:2FTS	ND		1.9	0.88	1	06/22/2019 09:52	27619-97-2	N2
8:2FTS	ND	D	19	7.2	10	06/24/2019 14:11	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	OW-5	Date Extracted	06/17/2019
Lab Sample ID	10478022005	Total Amount Extracted	265 mL
Filename	Q190621C_035	ICAL ID	190620A01
Matrix	Ground_Water	Starting CCal	Q190621C_033
Collected	06/04/2019	Ending CCal	Q190621C_038
Received	06/06/2019	Method Blank Filename	Q190621C_021

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	19	19	99	50-150	Pass	1339534
13C5_PFPeA	19	21	112	50-150	Pass	1078177
13C5_PFHxA	19	21	112	50-150	Pass	1053692
13C4_PFHpA	19	22	114	50-150	Pass	1214124
13C8_PFOA	19	22	115	50-150	Pass	898466
13C9_PFNA	19	28	146	50-150	Pass	853227
13C6_PFDA	19	21	112	50-150	Pass	36425
13C7_PFUdA	19	26	140	50-150	Pass	532313
13C2_PFDoA	19	21	113	50-150	Pass	55151
13C2_PFTeDA	19	25	133	50-150	Pass	32430
d5-EtFOSAA	19	25	130	50-150	Pass	8514
d3-MeFOSAA	19	25	130	50-150	Pass	9610
13C3_PFBS	19	20	108	50-150	Pass	761462
13C3_PFHxS	19	23	123	50-150	Pass	692901
13C8_PFOS	19	22	117	50-150	Pass	471578
13C8_FOSA	19	14	74	50-150	Pass	662697
13C2_4:2FTS	19	32	168	50-150	Fail	16294
13C6_6:2FTS	19	27	142	50-150	Pass	162294
13C6_8:2FTS	19	22	117	50-150	Pass	9910

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1026376	457003 - 1371008	462036 - 1386109	Pass
13C4_PFOS	478812	246073 - 738220	256408 - 769225	Pass

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PFAS by Isotope Dilution
Sample Analysis Summary

Client's Sample ID	Field Reagent Blank	Date Extracted	06/17/2019
Lab Sample ID	10478022006	Total Amount Extracted	254 mL
Filename	Q190701A_005	ICAL ID	190628A01
Matrix	Ground_Water	Starting CCal	Q190701A_003
Collected	06/04/2019	Ending CCal	Q190701A_009
Received	06/06/2019	Method Blank Filename	Q190621C_021

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.0	0.82	1	07/01/2019 14:00	375-22-4	N2
PFPeA	ND	2.0	0.50	1	07/01/2019 14:00	2706-90-3	N2
PFHxA	ND	2.0	0.51	1	07/01/2019 14:00	307-24-4	N2
PFHpA	ND	2.0	0.54	1	07/01/2019 14:00	375-85-9	N2
PFOA	ND	2.0	0.55	1	07/01/2019 14:00	335-67-1	N2
PFNA	ND	2.0	0.57	1	07/01/2019 14:00	375-95-1	N2
PFDA	ND	2.0	0.60	1	07/01/2019 14:00	335-76-2	N2
PFUdA	ND	2.0	0.43	1	07/01/2019 14:00	2058-94-8	N2
PFDoA	ND	2.0	0.57	1	07/01/2019 14:00	307-55-1	N2
PFTrDA	ND	2.0	0.59	1	07/01/2019 14:00	72629-94-8	N2
PFTeDA	ND	2.0	0.40	1	07/01/2019 14:00	376-06-7	N2
PFOSA	ND	2.0	0.34	1	07/01/2019 14:00	754-91-6	N2
N-EtFOSAA	ND	2.0	0.57	1	07/01/2019 14:00	2991-50-6	N2
N-MeFOSAA	ND	2.0	0.66	1	07/01/2019 14:00	2355-31-9	N2
PFBS	ND	1.7	0.53	1	07/01/2019 14:00	375-73-5	N2
PFPeS	ND	1.9	0.65	1	07/01/2019 14:00	2706-91-4	N2
PFHxS	ND	1.8	0.58	1	07/01/2019 14:00	355-46-4	N2
PFHpS	ND	1.9	0.69	1	07/01/2019 14:00	375-92-8	N2
PFOS	ND	1.8	0.40	1	07/01/2019 14:00	1763-23-1	N2
PFNS	ND	2.0	0.97	1	07/01/2019 14:00	68259-12-1	N2
PFDS	ND	2.0	0.88	1	07/01/2019 14:00	335-77-3	N2
4:2FTS	ND	2.0	0.72	1	07/01/2019 14:00	757124-72-4	N2
6:2FTS	ND	2.0	0.96	1	07/01/2019 14:00	27619-97-2	N2
8:2FTS	ND	2.0	0.74	1	07/01/2019 14:00	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	Field Reagent Blank	Date Extracted	06/17/2019
Lab Sample ID	10478022006	Total Amount Extracted	254 mL
Filename	Q190701A_005	ICAL ID	190628A01
Matrix	Ground_Water	Starting CCal	Q190701A_003
Collected	06/04/2019	Ending CCal	Q190701A_009
Received	06/06/2019	Method Blank Filename	Q190621C_021

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	22	111	50-150	Pass	1181564
13C5_PFPeA	20	22	112	50-150	Pass	832853
13C5_PFHxA	20	22	113	50-150	Pass	791006
13C4_PFHpA	20	21	109	50-150	Pass	856260
13C8_PFOA	20	24	123	50-150	Pass	672373
13C9_PFNA	20	22	110	50-150	Pass	500944
13C6_PFDA	20	20	104	50-150	Pass	260306
13C7_PFUdA	20	19	94	50-150	Pass	279411
13C2_PFDoA	20	24	121	50-150	Pass	461593
13C2_PFTeDA	20	22	109	50-150	Pass	194220
d5-EtFOSAA	20	19	98	50-150	Pass	46387
d3-MeFOSAA	20	20	99	50-150	Pass	58978
13C3_PFBS	20	23	115	50-150	Pass	543203
13C3_PFHxS	20	25	127	50-150	Pass	496950
13C8_PFOS	20	20	104	50-150	Pass	250311
13C8_FOSA	20	9.1	46	50-150	Fail	210861
13C2_4:2FTS	20	23	114	50-150	Pass	77423
13C6_6:2FTS	20	25	127	50-150	Pass	64961
13C6_8:2FTS	20	20	101	50-150	Pass	41600

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	701346	385075 - 1155225	428276 - 1284829	Pass
13C4_PFOS	303211	169716 - 509148	191489 - 574466	Pass

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	Equipment Blank	Date Extracted	06/17/2019
Lab Sample ID	10478022007	Total Amount Extracted	185 mL
Filename	Q190701A_006	ICAL ID	190628A01
Matrix	Ground_Water	Starting CCal	Q190701A_003
Collected	06/04/2019	Ending CCal	Q190701A_009
Received	06/06/2019	Method Blank Filename	Q190621C_021

Compound	Concentration (ng/L)		PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND		2.7	1.1	1	07/01/2019 14:26	375-22-4	N2
PFPeA	ND		2.7	0.69	1	07/01/2019 14:26	2706-90-3	N2
PFHxA	ND		2.7	0.70	1	07/01/2019 14:26	307-24-4	N2
PFHpA	ND		2.7	0.74	1	07/01/2019 14:26	375-85-9	N2
PFOA	ND		2.7	0.76	1	07/01/2019 14:26	335-67-1	N2
PFNA	ND		2.7	0.78	1	07/01/2019 14:26	375-95-1	N2
PFDA	ND		2.7	0.83	1	07/01/2019 14:26	335-76-2	N2
PFUdA	ND		2.7	0.59	1	07/01/2019 14:26	2058-94-8	N2
PFDoA	ND		2.7	0.79	1	07/01/2019 14:26	307-55-1	N2
PFTrDA	ND		2.7	0.81	1	07/01/2019 14:26	72629-94-8	N2
PFTeDA	ND	D	27	5.1	10	06/24/2019 14:38	376-06-7	N2
PFOSA	ND		2.7	0.47	1	07/01/2019 14:26	754-91-6	N2
N-EtFOSAA	ND		2.7	0.79	1	07/01/2019 14:26	2991-50-6	N2
N-MeFOSAA	ND		2.7	0.90	1	07/01/2019 14:26	2355-31-9	N2
PFBS	ND		2.4	0.73	1	07/01/2019 14:26	375-73-5	N2
PFPeS	ND		2.5	0.90	1	07/01/2019 14:26	2706-91-4	N2
PFHxS	ND		2.5	0.80	1	07/01/2019 14:26	355-46-4	N2
PFHpS	ND		2.6	0.94	1	07/01/2019 14:26	375-92-8	N2
PFOS	ND		2.5	0.55	1	07/01/2019 14:26	1763-23-1	N2
PFNS	ND		2.7	1.3	1	07/01/2019 14:26	68259-12-1	N2
PFDS	ND		2.7	1.2	1	07/01/2019 14:26	335-77-3	N2
4:2FTS	ND		2.7	0.99	1	07/01/2019 14:26	757124-72-4	N2
6:2FTS	ND	D	27	13	10	06/24/2019 14:38	27619-97-2	N2
8:2FTS	ND	D	27	10	10	06/24/2019 14:38	39108-34-4	N2

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PFAS by Isotope Dilution

Sample Analysis Summary

Client's Sample ID	Equipment Blank	Date Extracted	06/17/2019
Lab Sample ID	10478022007	Total Amount Extracted	185 mL
Filename	Q190701A_006	ICAL ID	190628A01
Matrix	Ground_Water	Starting CCal	Q190701A_003
Collected	06/04/2019	Ending CCal	Q190701A_009
Received	06/06/2019	Method Blank Filename	Q190621C_021

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	27	27	100	50-150	Pass	1186311
13C5_PFPeA	27	28	104	50-150	Pass	857321
13C5_PFHxA	27	29	106	50-150	Pass	816872
13C4_PFHpA	27	29	109	50-150	Pass	951739
13C8_PFOA	27	34	127	50-150	Pass	768394
13C9_PFNA	27	26	97	50-150	Pass	584970
13C6_PFDA	27	30	109	50-150	Pass	364409
13C7_PFUdA	27	24	90	50-150	Pass	355747
13C2_PFDoA	27	31	113	50-150	Pass	574157
13C2_PFTeDA	27	48	179	50-150	Fail	422444
d5-EtFOSAA	27	41	150	50-150	Pass	94199
d3-MeFOSAA	27	36	133	50-150	Pass	105350
13C3_PFBS	27	32	120	50-150	Pass	625761
13C3_PFHxS	27	29	108	50-150	Pass	558807
13C8_PFOS	27	33	123	50-150	Pass	393365
13C8_FOSA	27	23	86	50-150	Pass	521962
13C2_4:2FTS	27	32	118	50-150	Pass	88647
13C6_6:2FTS	27	36	133	50-150	Pass	16258
13C6_8:2FTS	27	30	112	50-150	Pass	11476

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	777220	385075 - 1155225	428276 - 1284829	Pass
13C4_PFOS	403187	169716 - 509148	191489 - 574466	Pass

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Appendix C

QC and Calibration Results Summary

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PFAS by Isotope DilutionBlank Analysis Summary

Lab Sample ID	BLANK-71171	Total Amount Extracted	240 mL
Filename	Q190621C_021	ICAL ID	190620A01
Matrix	Water	Starting CCal	Q190621C_020
Date Extracted	06/17/2019	Ending CCal	Q190621C_033

Compound	Concentration (ng/L)	PQL (ng/L)	MDL (ng/L)	Dilution	Analyzed	CAS No.	Qual.
PFBA	ND	2.1	0.23	1	06/22/201903:39	375-22-4	N2
PFPeA	ND	2.1	0.28	1	06/22/201903:39	2706-90-3	N2
PFHxA	ND	2.1	0.49	1	06/22/201903:39	307-24-4	N2
PFHpA	ND	2.1	0.14	1	06/22/201903:39	375-85-9	N2
PFOA	ND	2.1	0.65	1	06/22/201903:39	335-67-1	N2
PFNA	ND	2.1	0.66	1	06/22/201903:39	375-95-1	N2
PFDA	ND	2.1	0.89	1	06/22/201903:39	335-76-2	N2
PFUdA	ND	2.1	0.91	1	06/22/201903:39	2058-94-8	N2
PFDoA	ND	2.1	0.76	1	06/22/201903:39	307-55-1	N2
PFTrDA	ND	2.1	0.73	1	06/22/201903:39	72629-94-8	N2
PFTeDA	ND	2.1	0.39	1	06/22/201903:39	376-06-7	N2
PFOSA	ND	2.1	0.42	1	06/22/201903:39	754-91-6	N2
N-EtFOSAA	ND	2.1	0.96	1	06/22/201903:39	2991-50-6	N2
N-MeFOSAA	ND	2.1	0.50	1	06/22/201903:39	2355-31-9	N2
PFBS	ND	1.8	0.20	1	06/22/201903:39	375-73-5	N2
PFPeS	ND	2.0	0.19	1	06/22/201903:39	2706-91-4	N2
PFHxS	ND	1.9	0.36	1	06/22/201903:39	355-46-4	N2
PFHpS	ND	2.0	0.88	1	06/22/201903:39	375-92-8	N2
PFOS	ND	1.9	0.34	1	06/22/201903:39	1763-23-1	N2
PFNS	ND	2.1	0.69	1	06/22/201903:39	68259-12-1	N2
PFDS	ND	2.1	0.55	1	06/22/201903:39	335-77-3	N2
4:2FTS	ND	2.1	0.36	1	06/22/201903:39	757124-72-4	N2
6:2FTS	ND	2.1	0.97	1	06/22/201903:39	27619-97-2	N2
8:2FTS	ND	2.1	0.79	1	06/22/201903:39	39108-34-4	N2

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PFAS by Isotope DilutionBlank Analysis Summary

Client's Sample ID	BLKCT	Date Extracted	06/17/2019
Lab Sample ID	BLANK-71171	Total Amount Extracted	240 mL
Filename	Q190621C_021	ICAL ID	190620A01
Matrix	Water	Starting CCal	Q190621C_020
Collected	06/13/2019	Ending CCal	Q190621C_033
Received	06/13/2019	Method Blank Filename	

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	21	25	121	50-150	Pass	1293983
13C5_PFPeA	21	26	123	50-150	Pass	943504
13C5_PFHxA	21	25	122	50-150	Pass	913790
13C4_PFHpA	21	27	128	50-150	Pass	1086699
13C8_PFOA	21	26	124	50-150	Pass	771161
13C9_PFNA	21	26	126	50-150	Pass	647170
13C6_PFDA	21	27	128	50-150	Pass	381672
13C7_PFUdA	21	29	140	50-150	Pass	467217
13C2_PFDoA	21	27	131	50-150	Pass	588067
13C2_PFTeDA	21	34	161	50-150	Fail	360822
d5-EtFOSAA	21	27	132	50-150	Pass	79528
d3-MeFOSAA	21	28	133	50-150	Pass	90450
13C3_PFBS	21	25	123	50-150	Pass	684635
13C3_PFHxS	21	27	132	50-150	Pass	651832
13C8_PFOS	21	27	128	50-150	Pass	452951
13C8_FOSA	21	20	98	50-150	Pass	768708
13C2_4:2FTS	21	25	119	50-150	Pass	113933
13C6_6:2FTS	21	25	119	50-150	Pass	108581
13C6_8:2FTS	21	25	122	50-150	Pass	94969

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	816463	457003 - 1371008	513524 - 1540572	Pass
13C4_PFOS	420492	246073 - 738220	267452 - 802356	Pass

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID	LCS-71172		
LCS Filename	Q190621C_022	Matrix	Water
Total Amount Extracted	249mL	Dilution	1
ICAL ID	190620A01	Extracted	06/17/2019
Start CCal Filename	Q190621C_020	Analyzed	06/22/2019 04:05
End CCal Filename	Q190621C_033	Injected By	QL
Method Blank Filename	Q190621C_021		

Compound	Spiked (ng/L)	Recovered (ng/L)	Recovery %	Limits
PFBA	20	24	122	70.0 - 130.0
PFPeA	20	25	124	70.0 - 130.0
PFHxA	20	25	126	70.0 - 130.0
PFHpA	20	25	126	70.0 - 130.0
PFOA	20	25	126	70.0 - 130.0
PFNA	20	24	122	70.0 - 130.0
PFDA	20	24	122	70.0 - 130.0
PFUdA	20	24	121	70.0 - 130.0
PFDoA	20	24	122	70.0 - 130.0
PFTrDA	20	23	116	70.0 - 130.0
PFTeDA	20	24	120	70.0 - 130.0
PFOSA	20	24	121	70.0 - 130.0
N-EtFOSAA	20	24	118	70.0 - 130.0
N-MeFOSAA	20	26	129	70.0 - 130.0
PFBS	18	23	128	70.0 - 130.0
PFPeS	19	24	129	70.0 - 130.0
PFHxS	18	21	115	70.0 - 130.0
PFHpS	19	23	120	70.0 - 130.0
PFOS	19	21	114	70.0 - 130.0
PFNS	20	24	121	70.0 - 130.0
PFDS	20	25	124	70.0 - 130.0
4:2FTS	20	23	117	70.0 - 130.0
6:2FTS	20	24	119	70.0 - 130.0
8:2FTS	20	26 R	132	70.0 - 130.0

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PFAS by Isotope DilutionLaboratory Control Sample (LCS)

LCS Lab Sample ID LCS-71172
LCS Filename Q190621C_022 Matrix Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	22	111	50-150	Pass	1265676
13C5_PFPeA	20	22	112	50-150	Pass	907045
13C5_PFHxA	20	22	109	50-150	Pass	866233
13C4_PFHpA	20	22	111	50-150	Pass	989129
13C8_PFOA	20	22	107	50-150	Pass	706949
13C9_PFNA	20	23	113	50-150	Pass	653057
13C6_PFDA	20	21	107	50-150	Pass	361696
13C7_PFUdA	20	22	107	50-150	Pass	404424
13C2_PFDoA	20	21	103	50-150	Pass	524307
13C2_PFTeDA	20	24	118	50-150	Pass	299824
d5-EtFOSAA	20	21	104	50-150	Pass	71124
d3-MeFOSAA	20	21	102	50-150	Pass	78556
13C3_PFBS	20	22	111	50-150	Pass	657498
13C3_PFHxS	20	23	115	50-150	Pass	642124
13C8_PFOS	20	22	111	50-150	Pass	445121
13C8_FOSA	20	17	85	50-150	Pass	759378
13C2_4:2FTS	20	25	123	50-150	Pass	123825
13C6_6:2FTS	20	24	119	50-150	Pass	114160
13C6_8:2FTS	20	22	109	50-150	Pass	96305

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	863239	457003 - 1371008	513524 - 1540572	Pass
13C4_PFOS	476587	246073 - 738220	267452 - 802356	Pass

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PFAS by Isotope DilutionMatrix Spike Sample (MS)

MS Lab Sample ID	10478022003-MS		
MS Filename	Q190625A_009	Matrix	Ground_Water
Total Amount Extracted	48.8mL	Dilution	1
ICAL ID	190620A01	Extracted	06/17/2019
Start CCal Filename	Q190624A_051	Analyzed	06/25/2019 13:19
End CCal Filename	Q190625A_011	Injected By	QL
Method Blank Filename	Q190621C_021		

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Limits	Flags
PFBA	100	0	130	122	70.0 - 130.0	
PFPeA	100	0	120	120	70.0 - 130.0	
PFHxA	100	0	130	128	70.0 - 130.0	
PFHpA	100	0	120	120	70.0 - 130.0	
PFOA	100	0	130	128	70.0 - 130.0	
PFNA	100	0	120	119	70.0 - 130.0	
PFDA	100	0	130	122	70.0 - 130.0	
PFUdA	100	0	120	117	70.0 - 130.0	
PFDoA	100	0	130	127	70.0 - 130.0	
PFTrDA	100	0	130	127	70.0 - 130.0	
PFTeDA	100	0	130	125	70.0 - 130.0	
PFOSA	100	0	130	123	70.0 - 130.0	
N-EtFOSAA	100	0	120	114	70.0 - 130.0	
N-MeFOSAA	100	0	120	119	70.0 - 130.0	
PFBS	91	0	110	124	70.0 - 130.0	
PFPeS	96	0	130	132	70.0 - 130.0	
PFHxS	94	0	110	120	70.0 - 130.0	
PFHpS	97	0	130	137	70.0 - 130.0	
PFOS	95	0	130	135	70.0 - 130.0	
PFNS	100	0	120	116	70.0 - 130.0	
PFDS	100	0	130	128	70.0 - 130.0	
4:2FTS	100	0	120	114	70.0 - 130.0	
6:2FTS	100	0	130	128	70.0 - 130.0	
8:2FTS	100	0	140	134	70.0 - 130.0	

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PFAS by Isotope DilutionMatrix Spike Sample (MS)

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Limits	Flags

MS Lab Sample ID 10478022003-MS
MS Filename Q190625A_009 Matrix Ground_Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	100	120	117	50-150	Pass	1146723
13C5_PFPeA	100	120	114	50-150	Pass	797697
13C5_PFHxA	100	110	111	50-150	Pass	758117
13C4_PFHpA	100	110	110	50-150	Pass	850850
13C8_PFOA	100	110	106	50-150	Pass	603461
13C9_PFNA	100	100	97	50-150	Pass	532534
13C6_PFDA	100	100	98	50-150	Pass	312105
13C7_PFUdA	100	110	106	50-150	Pass	376109
13C2_PFDoA	100	99	97	50-150	Pass	465161
13C2_PFTeDA	100	100	99	50-150	Pass	235420
d5-EtFOSAA	100	100	102	50-150	Pass	65399
d3-MeFOSAA	100	110	106	50-150	Pass	76793
13C3_PFBS	100	120	117	50-150	Pass	595073
13C3_PFHxS	100	110	105	50-150	Pass	552206
13C8_PFOS	100	98	96	50-150	Pass	362836
13C8_FOSA	100	81	79	50-150	Pass	664752
13C2_4:2FTS	100	140	135	50-150	Pass	118088
13C6_6:2FTS	100	130	128	50-150	Pass	106431
13C6_8:2FTS	100	110	108	50-150	Pass	89904

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	744665	457003 - 1371008	347316 - 1041947	Pass
13C4_PFOS	449050	246073 - 738220	204092 - 612277	Pass

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PFAS by Isotope DilutionMatrix Spike Sample Duplicate (MSD)

MSD Lab Sample ID	10478022003-MSD		
MSD Filename	Q190625A_010	MS Filename	Q190625A_009
Total Amount Extracted	49.3mL	Matrix	Ground_Water
ICAL ID	190620A01	Dilution	1
Start CCal Filename	Q190624A_051	Extracted	06/17/2019
End CCal Filename	Q190625A_011	Analyzed	06/25/2019 13:46
Method Blank Filename	Q190621C_021	Injected By	QL

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Recovery Limits	Flags	RPD %
PFBA	100	0	120	123	70.0 - 130.0		1
PFPeA	100	0	120	119	70.0 - 130.0		1
PFHxA	100	0	130	130	70.0 - 130.0		0
PFHpA	100	0	130	127	70.0 - 130.0		5
PFOA	100	0	120	123	70.0 - 130.0		5
PFNA	100	0	120	117	70.0 - 130.0		3
PFDA	100	0	130	129	70.0 - 130.0		5
PFUdA	100	0	120	118	70.0 - 130.0		0
PFDoA	100	0	120	115	70.0 - 130.0		12
PFTrDA	100	0	110	105	70.0 - 130.0		19
PFTeDA	100	0	110	111	70.0 - 130.0		13
PFOSA	100	0	120	118	70.0 - 130.0		5
N-EtFOSAA	100	0	110	111	70.0 - 130.0		4
N-MeFOSAA	100	0	120	123	70.0 - 130.0		2
PFBS	90	0	100	114	70.0 - 130.0		9
PFPeS	95	0	130	141	70.0 - 130.0		6
PFHxS	93	0	110	119	70.0 - 130.0		2
PFHpS	96	0	130	137	70.0 - 130.0		1
PFOS	94	0	110	122	70.0 - 130.0		11
PFNS	100	0	130	127	70.0 - 130.0		8
PFDS	100	0	130	128	70.0 - 130.0		1
4:2FTS	100	0	120	114	70.0 - 130.0		1
6:2FTS	100	0	140	140	70.0 - 130.0		8
8:2FTS	100	0	130	128	70.0 - 130.0		5

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PFAS by Isotope DilutionMatrix Spike Sample Duplicate (MSD)

Compound	Spike (ng/L)	Sample (ng/L)	Recovered (ng/L)	Recovery %	Recovery Limits	Flags	RPD %

MSD Lab Sample ID 10478022003-MSD
MSD Filename Q190625A_010
MS Filename Q190625A_009
Matrix Ground_Water

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	100	120	121	50-150	Pass	1166634
13C5_PFPeA	100	120	119	50-150	Pass	827675
13C5_PFHxA	100	110	112	50-150	Pass	756851
13C4_PFHpA	100	110	107	50-150	Pass	814781
13C8_PFOA	100	110	113	50-150	Pass	631451
13C9_PFNA	100	100	103	50-150	Pass	520519
13C6_PFDA	100	96	95	50-150	Pass	278295
13C7_PFUdA	100	100	102	50-150	Pass	334362
13C2_PFDoA	100	100	101	50-150	Pass	449772
13C2_PFTeDA	100	76	75	50-150	Pass	165156
d5-EtFOSAA	100	110	110	50-150	Pass	65300
d3-MeFOSAA	100	110	108	50-150	Pass	72415
13C3_PFBS	100	130	128	50-150	Pass	645442
13C3_PFHxS	100	120	116	50-150	Pass	565895
13C8_PFOS	100	110	109	50-150	Pass	382155
13C8_FOSA	100	81	80	50-150	Pass	619140
13C2_4:2FTS	100	160	157	50-150	Fail	135458
13C6_6:2FTS	100	130	126	50-150	Pass	103195
13C6_8:2FTS	100	130	125	50-150	Pass	95618

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	735783	457003 - 1371008	347316 - 1041947	Pass
13C4_PFOS	413870	246073 - 738220	204092 - 612277	Pass

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PFAA Initial Calibration Response Factor Summary

ICAL ID	**190620A01**	Data Files:	Time		Time
Calibration Date	06/20/2019	CS-1 Q190620A_004	16:24	CS-5 Q190620A_008	18:11
Instrument	10LCMS01	CS-2 Q190620A_005	16:51	CS-6 Q190620A_009	18:38
Column Phase	C18	CS-3 Q190620A_006	17:18	CS-7 Q190620A_010	19:04
Column ID No.	H17-401201	CS-4 Q190620A_007	17:44		
Analyst	QL				

Response Factors

Compound	Type	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	Mean	%RSD
CleanupStandards										
13C4_PFOA	M	194000	196000	191000	189000	187000	173000	150000	183000	9
13C4_PFOS	M	104000	98300	104000	99400	96600	94700	91400	98400	5
InternalStandards										
13C4_PFBA	M	1.27	1.23	1.25	1.29	1.30	1.38	1.48	1.32	7
13C5_PFPeA	M	0.907	0.889	0.894	0.937	0.930	0.987	1.05	0.941	6
13C5_PFHxA	M	0.901	0.947	0.858	0.936	0.912	0.929	0.959	0.920	4
13C4_PFHpA	M	1.03	0.997	1.01	1.02	1.02	1.06	1.12	1.04	4
13C8_PFOA	M	0.721	0.719	0.751	0.714	0.795	0.834	0.802	0.762	6
13C9_PFNA	M	1.16	1.20	1.16	1.24	1.27	1.29	1.21	1.22	4
13C6_PFDA	M	0.644	0.678	0.685	0.745	0.740	0.812	0.671	0.711	8
13C7_PFUdA	M	0.793	0.829	0.703	0.887	0.781	0.812	0.735	0.791	8
13C2_PFDoA	M	1.11	1.07	0.996	1.10	1.10	1.08	1.04	1.07	4
13C2_PFTeDA	M	0.546	0.484	0.463	0.559	0.543	0.596		0.532	9
d5-EtFOSAA	M	0.138	0.144	0.144	0.153	0.136	0.145	0.143	0.143	4
d3-MeFOSAA	M	0.168	0.160	0.155	0.168	0.156	0.164	0.158	0.161	3
13C3_PFBS	M	0.686	0.673	0.685	0.672	0.678	0.680	0.715	0.684	2
13C3_PFHxS	M	1.17	1.20	1.16	1.23	1.19	1.22	1.06	1.18	5
13C8_PFOS	M	0.854	0.918	0.789	0.840	0.867	0.855	0.786	0.844	5
13C8_FOSA	M	1.94	1.85	1.77	1.90	1.85	1.91	1.85	1.87	3
13C2_4:2FTS	M	0.109	0.110	0.109	0.121	0.117	0.137		0.117	9
13C6_6:2FTS	M	0.108	0.104	0.108	0.0989	0.123	0.126		0.111	10
13C6_8:2FTS	M	0.164	0.180	0.170	0.184	0.179	0.231		0.185	13

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PFAA Initial Calibration Response Factor Summary

Compound	Type	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	Mean	%RSD
Native Analytes										
PFBA	M	1.10	1.06	1.15	1.11	1.07	1.04	0.978	1.07	5
PFPeA	M	1.00	1.02	1.13	1.06	1.05	1.01	0.965	1.03	5
PFHxA	M	0.844	0.823	1.05	0.929	0.976	0.904	0.895	0.917	8
PFHpA	M	0.710	0.784	0.876	0.824	0.800	0.788	0.754	0.791	7
PFOA	M	1.28	1.18	1.27	1.39	1.21	1.17	1.21	1.24	6
PFNA	M	0.791	0.797	0.800	0.742	0.825	0.762	0.751	0.781	4
PFDA	M	1.12	1.16	1.13	1.22	1.03	1.04	1.23	1.13	7
PFUdA	M	0.688	0.685	0.828	0.667	0.808	0.726	0.770	0.739	9
PFDoA	M	0.624	0.637	0.694	0.648	0.685	0.706	0.623	0.660	5
PFTrDA	M	0.642	0.682	0.766	0.714	0.728	0.753	0.755	0.720	6
PFTeDA	M	0.808	0.811	0.858	0.883	0.832	0.774		0.828	5
PFOSA	M	0.619	0.690	0.734	0.707	0.721	0.680	0.649	0.686	6
N-EtFOSAA	M	1.38	1.40	1.38	1.26	1.58	1.41	1.35	1.40	7
N-MeFOSAA	M	1.39	1.63	1.68	1.60	1.74	1.64	1.56	1.61	7
PFBS	M	1.13	1.21	1.28	1.27	1.22	1.22	1.15	1.21	5
PFPeS	M	0.569	0.609	0.660	0.643	0.617	0.587	0.545	0.604	7
PFHxS	M	1.14	1.25	1.29	1.24	1.23	1.17	1.24	1.22	4
PFHpS	M	1.01	1.15	1.22	1.13	1.11	1.02	0.978	1.09	8
PFOS	M	1.05	1.12	1.34	1.25	1.20	1.22	1.25	1.20	8
PFNS	M	1.17	1.17	1.43	1.15	1.26	1.13	1.19	1.21	9
PFDS	M	0.581	0.681	0.708	0.668	0.673	0.659	0.613	0.655	7
4:2FTS	M	0.855	0.994	1.05	1.01	1.02	0.883		0.968	8
6:2FTS	M	1.25	1.25	1.36	1.58	1.18	1.22		1.31	11
8:2FTS	M	0.906	0.908	1.08	1.12	1.12	0.891		1.00	11

Slope: Mean Response Factor

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PFAA Initial Calibration Recovery Summary

ICAL ID	**190620A01**	Data Files:		Time
Calibration Date	06/20/2019	CS-1	Q190620A_004	16:24
Instrument	10LCMS01	CS-2	Q190620A_005	16:51
Column Phase	C18	CS-3	Q190620A_006	17:18
Column ID No.	H17-401201	CS-4	Q190620A_007	17:44
Analyst	QL	CS-5	Q190620A_008	18:11

%Recoveries

Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7
CleanupStandards							
13C4_PFOA	106	107	104	103	102	95	82
13C4_PFOS	106	100	106	101	98	96	93
InternalStandards							
13C4_PFBA	97	94	95	98	99	105	113
13C5_PFPeA	96	94	95	99	99	105	111
13C5_PFHxA	98	103	93	102	99	101	104
13C4_PFHpA	99	96	97	99	99	102	108
13C8_PFOA	95	94	99	94	104	109	105
13C9_PFNA	96	99	95	102	104	106	99
13C6_PFDA	91	95	96	105	104	114	94
13C7_PFUdA	100	105	89	112	99	103	93
13C2_PFDoA	103	100	93	103	103	101	97
13C2_PFTeDA	103	91	87	105	102	112	0
d5-EtFOSAA	96	101	100	107	95	101	100
d3-MeFOSAA	104	99	96	104	97	102	98
13C3_PFBS	100	98	100	98	99	99	104
13C3_PFHxS	99	102	99	104	101	104	90
13C8_PFOS	101	109	93	100	103	101	93
13C8_FOSA	104	99	95	102	99	102	99
13C2_4:2FTS	93	94	93	103	100	117	0
13C6_6:2FTS	97	93	97	89	110	113	0
13C6_8:2FTS	89	97	92	100	97	125	0

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PFAA Initial Calibration Recovery Summary

Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7
Native Analytes							
PFBA	103	99	108	103	99	97	91
PFPeA	97	99	110	102	101	98	93
PFHxA	92	90	114	101	106	99	98
PFHpA	90	99	111	104	101	100	95
PFOA	103	95	102	111	97	94	97
PFNA	101	102	102	95	106	98	96
PFDA	99	102	100	107	91	92	109
PFUdA	93	93	112	90	109	98	104
PFDoA	95	97	105	98	104	107	94
PFTrDA	89	95	106	99	101	105	105
PFTeDA	98	98	104	107	101	94	0
PFOSA	90	101	107	103	105	99	95
N-EtFOSAA	99	100	99	91	113	101	97
N-MeFOSAA	87	101	105	99	109	102	97
PFBS	93	100	106	105	101	101	95
PFPeS	94	101	109	106	102	97	90
PFHxS	93	102	106	101	101	95	102
PFHpS	93	106	112	104	102	94	90
PFOS	87	93	111	104	99	101	104
PFNS	96	97	118	95	104	93	98
PFDS	89	104	108	102	103	101	94
4:2FTS	88	103	108	104	105	91	0
6:2FTS	95	96	104	121	91	93	0
8:2FTS	90	90	107	112	112	89	0

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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190620A_012	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/20/2019 19:58		

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	20	101	70.0-130.0	1333758
PFPeA	20	20	101	70.0-130.0	928970
PFHxA	20	21	104	70.0-130.0	820143
PFHpA	20	20	100	70.0-130.0	789857
PFOA	20	21	103	70.0-130.0	930472
PFNA	20	19	94	70.0-130.0	477144
PFDA	20	21	103	70.0-130.0	419731
PFUdA	20	22	110	70.0-130.0	319731
PFDoA	20	21	104	70.0-130.0	378145
PFTrDA	20	20	100	70.0-130.0	395642
PFTeDA	20	21	107	70.0-130.0	232083
PFOSA	20	21	105	70.0-130.0	660305
N-EtFOSAA	20	21	104	70.0-130.0	105296
N-MeFOSAA	20	22	109	70.0-130.0	137432
PFBS	18	18	103	70.0-130.0	722149
PFPeS	19	19	103	70.0-130.0	582384
PFHxS	18	18	99	70.0-130.0	667014
PFHpS	19	19	100	70.0-130.0	671323
PFOS	19	19	101	70.0-130.0	485572
PFNS	20	21	103	70.0-130.0	493755
PFDS	20	21	104	70.0-130.0	377066
4:2FTS	20	21	104	70.0-130.0	109068
6:2FTS	20	24	121	70.0-130.0	158311
8:2FTS	20	23	115	70.0-130.0	110711

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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190620A_012	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/20/2019 19:58		

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	20	100	50-150	Pass	1228105
13C5_PFPeA	20	20	100	50-150	Pass	886142
13C5_PFHxA	20	20	100	50-150	Pass	859598
13C4_PFHpA	20	21	103	50-150	Pass	997923
13C8_PFOA	20	20	102	50-150	Pass	727941
13C9_PFNA	20	22	108	50-150	Pass	648180
13C6_PFDA	20	21	103	50-150	Pass	358630
13C7_PFUdA	20	20	101	50-150	Pass	393935
13C2_PFDoA	20	21	105	50-150	Pass	551076
13C2_PFTeDA	20	20	100	50-150	Pass	262043
d5-EtFOSAA	20	21	103	50-150	Pass	72390
d3-MeFOSAA	20	20	99	50-150	Pass	78201
13C3_PFBS	20	20	102	50-150	Pass	656857
13C3_PFHxS	20	21	105	50-150	Pass	605300
13C8_PFOS	20	21	104	50-150	Pass	430532
13C8_FOSA	20	20	100	50-150	Pass	917135
13C2_4:2FTS	20	20	99	50-150	Pass	108394
13C6_6:2FTS	20	19	96	50-150	Pass	100330
13C6_8:2FTS	20	21	106	50-150	Pass	96038

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	937645	457003 - 1371008	---	Pass
13C4_PFOS	491262	246073 - 738220	---	Pass

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PFAA Initial Calibration Response Factor Summary

ICAL ID	**190628A01**	Data Files:	Time		Time
Calibration Date	06/28/2019	CS-1 Q190628A_003	11:21	CS-5 Q190628A_007	13:08
Instrument	10LCMS01	CS-2 Q190628A_004	11:48	CS-6 Q190628A_008	13:35
Column Phase	C18	CS-3 Q190628A_005	12:15	CS-7 Q190628A_009	14:02
Column ID No.	H17-401201	CS-4 Q190628A_006	12:42		
Analyst	QL				

Response Factors

Compound	Type	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	Mean	%RSD
CleanupStandards										
13C4_PFOA	M	159000	158000	159000	161000	154000	152000	136000	154000	6
13C4_PFOS	M	73900	68700	69600	69200	66400	63300	63900	67900	5
InternalStandards										
13C4_PFBA	M	1.54	1.49	1.45	1.48	1.54	1.54	1.62	1.52	4
13C5_PFPeA	M	1.08	1.05	1.02	1.02	1.08	1.07	1.12	1.06	4
13C5_PFHxA	M	1.05	0.999	0.956	0.949	1.05	0.961	0.992	0.994	4
13C4_PFHpA	M	1.14	1.11	1.11	1.09	1.17	1.13	1.12	1.12	3
13C8_PFOA	M	0.813	0.771	0.787	0.763	0.765	0.749	0.798	0.778	3
13C9_PFNA	M	1.35	1.46	1.48	1.54	1.54	1.66	1.48	1.50	6
13C6_PFDA	M	0.811	0.748	0.769	0.863	0.881	0.888	0.825	0.826	7
13C7_PFUdA	M	0.954	1.04	0.966	0.965	1.02	0.965	0.928	0.977	4
13C2_PFDoA	M	1.14	1.21	1.18	1.30	1.27	1.45	1.27	1.26	8
13C2_PFTeDA	M	0.579	0.542	0.492	0.598	0.609	0.700		0.587	12
d5-EtFOSAA	M	0.157	0.156	0.154	0.158	0.164	0.153	0.149	0.156	3
d3-MeFOSAA	M	0.194	0.190	0.189	0.198	0.211	0.203	0.185	0.196	5
13C3_PFBS	M	0.691	0.695	0.664	0.668	0.684	0.643	0.654	0.671	3
13C3_PFHxS	M	1.29	1.38	1.31	1.33	1.32	1.27	1.11	1.29	7
13C8_PFOS	M	0.753	0.764	0.818	0.808	0.841	0.786	0.802	0.796	4
13C8_FOSA	M	1.41	1.50	1.46	1.51	1.57	1.57	1.51	1.51	4
13C2_4:2FTS	M	0.0939	0.0887	0.0886	0.0928	0.102	0.114		0.0966	10
13C6_6:2FTS	M	0.0707	0.0674	0.0669	0.0699	0.0756	0.0870		0.0729	10
13C6_8:2FTS	M	0.113	0.126	0.126	0.134	0.151	0.163		0.135	14

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PFAA Initial Calibration Response Factor Summary

Compound	Type	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7	Mean	%RSD
Native Analytes										
PFBA	M	1.19	1.09	1.18	1.21	1.09	1.06	0.997	1.12	7
PFPeA	M	0.974	1.02	1.11	1.07	1.04	1.00	0.975	1.03	5
PFHxA	M	0.826	0.968	0.996	0.998	0.947	0.986	0.954	0.954	6
PFHpA	M	0.754	0.814	0.884	0.825	0.803	0.787	0.776	0.806	5
PFOA	M	1.21	1.28	1.47	1.37	1.47	1.37	1.22	1.34	8
PFNA	M	0.858	0.838	0.818	0.807	0.819	0.768	0.755	0.809	5
PFDA	M	1.16	1.27	1.21	1.24	1.31	1.11	1.16	1.21	6
PFUdA	M	0.651	0.644	0.721	0.670	0.723	0.756	0.698	0.695	6
PFDoA	M	0.640	0.633	0.698	0.650	0.693	0.614	0.611	0.649	5
PFTrDA	M	0.613	0.608	0.655	0.648	0.657	0.643	0.619	0.635	3
PFTeDA	M	0.852	0.870	0.887	0.845	0.853	0.830		0.856	2
PFOSA	M	0.612	0.628	0.716	0.705	0.694	0.701	0.674	0.676	6
N-EtFOSAA	M	1.33	1.43	1.53	1.52	1.42	1.58	1.49	1.47	6
N-MeFOSAA	M	1.36	1.69	2.03	1.78	1.65	1.85	1.69	1.72	12
PFBS	M	1.17	1.16	1.29	1.21	1.22	1.21	1.17	1.20	4
PFPeS	M	0.480	0.515	0.593	0.565	0.501	0.495	0.491	0.520	8
PFHxS	M	1.10	1.14	1.32	1.25	1.24	1.26	1.24	1.22	6
PFHpS	M	0.969	0.970	1.06	0.982	1.01	0.870	0.852	0.958	8
PFOS	M	1.33	1.39	1.36	1.43	1.39	1.44	1.26	1.37	4
PFNS	M	0.871	0.888	1.07	1.05	0.996	0.992	0.919	0.969	8
PFDS	M	0.559	0.570	0.621	0.535	0.566	0.479	0.465	0.542	10
4:2FTS	M	0.934	0.978	1.08	1.00	0.935	0.826		0.959	9
6:2FTS	M	1.26	1.43	1.56	1.42	1.43	1.27		1.39	8
8:2FTS	M	1.01	0.940	1.15	1.04	1.01	0.935		1.01	8

Slope: Mean Response Factor

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PFAA Initial Calibration Recovery Summary

ICAL ID	**190628A01**	Data Files:		Time
Calibration Date	06/28/2019	CS-1	Q190628A_003	11:21
Instrument	10LCMS01	CS-2	Q190628A_004	11:48
Column Phase	C18	CS-3	Q190628A_005	12:15
Column ID No.	H17-401201	CS-4	Q190628A_006	12:42
Analyst	QL	CS-5	Q190628A_007	13:08

%Recoveries

Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7
CleanupStandards							
13C4_PFOA	103	102	103	105	100	99	88
13C4_PFOS	109	101	103	102	98	93	94
InternalStandards							
13C4_PFBA	101	98	95	97	101	101	107
13C5_PFPeA	102	98	96	96	101	101	106
13C5_PFHxA	105	101	96	95	106	97	100
13C4_PFHpA	102	98	98	97	104	100	100
13C8_PFOA	105	99	101	98	98	96	103
13C9_PFNA	90	97	99	103	102	110	99
13C6_PFDA	98	90	93	104	107	107	100
13C7_PFUdA	98	107	99	99	104	99	95
13C2_PFDoA	90	96	93	104	101	115	101
13C2_PFTeDA	99	92	84	102	104	119	0
d5-EtFOSAA	100	100	99	101	105	98	96
d3-MeFOSAA	99	97	96	101	108	104	94
13C3_PFBS	103	103	99	100	102	96	97
13C3_PFHxS	100	108	101	103	102	99	86
13C8_PFOS	95	96	103	102	106	99	101
13C8_FOSA	94	100	97	100	104	104	101
13C2_4:2FTS	97	92	92	96	106	118	0
13C6_6:2FTS	97	92	92	96	104	119	0
13C6_8:2FTS	83	93	93	99	111	120	0

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PFAA Initial Calibration Recovery Summary

Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	CAL7
Native Analytes							
PFBA	107	98	106	108	98	95	89
PFPeA	95	100	108	104	101	97	95
PFHxA	87	102	104	105	99	103	100
PFHpA	94	101	110	102	100	98	96
PFOA	90	96	109	102	110	102	91
PFNA	106	104	101	100	101	95	93
PFDA	96	105	100	103	109	92	96
PFUdA	94	93	104	96	104	109	101
PFDoA	99	98	108	100	107	95	94
PFTrDA	97	96	103	102	103	101	98
PFTeDA	100	102	104	99	100	97	0
PFOSA	91	93	106	104	103	104	100
N-EtFOSAA	90	97	104	104	97	107	101
N-MeFOSAA	79	98	118	103	96	108	98
PFBS	98	96	107	100	101	101	97
PFPeS	92	99	114	109	96	95	94
PFHxS	90	93	108	102	102	103	102
PFHpS	101	101	110	102	105	91	89
PFOS	97	102	99	104	101	105	92
PFNS	90	92	110	108	103	102	95
PFDS	103	105	115	99	104	88	86
4:2FTS	97	102	112	104	98	86	0
6:2FTS	90	102	112	102	103	91	0
8:2FTS	99	93	114	103	99	92	0

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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190628A_011	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	06/28/2019 14:55		

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	20	100	70.0-130.0	1336563
PFPeA	20	21	103	70.0-130.0	875028
PFHxA	20	20	102	70.0-130.0	751177
PFHpA	20	21	103	70.0-130.0	749262
PFOA	20	19	96	70.0-130.0	806145
PFNA	20	21	103	70.0-130.0	438007
PFDA	20	23	115	70.0-130.0	397447
PFUdA	20	20	98	70.0-130.0	246147
PFDoA	20	20	100	70.0-130.0	299534
PFTrDA	20	20	102	70.0-130.0	297252
PFTeDA	20	20	102	70.0-130.0	191821
PFOSA	20	21	104	70.0-130.0	362192
N-EtFOSAA	20	21	107	70.0-130.0	86648
N-MeFOSAA	20	21	104	70.0-130.0	121805
PFBS	18	19	108	70.0-130.0	598383
PFPeS	19	19	102	70.0-130.0	451574
PFHxS	18	18	96	70.0-130.0	503217
PFHpS	19	21	109	70.0-130.0	521287
PFOS	19	18	95	70.0-130.0	346130
PFNS	20	20	101	70.0-130.0	356006
PFDS	20	20	101	70.0-130.0	251428
4:2FTS	20	20	100	70.0-130.0	72807
6:2FTS	20	22	112	70.0-130.0	86784
8:2FTS	20	21	103	70.0-130.0	47149

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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190628A_011	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	06/28/2019 14:55		

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	20	98	50-150	Pass	1201402
13C5_PFPeA	20	19	96	50-150	Pass	823646
13C5_PFHxA	20	19	97	50-150	Pass	774578
13C4_PFHpA	20	20	100	50-150	Pass	906062
13C8_PFOA	20	20	100	50-150	Pass	627106
13C9_PFNA	20	20	99	50-150	Pass	526872
13C6_PFDA	20	20	98	50-150	Pass	286041
13C7_PFUdA	20	21	105	50-150	Pass	362427
13C2_PFDoA	20	21	103	50-150	Pass	459927
13C2_PFTeDA	20	21	106	50-150	Pass	219862
d5-EtFOSAA	20	20	99	50-150	Pass	54802
d3-MeFOSAA	20	20	98	50-150	Pass	68163
13C3_PFBS	20	19	96	50-150	Pass	518449
13C3_PFHxS	20	21	103	50-150	Pass	468476
13C8_PFOS	20	20	102	50-150	Pass	287577
13C8_FOSA	20	19	96	50-150	Pass	513288
13C2_4:2FTS	20	20	98	50-150	Pass	76117
13C6_6:2FTS	20	19	95	50-150	Pass	55728
13C6_8:2FTS	20	19	94	50-150	Pass	45321

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	807212	385075 - 1155225	---	Pass
13C4_PFOS	354124	169716 - 509148	---	Pass

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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190620A_012	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/20/2019 19:58		

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	20	101	70.0-130.0	1333758
PFPeA	20	20	101	70.0-130.0	928970
PFHxA	20	21	104	70.0-130.0	820143
PFHpA	20	20	100	70.0-130.0	789857
PFOA	20	21	103	70.0-130.0	930472
PFNA	20	19	94	70.0-130.0	477144
PFDA	20	21	103	70.0-130.0	419731
PFUdA	20	22	110	70.0-130.0	319731
PFDoA	20	21	104	70.0-130.0	378145
PFTrDA	20	20	100	70.0-130.0	395642
PFTeDA	20	21	107	70.0-130.0	232083
PFOSA	20	21	105	70.0-130.0	660305
N-EtFOSAA	20	21	104	70.0-130.0	105296
N-MeFOSAA	20	22	109	70.0-130.0	137432
PFBS	18	18	103	70.0-130.0	722149
PFPeS	19	19	103	70.0-130.0	582384
PFHxS	18	18	99	70.0-130.0	667014
PFHpS	19	19	100	70.0-130.0	671323
PFOS	19	19	101	70.0-130.0	485572
PFNS	20	21	103	70.0-130.0	493755
PFDS	20	21	104	70.0-130.0	377066
4:2FTS	20	21	104	70.0-130.0	109068
6:2FTS	20	24	121	70.0-130.0	158311
8:2FTS	20	23	115	70.0-130.0	110711

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Minneapolis, MN 55414
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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190620A_012	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/20/2019 19:58		

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	20	100	50-150	Pass	1228105
13C5_PFPeA	20	20	100	50-150	Pass	886142
13C5_PFHxA	20	20	100	50-150	Pass	859598
13C4_PFHpA	20	21	103	50-150	Pass	997923
13C8_PFOA	20	20	102	50-150	Pass	727941
13C9_PFNA	20	22	108	50-150	Pass	648180
13C6_PFDA	20	21	103	50-150	Pass	358630
13C7_PFUdA	20	20	101	50-150	Pass	393935
13C2_PFDoA	20	21	105	50-150	Pass	551076
13C2_PFTeDA	20	20	100	50-150	Pass	262043
d5-EtFOSAA	20	21	103	50-150	Pass	72390
d3-MeFOSAA	20	20	99	50-150	Pass	78201
13C3_PFBS	20	20	102	50-150	Pass	656857
13C3_PFHxS	20	21	105	50-150	Pass	605300
13C8_PFOS	20	21	104	50-150	Pass	430532
13C8_FOSA	20	20	100	50-150	Pass	917135
13C2_4:2FTS	20	20	99	50-150	Pass	108394
13C6_6:2FTS	20	19	96	50-150	Pass	100330
13C6_8:2FTS	20	21	106	50-150	Pass	96038

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	937645	457003 - 1371008	---	Pass
13C4_PFOS	491262	246073 - 738220	---	Pass

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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190628A_011	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	06/28/2019 14:55		

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	20	100	70.0-130.0	1336563
PFPeA	20	21	103	70.0-130.0	875028
PFHxA	20	20	102	70.0-130.0	751177
PFHpA	20	21	103	70.0-130.0	749262
PFOA	20	19	96	70.0-130.0	806145
PFNA	20	21	103	70.0-130.0	438007
PFDA	20	23	115	70.0-130.0	397447
PFUdA	20	20	98	70.0-130.0	246147
PFDoA	20	20	100	70.0-130.0	299534
PFTrDA	20	20	102	70.0-130.0	297252
PFTeDA	20	20	102	70.0-130.0	191821
PFOSA	20	21	104	70.0-130.0	362192
N-EtFOSAA	20	21	107	70.0-130.0	86648
N-MeFOSAA	20	21	104	70.0-130.0	121805
PFBS	18	19	108	70.0-130.0	598383
PFPeS	19	19	102	70.0-130.0	451574
PFHxS	18	18	96	70.0-130.0	503217
PFHpS	19	21	109	70.0-130.0	521287
PFOS	19	18	95	70.0-130.0	346130
PFNS	20	20	101	70.0-130.0	356006
PFDS	20	20	101	70.0-130.0	251428
4:2FTS	20	20	100	70.0-130.0	72807
6:2FTS	20	22	112	70.0-130.0	86784
8:2FTS	20	21	103	70.0-130.0	47149

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PFAS by Isotope Dilution Calibration Verification Summary

ICV

Lab Calibration ID	ICV-19206-007	Instrument ID	10LCMS01
Run File Name	Q190628A_011	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	06/28/2019 14:55		

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	20	98	50-150	Pass	1201402
13C5_PFPeA	20	19	96	50-150	Pass	823646
13C5_PFHxA	20	19	97	50-150	Pass	774578
13C4_PFHpA	20	20	100	50-150	Pass	906062
13C8_PFOA	20	20	100	50-150	Pass	627106
13C9_PFNA	20	20	99	50-150	Pass	526872
13C6_PFDA	20	20	98	50-150	Pass	286041
13C7_PFUdA	20	21	105	50-150	Pass	362427
13C2_PFDoA	20	21	103	50-150	Pass	459927
13C2_PFTeDA	20	21	106	50-150	Pass	219862
d5-EtFOSAA	20	20	99	50-150	Pass	54802
d3-MeFOSAA	20	20	98	50-150	Pass	68163
13C3_PFBS	20	19	96	50-150	Pass	518449
13C3_PFHxS	20	21	103	50-150	Pass	468476
13C8_PFOS	20	20	102	50-150	Pass	287577
13C8_FOSA	20	19	96	50-150	Pass	513288
13C2_4:2FTS	20	20	98	50-150	Pass	76117
13C6_6:2FTS	20	19	95	50-150	Pass	55728
13C6_8:2FTS	20	19	94	50-150	Pass	45321

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	807212	385075 - 1155225	---	Pass
13C4_PFOS	354124	169716 - 509148	---	Pass

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190621C_020	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/22/2019 03:12	Level	Low

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	2.0	2.1	103	70.0-130.0	141283
PFPeA	2.0	1.9	95	70.0-130.0	92322
PFHxA	2.0	1.8	92	70.0-130.0	78514
PFHpA	2.0	1.8	92	70.0-130.0	77624
PFOA	2.0	1.9	96	70.0-130.0	93031
PFNA	2.0	1.8	91	70.0-130.0	47383
PFDA	2.0	1.6	82	70.0-130.0	38465
PFUdA	2.0	1.8	89	70.0-130.0	30164
PFDoA	2.0	2.0	102	70.0-130.0	41550
PFTrDA	2.0	1.8	89	70.0-130.0	39808
PFTeDA	2.0	1.9	95	70.0-130.0	25331
PFOSA	2.0	1.9	96	70.0-130.0	56961
N-EtFOSAA	2.0	1.7	85	70.0-130.0	9492
N-MeFOSAA	2.0	1.9	94	70.0-130.0	14069
PFBS	1.8	1.6	93	70.0-130.0	71015
PFPeS	1.9	1.7	93	70.0-130.0	56358
PFHxS	1.8	1.6	90	70.0-130.0	67177
PFHpS	1.9	1.8	95	70.0-130.0	65596
PFOS	1.8	1.6	89	70.0-130.0	46057
PFNS	2.0	1.7	87	70.0-130.0	48384
PFDS	2.0	1.8	88	70.0-130.0	35640
4:2FTS	2.0	1.8	89	70.0-130.0	10523
6:2FTS	2.0	2.0	102	70.0-130.0	15308
8:2FTS	2.0	2.1	103	70.0-130.0	11612

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190621C_020	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/22/2019 03:12	Level	Low

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	19	95	50-150	Pass	1279267
13C5_PFPeA	20	19	97	50-150	Pass	937992
13C5_PFHxA	20	20	99	50-150	Pass	935543
13C4_PFHpA	20	20	101	50-150	Pass	1070691
13C8_PFOA	20	20	100	50-150	Pass	782670
13C9_PFNA	20	21	103	50-150	Pass	667949
13C6_PFDA	20	22	109	50-150	Pass	412514
13C7_PFUdA	20	22	108	50-150	Pass	457637
13C2_PFDoA	20	22	108	50-150	Pass	619468
13C2_PFTeDA	20	23	113	50-150	Pass	320997
d5-EtFOSAA	20	21	104	50-150	Pass	79659
d3-MeFOSAA	20	22	108	50-150	Pass	93129
13C3_PFBS	20	20	102	50-150	Pass	713659
13C3_PFHxS	20	21	106	50-150	Pass	668529
13C8_PFOS	20	21	103	50-150	Pass	467046
13C8_FOSA	20	17	87	50-150	Pass	867520
13C2_4:2FTS	20	20	102	50-150	Pass	122623
13C6_6:2FTS	20	20	100	50-150	Pass	114338
13C6_8:2FTS	20	23	113	50-150	Pass	111668

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	1027048	457003 - 1371008	468455 - 1405364	Pass
13C4_PFOS	534904	246073 - 738220	245941 - 737822	Pass

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190621C_033	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/22/2019 08:59	Level	Mid

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	21	103	70.0-130.0	1351104
PFPeA	20	21	104	70.0-130.0	954875
PFHxA	20	21	105	70.0-130.0	857511
PFHpA	20	20	102	70.0-130.0	817932
PFOA	20	21	106	70.0-130.0	933204
PFNA	20	20	102	70.0-130.0	509284
PFDA	20	19	93	70.0-130.0	413612
PFUdA	20	20	101	70.0-130.0	308349
PFDoA	20	23	116	70.0-130.0	446611
PFTrDA	20	21	106	70.0-130.0	443449
PFTeDA	20	20	101	70.0-130.0	259939
PFOSA	20	20	101	70.0-130.0	588109
N-EtFOSAA	20	19	93	70.0-130.0	113185
N-MeFOSAA	20	23	114	70.0-130.0	149541
PFBS	18	18	104	70.0-130.0	723833
PFPeS	19	21	109	70.0-130.0	630634
PFHxS	18	18	96	70.0-130.0	677097
PFHpS	19	21	108	70.0-130.0	714818
PFOS	19	19	104	70.0-130.0	501724
PFNS	20	20	100	70.0-130.0	502605
PFDS	20	21	106	70.0-130.0	402947
4:2FTS	20	22	108	70.0-130.0	127338
6:2FTS	20	22	109	70.0-130.0	164977
8:2FTS	20	22	112	70.0-130.0	115604

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Minneapolis, MN 55414
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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190621C_033	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/22/2019 08:59	Level	Mid

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	20	101	50-150	Pass	1226678
13C5_PFPeA	20	20	102	50-150	Pass	889282
13C5_PFHxA	20	21	105	50-150	Pass	892283
13C4_PFHpA	20	21	106	50-150	Pass	1014183
13C8_PFOA	20	20	101	50-150	Pass	709198
13C9_PFNA	20	20	102	50-150	Pass	638059
13C6_PFDA	20	21	107	50-150	Pass	391180
13C7_PFUdA	20	20	102	50-150	Pass	414533
13C2_PFDoA	20	21	106	50-150	Pass	581793
13C2_PFTeDA	20	23	114	50-150	Pass	310760
d5-EtFOSAA	20	24	118	50-150	Pass	86989
d3-MeFOSAA	20	20	99	50-150	Pass	81777
13C3_PFBS	20	20	102	50-150	Pass	647700
13C3_PFHxS	20	21	105	50-150	Pass	632491
13C8_PFOS	20	20	100	50-150	Pass	434302
13C8_FOSA	20	18	88	50-150	Pass	845178
13C2_4:2FTS	20	23	113	50-150	Pass	122238
13C6_6:2FTS	20	22	112	50-150	Pass	115398
13C6_8:2FTS	20	22	109	50-150	Pass	102969

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	924073	457003 - 1371008	513524 - 1540572	Pass
13C4_PFOS	512817	246073 - 738220	267452 - 802356	Pass

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(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190621C_038	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/22/2019 11:12	Level	Low

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	2.0	2.0	102	70.0-130.0	142491
PFPeA	2.0	1.9	95	70.0-130.0	93359
PFHxA	2.0	1.9	93	70.0-130.0	79661
PFHpA	2.0	1.9	95	70.0-130.0	77254
PFOA	2.0	1.9	93	70.0-130.0	88068
PFNA	2.0	1.9	95	70.0-130.0	46182
PFDA	2.0	1.7	87	70.0-130.0	39452
PFUdA	2.0	1.7	84	70.0-130.0	28413
PFDoA	2.0	1.8	89	70.0-130.0	36263
PFTrDA	2.0	2.0	98	70.0-130.0	43387
PFTeDA	2.0	1.9	93	70.0-130.0	25332
PFOSA	2.0	2.0	98	70.0-130.0	57181
N-EtFOSAA	2.0	1.9	94	70.0-130.0	11090
N-MeFOSAA	2.0	1.7	83	70.0-130.0	12568
PFBS	1.8	1.7	93	70.0-130.0	69977
PFPeS	1.9	1.9	99	70.0-130.0	57741
PFHxS	1.8	1.7	92	70.0-130.0	65987
PFHpS	1.9	1.9	100	70.0-130.0	64975
PFOS	1.8	1.8	98	70.0-130.0	48908
PFNS	2.0	1.8	89	70.0-130.0	49106
PFDS	2.0	1.8	92	70.0-130.0	36910
4:2FTS	2.0	2.0	101	70.0-130.0	11834
6:2FTS	2.0	2.3	114	70.0-130.0	15866
8:2FTS	2.0	2.3	113	70.0-130.0	11474

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190621C_038	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/22/2019 11:12	Level	Low

Internal Standards	Known	Conc.		Recovery		
Compound	Conc.	Found	%Recovery	Limits	Pass/Fail	Area
13C4_PFBA	20	21	103	50-150	Pass	1302467
13C5_PFPeA	20	21	105	50-150	Pass	950937
13C5_PFHxA	20	21	105	50-150	Pass	934757
13C4_PFHpA	20	21	103	50-150	Pass	1028976
13C8_PFOA	20	21	103	50-150	Pass	759743
13C9_PFNA	20	19	96	50-150	Pass	624493
13C6_PFDA	20	21	105	50-150	Pass	399481
13C7_PFUdA	20	22	108	50-150	Pass	456475
13C2_PFDoA	20	22	108	50-150	Pass	614504
13C2_PFTeDA	20	23	116	50-150	Pass	329261
d5-EtFOSAA	20	22	110	50-150	Pass	84259
d3-MeFOSAA	20	22	110	50-150	Pass	94685
13C3_PFBS	20	21	106	50-150	Pass	699577
13C3_PFHxS	20	21	103	50-150	Pass	642216
13C8_PFOS	20	20	100	50-150	Pass	449300
13C8_FOSA	20	17	86	50-150	Pass	850948
13C2_4:2FTS	20	22	108	50-150	Pass	121318
13C6_6:2FTS	20	20	99	50-150	Pass	106163
13C6_8:2FTS	20	21	103	50-150	Pass	101452

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	963133	457003 - 1371008	462036 - 1386109	Pass
13C4_PFOS	533075	246073 - 738220	256408 - 769225	Pass

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Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190624A_003	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/24/2019 11:31	Level	Low

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	2.0	2.1	103	70.0-130.0	135524
PFPeA	2.0	1.9	94	70.0-130.0	84174
PFHxA	2.0	1.9	97	70.0-130.0	73191
PFHpA	2.0	1.8	90	70.0-130.0	67495
PFOA	2.0	2.0	99	70.0-130.0	80303
PFNA	2.0	1.9	97	70.0-130.0	40737
PFDA	2.0	1.9	97	70.0-130.0	36174
PFUdA	2.0	1.9	93	70.0-130.0	25310
PFDoA	2.0	2.0	99	70.0-130.0	28800
PFTrDA	2.0	1.8	89	70.0-130.0	28180
PFTeDA	2.0	1.9	96	70.0-130.0	19336
PFOSA	2.0	1.8	91	70.0-130.0	37683
N-EtFOSAA	2.0	1.8	91	70.0-130.0	8921
N-MeFOSAA	2.0	1.9	96	70.0-130.0	12166
PFBS	1.8	1.6	92	70.0-130.0	61925
PFPeS	1.9	1.9	99	70.0-130.0	52826
PFHxS	1.8	1.6	89	70.0-130.0	58687
PFHpS	1.9	1.9	102	70.0-130.0	56803
PFOS	1.8	1.9	103	70.0-130.0	43235
PFNS	2.0	1.8	90	70.0-130.0	40204
PFDS	2.0	2.1	106	70.0-130.0	30609
4:2FTS	2.0	1.9	93	70.0-130.0	10623
6:2FTS	2.0	2.0	102	70.0-130.0	13622
8:2FTS	2.0	2.1	103	70.0-130.0	8204

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190624A_003	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/24/2019 11:31	Level	Low

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	22	112	50-150	Pass	1230574
13C5_PFPeA	20	22	111	50-150	Pass	866951
13C5_PFHxA	20	22	108	50-150	Pass	826653
13C4_PFHpA	20	22	109	50-150	Pass	943932
13C8_PFOA	20	20	102	50-150	Pass	650251
13C9_PFNA	20	19	95	50-150	Pass	539319
13C6_PFDA	20	20	100	50-150	Pass	328591
13C7_PFUdA	20	20	100	50-150	Pass	368736
13C2_PFDoA	20	18	88	50-150	Pass	439387
13C2_PFTeDA	20	20	99	50-150	Pass	243649
d5-EtFOSAA	20	21	106	50-150	Pass	70613
d3-MeFOSAA	20	21	106	50-150	Pass	79126
13C3_PFBS	20	22	110	50-150	Pass	625513
13C3_PFHxS	20	22	108	50-150	Pass	589334
13C8_PFOS	20	19	97	50-150	Pass	377913
13C8_FOSA	20	14	70	50-150	Pass	606437
13C2_4:2FTS	20	24	120	50-150	Pass	117423
13C6_6:2FTS	20	22	110	50-150	Pass	102002
13C6_8:2FTS	20	19	93	50-150	Pass	79456

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	833112	457003 - 1371008	---	Pass
13C4_PFOS	463865	246073 - 738220	---	Pass

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190624A_018	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/24/2019 18:12	Level	Mid

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	20	102	70.0-130.0	1110252
PFPeA	20	21	103	70.0-130.0	752005
PFHxA	20	20	101	70.0-130.0	634252
PFHpA	20	21	104	70.0-130.0	623315
PFOA	20	22	108	70.0-130.0	751433
PFNA	20	21	106	70.0-130.0	403637
PFDA	20	20	98	70.0-130.0	334126
PFUdA	20	20	101	70.0-130.0	234617
PFDoA	20	21	104	70.0-130.0	289303
PFTrDA	20	20	99	70.0-130.0	301815
PFTeDA	20	21	103	70.0-130.0	188957
PFOSA	20	21	107	70.0-130.0	389096
N-EtFOSAA	20	19	96	70.0-130.0	84685
N-MeFOSAA	20	23	116	70.0-130.0	119794
PFBS	18	18	102	70.0-130.0	590519
PFPeS	19	21	113	70.0-130.0	487849
PFHxS	18	19	104	70.0-130.0	551234
PFHpS	19	21	110	70.0-130.0	553627
PFOS	19	19	103	70.0-130.0	394820
PFNS	20	20	99	70.0-130.0	378502
PFDS	20	21	107	70.0-130.0	296322
4:2FTS	20	19	95	70.0-130.0	100843
6:2FTS	20	23	117	70.0-130.0	139526
8:2FTS	20	24	118	70.0-130.0	92083

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190624A_018	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/24/2019 18:12	Level	Mid

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	21	104	50-150	Pass	1016985
13C5_PFPeA	20	20	102	50-150	Pass	709897
13C5_PFHxA	20	20	101	50-150	Pass	687554
13C4_PFHpA	20	20	99	50-150	Pass	759884
13C8_PFOA	20	20	99	50-150	Pass	559897
13C9_PFNA	20	19	94	50-150	Pass	486934
13C6_PFDA	20	20	100	50-150	Pass	300319
13C7_PFUdA	20	19	94	50-150	Pass	315127
13C2_PFDoA	20	19	93	50-150	Pass	422913
13C2_PFTeDA	20	20	98	50-150	Pass	221825
d5-EtFOSAA	20	21	104	50-150	Pass	63243
d3-MeFOSAA	20	19	94	50-150	Pass	64469
13C3_PFBS	20	21	106	50-150	Pass	538632
13C3_PFHxS	20	19	96	50-150	Pass	477545
13C8_PFOS	20	19	97	50-150	Pass	345221
13C8_FOSA	20	13	67	50-150	Pass	528833
13C2_4:2FTS	20	25	127	50-150	Pass	109665
13C6_6:2FTS	20	22	110	50-150	Pass	91068
13C6_8:2FTS	20	20	99	50-150	Pass	77490

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	740582	457003 - 1371008	416556 - 1249668	Pass
13C4_PFOS	423584	246073 - 738220	231933 - 695798	Pass

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190624A_051	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/25/2019 08:52	Level	Low

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	2.0	2.0	101	70.0-130.0	104211
PFPeA	2.0	1.9	96	70.0-130.0	66773
PFHxA	2.0	1.9	95	70.0-130.0	57641
PFHpA	2.0	1.9	95	70.0-130.0	53709
PFOA	2.0	1.9	95	70.0-130.0	60971
PFNA	2.0	1.7	87	70.0-130.0	33253
PFDA	2.0	2.0	99	70.0-130.0	29622
PFUdA	2.0	1.8	91	70.0-130.0	21441
PFDoA	2.0	1.9	95	70.0-130.0	26526
PFTrDA	2.0	1.9	95	70.0-130.0	29147
PFTeDA	2.0	1.9	96	70.0-130.0	18605
PFOSA	2.0	1.9	93	70.0-130.0	44416
N-EtFOSAA	2.0	2.3	115	70.0-130.0	8276
N-MeFOSAA	2.0	1.8	91	70.0-130.0	10693
PFBS	1.8	1.7	96	70.0-130.0	55587
PFPeS	1.9	2.0	107	70.0-130.0	43588
PFHxS	1.8	1.7	94	70.0-130.0	52001
PFHpS	1.9	1.9	102	70.0-130.0	51370
PFOS	1.8	2.1	114	70.0-130.0	39438
PFNS	2.0	2.1	104	70.0-130.0	39994
PFDS	2.0	1.9	97	70.0-130.0	26935
4:2FTS	2.0	1.7	87	70.0-130.0	8659
6:2FTS	2.0	1.9	97	70.0-130.0	11620
8:2FTS	2.0	2.0	98	70.0-130.0	7350

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Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190624A_051	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/25/2019 08:52	Level	Low

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	21	105	50-150	Pass	963168
13C5_PFPeA	20	21	103	50-150	Pass	675164
13C5_PFHxA	20	21	104	50-150	Pass	662081
13C4_PFHpA	20	20	99	50-150	Pass	715457
13C8_PFOA	20	19	97	50-150	Pass	515221
13C9_PFNA	20	20	98	50-150	Pass	487815
13C6_PFDA	20	18	91	50-150	Pass	264014
13C7_PFUdA	20	20	98	50-150	Pass	317166
13C2_PFDoA	20	19	97	50-150	Pass	425256
13C2_PFTeDA	20	21	107	50-150	Pass	232973
d5-EtFOSAA	20	18	89	50-150	Pass	51782
d3-MeFOSAA	20	22	111	50-150	Pass	72807
13C3_PFBS	20	23	113	50-150	Pass	537388
13C3_PFHxS	20	21	103	50-150	Pass	493985
13C8_PFOS	20	18	90	50-150	Pass	310323
13C8_FOSA	20	18	91	50-150	Pass	694366
13C2_4:2FTS	20	25	126	50-150	Pass	102649
13C6_6:2FTS	20	24	119	50-150	Pass	91984
13C6_8:2FTS	20	20	99	50-150	Pass	74467

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	694631	457003 - 1371008	358789 - 1076368	Pass
13C4_PFOS	408185	246073 - 738220	215662 - 646986	Pass

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PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190625A_011	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/25/2019 14:12	Level	Mid

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	25	124	70.0-130.0	1444744
PFPeA	20	20	101	70.0-130.0	814829
PFHxA	20	20	101	70.0-130.0	685586
PFHpA	20	22	112	70.0-130.0	702816
PFOA	20	21	104	70.0-130.0	788781
PFNA	20	20	100	70.0-130.0	398801
PFDA	20	20	100	70.0-130.0	333622
PFUdA	20	21	107	70.0-130.0	260707
PFDoA	20	19	97	70.0-130.0	306680
PFTrDA	20	19	94	70.0-130.0	322992
PFTeDA	20	22	109	70.0-130.0	183700
PFOSA	20	21	106	70.0-130.0	465723
N-EtFOSAA	20	21	103	70.0-130.0	89739
N-MeFOSAA	20	23	114	70.0-130.0	131990
PFBS	18	19	109	70.0-130.0	663493
PFPeS	19	22	116	70.0-130.0	526103
PFHxS	18	19	104	70.0-130.0	612897
PFHpS	19	22	116	70.0-130.0	612608
PFOS	19	20	106	70.0-130.0	437021
PFNS	20	23	113	70.0-130.0	448401
PFDS	20	21	106	70.0-130.0	332527
4:2FTS	20	22	110	70.0-130.0	119562
6:2FTS	20	21	105	70.0-130.0	142265
8:2FTS	20	21	107	70.0-130.0	98292

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Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190625A_011	Column ID	H17-401201
Injected By	QL	Ical ID	190620A01
Analyzed	06/25/2019 14:12	Level	Mid

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	24	118	50-150	Pass	1091608
13C5_PFPeA	20	23	117	50-150	Pass	778490
13C5_PFHxA	20	23	114	50-150	Pass	742067
13C4_PFHpA	20	22	109	50-150	Pass	795394
13C8_PFOA	20	23	114	50-150	Pass	610604
13C9_PFNA	20	19	96	50-150	Pass	509790
13C6_PFDA	20	19	94	50-150	Pass	294114
13C7_PFUdA	20	19	95	50-150	Pass	328924
13C2_PFDoA	20	20	102	50-150	Pass	478909
13C2_PFTeDA	20	17	87	50-150	Pass	203150
d5-EtFOSAA	20	20	100	50-150	Pass	62493
d3-MeFOSAA	20	20	102	50-150	Pass	71966
13C3_PFBS	20	24	118	50-150	Pass	567089
13C3_PFHxS	20	21	103	50-150	Pass	529626
13C8_PFOS	20	20	100	50-150	Pass	370142
13C8_FOSA	20	16	78	50-150	Pass	639720
13C2_4:2FTS	20	27	137	50-150	Pass	112754
13C6_6:2FTS	20	26	132	50-150	Pass	103841
13C6_8:2FTS	20	22	112	50-150	Pass	91144

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	704747	457003 - 1371008	347316 - 1041947	Pass
13C4_PFOS	438268	246073 - 738220	204092 - 612277	Pass

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Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190701A_003	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	07/01/2019 13:06	Level	Low

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	2.0	2.1	103	70.0-130.0	146094
PFPeA	2.0	1.9	94	70.0-130.0	87428
PFHxA	2.0	1.9	93	70.0-130.0	72848
PFHpA	2.0	1.9	94	70.0-130.0	72619
PFOA	2.0	1.8	90	70.0-130.0	87753
PFNA	2.0	1.9	97	70.0-130.0	43214
PFDA	2.0	2.1	105	70.0-130.0	33989
PFUdA	2.0	1.9	96	70.0-130.0	24670
PFDoA	2.0	2.2	110	70.0-130.0	30022
PFTrDA	2.0	1.8	89	70.0-130.0	23862
PFTeDA	2.0	1.8	91	70.0-130.0	18486
PFOSA	2.0	1.9	94	70.0-130.0	33919
N-EtFOSAA	2.0	1.7	87	70.0-130.0	7893
N-MeFOSAA	2.0	1.8	92	70.0-130.0	11843
PFBS	1.8	1.7	98	70.0-130.0	63429
PFPeS	1.9	1.8	95	70.0-130.0	44603
PFHxS	1.8	1.7	92	70.0-130.0	52795
PFHpS	1.9	1.9	99	70.0-130.0	49624
PFOS	1.8	1.7	91	70.0-130.0	34400
PFNS	2.0	2.0	102	70.0-130.0	36889
PFDS	2.0	2.3	116	70.0-130.0	26387
4:2FTS	2.0	1.9	97	70.0-130.0	7432
6:2FTS	2.0	2.1	104	70.0-130.0	8731
8:2FTS	2.0	2.3	114	70.0-130.0	4946

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1700 Elm Street, Suite 200
Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-01	Instrument ID	10LCMS01
Run File Name	Q190701A_003	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	07/01/2019 13:06	Level	Low

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	19	97	50-150	Pass	1271041
13C5_PFPeA	20	20	99	50-150	Pass	902847
13C5_PFHxA	20	19	97	50-150	Pass	825223
13C4_PFHpA	20	20	100	50-150	Pass	959815
13C8_PFOA	20	22	109	50-150	Pass	725822
13C9_PFNA	20	19	95	50-150	Pass	548511
13C6_PFDA	20	17	85	50-150	Pass	269215
13C7_PFUdA	20	20	99	50-150	Pass	371712
13C2_PFDoA	20	17	87	50-150	Pass	421474
13C2_PFTeDA	20	21	105	50-150	Pass	236983
d5-EtFOSAA	20	21	103	50-150	Pass	61502
d3-MeFOSAA	20	20	100	50-150	Pass	74706
13C3_PFBS	20	21	105	50-150	Pass	604922
13C3_PFHxS	20	21	104	50-150	Pass	514185
13C8_PFOS	20	20	98	50-150	Pass	299927
13C8_FOSA	20	19	93	50-150	Pass	535925
13C2_4:2FTS	20	19	97	50-150	Pass	80132
13C6_6:2FTS	20	19	96	50-150	Pass	60156
13C6_8:2FTS	20	16	82	50-150	Pass	42682

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	856553	385075 - 1155225	---	Pass
13C4_PFOS	382977	169716 - 509148	---	Pass

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Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190701A_009	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	07/01/2019 15:46	Level	Mid

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Area
PFBA	20	22	108	70.0-130.0	1550823
PFPeA	20	21	104	70.0-130.0	968923
PFHxA	20	21	104	70.0-130.0	827446
PFHpA	20	20	98	70.0-130.0	769955
PFOA	20	19	97	70.0-130.0	921652
PFNA	20	24	118	70.0-130.0	488495
PFDA	20	23	114	70.0-130.0	439318
PFUdA	20	21	105	70.0-130.0	248421
PFDoA	20	19	97	70.0-130.0	299730
PFTrDA	20	20	102	70.0-130.0	307954
PFTeDA	20	19	95	70.0-130.0	174598
PFOSA	20	20	101	70.0-130.0	369540
N-EtFOSAA	20	20	102	70.0-130.0	83817
N-MeFOSAA	20	23	116	70.0-130.0	136326
PFBS	18	19	105	70.0-130.0	642705
PFPeS	19	20	108	70.0-130.0	515073
PFHxS	18	19	101	70.0-130.0	582091
PFHpS	19	23	122	70.0-130.0	568198
PFOS	19	19	102	70.0-130.0	404129
PFNS	20	24	121	70.0-130.0	400578
PFDS	20	21	106	70.0-130.0	274361
4:2FTS	20	21	103	70.0-130.0	82162
6:2FTS	20	22	110	70.0-130.0	96421
8:2FTS	20	20	100	70.0-130.0	50152

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1700 Elm Street, Suite 200
Minneapolis, MN 55414
(612) 607-1700

PFAS by Isotope Dilution Calibration Verification Summary

CCV

Lab Calibration ID	CAL-19206-006-04	Instrument ID	10LCMS01
Run File Name	Q190701A_009	Column ID	H17-401201
Injected By	QL	Ical ID	190628A01
Analyzed	07/01/2019 15:46	Level	Mid

Internal Standards Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Pass/Fail	Area
13C4_PFBA	20	19	97	50-150	Pass	1282518
13C5_PFPeA	20	20	98	50-150	Pass	901755
13C5_PFHxA	20	20	98	50-150	Pass	837422
13C4_PFHpA	20	20	100	50-150	Pass	971567
13C8_PFOA	20	21	106	50-150	Pass	710193
13C9_PFNA	20	18	88	50-150	Pass	510188
13C6_PFDA	20	20	100	50-150	Pass	318939
13C7_PFUdA	20	18	90	50-150	Pass	341468
13C2_PFDoA	20	20	98	50-150	Pass	476977
13C2_PFTeDA	20	19	95	50-150	Pass	214889
d5-EtFOSAA	20	19	93	50-150	Pass	55893
d3-MeFOSAA	20	18	90	50-150	Pass	68038
13C3_PFBS	20	20	99	50-150	Pass	574122
13C3_PFHxS	20	21	104	50-150	Pass	514987
13C8_PFOS	20	20	101	50-150	Pass	311658
13C8_FOSA	20	19	93	50-150	Pass	543029
13C2_4:2FTS	20	20	100	50-150	Pass	83586
13C6_6:2FTS	20	20	100	50-150	Pass	62990
13C6_8:2FTS	20	19	95	50-150	Pass	49654

Injection Internal Standards

IS Compound	Area	Ical Limits	CCV Limits	Pass/Fail
13C4_PFOA	864282	385075 - 1155225	428276 - 1284829	Pass
13C4_PFOS	386625	169716 - 509148	191489 - 574466	Pass

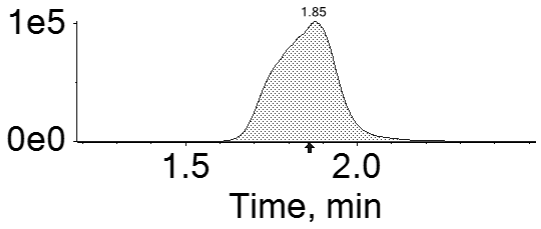
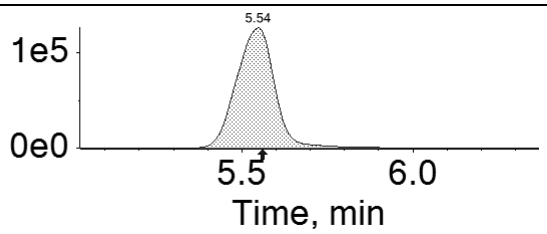
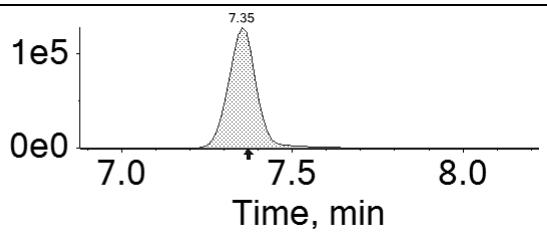
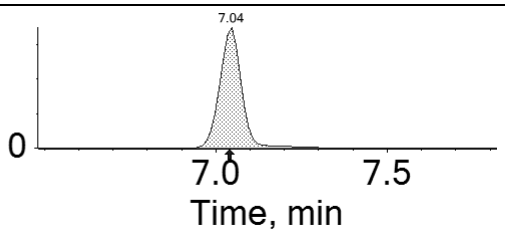
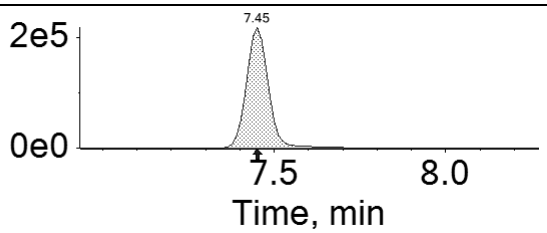
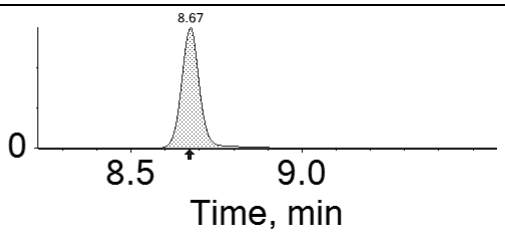
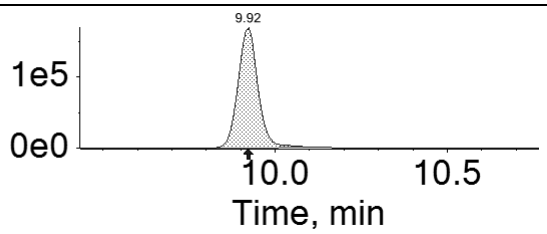
Appendix D

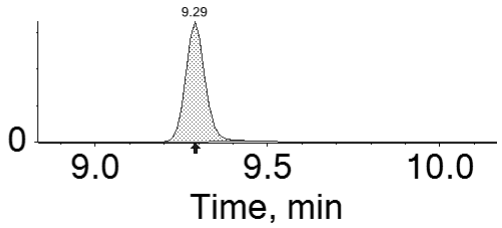
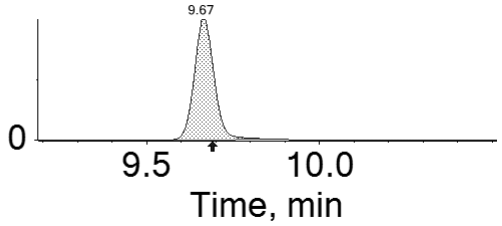
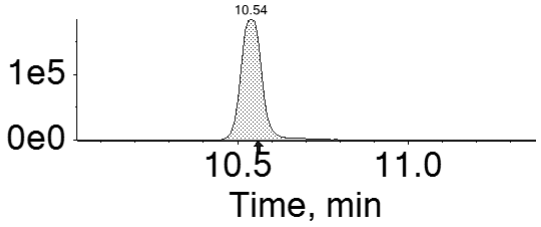
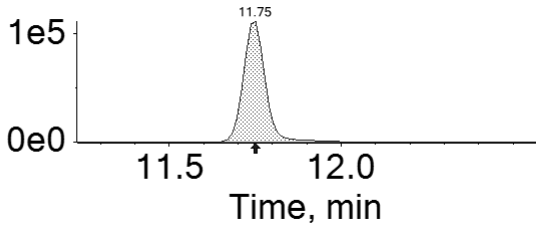
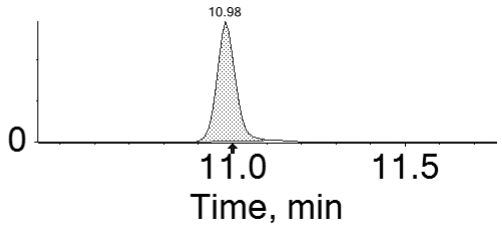
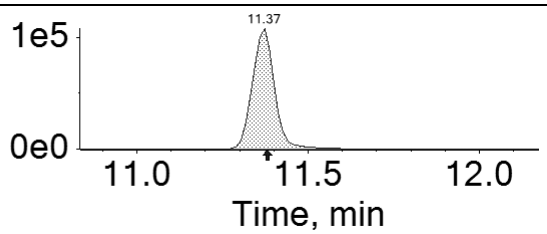
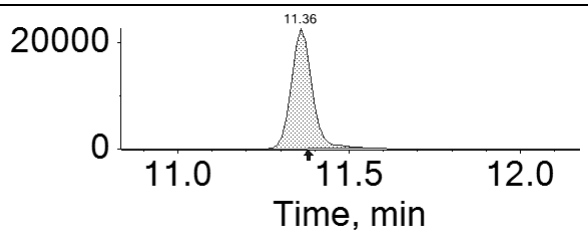
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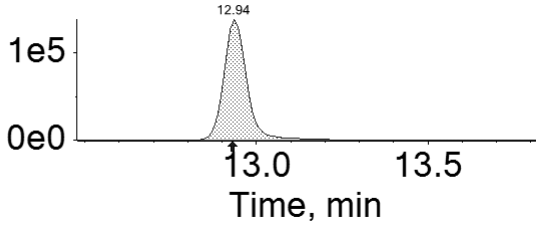
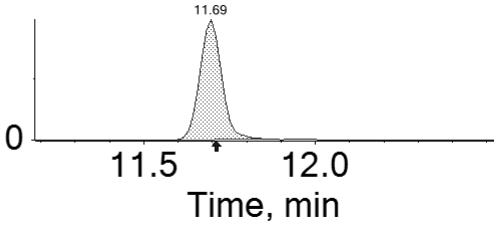
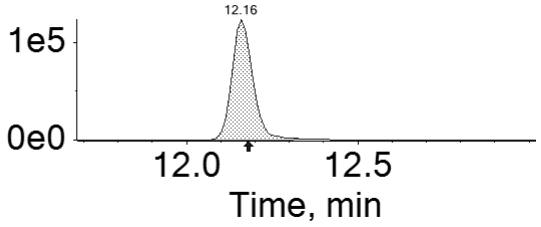
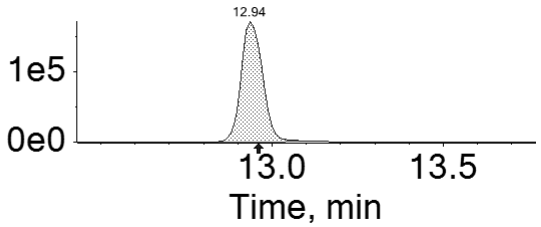
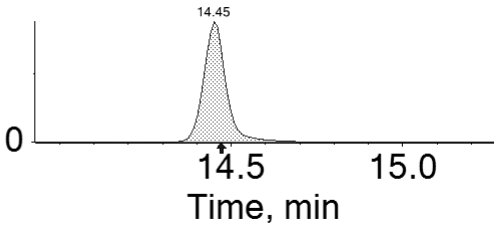
Sample Name	10478022001	**Injection Vial**	29
Sample ID	10478022001	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T08:05:54	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

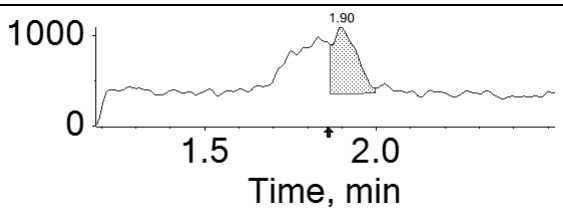
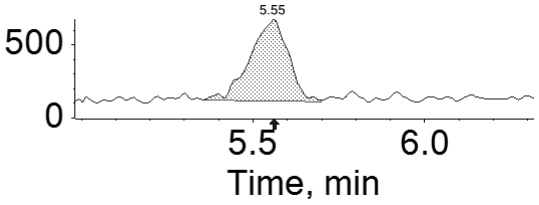
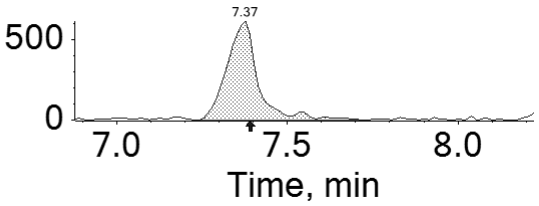
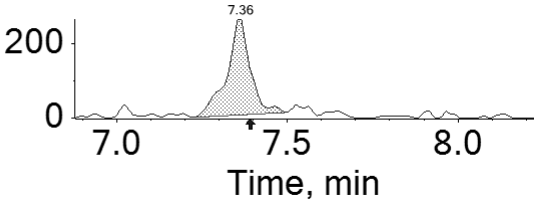
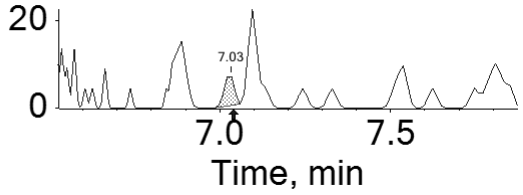
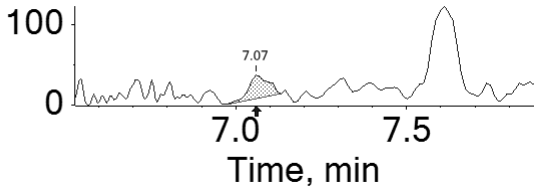
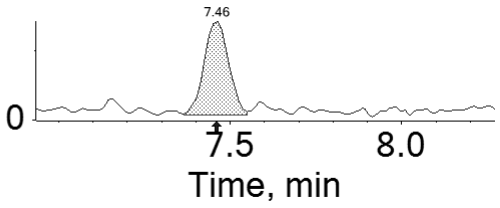
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.289e6	1.85	1.00	-
13C5_PFPeA	9.779e5	5.54	1.00	-
13C3_PFBS	7.276e5	7.35	1.00	-
13C2_4:2FTS	1.536e5	7.04	1.00	-
13C5_PFHxA	9.708e5	7.45	1.00	-
13C4_PFHpA	1.110e6	8.67	1.00	-
13C3_PFHxS	6.784e5	9.92	1.00	-
13C2_6:2FTS	1.294e5	9.29	1.00	-
13C8_PFOA	7.987e5	9.67	1.00	-
13C9_PFNA	8.048e5	10.54	1.00	-
13C8_PFOS	4.952e5	11.75	1.00	-
13C2_8:2FTS	1.082e5	10.98	1.00	-
13C6_PFDA	4.815e5	11.37	1.00	-
d3-MeFOSAA	9.430e4	11.36	1.00	-
13C8_FOSA	6.418e5	12.94	1.00	-
d5-EtFOSAA	8.680e4	11.69	1.00	-
13C7_PFUdA	5.231e5	12.16	1.00	-
13C2_PFDoA	7.469e5	12.94	1.00	-
13C2_PFTeDA	3.987e5	14.45	1.00	-

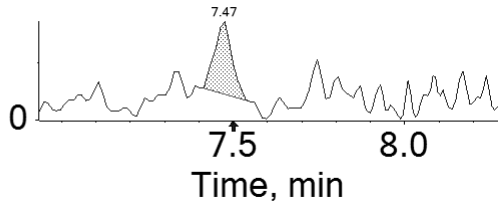
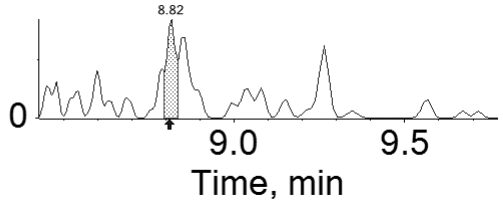
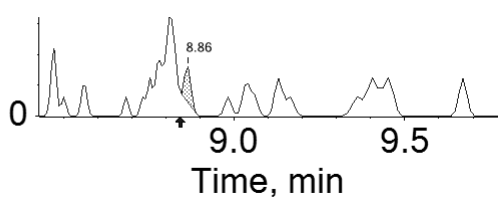
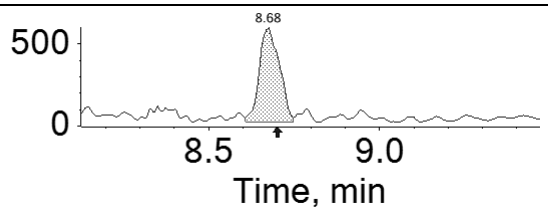
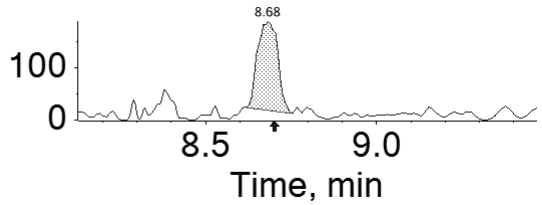
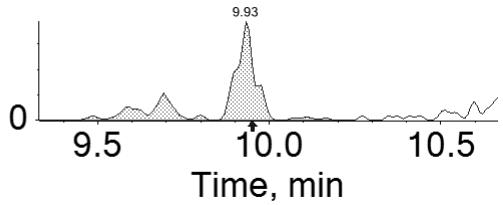
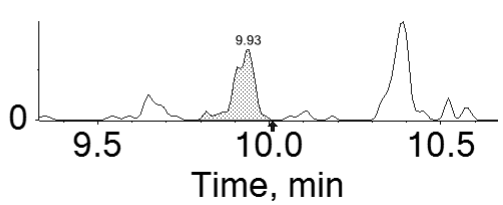
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	3.496e+03	1.90	N/A	0.013
PFPeA	4.316e+03	5.55	N/A	0.021
PFBS	3.878e+03	7.37	N/A	0.025
PFBS_2	1.232e+03	7.36	N/A	0.022
4:2FTS	1.425e+01	7.03	N/A	0.000
4:2FTS_2	1.164e+02	7.07	N/A	0.006
PFHxA	3.372e+03	7.46	N/A	0.019
PFHxA_2	2.246e+02	7.47	N/A	0.015
PFPeS	1.560e+02	8.82	N/A	0.001
PFPeS_2	1.457e+01	8.86	N/A	0.000
PFHpA	2.338e+03	8.68	N/A	0.013
PFHpA_2	6.953e+02	8.68	N/A	0.012
PFHxS	2.134e+03	9.93	N/A	0.014
PFHxS_2	5.778e+02	9.93	N/A	0.010
6:2FTS	5.669e+02	9.28	N/A	0.017
6:2FTS_2	2.152e+02	9.27	N/A	0.008
PFOA	1.296e+04	9.67	N/A	0.065
PFOA_2	5.097e+03	9.67	N/A	0.066
PFHpS	1.732e+02	10.89	N/A	0.001
PFHpS_2	8.622e+01	10.88	N/A	0.002
PFNA	7.949e+02	10.55	N/A	0.006
PFNA_2	4.088e+02	10.54	N/A	0.009
PFOS	4.691e+03	11.50	N/A	0.043
PFOS_2	2.285e+02	11.77	N/A	0.007
8:2FTS	1.917e+02	10.98	N/A	0.009
8:2FTS_2	1.613e+01	11.01	N/A	0.001
PFDA	1.751e+03	11.37	N/A	0.016
PFDA_2	2.974e+02	11.36	N/A	0.011
PFNS	4.618e+01	12.65	N/A	0.000
PFNS_2	2.308e+01	12.75	N/A	0.001
N-MeFOSAA	2.717e+01	11.36	N/A	0.001
N-MeFOSAA_2	4.556e+01	11.56	N/A	0.003
FOSA	1.129e+02	12.95	N/A	0.001
N-EtFOSAA	2.656e+01	11.70	N/A	0.001
N-EtFOSAA_2	N/A	N/A	N/A	N/A
PFUdA	3.679e+02	12.17	N/A	0.005
PFUdA_2	1.666e+01	12.11	N/A	0.001
PFDS	9.738e+01	13.39	N/A	0.001
PFDS_2	1.082e+01	13.36	N/A	0.000
PFDoA	9.343e+02	12.94	N/A	0.009
PFDoA_2	1.626e+02	12.92	N/A	0.010
PFTrDA	1.539e+02	13.75	N/A	0.001
PFTrDA_2	8.334e+01	13.70	N/A	0.004
PFTeDA	2.502e+02	14.47	N/A	0.004
PFTeDA_2	4.934e+01	14.44	N/A	0.005
13C4_PFOA	9.380e+05	9.67	N/A	1.757
13C4_PFOS	4.666e+05	11.75	N/A	1.653

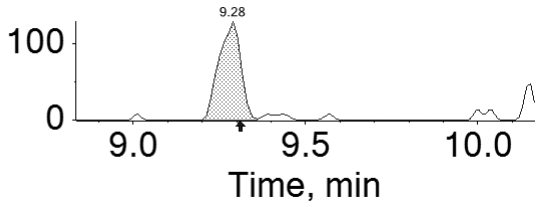
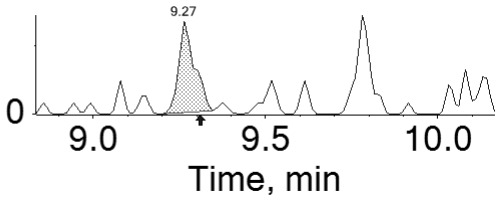
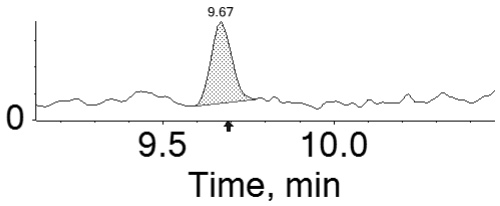
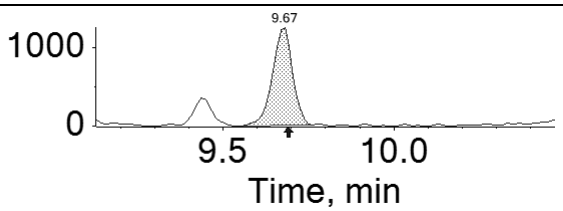
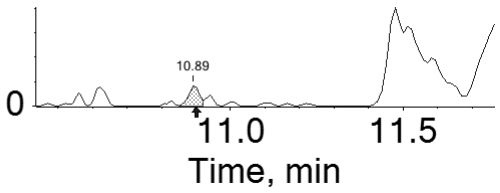
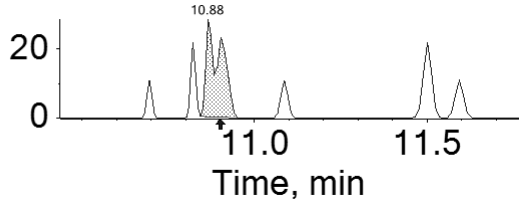
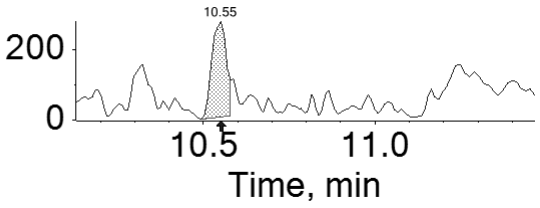
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.85(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.54(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.35(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.04(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.45(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.67(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.92(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

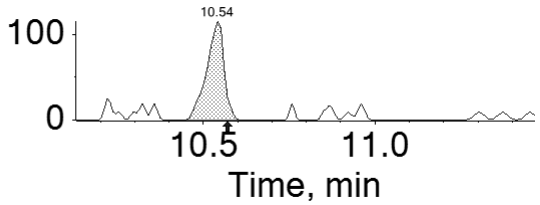
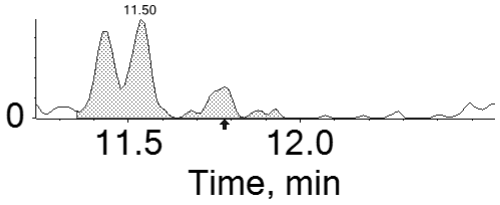
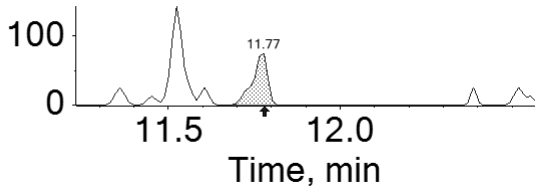
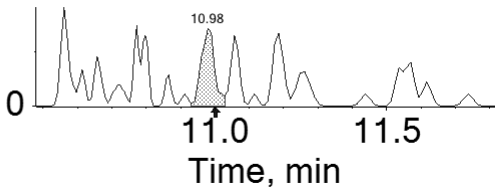
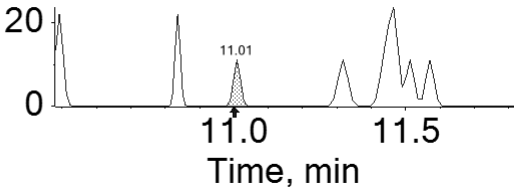
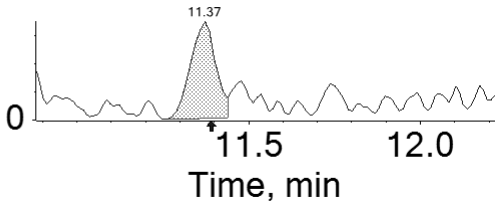
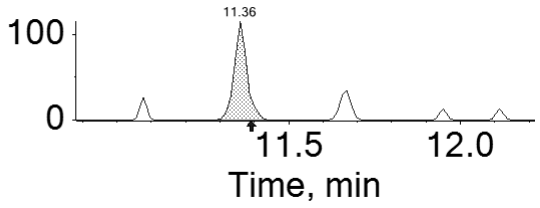
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.29(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.54(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.98(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.36(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

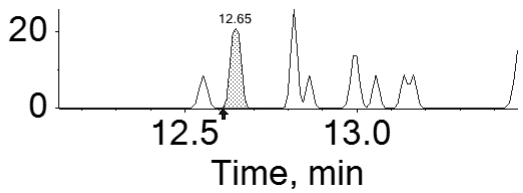
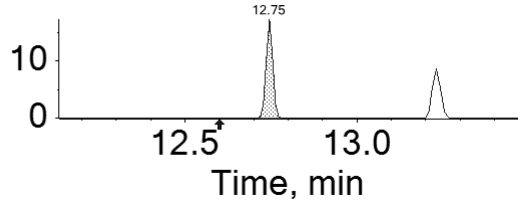
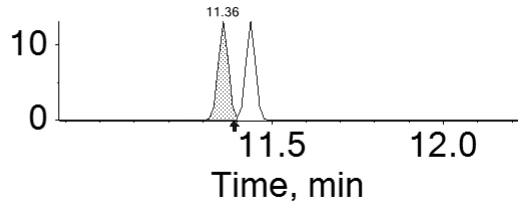
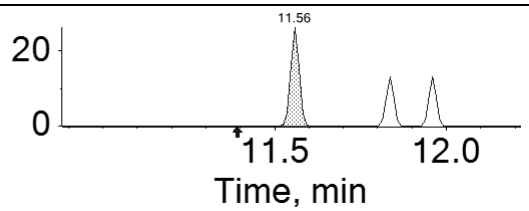
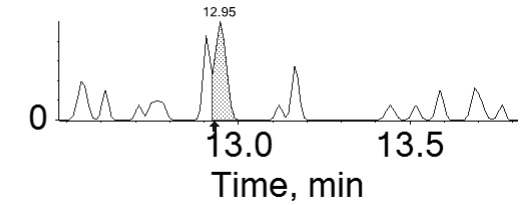
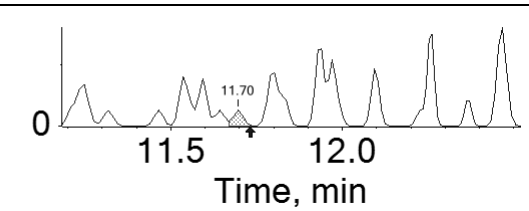
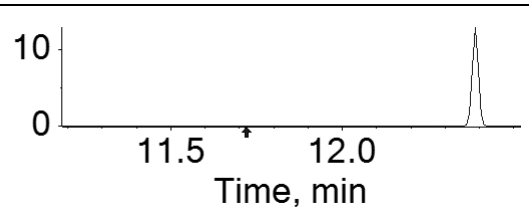
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.69(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.16(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

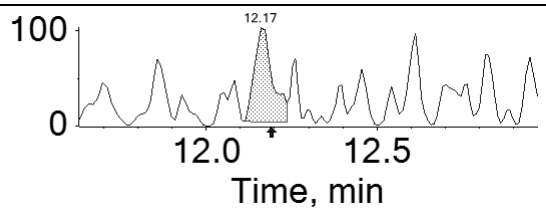
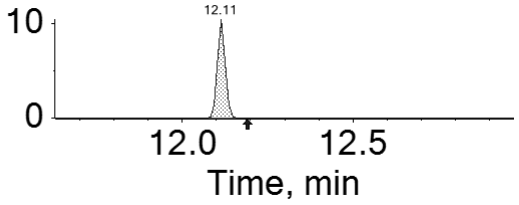
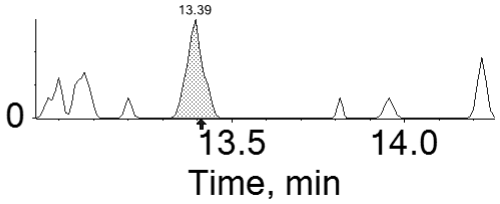
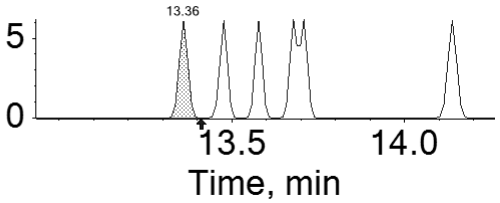
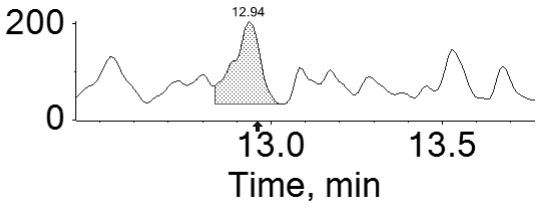
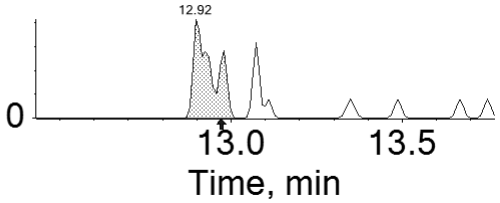
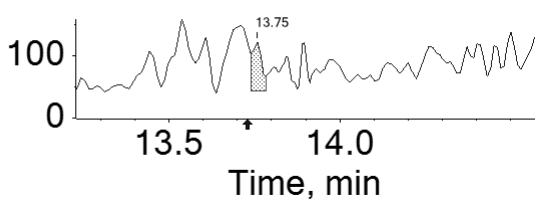
PFBA (213.0 / 169.0) RT (Exp. RT): 1.90 (1.86) min Calculated conc: 0.013 Area Ratio: 2.713e-3 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.55 (5.56) min Calculated conc: 0.021 Area Ratio: 4.413e-3 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 0.025 Area Ratio: 5.329e-3 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.36 (7.39) min Calculated conc: 0.022 Area Ratio: 1.693e-3 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.03 (7.04) min Calculated conc: 0.000 Area Ratio: 9.278e-5 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 0.006 Area Ratio: 7.575e-4 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.46 (7.46) min Calculated conc: 0.019 Area Ratio: 3.473e-3 Sample Type: (Unknown)	

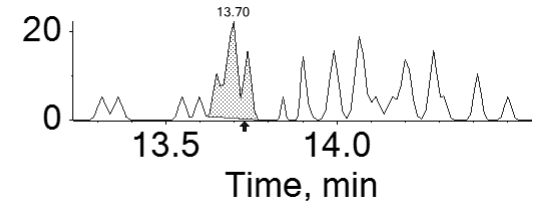
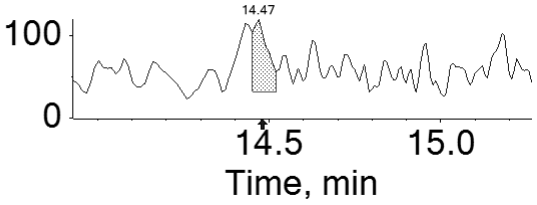
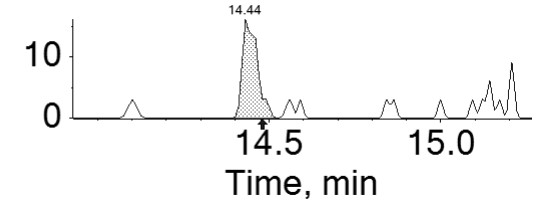
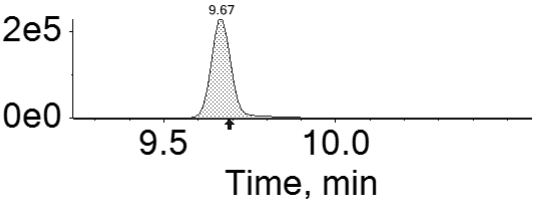
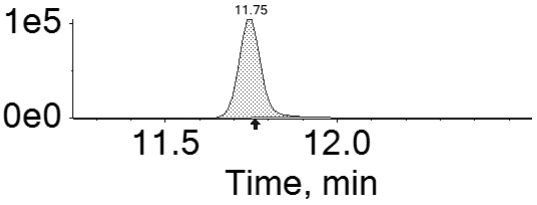
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 0.015 Area Ratio: 2.314e-4 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: 0.001 Area Ratio: 1.405e-4 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.86 (8.84) min Calculated conc: 0.000 Area Ratio: 1.313e-5 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.013 Area Ratio: 2.106e-3 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.012 Area Ratio: 6.262e-4 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: 0.014 Area Ratio: 3.145e-3 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 0.010 Area Ratio: 8.518e-4 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.28 (9.31) min Calculated conc: 0.017 Area Ratio: 4.380e-3 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.27 (9.31) min Calculated conc: 0.008 Area Ratio: 1.663e-3 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 0.065 Area Ratio: 1.623e-2 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 0.066 Area Ratio: 6.382e-3 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 0.001 Area Ratio: 2.152e-4 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 0.002 Area Ratio: 1.071e-4 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.55 (10.55) min Calculated conc: 0.006 Area Ratio: 9.876e-4 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.54 (10.57) min Calculated conc: 0.009 Area Ratio: 5.079e-4 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.50 (11.78) min Calculated conc: 0.043 Area Ratio: 9.474e-3 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 0.007 Area Ratio: 4.614e-4 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.98 (11.00) min Calculated conc: 0.009 Area Ratio: 1.771e-3 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 0.001 Area Ratio: 1.490e-4 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 0.016 Area Ratio: 3.637e-3 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.36 (11.39) min Calculated conc: 0.011 Area Ratio: 6.178e-4 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.65 (12.61) min Calculated conc: 0.000 Area Ratio: 5.738e-5 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.75 (12.60) min Calculated conc: 0.001 Area Ratio: 4.413e-5 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.36 (11.39) min Calculated conc: 0.001 Area Ratio: 2.882e-4 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.56 (11.39) min Calculated conc: 0.003 Area Ratio: 4.831e-4 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.95 (12.93) min Calculated conc: 0.001 Area Ratio: 1.759e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.70 (11.73) min Calculated conc: 0.001 Area Ratio: 3.060e-4 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): N/A (11.72) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	

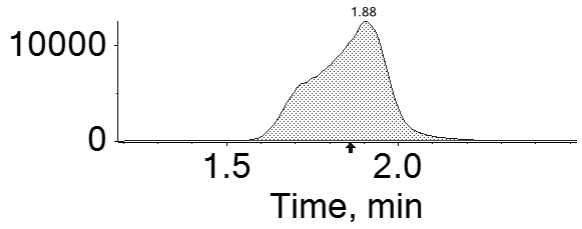
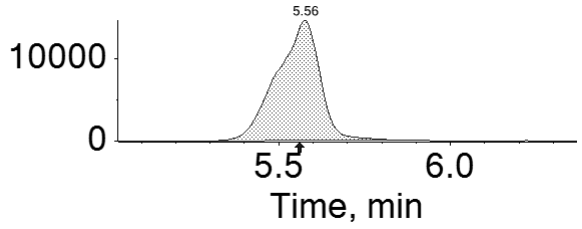
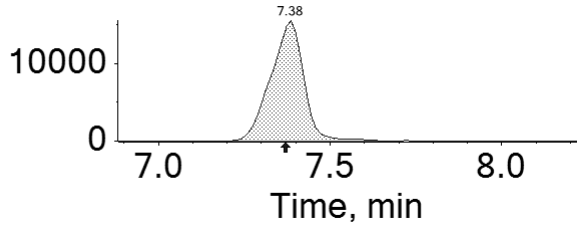
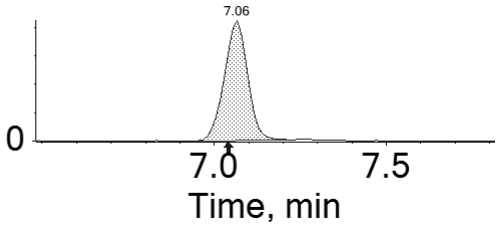
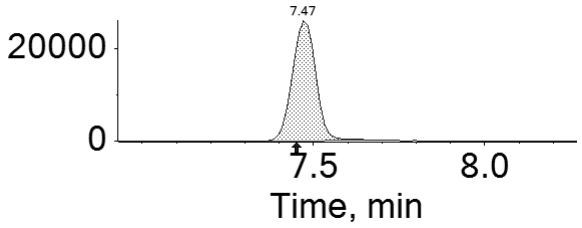
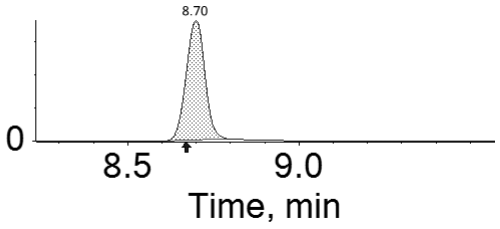
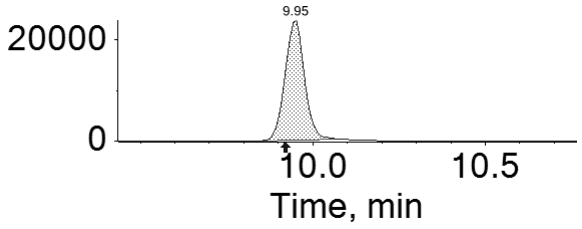
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 0.005 Area Ratio: 7.034e-4 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.11 (12.19) min Calculated conc: 0.001 Area Ratio: 3.185e-5 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 0.001 Area Ratio: 1.304e-4 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.36 (13.41) min Calculated conc: 0.000 Area Ratio: 1.449e-5 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.94 (12.96) min Calculated conc: 0.009 Area Ratio: 1.251e-3 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.92 (12.97) min Calculated conc: 0.010 Area Ratio: 2.177e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 0.001 Area Ratio: 2.060e-4 Sample Type: (Unknown)	

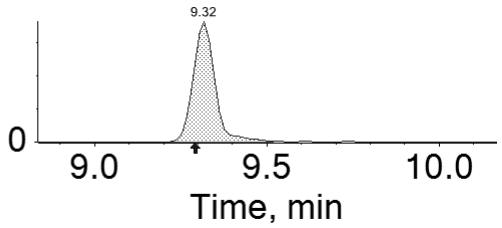
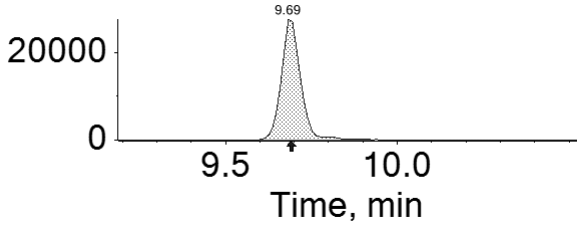
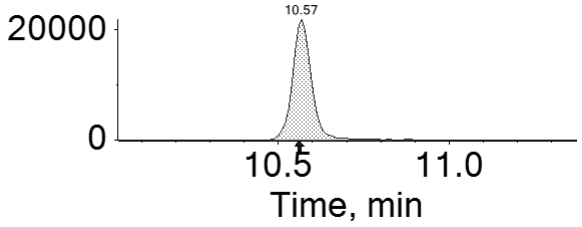
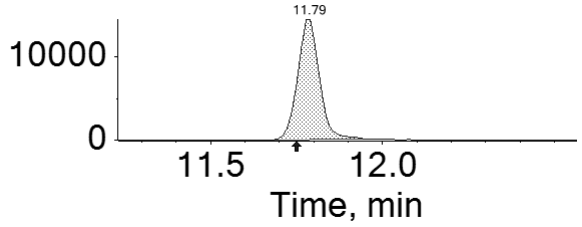
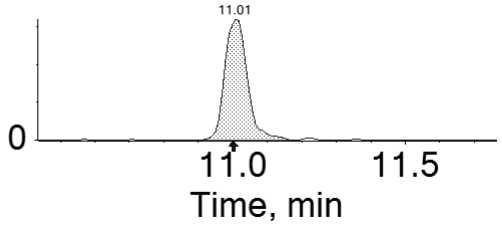
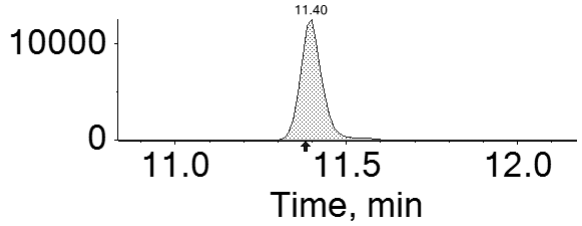
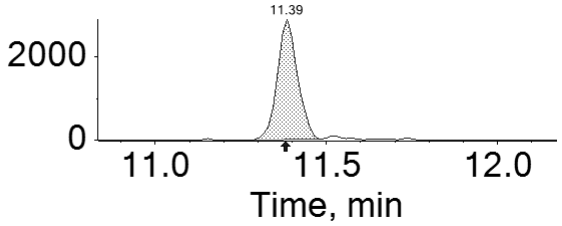
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: 0.004 Area Ratio: 1.116e-4 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.47 (14.48) min Calculated conc: 0.004 Area Ratio: 6.275e-4 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.44 (14.48) min Calculated conc: 0.005 Area Ratio: 1.237e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.757 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 1.653 Area Ratio: N/A Sample Type: (Unknown)	

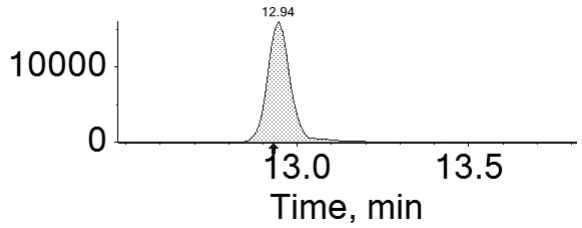
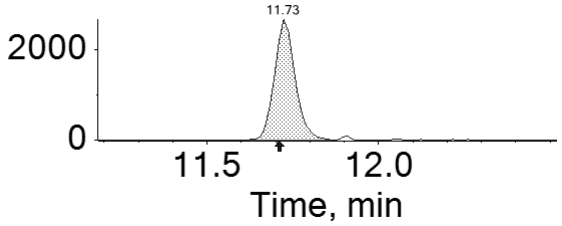
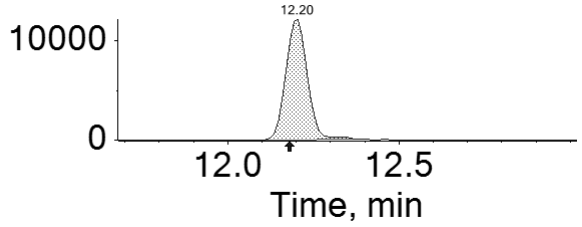
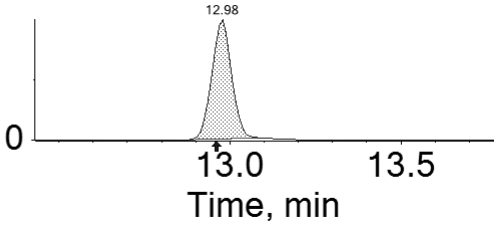
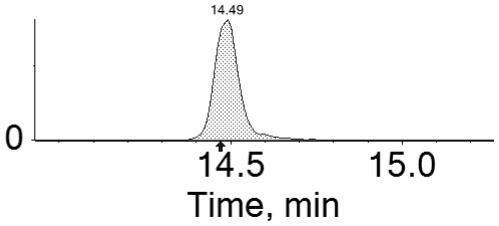
Sample Name	10478022001 D10	**Injection Vial**	5
Sample ID	10478022001	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-24T13:18:29	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190624A.wiff		
Result Table	190624AM		
Sample Comment			

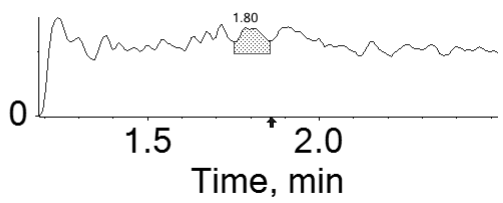
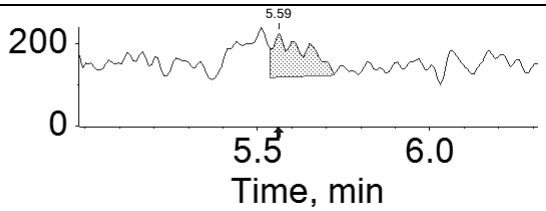
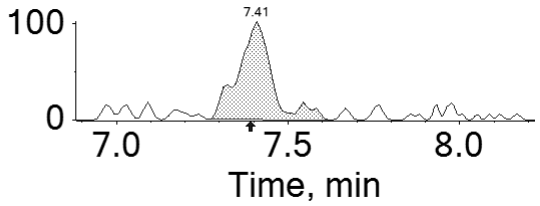
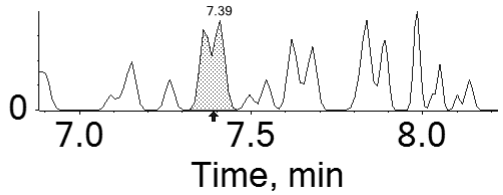
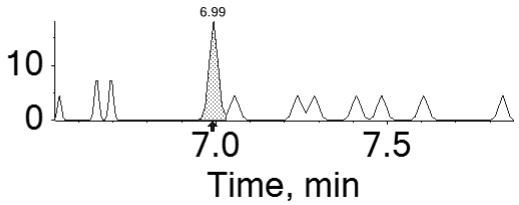
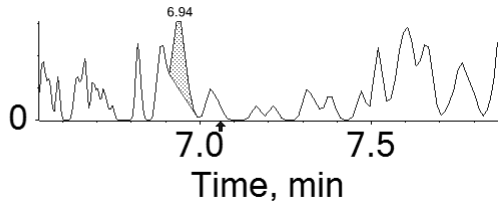
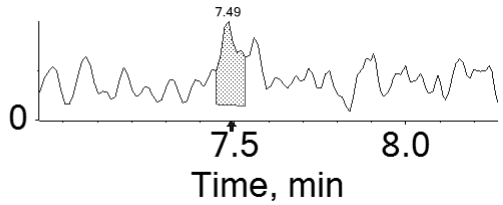
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.775e5	1.88	1.00	-
13C5_PFPeA	1.272e5	5.56	1.00	-
13C3_PFBS	1.030e5	7.38	1.00	-
13C2_4:2FTS	1.989e4	7.06	1.00	-
13C5_PFHxA	1.237e5	7.47	1.00	-
13C4_PFHpA	1.360e5	8.70	1.00	-
13C3_PFHxS	9.266e4	9.95	1.00	-
13C2_6:2FTS	1.590e4	9.32	1.00	-
13C8_PFOA	1.069e5	9.69	1.00	-
13C9_PFNA	8.529e4	10.57	1.00	-
13C8_PFOS	6.345e4	11.79	1.00	-
13C2_8:2FTS	1.457e4	11.01	1.00	-
13C6_PFDA	5.499e4	11.40	1.00	-
d3-MeFOSAA	1.181e4	11.39	1.00	-
13C8_FOSA	7.518e4	12.94	1.00	-
d5-EtFOSAA	1.115e4	11.73	1.00	-
13C7_PFUdA	5.313e4	12.20	1.00	-
13C2_PFDoA	7.867e4	12.98	1.00	-
13C2_PFTeDA	4.065e4	14.49	1.00	-

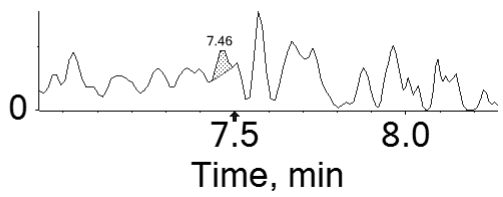
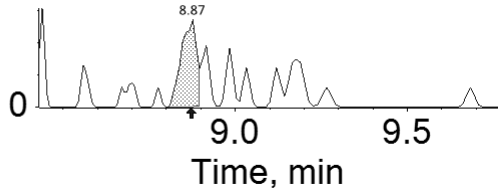
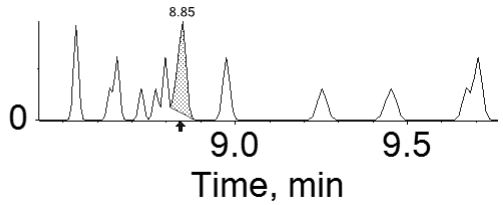
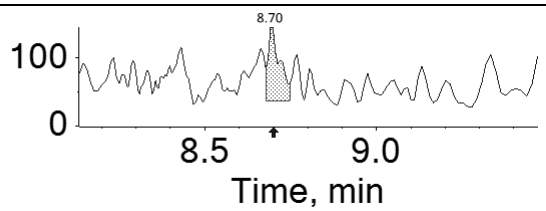
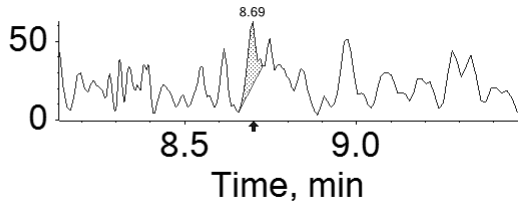
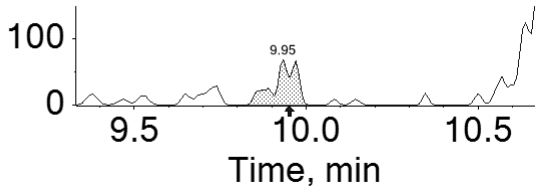
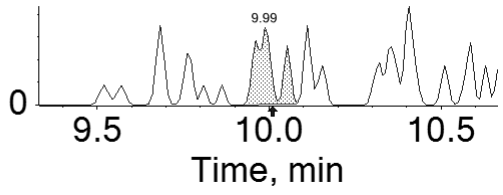
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	9.889e+02	1.80	N/A	0.026
PFPeA	6.903e+02	5.59	N/A	0.026
PFBS	6.949e+02	7.41	N/A	0.031
PFBS_2	1.473e+02	7.39	N/A	0.019
4:2FTS	3.332e+01	6.99	N/A	0.009
4:2FTS_2	5.014e+01	6.94	N/A	0.019
PFHxA	6.273e+02	7.49	N/A	0.028
PFHxA_2	3.904e+01	7.46	N/A	0.021
PFPeS	8.364e+01	8.87	N/A	0.005
PFPeS_2	3.027e+01	8.85	N/A	0.005
PFHpA	2.616e+02	8.70	N/A	0.012
PFHpA_2	6.928e+01	8.69	N/A	0.010
PFHxS	3.186e+02	9.95	N/A	0.015
PFHxS_2	1.414e+02	9.99	N/A	0.017
6:2FTS	1.401e+02	9.33	N/A	0.034
6:2FTS_2	2.216e+02	9.32	N/A	0.070
PFOA	2.087e+03	9.69	N/A	0.077
PFOA_2	6.471e+02	9.70	N/A	0.063
PFHpS	9.508e+01	10.90	N/A	0.005
PFHpS_2	4.787e+01	11.06	N/A	0.009
PFNA	3.719e+02	10.56	N/A	0.028
PFNA_2	2.845e+01	10.52	N/A	0.006
PFOS	7.241e+02	11.55	N/A	0.051
PFOS_2	3.955e+01	11.90	N/A	0.010
8:2FTS	5.430e+01	11.00	N/A	0.019
8:2FTS_2	3.227e+01	10.91	N/A	0.012
PFDA	3.322e+02	11.38	N/A	0.027
PFDA_2	5.119e+01	11.45	N/A	0.016
PFNS	4.738e+01	12.59	N/A	0.004
PFNS_2	1.153e+01	12.61	N/A	0.003
N-MeFOSAA	7.933e+01	11.38	N/A	0.021
N-MeFOSAA_2	N/A	N/A	N/A	N/A
FOSA	6.650e+01	12.91	N/A	0.006
N-EtFOSAA	6.939e+01	11.80	N/A	0.022
N-EtFOSAA_2	1.035e+02	11.72	N/A	0.063
PFUdA	1.154e+02	12.17	N/A	0.015
PFUdA_2	3.967e+01	12.33	N/A	0.023
PFDS	3.240e+01	13.44	N/A	0.003
PFDS_2	7.484e+01	13.45	N/A	0.021
PFDoA	1.411e+02	12.96	N/A	0.014
PFDoA_2	2.116e+01	12.79	N/A	0.012
PFTrDA	2.307e+02	13.71	N/A	0.020
PFTrDA_2	4.494e+00	13.75	N/A	0.002
PFTeDA	N/A	N/A	N/A	N/A
PFTeDA_2	8.990e+00	14.52	N/A	0.010
13C4_PFOA	1.162e+05	9.69	N/A	0.218
13C4_PFOS	6.427e+04	11.78	N/A	0.228

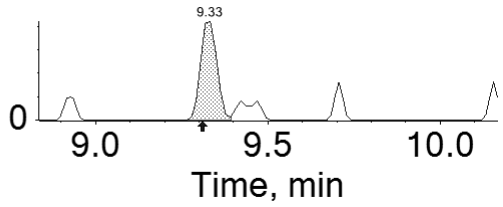
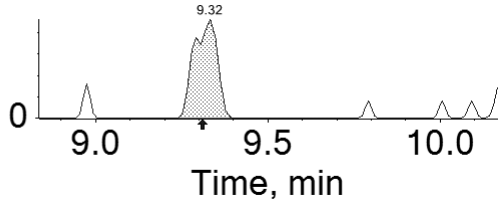
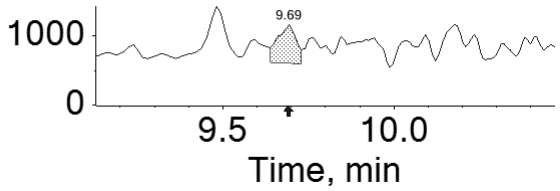
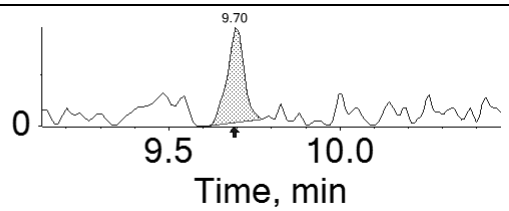
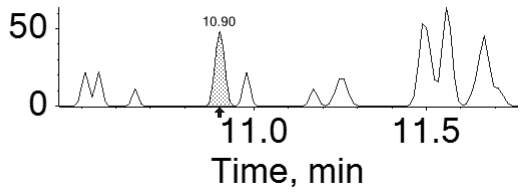
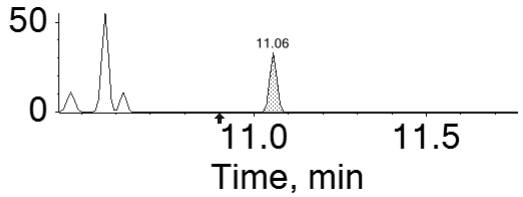
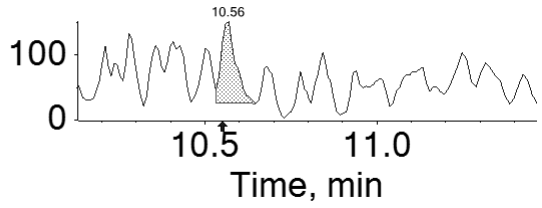
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.88(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.56(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.95(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

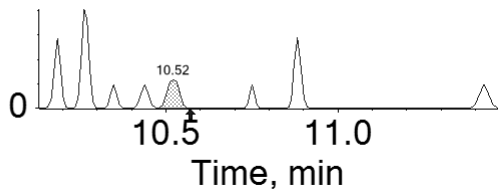
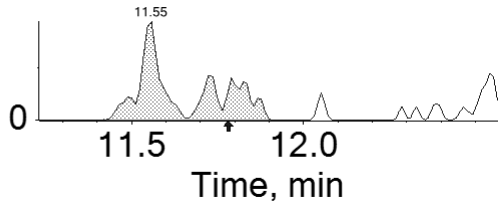
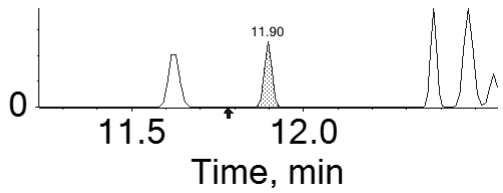
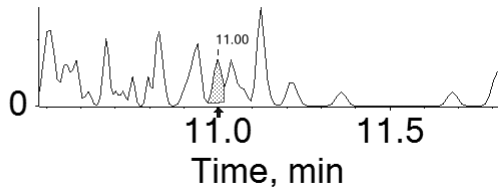
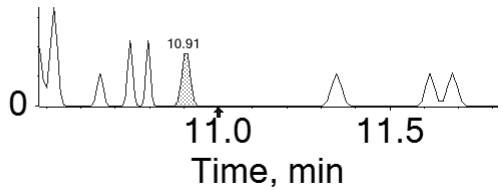
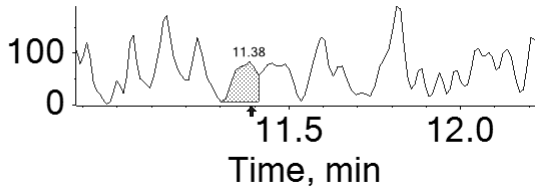
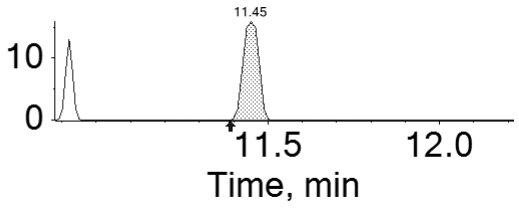
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.57(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.79(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.01(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.39(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

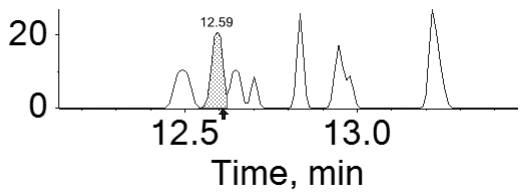
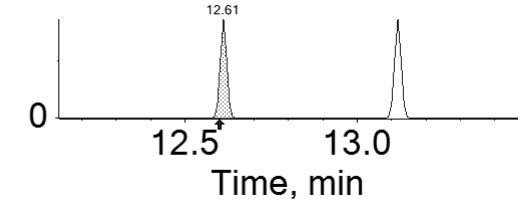
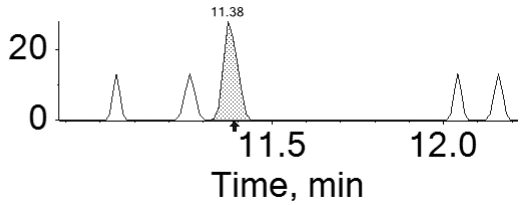
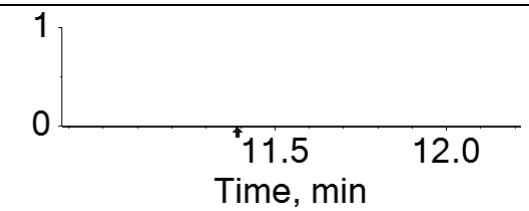
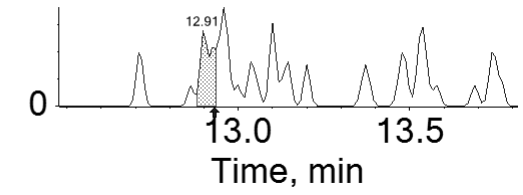
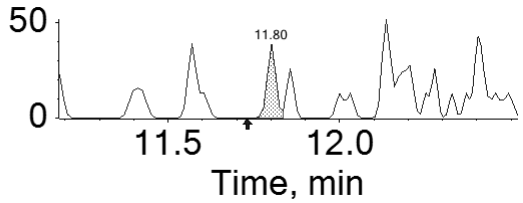
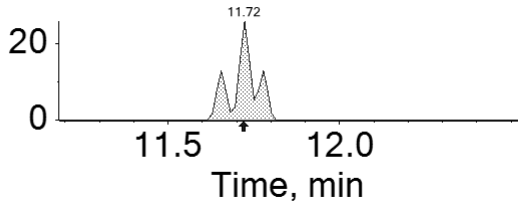
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.73(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.20(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.98(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.49(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

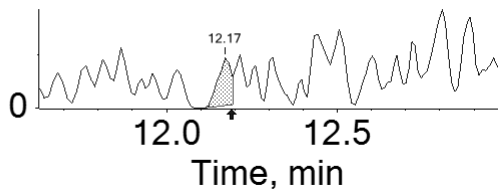
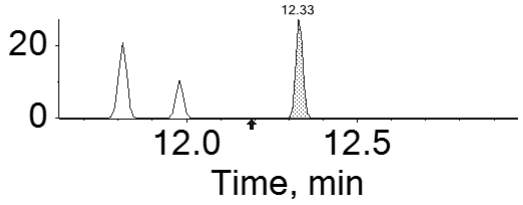
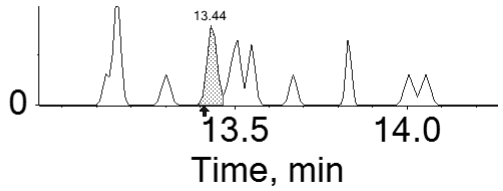
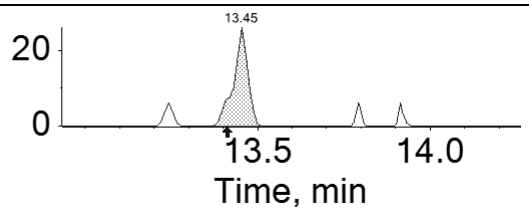
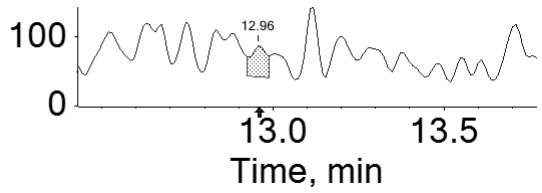
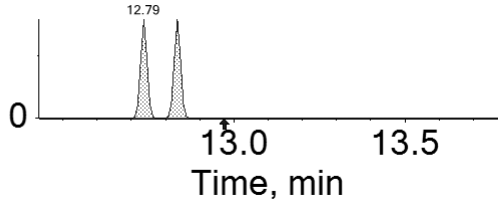
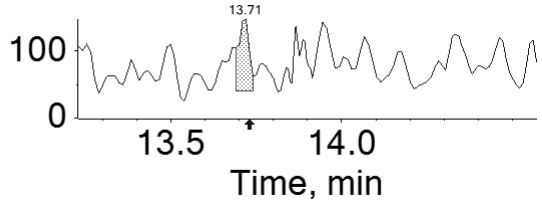
PFBA (213.0 / 169.0) RT (Exp. RT): 1.80 (1.86) min Calculated conc: 0.026 Area Ratio: 5.572e-3 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.59 (5.56) min Calculated conc: 0.026 Area Ratio: 5.425e-3 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.41 (7.39) min Calculated conc: 0.031 Area Ratio: 6.744e-3 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.019 Area Ratio: 1.429e-3 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 6.99 (6.99) min Calculated conc: 0.009 Area Ratio: 1.675e-3 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 6.94 (7.06) min Calculated conc: 0.019 Area Ratio: 2.521e-3 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.49) min Calculated conc: 0.028 Area Ratio: 5.069e-3 Sample Type: (Unknown)	

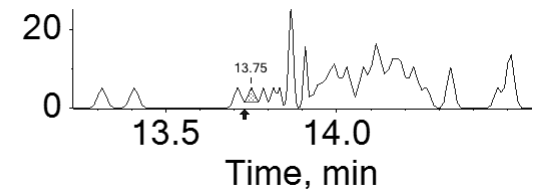
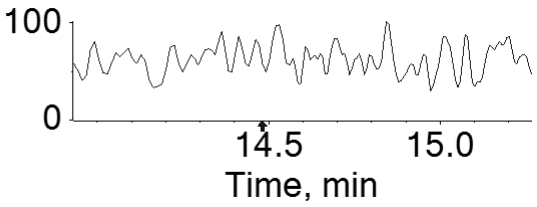
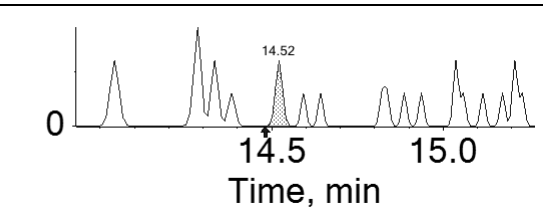
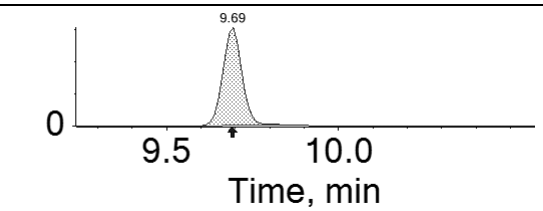
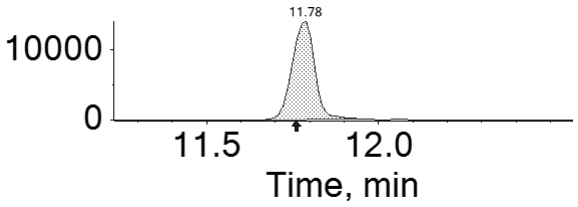
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.46 (7.50) min Calculated conc: 0.021 Area Ratio: 3.155e-4 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.87 (8.87) min Calculated conc: 0.005 Area Ratio: 6.148e-4 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.85 (8.84) min Calculated conc: 0.005 Area Ratio: 2.225e-4 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 0.012 Area Ratio: 1.923e-3 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 0.010 Area Ratio: 5.092e-4 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 0.015 Area Ratio: 3.438e-3 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.99 (10.01) min Calculated conc: 0.017 Area Ratio: 1.526e-3 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 0.034 Area Ratio: 8.814e-3 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 0.070 Area Ratio: 1.394e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 0.077 Area Ratio: 1.952e-2 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.063 Area Ratio: 6.053e-3 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 0.005 Area Ratio: 1.115e-3 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 11.06 (10.90) min Calculated conc: 0.009 Area Ratio: 5.613e-4 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 0.028 Area Ratio: 4.361e-3 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.52 (10.57) min Calculated conc: 0.006 Area Ratio: 3.336e-4 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.55 (11.78) min Calculated conc: 0.051 Area Ratio: 1.141e-2 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.90 (11.78) min Calculated conc: 0.010 Area Ratio: 6.234e-4 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 0.019 Area Ratio: 3.727e-3 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.91 (11.00) min Calculated conc: 0.012 Area Ratio: 2.215e-3 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.027 Area Ratio: 6.042e-3 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.45 (11.39) min Calculated conc: 0.016 Area Ratio: 9.309e-4 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: 0.004 Area Ratio: 5.556e-4 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.61 (12.60) min Calculated conc: 0.003 Area Ratio: 2.171e-4 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.021 Area Ratio: 6.718e-3 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): N/A (11.39) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.91 (12.93) min Calculated conc: 0.006 Area Ratio: 8.846e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.80 (11.73) min Calculated conc: 0.022 Area Ratio: 6.223e-3 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: 0.063 Area Ratio: 9.283e-3 Sample Type: (Unknown)	

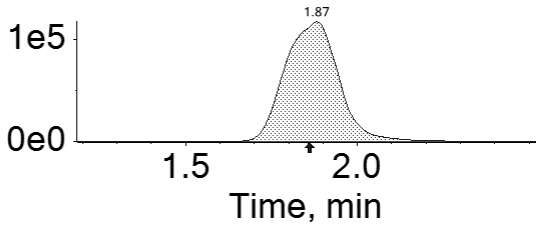
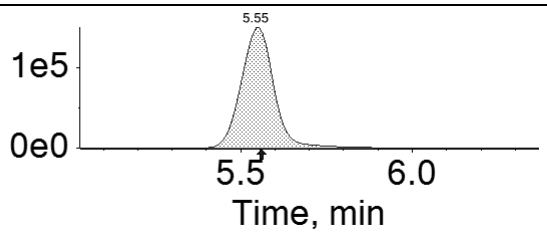
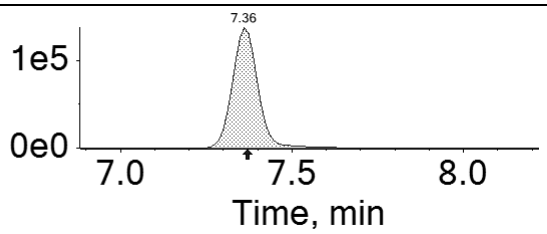
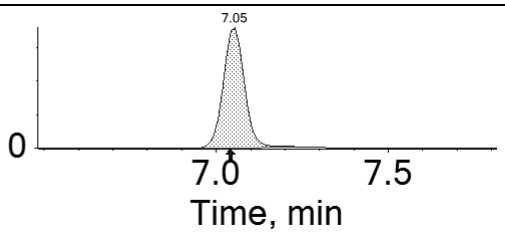
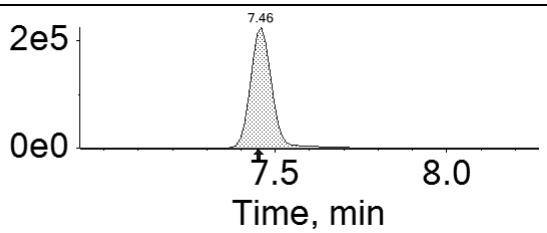
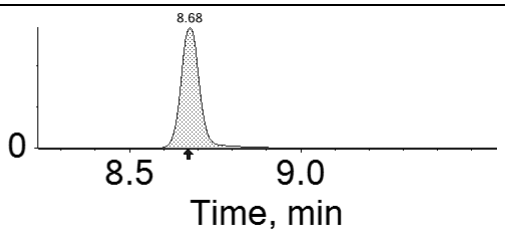
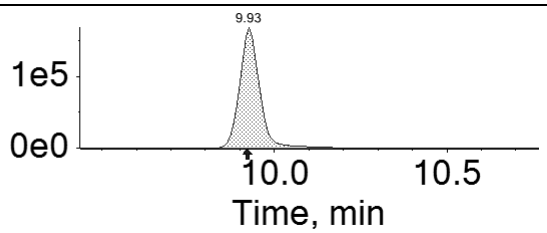
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 0.015 Area Ratio: 2.173e-3 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.33 (12.19) min Calculated conc: 0.023 Area Ratio: 7.468e-4 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.44 (13.41) min Calculated conc: 0.003 Area Ratio: 4.118e-4 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.45 (13.41) min Calculated conc: 0.021 Area Ratio: 9.513e-4 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.96 (12.96) min Calculated conc: 0.014 Area Ratio: 1.793e-3 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.79 (12.97) min Calculated conc: 0.012 Area Ratio: 2.690e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 0.020 Area Ratio: 2.933e-3 Sample Type: (Unknown)	

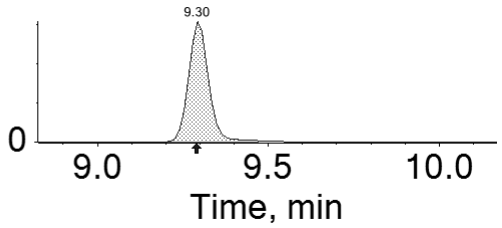
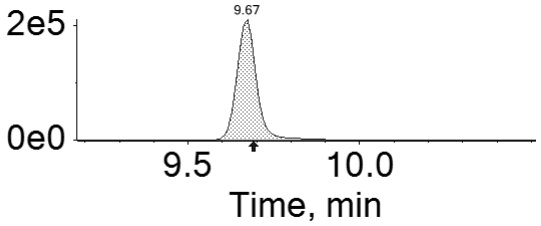
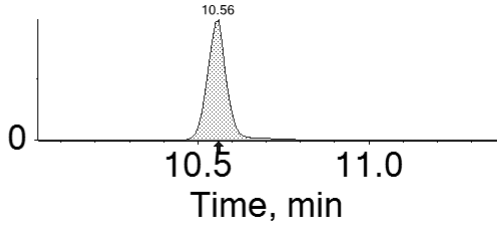
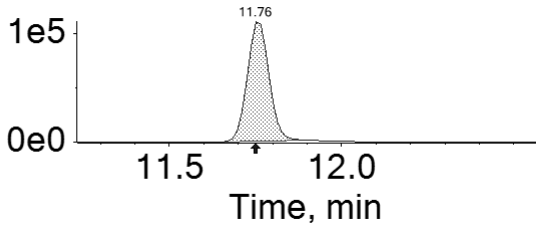
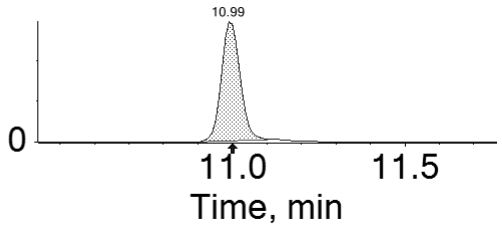
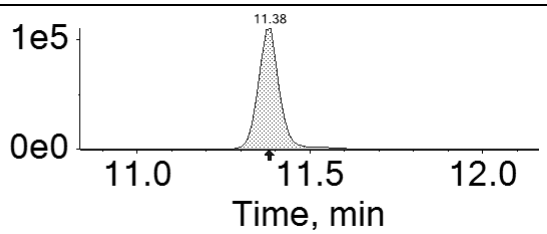
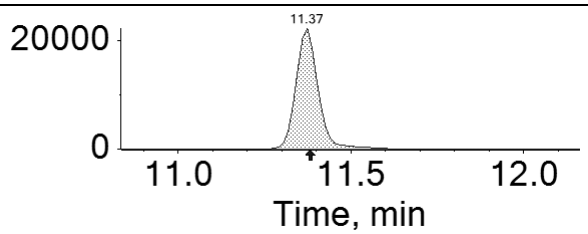
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 0.002 Area Ratio: 5.713e-5 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): N/A (14.48) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.52 (14.48) min Calculated conc: 0.010 Area Ratio: 2.212e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 0.218 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.78 (11.76) min Calculated conc: 0.228 Area Ratio: N/A Sample Type: (Unknown)	

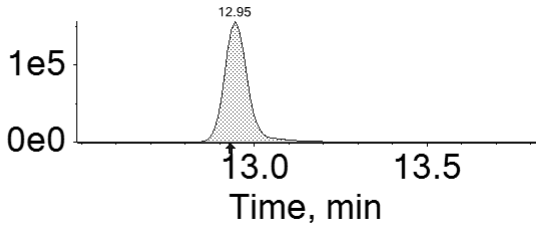
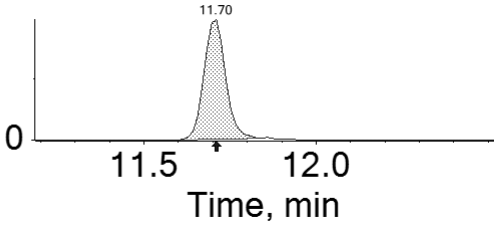
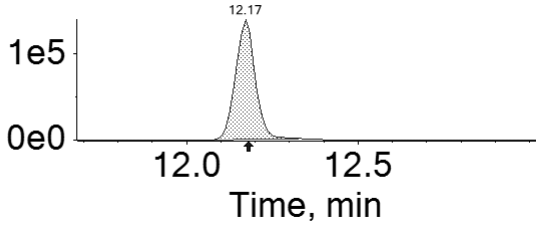
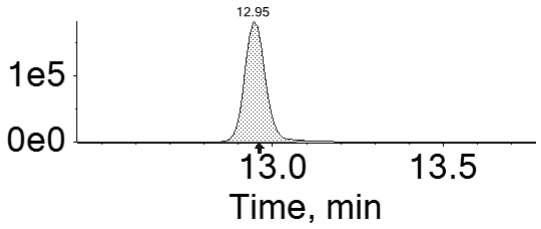
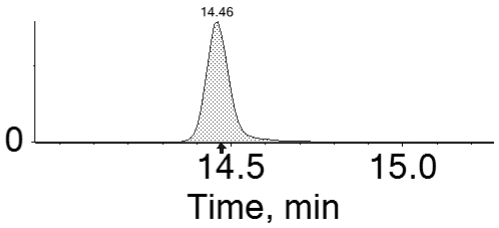
Sample Name	10478022002	**Injection Vial**	30
Sample ID	10478022002	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T08:32:35	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

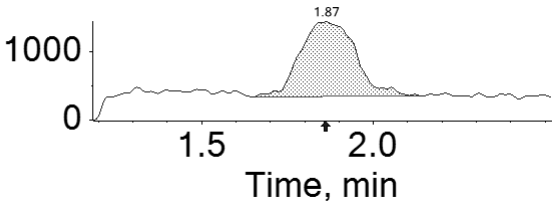
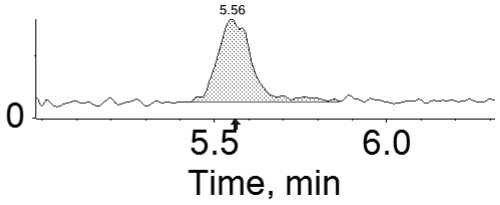
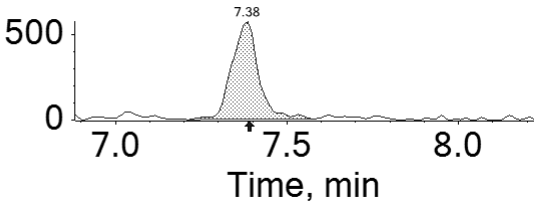
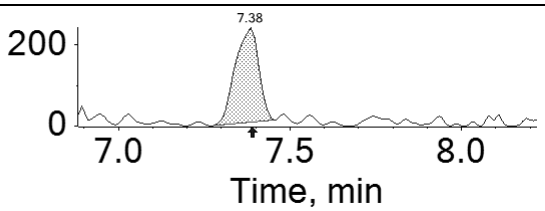
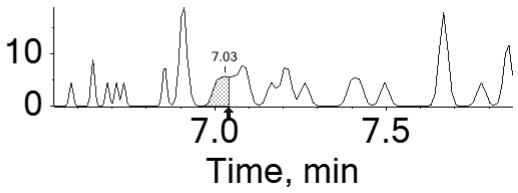
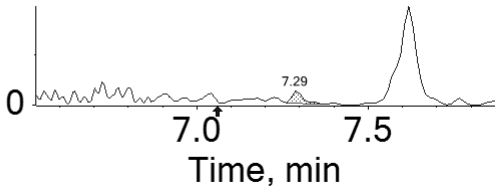
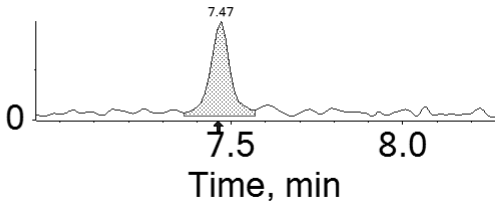
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.274e6	1.87	1.00	-
13C5_PFPeA	9.781e5	5.55	1.00	-
13C3_PFBS	7.109e5	7.36	1.00	-
13C2_4:2FTS	1.535e5	7.05	1.00	-
13C5_PFHxA	9.672e5	7.46	1.00	-
13C4_PFHpA	1.116e6	8.68	1.00	-
13C3_PFHxS	6.669e5	9.93	1.00	-
13C2_6:2FTS	1.252e5	9.30	1.00	-
13C8_PFOA	8.384e5	9.67	1.00	-
13C9_PFNA	7.755e5	10.56	1.00	-
13C8_PFOS	4.830e5	11.76	1.00	-
13C2_8:2FTS	1.103e5	10.99	1.00	-
13C6_PFDA	4.699e5	11.38	1.00	-
d3-MeFOSAA	9.799e4	11.37	1.00	-
13C8_FOSA	7.404e5	12.95	1.00	-
d5-EtFOSAA	8.589e4	11.70	1.00	-
13C7_PFUdA	5.525e5	12.17	1.00	-
13C2_PFDoA	7.733e5	12.95	1.00	-
13C2_PFTeDA	3.792e5	14.46	1.00	-

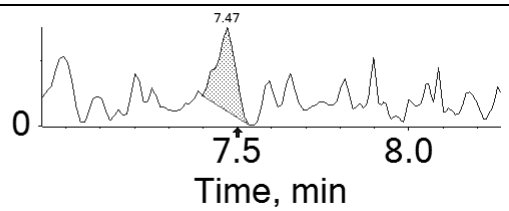
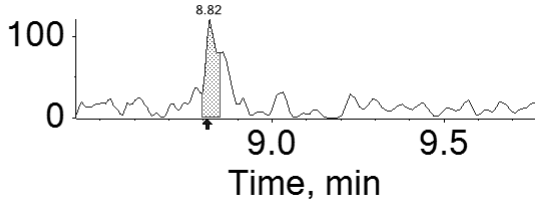
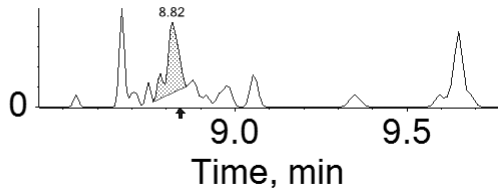
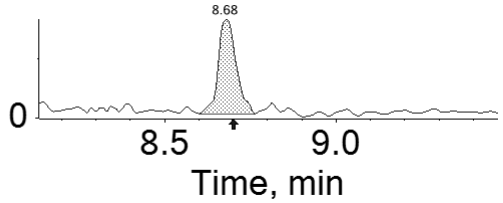
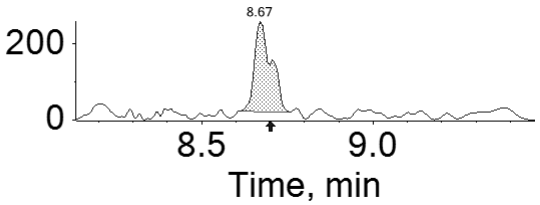
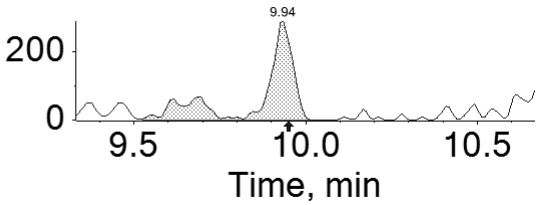
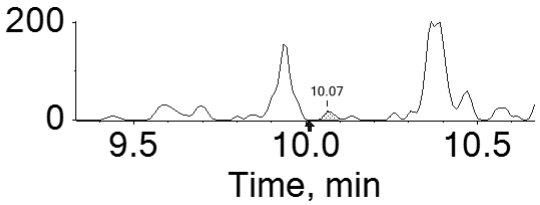
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.240e+04	1.87	N/A	0.045
PFPeA	4.773e+03	5.56	N/A	0.024
PFBS	3.105e+03	7.38	N/A	0.020
PFBS_2	1.113e+03	7.38	N/A	0.021
4:2FTS	1.657e+01	7.03	N/A	0.001
4:2FTS_2	5.512e+01	7.29	N/A	0.003
PFHxA	3.872e+03	7.47	N/A	0.022
PFHxA_2	2.361e+02	7.47	N/A	0.016
PFPeS	2.584e+02	8.82	N/A	0.002
PFPeS_2	8.442e+01	8.82	N/A	0.002
PFHpA	2.909e+03	8.68	N/A	0.016
PFHpA_2	8.152e+02	8.67	N/A	0.014
PFHxS	1.697e+03	9.94	N/A	0.011
PFHxS_2	3.555e+01	10.07	N/A	0.001
6:2FTS	6.626e+02	9.30	N/A	0.020
6:2FTS_2	5.269e+02	9.29	N/A	0.021
PFOA	1.281e+04	9.68	N/A	0.061
PFOA_2	5.647e+03	9.68	N/A	0.070
PFHpS	1.330e+02	10.89	N/A	0.001
PFHpS_2	1.370e+02	10.90	N/A	0.003
PFNA	1.625e+03	10.56	N/A	0.013
PFNA_2	5.085e+02	10.56	N/A	0.012
PFOS	5.226e+03	11.49	N/A	0.049
PFOS_2	1.901e+02	11.78	N/A	0.006
8:2FTS	7.214e+01	10.95	N/A	0.003
8:2FTS_2	1.582e+01	10.96	N/A	0.001
PFDA	1.526e+03	11.40	N/A	0.014
PFDA_2	3.774e+02	11.36	N/A	0.014
PFNS	1.022e+01	12.60	N/A	0.000
PFNS_2	1.448e+01	12.44	N/A	0.000
N-MeFOSAA	7.906e+01	11.39	N/A	0.003
N-MeFOSAA_2	2.586e+01	11.41	N/A	0.002
FOSA	1.458e+02	12.92	N/A	0.001
N-EtFOSAA	2.047e+02	11.76	N/A	0.009
N-EtFOSAA_2	2.690e+01	11.35	N/A	0.002
PFUdA	4.059e+02	12.19	N/A	0.005
PFUdA_2	3.570e+01	12.17	N/A	0.002
PFDS	8.195e+02	13.40	N/A	0.008
PFDS_2	2.700e+02	13.39	N/A	0.008
PFDoA	1.439e+03	12.95	N/A	0.014
PFDoA_2	1.872e+02	12.95	N/A	0.011
PFTrDA	3.527e+02	13.71	N/A	0.003
PFTrDA_2	3.427e+00	13.75	N/A	0.000
PFTeDA	3.809e+02	14.47	N/A	0.006
PFTeDA_2	4.896e+01	14.46	N/A	0.006
13C4_PFOA	9.173e+05	9.67	N/A	1.718
13C4_PFOS	4.407e+05	11.75	N/A	1.561

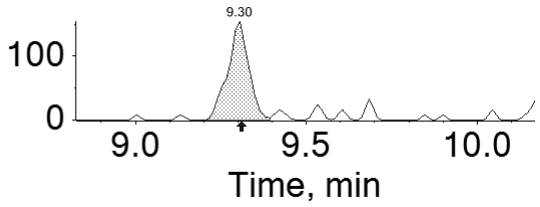
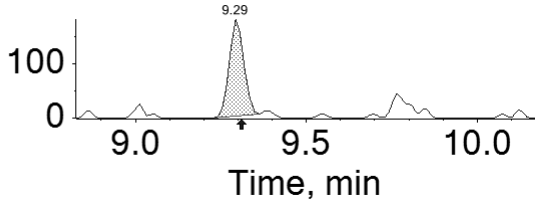
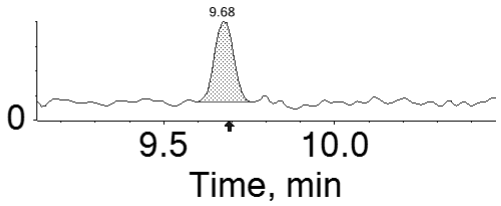
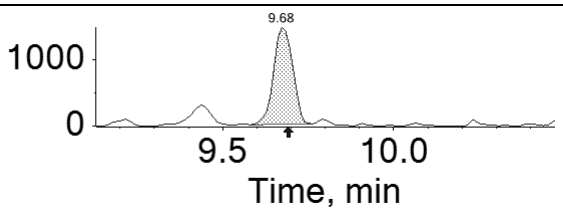
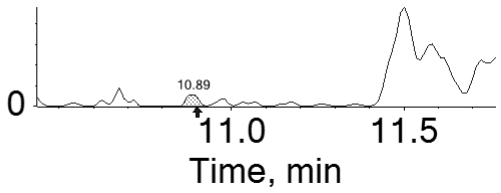
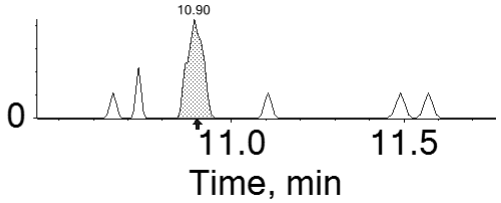
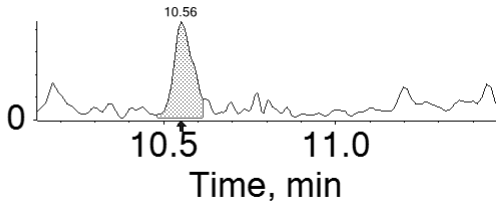
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.87(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.46(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

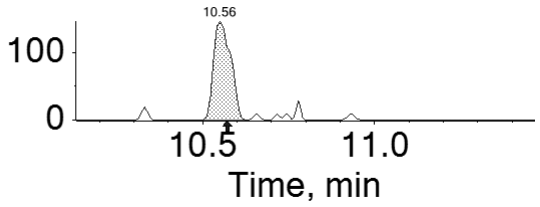
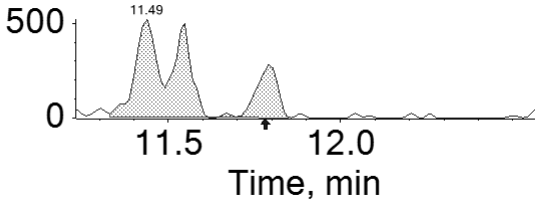
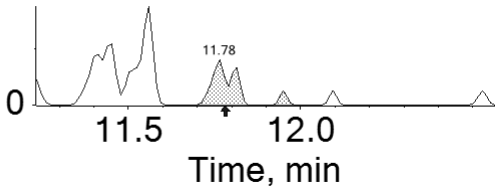
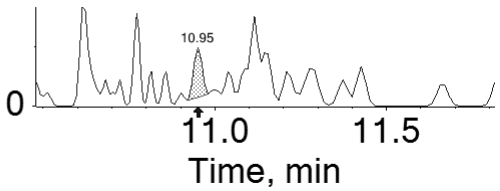
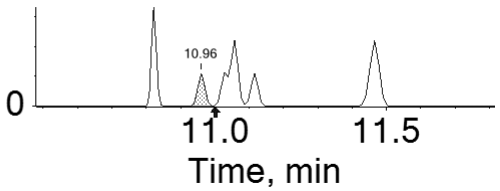
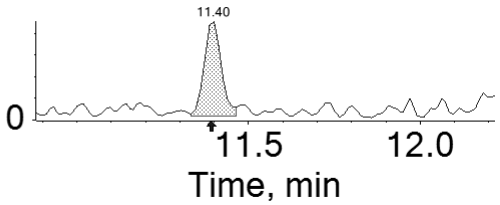
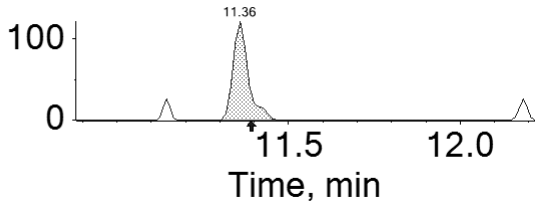
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

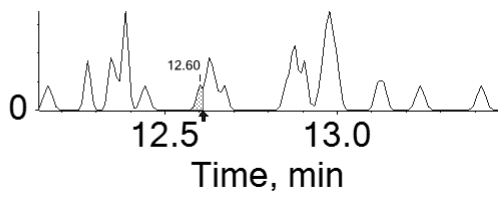
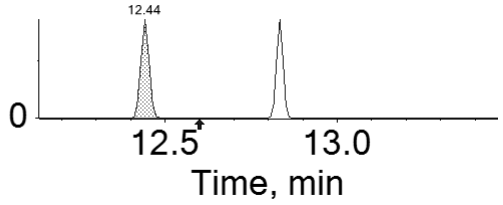
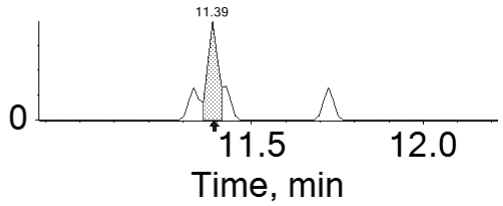
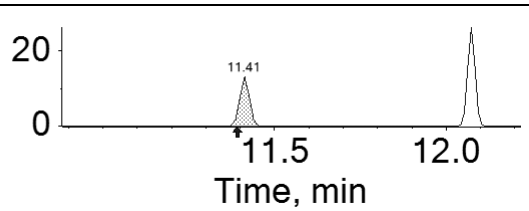
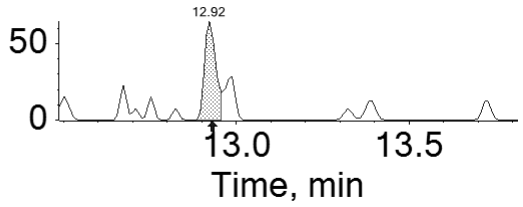
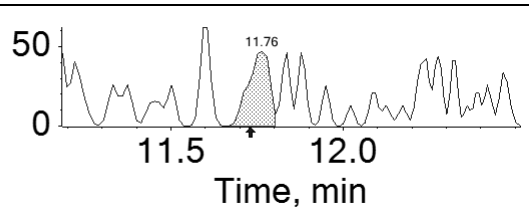
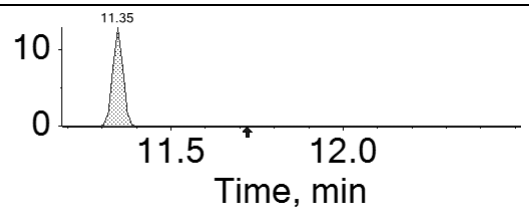
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.95(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.95(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.46(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

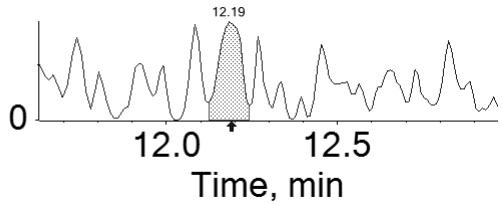
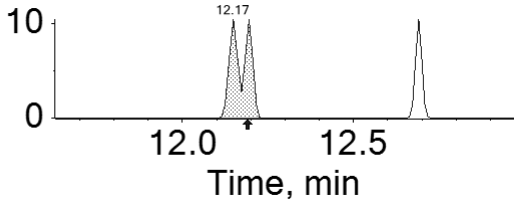
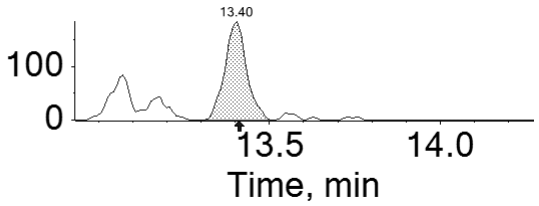
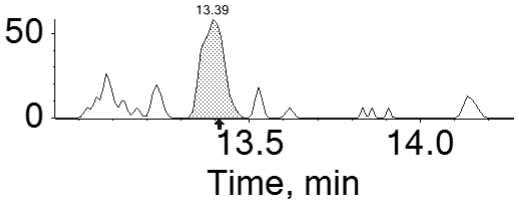
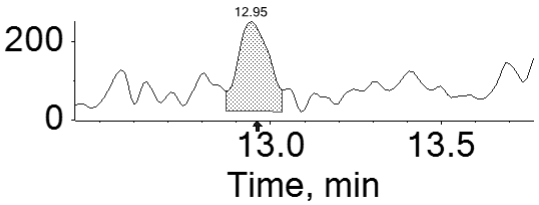
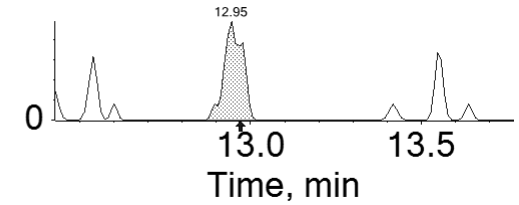
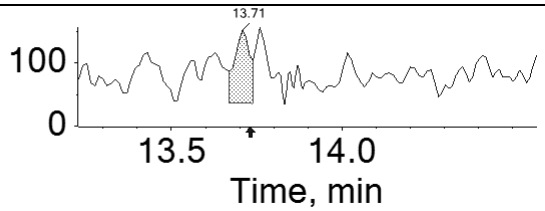
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.86) min Calculated conc: 0.045 Area Ratio: 9.726e-3 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.56) min Calculated conc: 0.024 Area Ratio: 4.880e-3 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.020 Area Ratio: 4.367e-3 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.021 Area Ratio: 1.566e-3 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.03 (7.04) min Calculated conc: 0.001 Area Ratio: 1.080e-4 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.29 (7.06) min Calculated conc: 0.003 Area Ratio: 3.591e-4 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 0.022 Area Ratio: 4.003e-3 Sample Type: (Unknown)	

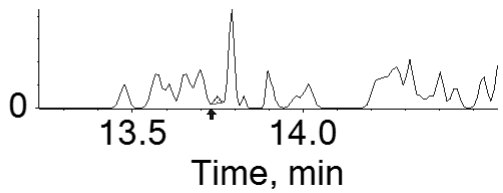
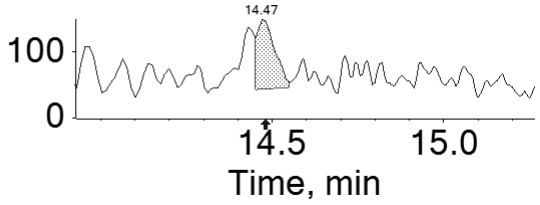
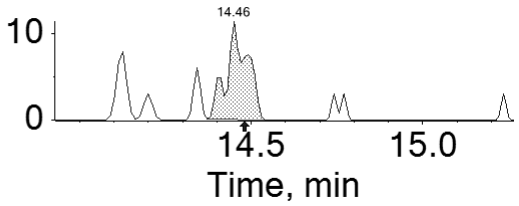
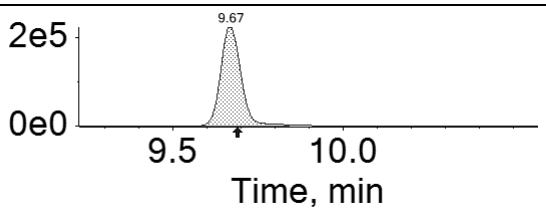
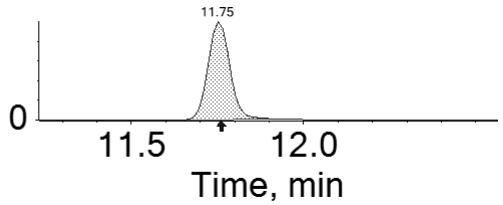
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 0.016 Area Ratio: 2.442e-4 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: 0.002 Area Ratio: 2.315e-4 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.82 (8.84) min Calculated conc: 0.002 Area Ratio: 7.562e-5 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.016 Area Ratio: 2.606e-3 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.67 (8.70) min Calculated conc: 0.014 Area Ratio: 7.303e-4 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 0.011 Area Ratio: 2.545e-3 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 10.07 (10.01) min Calculated conc: 0.001 Area Ratio: 5.331e-5 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.020 Area Ratio: 5.292e-3 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.29 (9.31) min Calculated conc: 0.021 Area Ratio: 4.209e-3 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.061 Area Ratio: 1.528e-2 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.070 Area Ratio: 6.735e-3 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 0.001 Area Ratio: 1.715e-4 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 0.003 Area Ratio: 1.767e-4 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 0.013 Area Ratio: 2.095e-3 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 0.012 Area Ratio: 6.556e-4 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.49 (11.78) min Calculated conc: 0.049 Area Ratio: 1.082e-2 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 0.006 Area Ratio: 3.937e-4 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.95 (10.95) min Calculated conc: 0.003 Area Ratio: 6.539e-4 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.96 (11.00) min Calculated conc: 0.001 Area Ratio: 1.434e-4 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 0.014 Area Ratio: 3.248e-3 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.36 (11.39) min Calculated conc: 0.014 Area Ratio: 8.032e-4 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.60 (12.61) min Calculated conc: 0.000 Area Ratio: 1.317e-5 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.44 (12.60) min Calculated conc: 0.000 Area Ratio: 2.621e-5 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.003 Area Ratio: 8.068e-4 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 0.002 Area Ratio: 2.639e-4 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.92 (12.93) min Calculated conc: 0.001 Area Ratio: 1.969e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.76 (11.73) min Calculated conc: 0.009 Area Ratio: 2.383e-3 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.35 (11.72) min Calculated conc: 0.002 Area Ratio: 3.132e-4 Sample Type: (Unknown)	

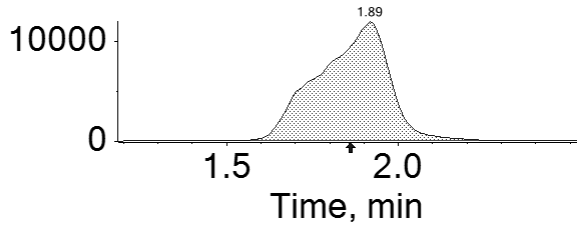
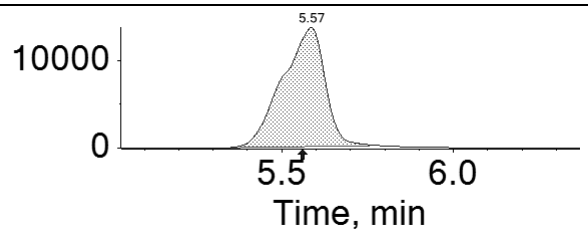
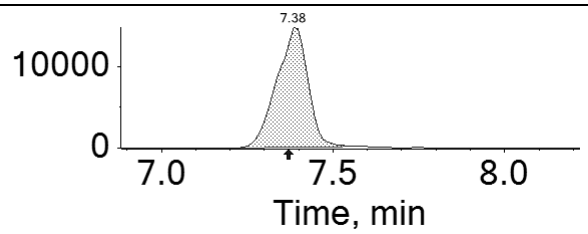
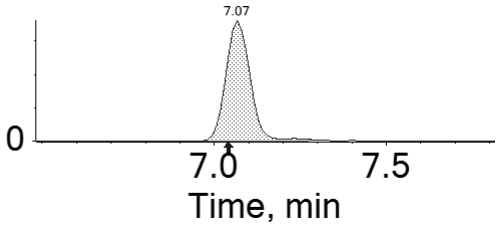
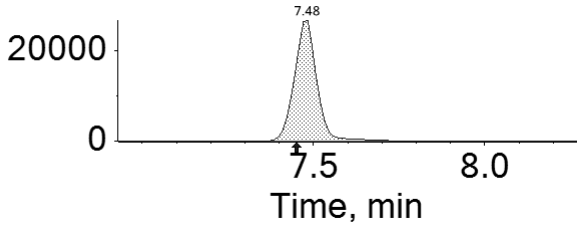
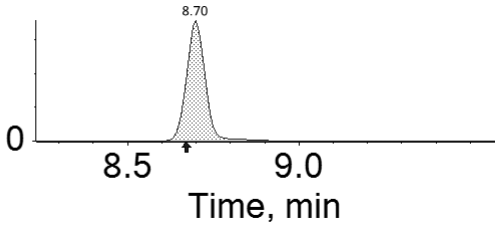
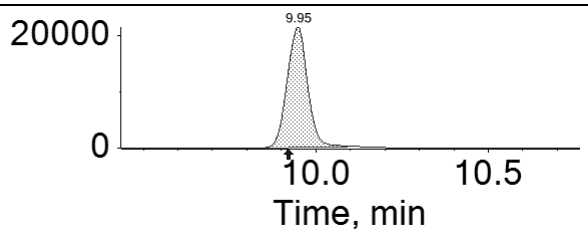
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 0.005 Area Ratio: 7.347e-4 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 0.002 Area Ratio: 6.461e-5 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 0.008 Area Ratio: 1.060e-3 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 0.008 Area Ratio: 3.491e-4 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.95 (12.96) min Calculated conc: 0.014 Area Ratio: 1.861e-3 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: 0.011 Area Ratio: 2.421e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 0.003 Area Ratio: 4.561e-4 Sample Type: (Unknown)	

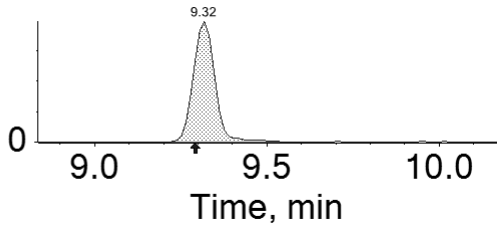
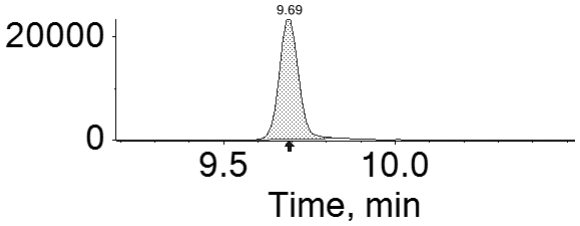
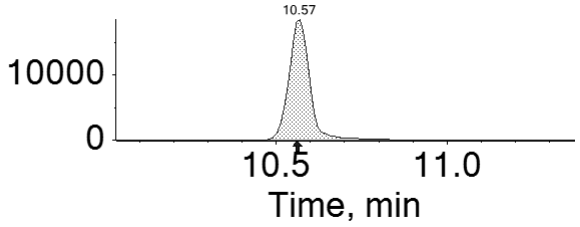
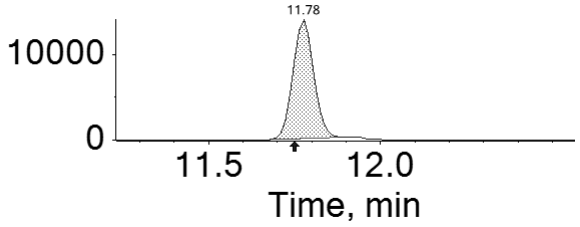
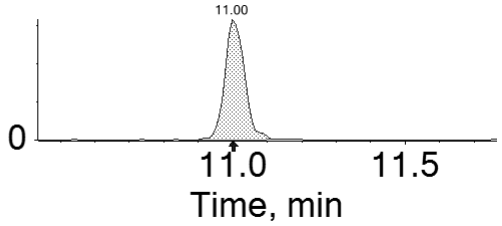
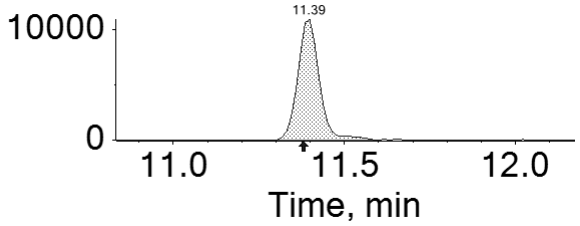
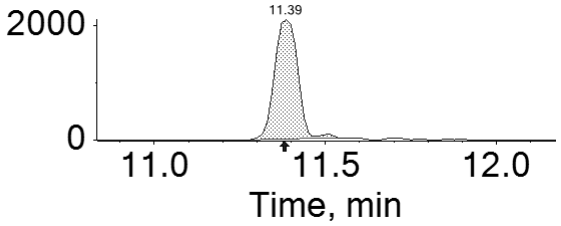
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 0.000 Area Ratio: 4.431e-6 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.47 (14.48) min Calculated conc: 0.006 Area Ratio: 1.005e-3 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 0.006 Area Ratio: 1.291e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.718 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 1.561 Area Ratio: N/A Sample Type: (Unknown)	

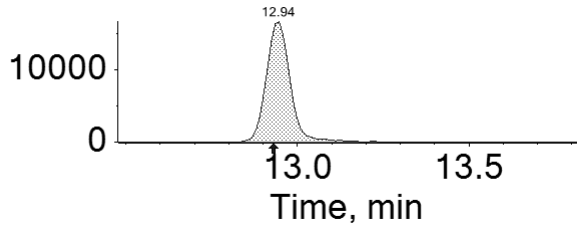
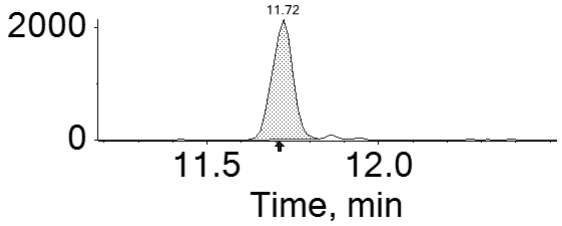
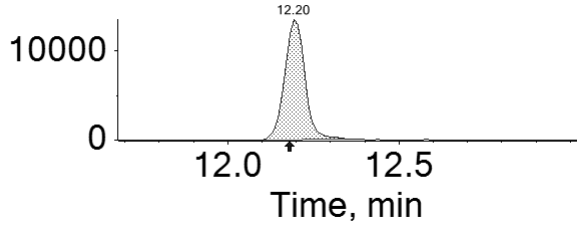
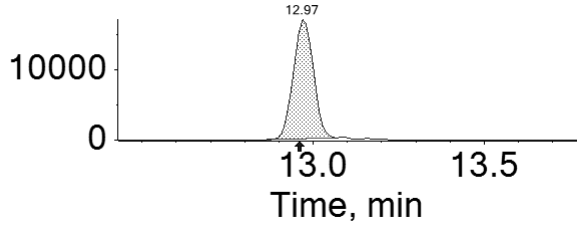
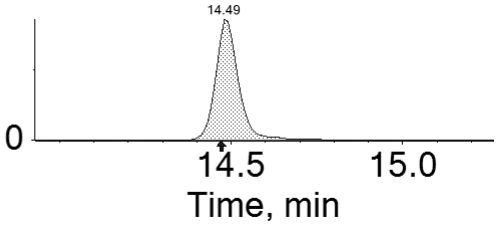
Sample Name	10478022002 D10	**Injection Vial**	6
Sample ID	10478022002	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-24T13:45:09	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190624A.wiff		
Result Table	190624AM		
Sample Comment			

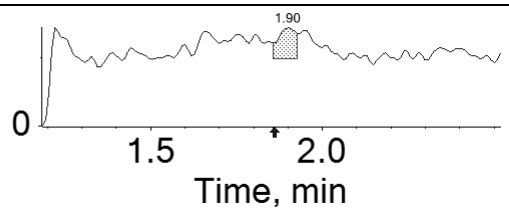
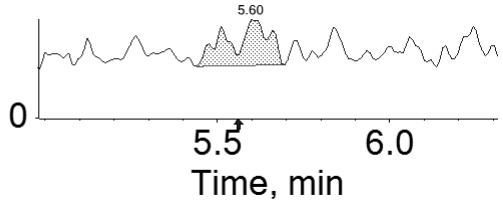
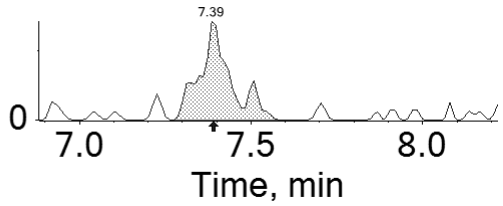
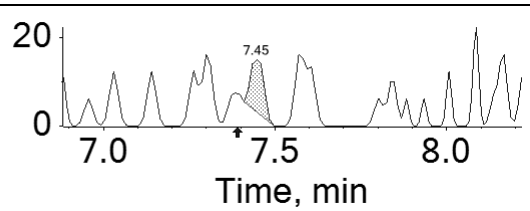
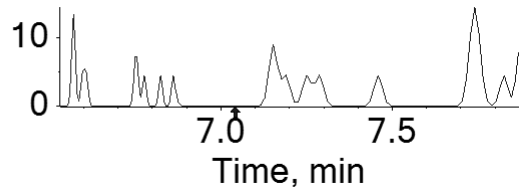
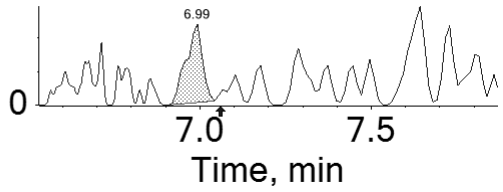
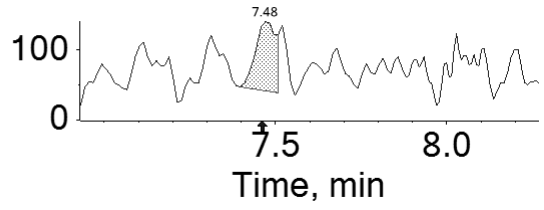
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.671e5	1.89	1.00	-
13C5_PFPeA	1.177e5	5.57	1.00	-
13C3_PFBS	9.308e4	7.38	1.00	-
13C2_4:2FTS	1.759e4	7.07	1.00	-
13C5_PFHxA	1.200e5	7.48	1.00	-
13C4_PFHpA	1.340e5	8.70	1.00	-
13C3_PFHxS	8.784e4	9.95	1.00	-
13C2_6:2FTS	1.723e4	9.32	1.00	-
13C8_PFOA	9.122e4	9.69	1.00	-
13C9_PFNA	7.816e4	10.57	1.00	-
13C8_PFOS	5.858e4	11.78	1.00	-
13C2_8:2FTS	1.264e4	11.00	1.00	-
13C6_PFDA	4.745e4	11.39	1.00	-
d3-MeFOSAA	9.828e3	11.39	1.00	-
13C8_FOSA	8.062e4	12.94	1.00	-
d5-EtFOSAA	8.937e3	11.72	1.00	-
13C7_PFUdA	5.550e4	12.20	1.00	-
13C2_PFDoA	6.879e4	12.97	1.00	-
13C2_PFTeDA	3.947e4	14.49	1.00	-

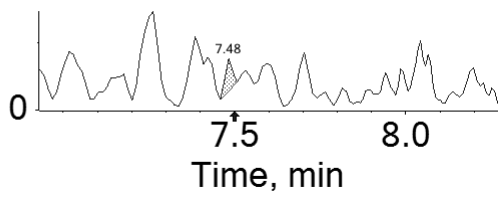
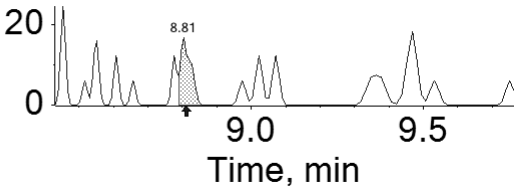
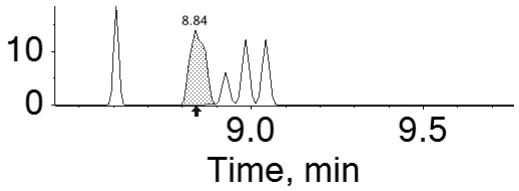
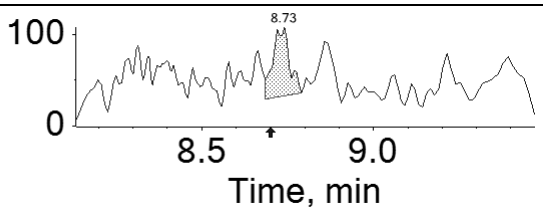
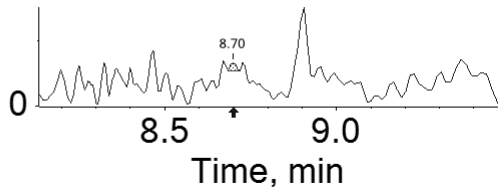
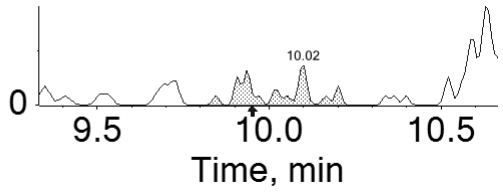
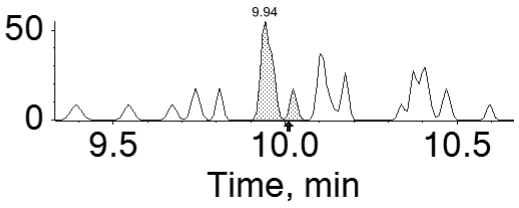
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	8.038e+02	1.90	N/A	0.022
PFPeA	7.433e+02	5.60	N/A	0.031
PFBS	4.441e+02	7.39	N/A	0.022
PFBS_2	3.236e+01	7.45	N/A	0.005
4:2FTS	N/A	N/A	N/A	N/A
4:2FTS_2	7.776e+01	6.99	N/A	0.033
PFHxA	3.995e+02	7.48	N/A	0.018
PFHxA_2	3.411e+01	7.48	N/A	0.019
PFPeS	3.480e+01	8.81	N/A	0.002
PFPeS_2	4.306e+01	8.84	N/A	0.007
PFHpA	2.541e+02	8.73	N/A	0.012
PFHpA_2	7.022e+00	8.70	N/A	0.001
PFHxS	2.440e+02	10.02	N/A	0.012
PFHxS_2	1.545e+02	9.94	N/A	0.020
6:2FTS	3.354e+01	9.31	N/A	0.007
6:2FTS_2	9.164e+01	9.32	N/A	0.027
PFOA	2.331e+03	9.71	N/A	0.100
PFOA_2	7.913e+02	9.69	N/A	0.090
PFHpS	3.613e+01	10.85	N/A	0.002
PFHpS_2	2.904e+01	10.89	N/A	0.006
PFNA	1.105e+02	10.53	N/A	0.009
PFNA_2	7.583e+01	10.59	N/A	0.018
PFOS	6.223e+02	11.44	N/A	0.048
PFOS_2	1.585e+02	11.59	N/A	0.043
8:2FTS	1.477e+02	11.01	N/A	0.058
8:2FTS_2	4.623e+01	11.32	N/A	0.020
PFDA	7.099e+01	11.39	N/A	0.007
PFDA_2	5.242e+01	11.39	N/A	0.019
PFNS	2.247e+01	12.64	N/A	0.002
PFNS_2	1.154e+01	12.63	N/A	0.003
N-MeFOSAA	5.242e+01	11.39	N/A	0.017
N-MeFOSAA_2	N/A	N/A	N/A	N/A
FOSA	5.019e+01	12.95	N/A	0.005
N-EtFOSAA	8.376e+01	11.74	N/A	0.034
N-EtFOSAA_2	2.651e+01	11.75	N/A	0.020
PFUdA	4.153e+02	12.22	N/A	0.051
PFUdA_2	N/A	N/A	N/A	N/A
PFDS	9.792e+01	13.42	N/A	0.011
PFDS_2	7.547e+01	13.40	N/A	0.025
PFDoA	N/A	N/A	N/A	N/A
PFDoA_2	5.705e+01	13.01	N/A	0.037
PFTrDA	N/A	N/A	N/A	N/A
PFTrDA_2	4.848e+01	13.73	N/A	0.026
PFTeDA	N/A	N/A	N/A	N/A
PFTeDA_2	5.806e+01	14.49	N/A	0.065
13C4_PFOA	1.066e+05	9.69	N/A	0.200
13C4_PFOS	6.469e+04	11.78	N/A	0.229

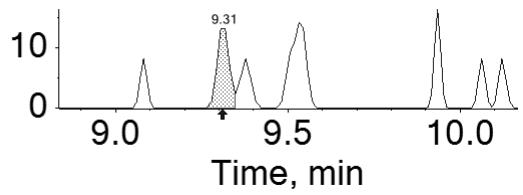
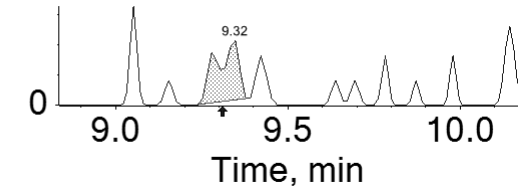
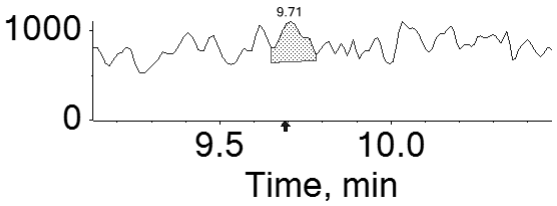
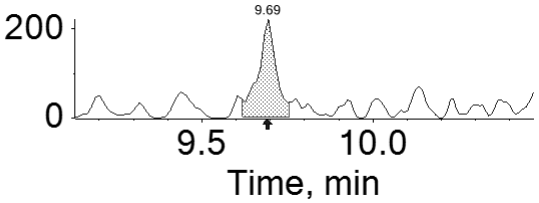
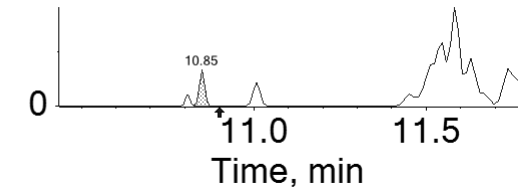
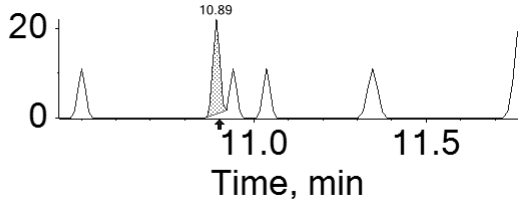
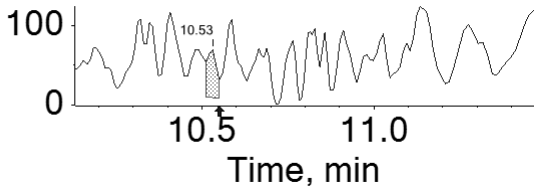
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.89(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.57(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.95(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

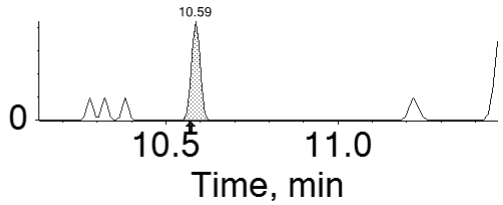
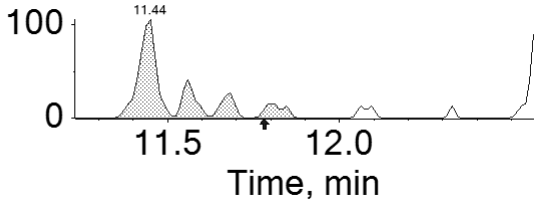
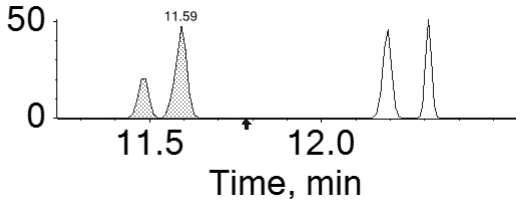
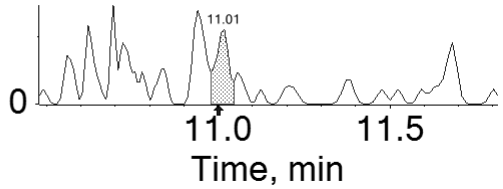
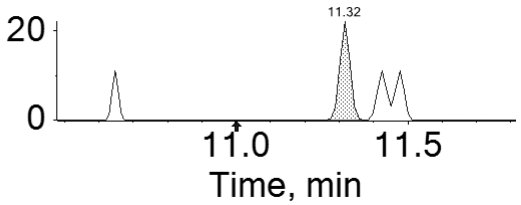
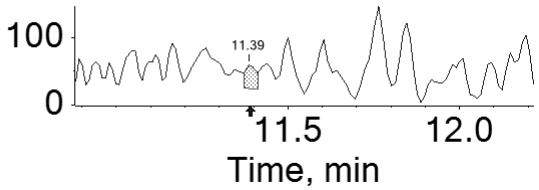
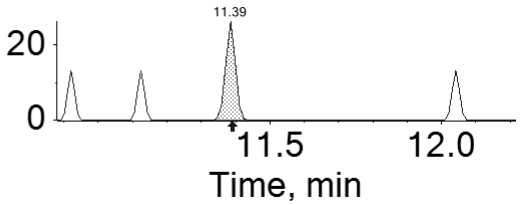
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.57(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.78(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.39(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.39(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

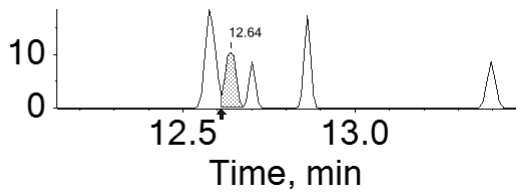
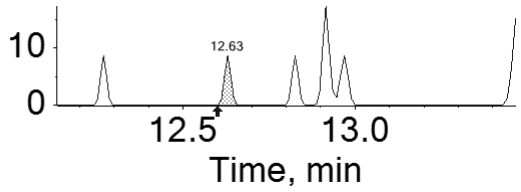
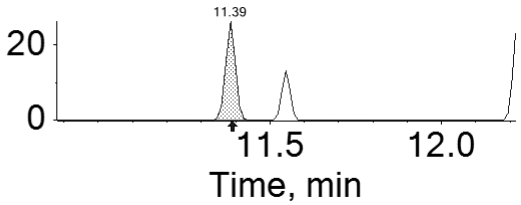
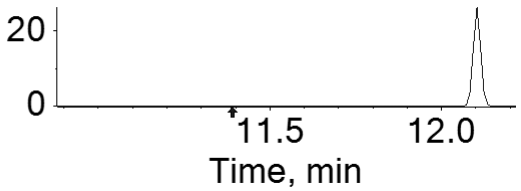
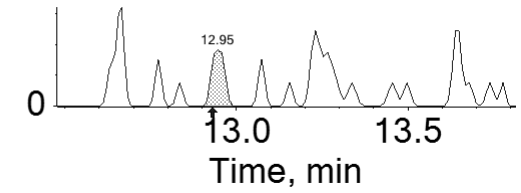
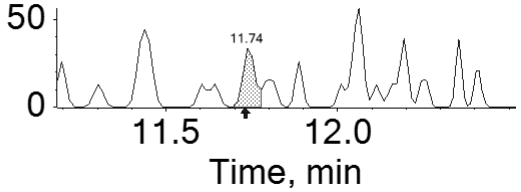
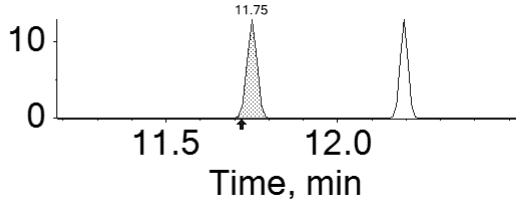
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.72(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.20(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.97(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.49(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

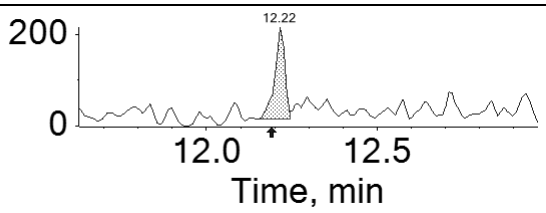
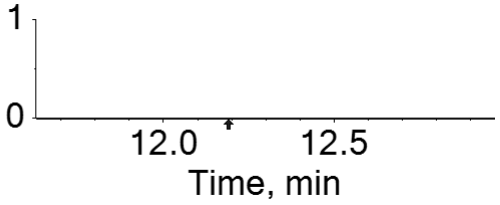
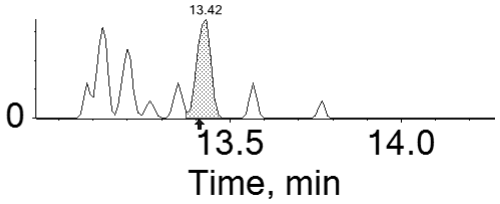
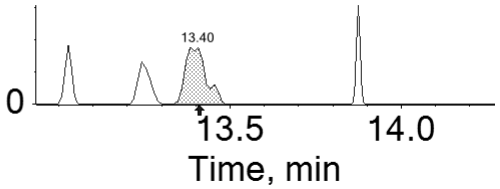
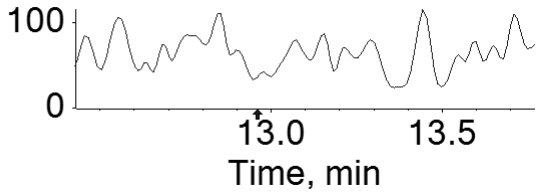
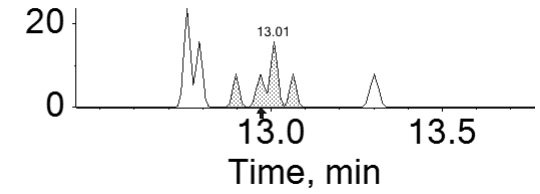
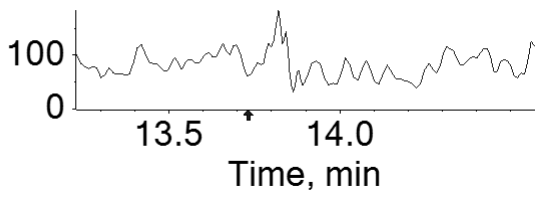
PFBA (213.0 / 169.0) RT (Exp. RT): 1.90 (1.86) min Calculated conc: 0.022 Area Ratio: 4.811e-3 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.60 (5.56) min Calculated conc: 0.031 Area Ratio: 6.316e-3 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.022 Area Ratio: 4.772e-3 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.45 (7.39) min Calculated conc: 0.005 Area Ratio: 3.476e-4 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): N/A (7.04) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 6.99 (7.06) min Calculated conc: 0.033 Area Ratio: 4.422e-3 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 0.018 Area Ratio: 3.329e-3 Sample Type: (Unknown)	

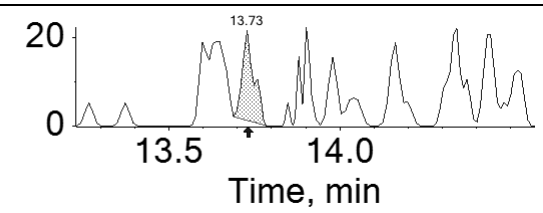
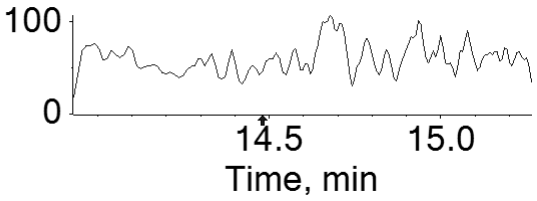
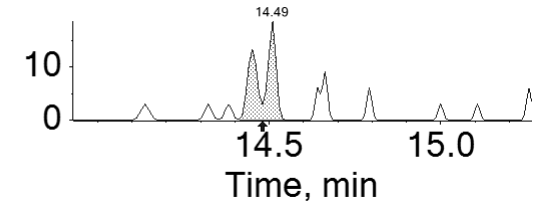
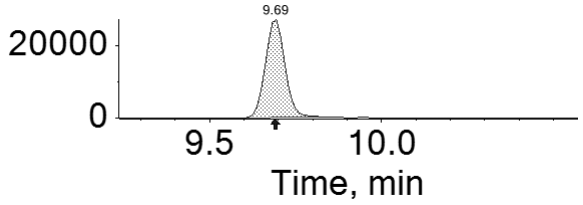
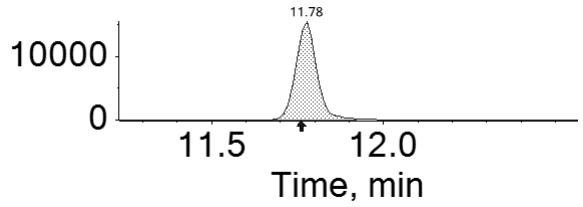
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 0.019 Area Ratio: 2.843e-4 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.81 (8.81) min Calculated conc: 0.002 Area Ratio: 2.597e-4 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 0.007 Area Ratio: 3.213e-4 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.73 (8.70) min Calculated conc: 0.012 Area Ratio: 1.896e-3 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 0.001 Area Ratio: 5.240e-5 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 10.02 (9.95) min Calculated conc: 0.012 Area Ratio: 2.778e-3 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 0.020 Area Ratio: 1.758e-3 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 0.007 Area Ratio: 1.947e-3 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 0.027 Area Ratio: 5.319e-3 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.71 (9.69) min Calculated conc: 0.100 Area Ratio: 2.555e-2 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 0.090 Area Ratio: 8.675e-3 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.85 (10.90) min Calculated conc: 0.002 Area Ratio: 4.622e-4 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 0.006 Area Ratio: 3.716e-4 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.53 (10.55) min Calculated conc: 0.009 Area Ratio: 1.414e-3 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.59 (10.57) min Calculated conc: 0.018 Area Ratio: 9.702e-4 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.44 (11.78) min Calculated conc: 0.048 Area Ratio: 1.062e-2 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.59 (11.78) min Calculated conc: 0.043 Area Ratio: 2.706e-3 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 0.058 Area Ratio: 1.169e-2 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.32 (11.00) min Calculated conc: 0.020 Area Ratio: 3.659e-3 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.007 Area Ratio: 1.496e-3 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.019 Area Ratio: 1.105e-3 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.64 (12.61) min Calculated conc: 0.002 Area Ratio: 2.875e-4 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.63 (12.60) min Calculated conc: 0.003 Area Ratio: 2.078e-4 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.017 Area Ratio: 5.334e-3 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): N/A (11.39) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.95 (12.93) min Calculated conc: 0.005 Area Ratio: 6.225e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.74 (11.73) min Calculated conc: 0.034 Area Ratio: 9.372e-3 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.75 (11.72) min Calculated conc: 0.020 Area Ratio: 2.966e-3 Sample Type: (Unknown)	

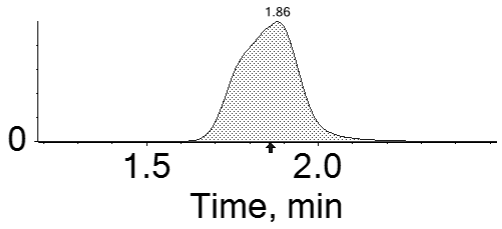
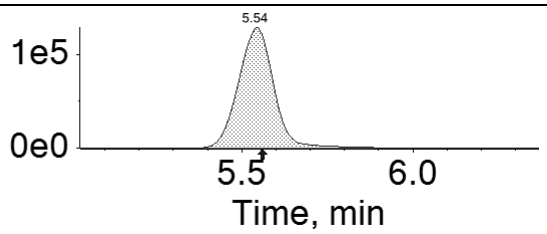
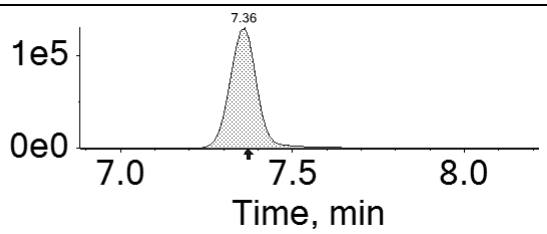
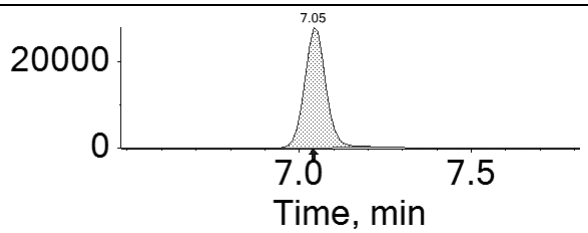
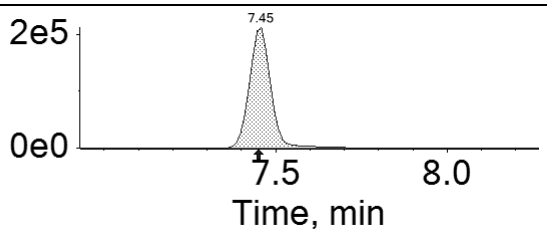
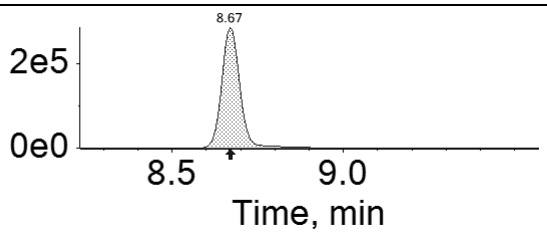
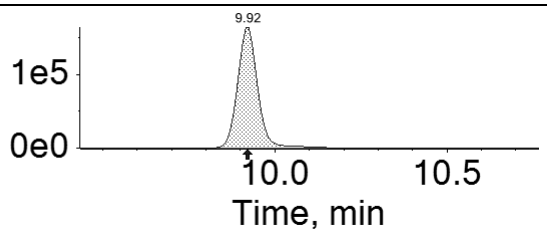
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.22 (12.19) min Calculated conc: 0.051 Area Ratio: 7.482e-3 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): N/A (12.19) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.011 Area Ratio: 1.423e-3 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 0.025 Area Ratio: 1.097e-3 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): N/A (12.96) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.01 (12.97) min Calculated conc: 0.037 Area Ratio: 8.293e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): N/A (13.73) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	

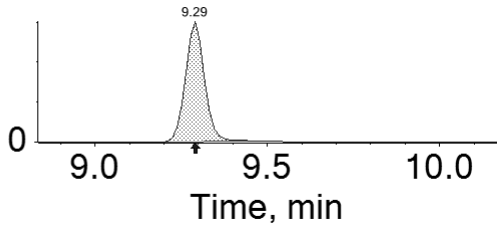
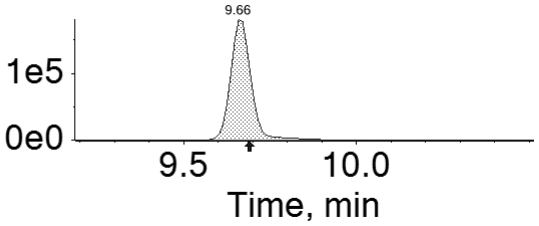
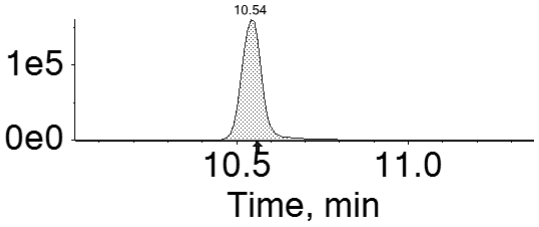
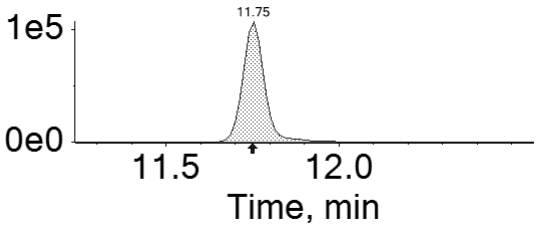
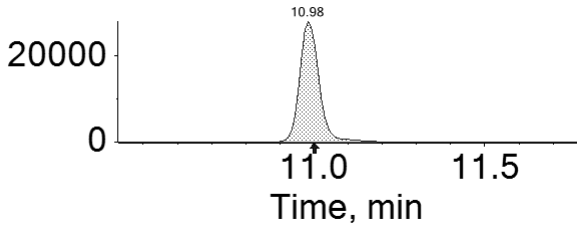
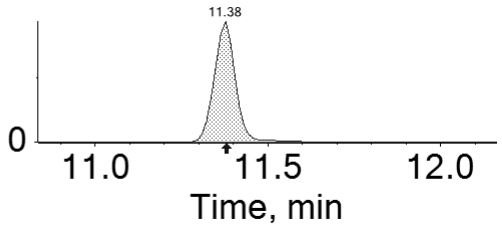
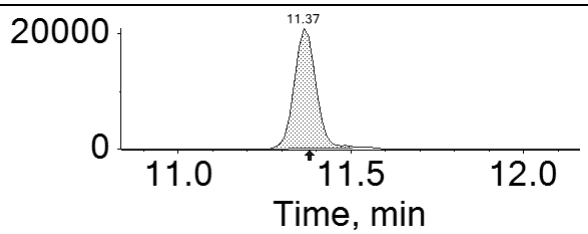
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.73 (13.73) min Calculated conc: 0.026 Area Ratio: 7.047e-4 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): N/A (14.48) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 0.065 Area Ratio: 1.471e-3 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 0.200 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.78 (11.76) min Calculated conc: 0.229 Area Ratio: N/A Sample Type: (Unknown)	

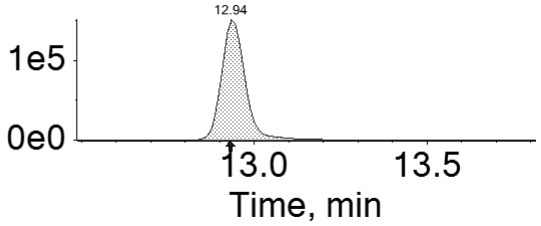
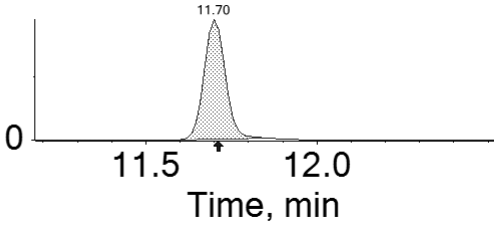
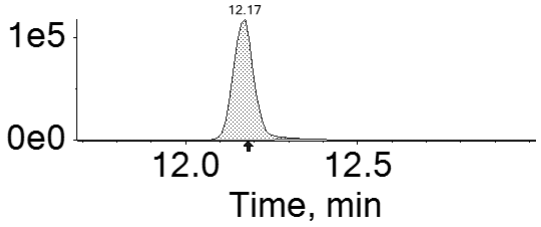
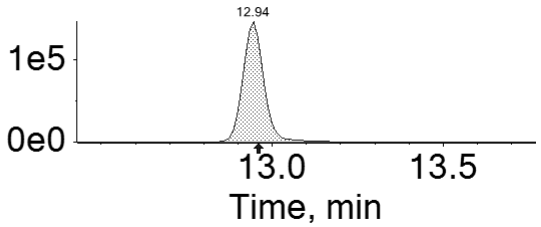
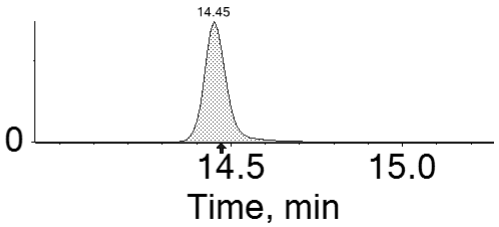
Sample Name	10478022003	**Injection Vial**	32
Sample ID	10478022003	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T09:25:57	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

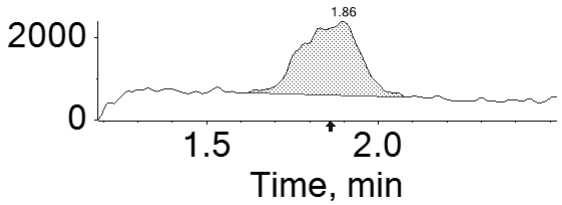
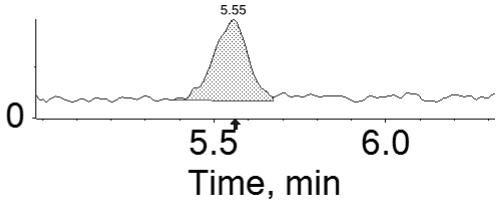
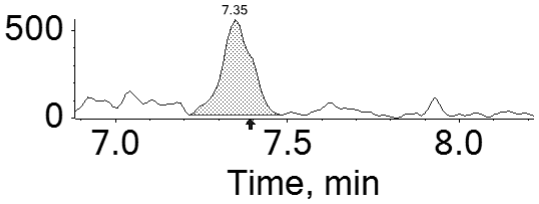
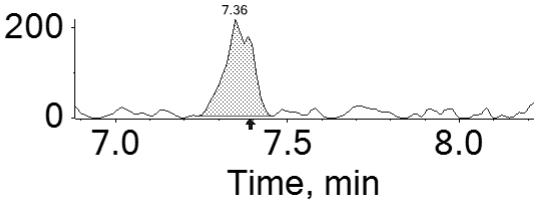
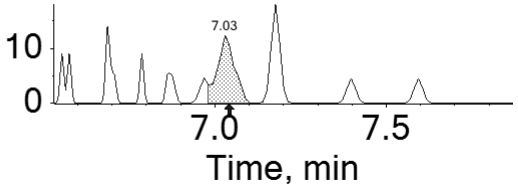
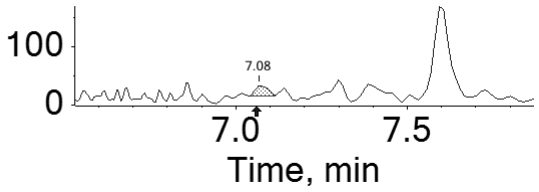
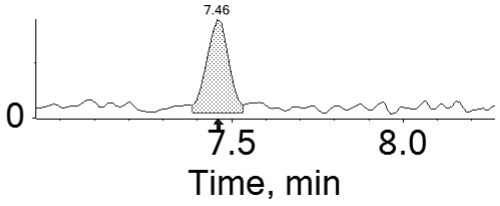
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.250e6	1.86	1.00	-
13C5_PFPeA	9.171e5	5.54	1.00	-
13C3_PFBS	7.114e5	7.36	1.00	-
13C2_4:2FTS	1.202e5	7.05	1.00	-
13C5_PFHxA	9.190e5	7.45	1.00	-
13C4_PFHpA	1.061e6	8.67	1.00	-
13C3_PFHxS	6.622e5	9.92	1.00	-
13C2_6:2FTS	1.158e5	9.29	1.00	-
13C8_PFOA	7.376e5	9.66	1.00	-
13C9_PFNA	6.714e5	10.54	1.00	-
13C8_PFOS	4.636e5	11.75	1.00	-
13C2_8:2FTS	1.106e5	10.98	1.00	-
13C6_PFDA	4.003e5	11.38	1.00	-
d3-MeFOSAA	9.062e4	11.37	1.00	-
13C8_FOSA	7.207e5	12.94	1.00	-
d5-EtFOSAA	8.218e4	11.70	1.00	-
13C7_PFUdA	4.999e5	12.17	1.00	-
13C2_PFDoA	6.227e5	12.94	1.00	-
13C2_PFTeDA	3.373e5	14.45	1.00	-

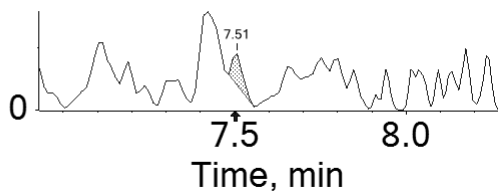
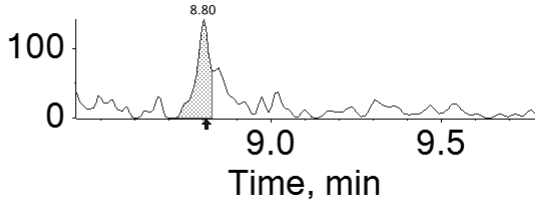
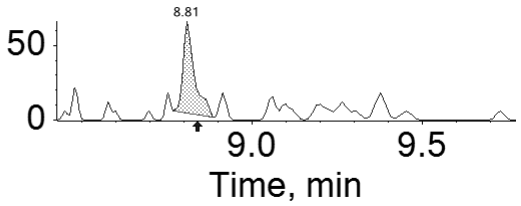
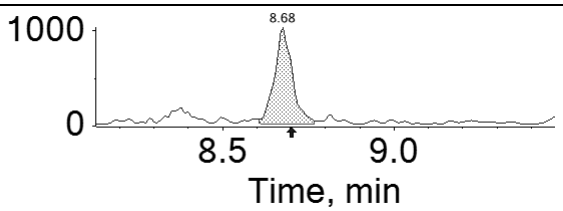
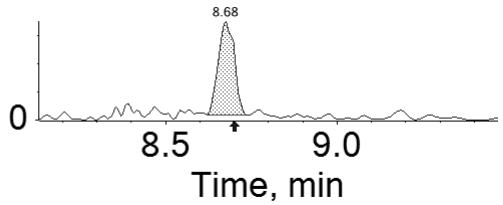
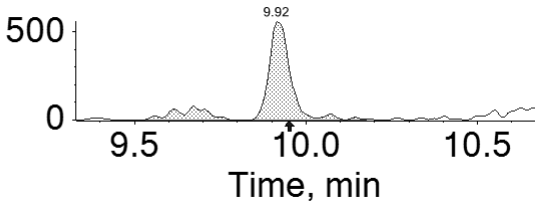
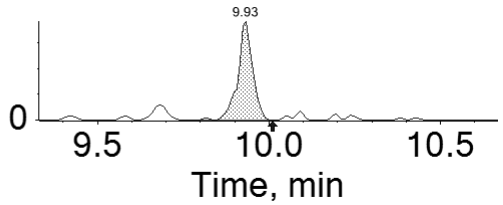
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	2.148e+04	1.86	N/A	0.080
PFPeA	5.608e+03	5.55	N/A	0.030
PFBS	3.320e+03	7.35	N/A	0.022
PFBS_2	1.177e+03	7.36	N/A	0.022
4:2FTS	4.267e+01	7.03	N/A	0.002
4:2FTS_2	4.631e+01	7.08	N/A	0.003
PFHxA	3.796e+03	7.46	N/A	0.023
PFHxA_2	5.138e+01	7.51	N/A	0.004
PFPeS	3.705e+02	8.80	N/A	0.003
PFPeS_2	1.424e+02	8.81	N/A	0.003
PFHpA	3.646e+03	8.68	N/A	0.022
PFHpA_2	1.087e+03	8.68	N/A	0.019
PFHxS	2.960e+03	9.92	N/A	0.020
PFHxS_2	1.156e+03	9.93	N/A	0.020
6:2FTS	2.368e+03	9.29	N/A	0.078
6:2FTS_2	1.586e+03	9.29	N/A	0.069
PFOA	3.273e+04	9.67	N/A	0.178
PFOA_2	1.197e+04	9.67	N/A	0.169
PFHpS	1.331e+02	10.90	N/A	0.001
PFHpS_2	1.716e+02	10.87	N/A	0.004
PFNA	1.475e+03	10.55	N/A	0.014
PFNA_2	2.794e+02	10.56	N/A	0.008
PFOS	6.826e+03	11.47	N/A	0.066
PFOS_2	3.390e+02	11.76	N/A	0.012
8:2FTS	6.689e+01	11.04	N/A	0.003
8:2FTS_2	9.488e+01	11.02	N/A	0.005
PFDA	6.162e+02	11.38	N/A	0.007
PFDA_2	1.594e+02	11.38	N/A	0.007
PFNS	8.233e+01	12.60	N/A	0.001
PFNS_2	4.843e+01	12.58	N/A	0.001
N-MeFOSAA	1.340e+02	11.37	N/A	0.005
N-MeFOSAA_2	5.240e+01	11.39	N/A	0.003
FOSA	6.999e+01	12.92	N/A	0.001
N-EtFOSAA	5.247e+01	11.70	N/A	0.002
N-EtFOSAA_2	4.708e+01	11.78	N/A	0.004
PFUdA	2.288e+02	12.18	N/A	0.003
PFUdA_2	1.484e+01	12.22	N/A	0.001
PFDS	4.167e+01	13.42	N/A	0.001
PFDS_2	1.653e+01	13.42	N/A	0.001
PFDoA	4.832e+01	12.96	N/A	0.001
PFDoA_2	4.438e+01	13.00	N/A	0.003
PFTrDA	4.677e+02	13.71	N/A	0.005
PFTrDA_2	1.037e+01	13.71	N/A	0.001
PFTeDA	5.334e+02	14.46	N/A	0.010
PFTeDA_2	8.057e+01	14.45	N/A	0.011
13C4_PFOA	8.853e+05	9.66	N/A	1.658
13C4_PFOS	4.355e+05	11.75	N/A	1.543

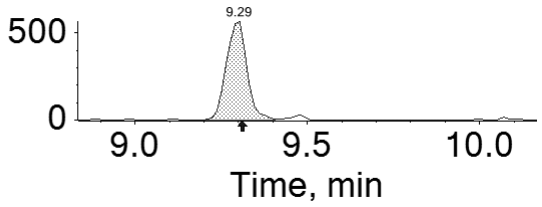
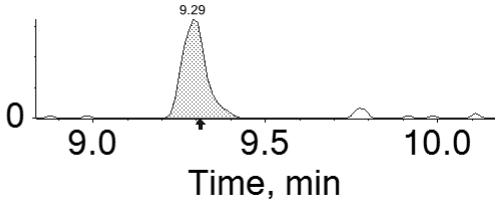
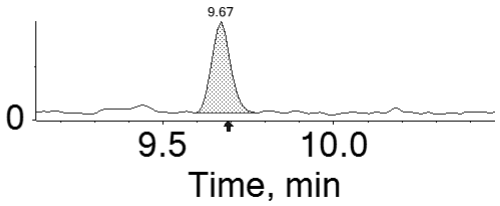
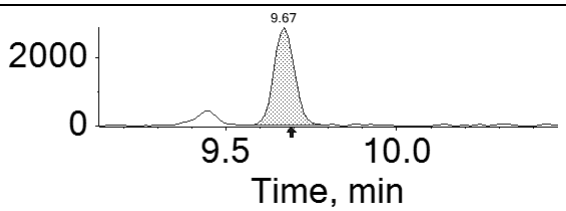
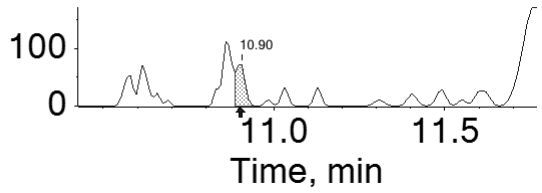
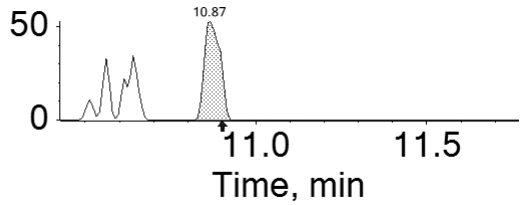
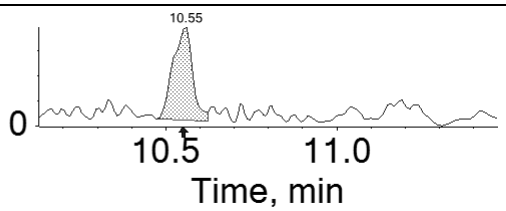
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.54(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.45(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.67(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.92(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

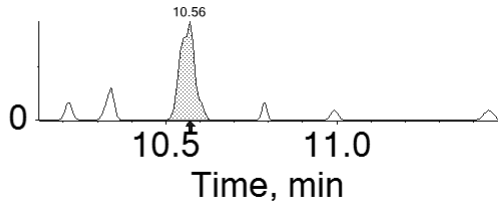
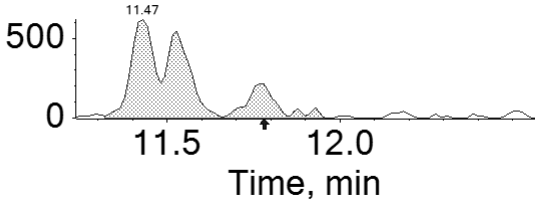
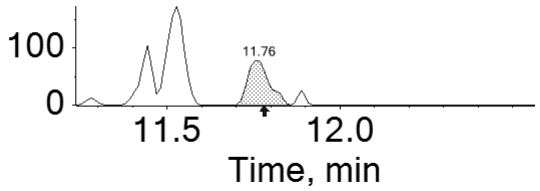
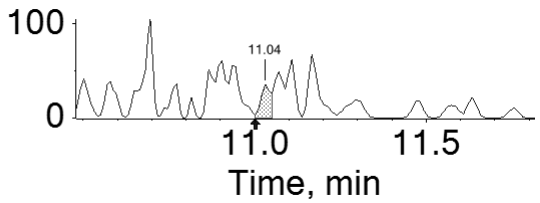
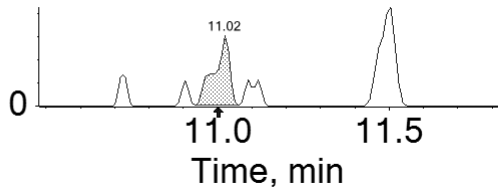
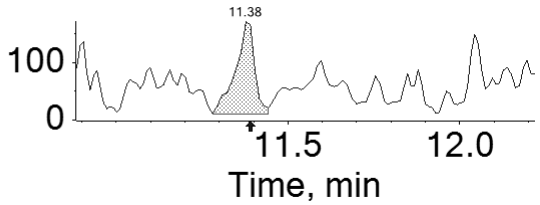
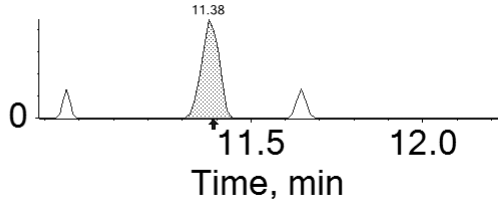
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.29(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.66(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.54(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.98(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

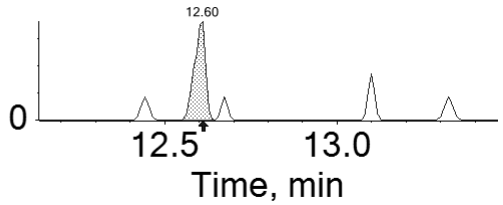
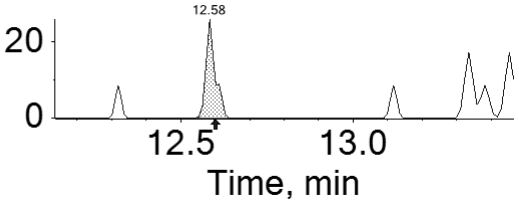
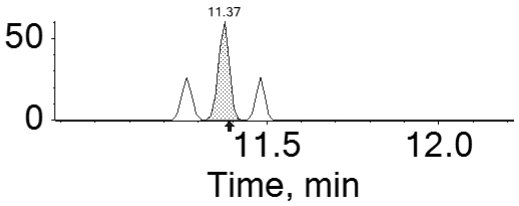
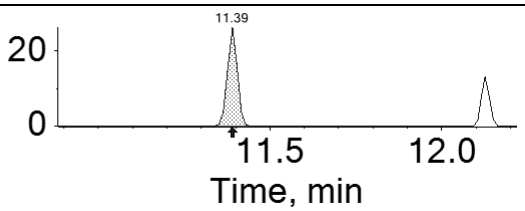
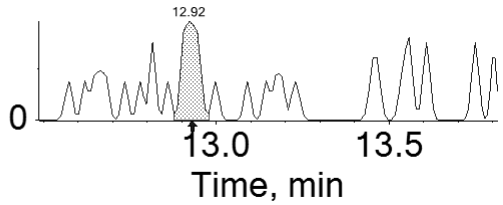
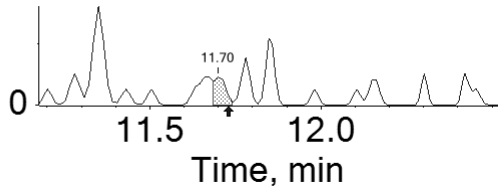
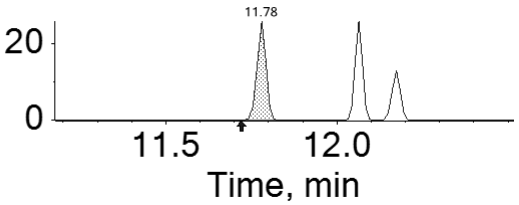
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

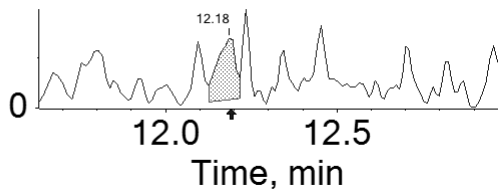
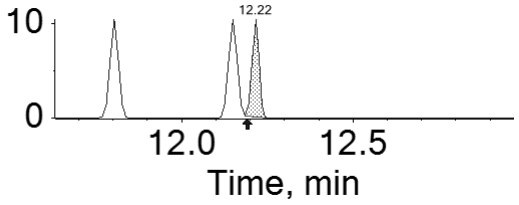
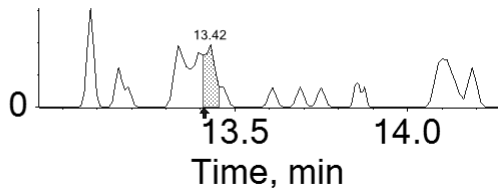
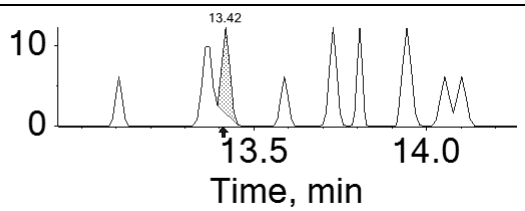
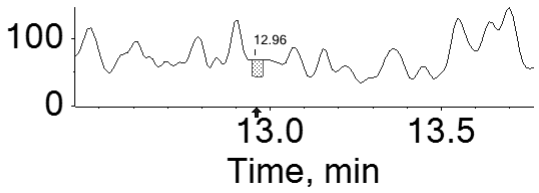
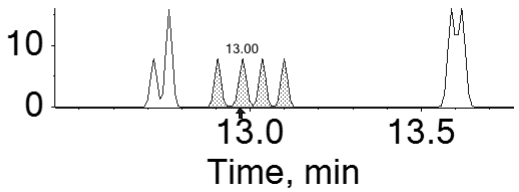
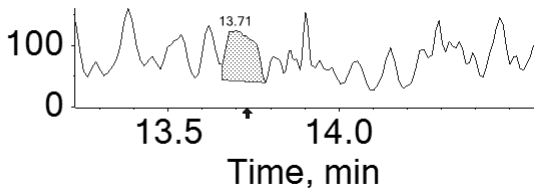
PFBA (213.0 / 169.0) RT (Exp. RT): 1.86 (1.86) min Calculated conc: 0.080 Area Ratio: 1.718e-2 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.55 (5.56) min Calculated conc: 0.030 Area Ratio: 6.115e-3 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.35 (7.39) min Calculated conc: 0.022 Area Ratio: 4.667e-3 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.36 (7.39) min Calculated conc: 0.022 Area Ratio: 1.655e-3 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.03 (7.04) min Calculated conc: 0.002 Area Ratio: 3.549e-4 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.08 (7.06) min Calculated conc: 0.003 Area Ratio: 3.853e-4 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.46 (7.46) min Calculated conc: 0.023 Area Ratio: 4.130e-3 Sample Type: (Unknown)	

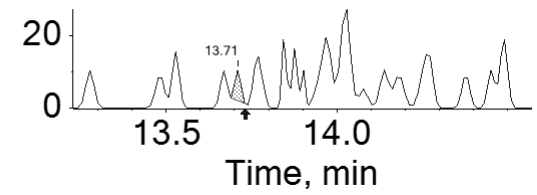
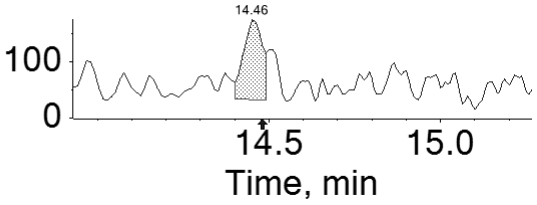
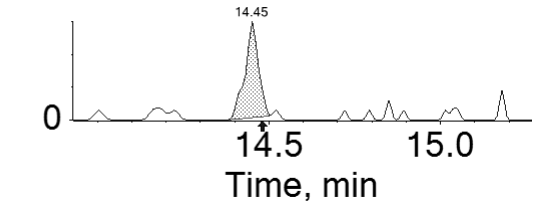
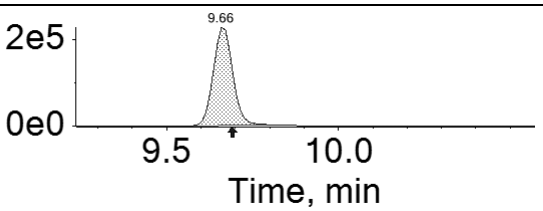
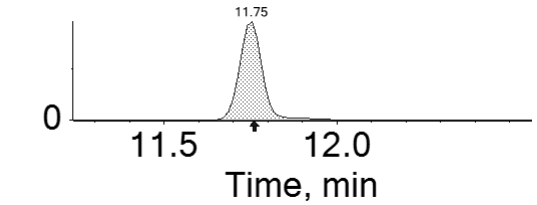
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.51 (7.50) min Calculated conc: 0.004 Area Ratio: 5.591e-5 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.80 (8.81) min Calculated conc: 0.003 Area Ratio: 3.493e-4 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.81 (8.84) min Calculated conc: 0.003 Area Ratio: 1.343e-4 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.022 Area Ratio: 3.437e-3 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.019 Area Ratio: 1.025e-3 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.92 (9.95) min Calculated conc: 0.020 Area Ratio: 4.471e-3 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 0.020 Area Ratio: 1.746e-3 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.29 (9.31) min Calculated conc: 0.078 Area Ratio: 2.045e-2 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.29 (9.31) min Calculated conc: 0.069 Area Ratio: 1.370e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 0.178 Area Ratio: 4.437e-2 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 0.169 Area Ratio: 1.623e-2 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 0.001 Area Ratio: 1.982e-4 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: 0.004 Area Ratio: 2.556e-4 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.55 (10.55) min Calculated conc: 0.014 Area Ratio: 2.197e-3 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 0.008 Area Ratio: 4.162e-4 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.47 (11.78) min Calculated conc: 0.066 Area Ratio: 1.472e-2 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 0.012 Area Ratio: 7.313e-4 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.04 (11.00) min Calculated conc: 0.003 Area Ratio: 6.050e-4 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 0.005 Area Ratio: 8.582e-4 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.007 Area Ratio: 1.539e-3 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.007 Area Ratio: 3.982e-4 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.60 (12.61) min Calculated conc: 0.001 Area Ratio: 1.226e-4 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.58 (12.60) min Calculated conc: 0.001 Area Ratio: 9.689e-5 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 0.005 Area Ratio: 1.478e-3 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.003 Area Ratio: 5.782e-4 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.92 (12.93) min Calculated conc: 0.001 Area Ratio: 9.711e-5 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.70 (11.73) min Calculated conc: 0.002 Area Ratio: 6.385e-4 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.78 (11.72) min Calculated conc: 0.004 Area Ratio: 5.729e-4 Sample Type: (Unknown)	

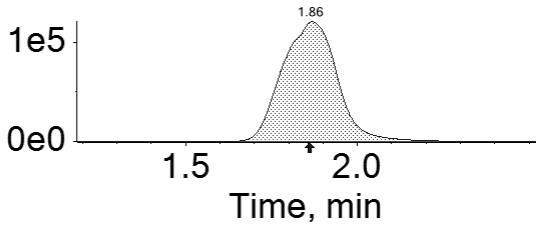
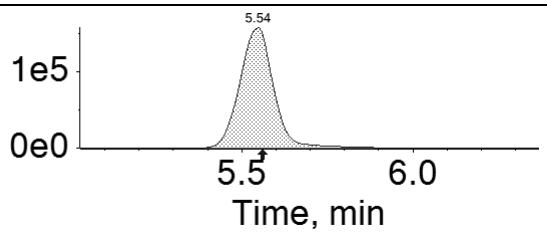
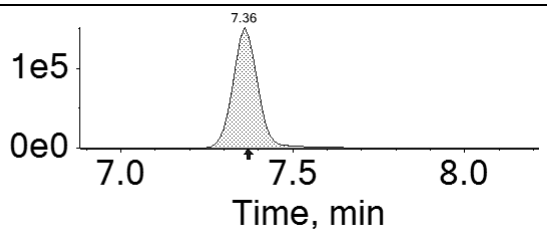
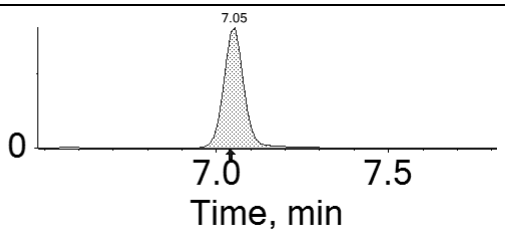
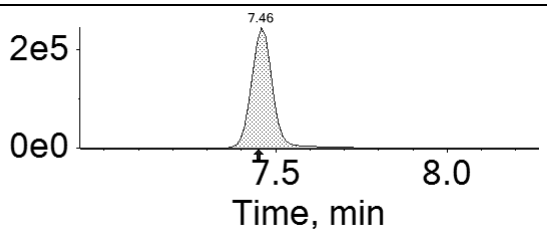
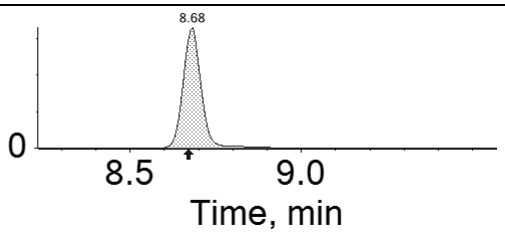
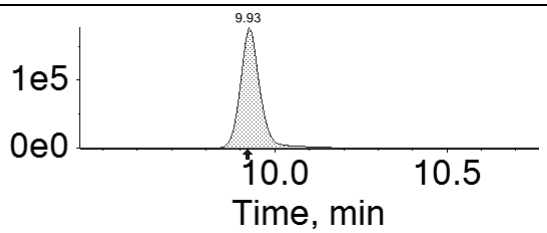
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 0.003 Area Ratio: 4.578e-4 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.22 (12.19) min Calculated conc: 0.001 Area Ratio: 2.968e-5 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.001 Area Ratio: 6.692e-5 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.001 Area Ratio: 2.655e-5 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.96 (12.96) min Calculated conc: 0.001 Area Ratio: 7.760e-5 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.00 (12.97) min Calculated conc: 0.003 Area Ratio: 7.127e-5 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 0.005 Area Ratio: 7.511e-4 Sample Type: (Unknown)	

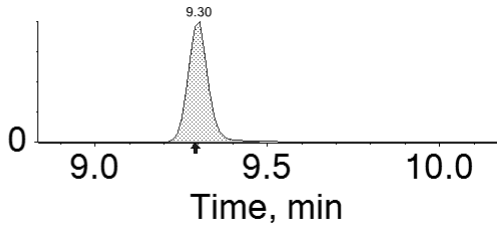
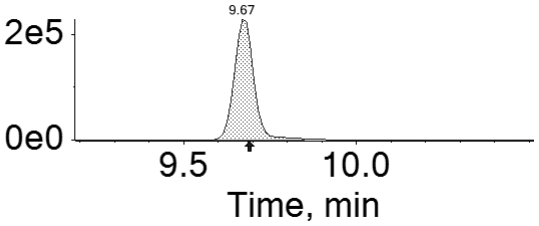
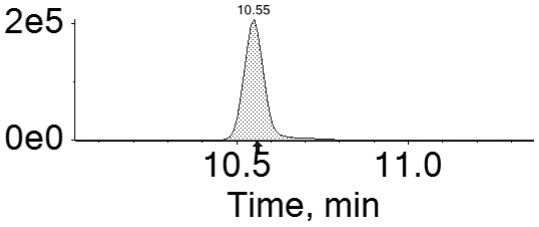
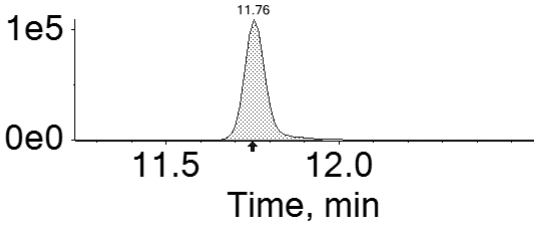
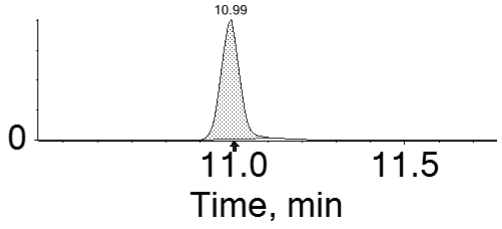
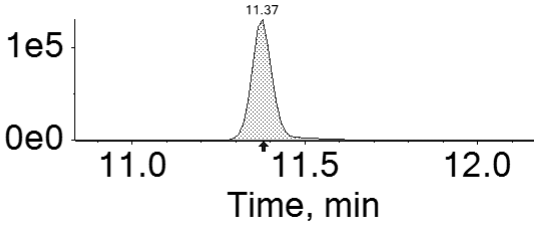
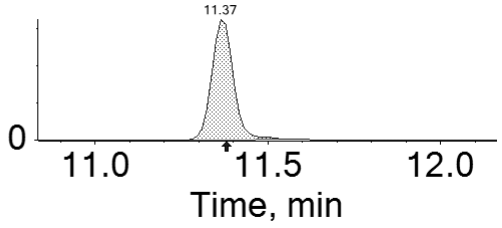
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 0.001 Area Ratio: 1.666e-5 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 0.010 Area Ratio: 1.581e-3 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 0.011 Area Ratio: 2.389e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.66 (9.69) min Calculated conc: 1.658 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 1.543 Area Ratio: N/A Sample Type: (Unknown)	

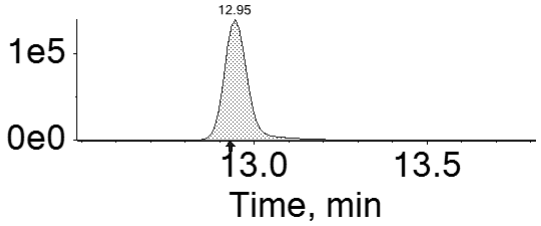
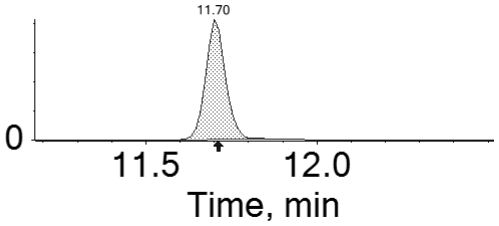
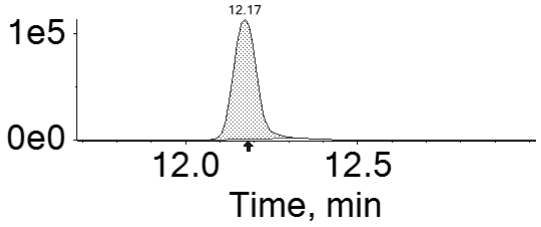
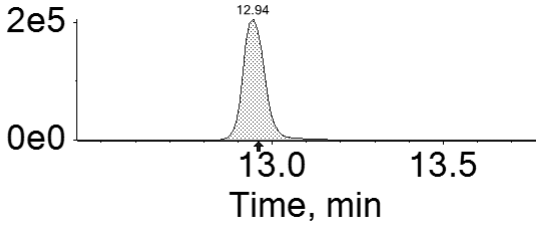
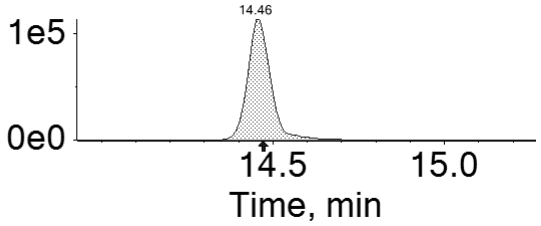
Sample Name	10478022005	**Injection Vial**	33
Sample ID	10478022005	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T09:52:39	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

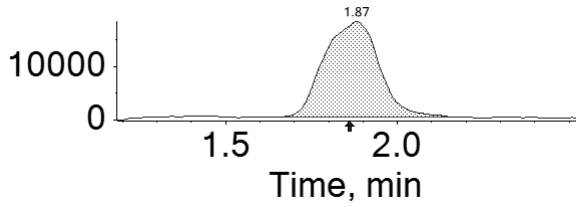
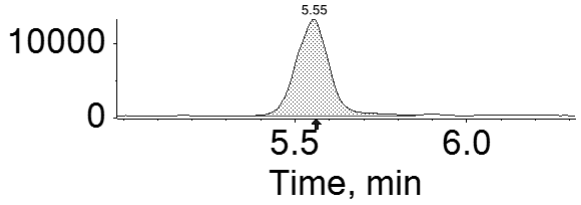
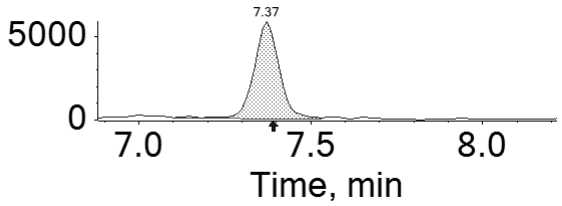
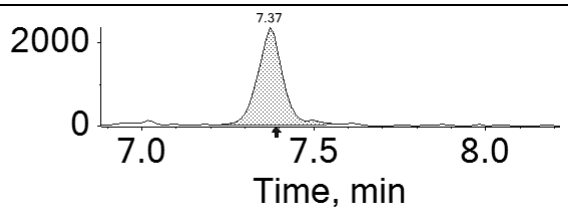
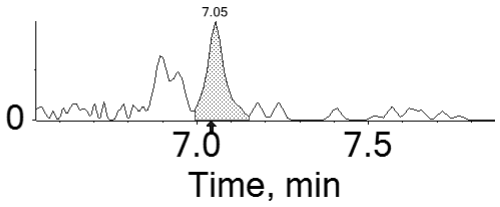
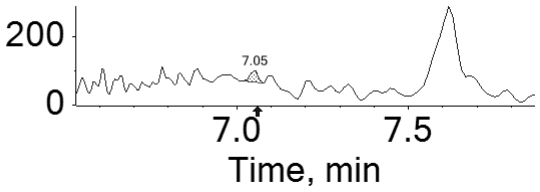
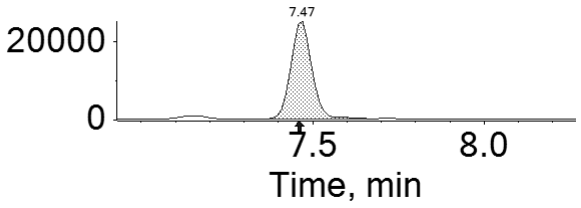
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.340e6	1.86	1.00	-
13C5_PFPeA	1.078e6	5.54	1.00	-
13C3_PFBS	7.615e5	7.36	1.00	-
13C2_4:2FTS	3.349e5	7.05	1.00	-
13C5_PFHxA	1.054e6	7.46	1.00	-
13C4_PFHpA	1.214e6	8.68	1.00	-
13C3_PFHxS	6.929e5	9.93	1.00	-
13C2_6:2FTS	1.623e5	9.30	1.00	-
13C8_PFOA	8.985e5	9.67	1.00	-
13C9_PFNA	8.532e5	10.55	1.00	-
13C8_PFOS	4.716e5	11.76	1.00	-
13C2_8:2FTS	1.506e5	10.99	1.00	-
13C6_PFDA	5.498e5	11.37	1.00	-
d3-MeFOSAA	1.411e5	11.37	1.00	-
13C8_FOSA	6.627e5	12.95	1.00	-
d5-EtFOSAA	1.655e5	11.70	1.00	-
13C7_PFUdA	5.323e5	12.17	1.00	-
13C2_PFDoA	9.170e5	12.94	1.00	-
13C2_PFTeDA	5.340e5	14.46	1.00	-

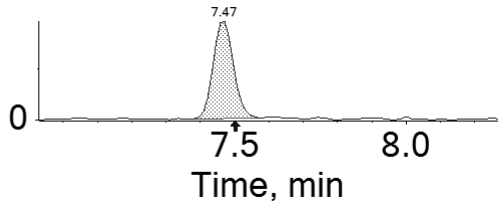
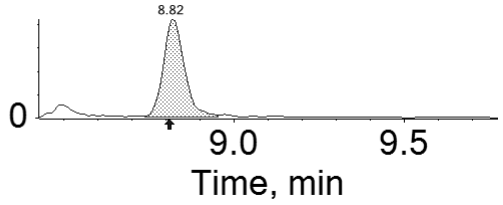
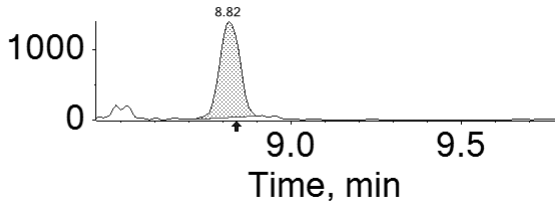
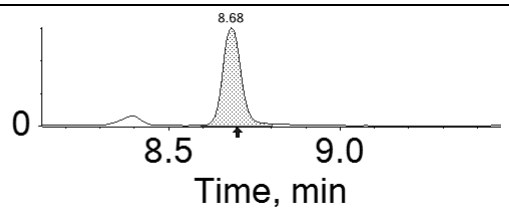
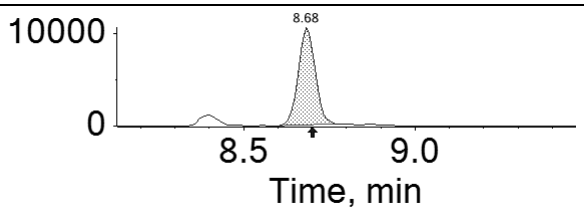
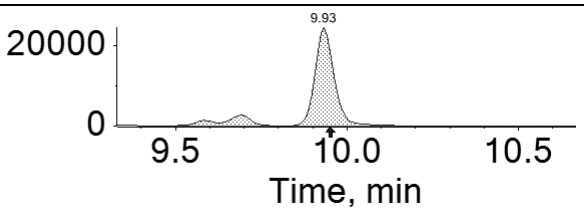
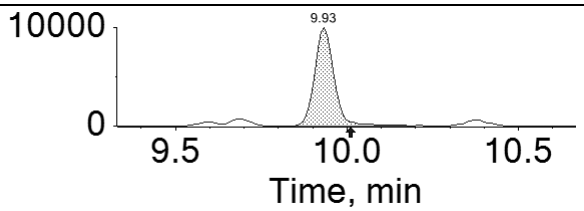
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.995e+05	1.87	N/A	0.695
PFPeA	8.930e+04	5.55	N/A	0.401
PFBS	2.986e+04	7.37	N/A	0.183
PFBS_2	1.199e+04	7.37	N/A	0.207
4:2FTS	3.702e+02	7.05	N/A	0.006
4:2FTS_2	5.375e+01	7.05	N/A	0.001
PFHxA	1.085e+05	7.47	N/A	0.561
PFHxA_2	7.881e+03	7.47	N/A	0.490
PFPeS	1.795e+04	8.82	N/A	0.130
PFPeS_2	5.666e+03	8.82	N/A	0.108
PFHpA	1.126e+05	8.68	N/A	0.586
PFHpA_2	3.585e+04	8.68	N/A	0.554
PFHxS	1.134e+05	9.93	N/A	0.734
PFHxS_2	3.920e+04	9.93	N/A	0.633
6:2FTS	8.510e+02	9.30	N/A	0.020
6:2FTS_2	8.332e+02	9.31	N/A	0.026
PFOA	5.754e+05	9.68	N/A	2.576
PFOA_2	2.043e+05	9.68	N/A	2.366
PFHpS	1.586e+04	10.88	N/A	0.090
PFHpS_2	4.435e+03	10.88	N/A	0.087
PFNA	1.740e+04	10.56	N/A	0.131
PFNA_2	6.442e+03	10.56	N/A	0.140
PFOS	2.542e+05	11.56	N/A	2.421
PFOS_2	4.871e+04	11.77	N/A	1.630
8:2FTS	1.423e+01	11.00	N/A	0.000
8:2FTS_2	1.342e+01	10.98	N/A	0.000
PFDA	3.620e+03	11.38	N/A	0.029
PFDA_2	5.562e+02	11.38	N/A	0.017
PFNS	3.359e+01	12.61	N/A	0.000
PFNS_2	3.461e+01	12.82	N/A	0.001
N-MeFOSAA	1.046e+02	11.40	N/A	0.002
N-MeFOSAA_2	5.178e+01	11.42	N/A	0.002
FOSA	8.149e+01	12.93	N/A	0.001
N-EtFOSAA	1.104e+02	11.73	N/A	0.002
N-EtFOSAA_2	1.062e+02	11.73	N/A	0.004
PFUdA	6.011e+02	12.15	N/A	0.008
PFUdA_2	1.853e+01	12.16	N/A	0.001
PFDS	4.295e+01	13.43	N/A	0.000
PFDS_2	1.082e+01	13.42	N/A	0.000
PFDoA	1.069e+03	12.94	N/A	0.009
PFDoA_2	2.498e+02	12.95	N/A	0.012
PFTrDA	4.199e+02	13.73	N/A	0.003
PFTrDA_2	7.461e+01	13.72	N/A	0.003
PFTeDA	7.735e+02	14.46	N/A	0.009
PFTeDA_2	1.303e+02	14.45	N/A	0.011
13C4_PFOA	1.026e+06	9.67	N/A	1.922
13C4_PFOS	4.788e+05	11.75	N/A	1.696

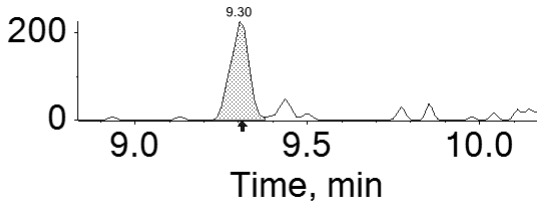
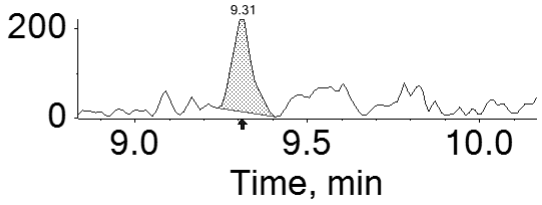
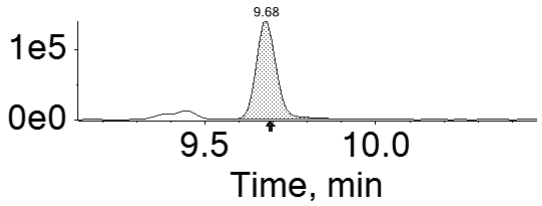
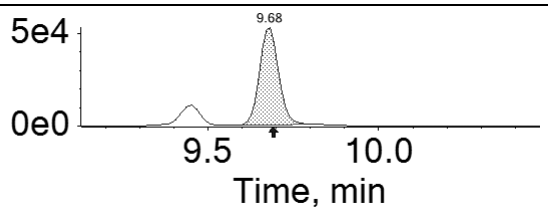
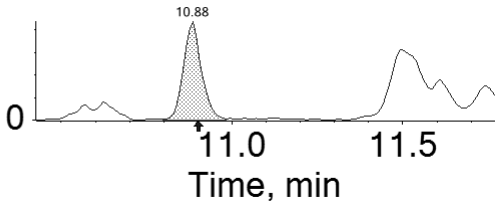
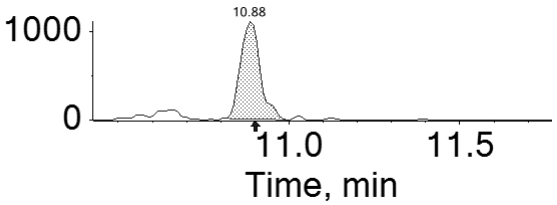
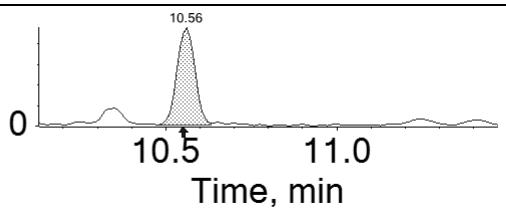
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.54(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.46(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

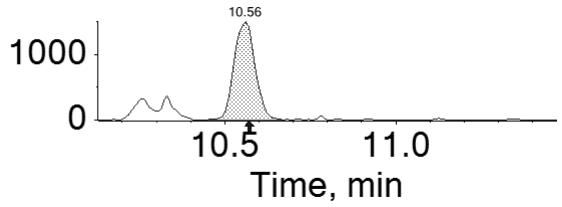
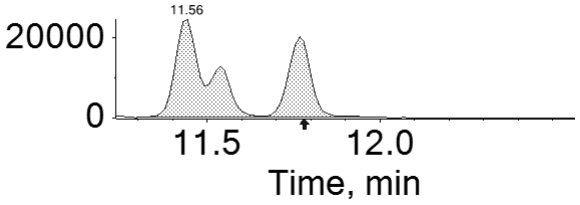
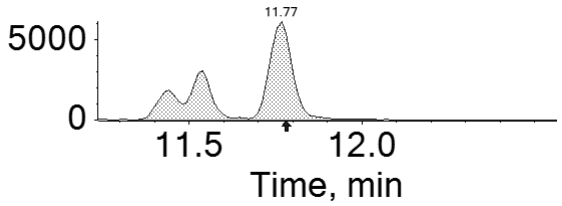
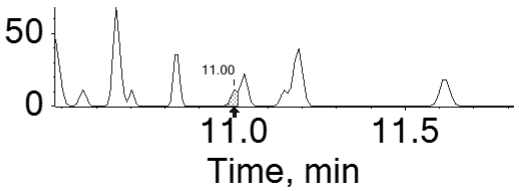
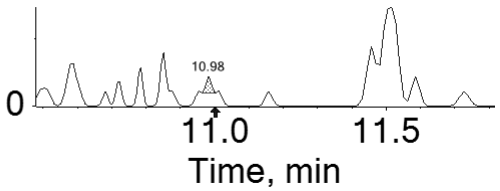
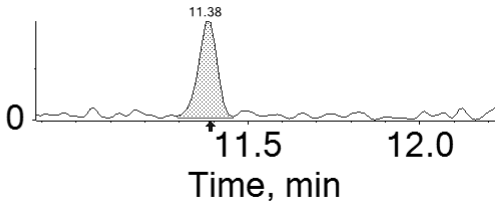
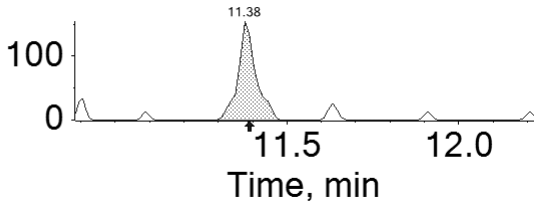
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

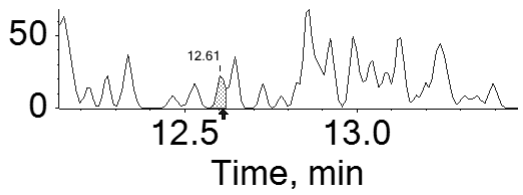
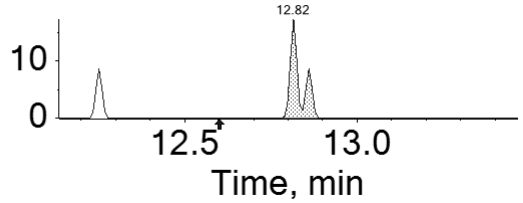
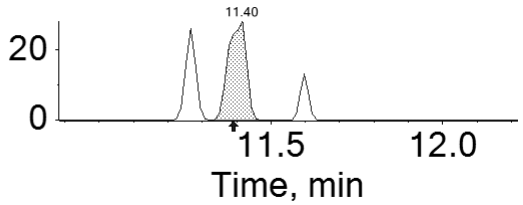
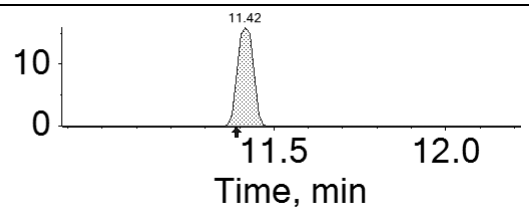
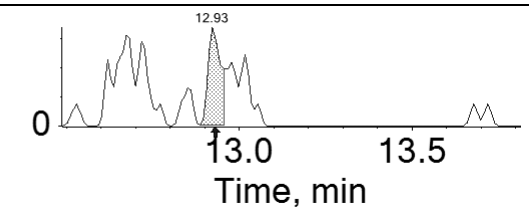
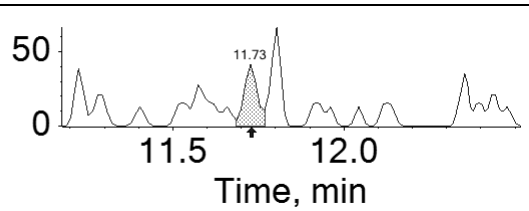
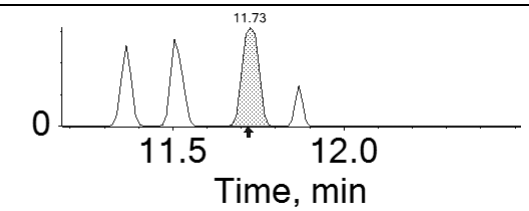
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.95(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.46(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

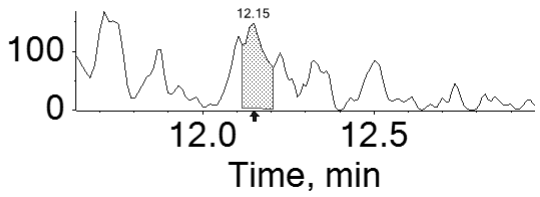
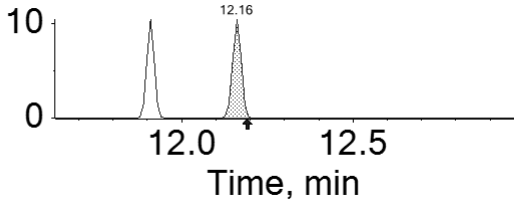
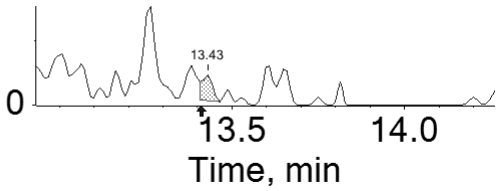
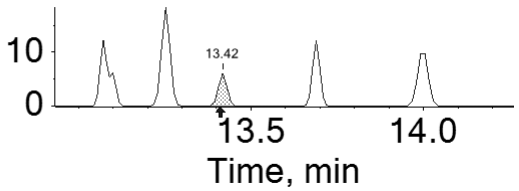
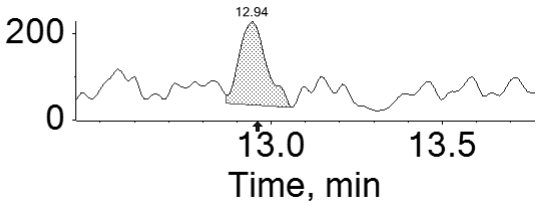
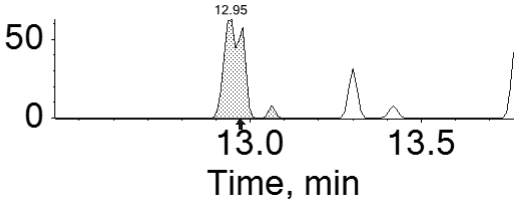
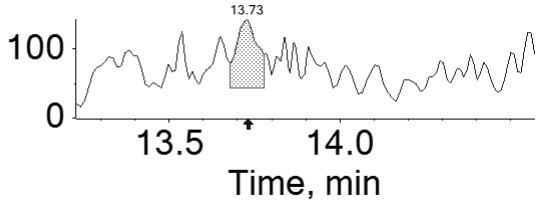
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.86) min Calculated conc: 0.695 Area Ratio: 1.489e-1 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.55 (5.56) min Calculated conc: 0.401 Area Ratio: 8.283e-2 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 0.183 Area Ratio: 3.921e-2 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 0.207 Area Ratio: 1.574e-2 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.05 (7.04) min Calculated conc: 0.006 Area Ratio: 1.106e-3 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.05 (7.06) min Calculated conc: 0.001 Area Ratio: 1.605e-4 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 0.561 Area Ratio: 1.029e-1 Sample Type: (Unknown)	

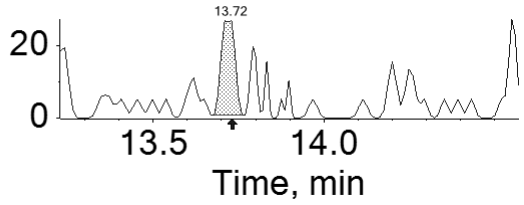
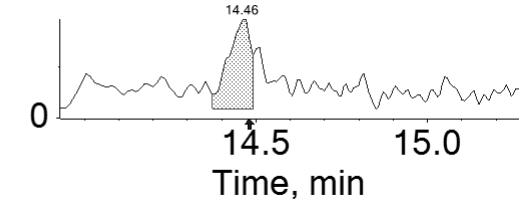
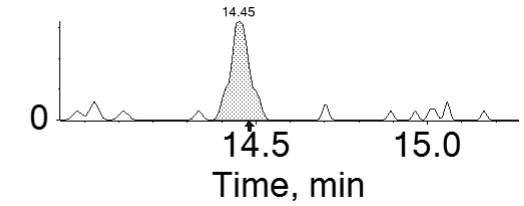
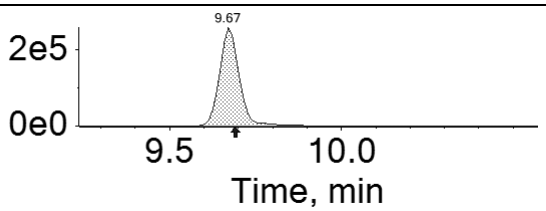
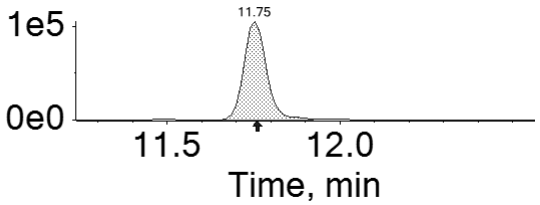
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 0.490 Area Ratio: 7.480e-3 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: 0.130 Area Ratio: 1.478e-2 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.82 (8.84) min Calculated conc: 0.108 Area Ratio: 4.667e-3 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.586 Area Ratio: 9.276e-2 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.554 Area Ratio: 2.953e-2 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: 0.734 Area Ratio: 1.637e-1 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 0.633 Area Ratio: 5.658e-2 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.020 Area Ratio: 5.244e-3 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 0.026 Area Ratio: 5.134e-3 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 2.576 Area Ratio: 6.404e-1 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 2.366 Area Ratio: 2.274e-1 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 0.090 Area Ratio: 1.859e-2 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 0.087 Area Ratio: 5.197e-3 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 0.131 Area Ratio: 2.040e-2 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 0.140 Area Ratio: 7.550e-3 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.56 (11.78) min Calculated conc: 2.421 Area Ratio: 5.391e-1 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 1.630 Area Ratio: 1.033e-1 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 0.000 Area Ratio: 9.451e-5 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.98 (11.00) min Calculated conc: 0.000 Area Ratio: 8.914e-5 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.029 Area Ratio: 6.586e-3 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.017 Area Ratio: 1.012e-3 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.61 (12.61) min Calculated conc: 0.000 Area Ratio: 3.937e-5 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.82 (12.60) min Calculated conc: 0.001 Area Ratio: 6.501e-5 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 0.002 Area Ratio: 7.413e-4 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 0.002 Area Ratio: 3.671e-4 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: 0.001 Area Ratio: 1.230e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.73 (11.73) min Calculated conc: 0.002 Area Ratio: 6.669e-4 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.73 (11.72) min Calculated conc: 0.004 Area Ratio: 6.416e-4 Sample Type: (Unknown)	

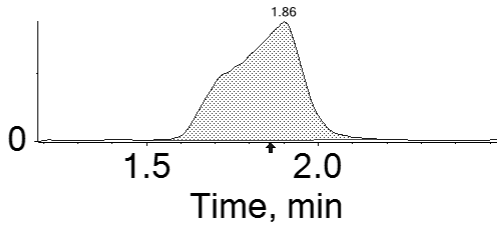
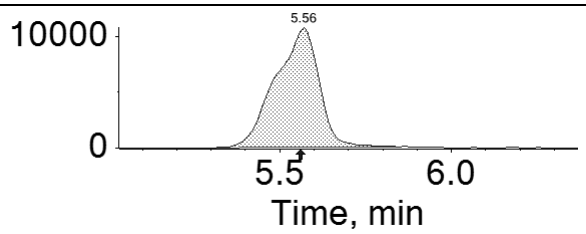
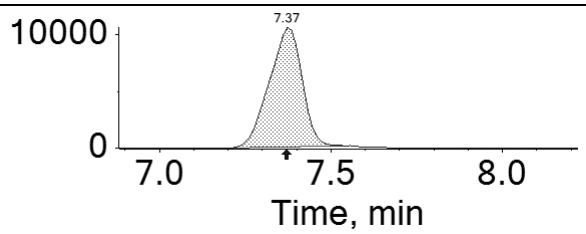
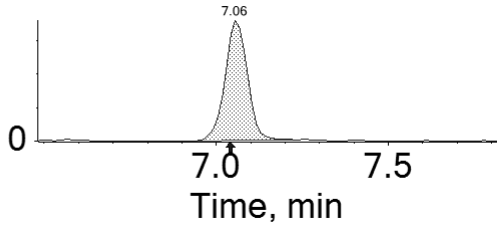
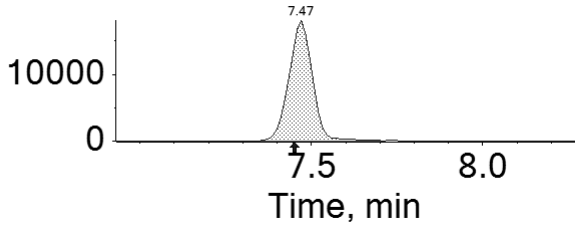
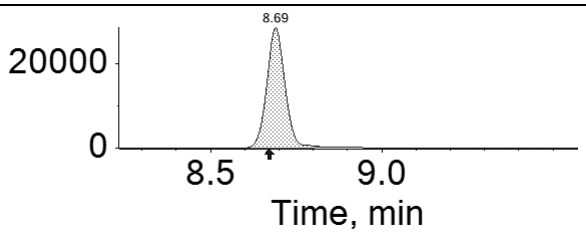
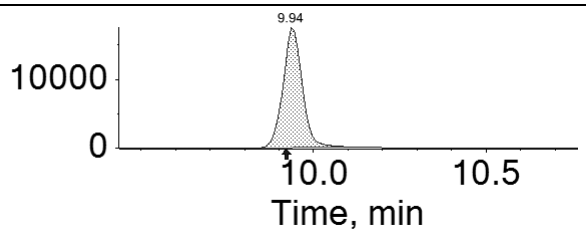
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.15 (12.15) min Calculated conc: 0.008 Area Ratio: 1.129e-3 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.16 (12.19) min Calculated conc: 0.001 Area Ratio: 3.481e-5 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.43 (13.41) min Calculated conc: 0.000 Area Ratio: 4.684e-5 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.000 Area Ratio: 1.180e-5 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.94 (12.96) min Calculated conc: 0.009 Area Ratio: 1.165e-3 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: 0.012 Area Ratio: 2.725e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.73 (13.73) min Calculated conc: 0.003 Area Ratio: 4.580e-4 Sample Type: (Unknown)	

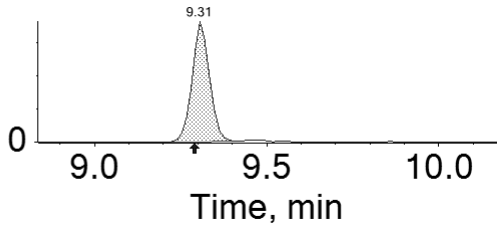
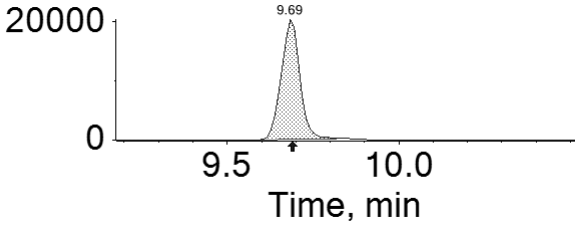
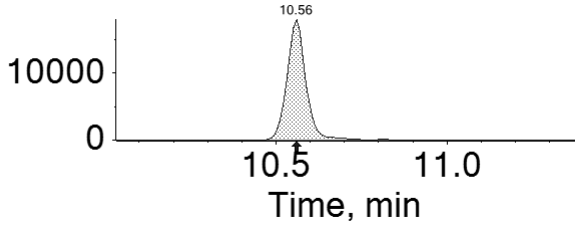
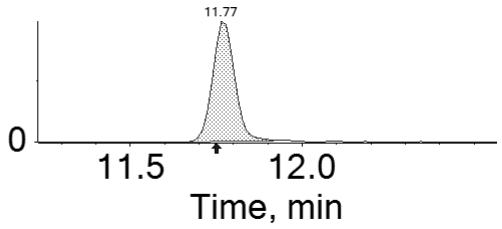
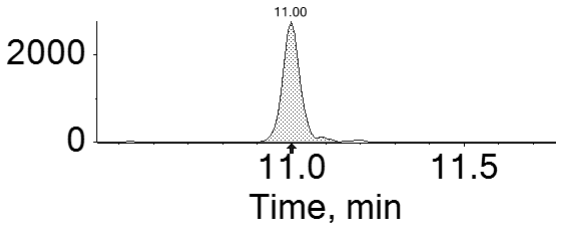
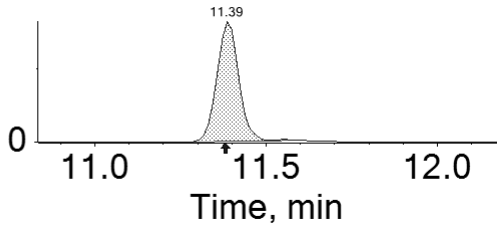
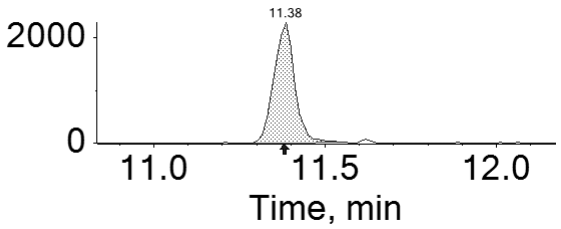
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: 0.003 Area Ratio: 8.136e-5 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 0.009 Area Ratio: 1.449e-3 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 0.011 Area Ratio: 2.440e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.922 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 1.696 Area Ratio: N/A Sample Type: (Unknown)	

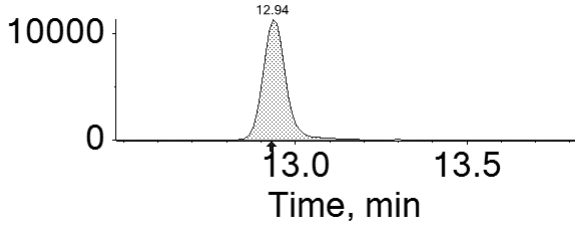
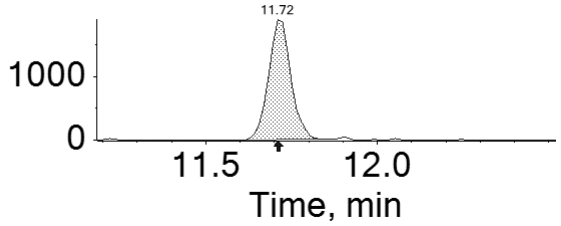
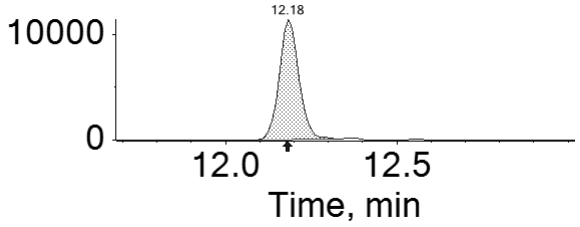
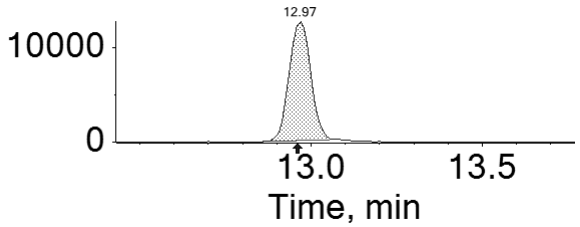
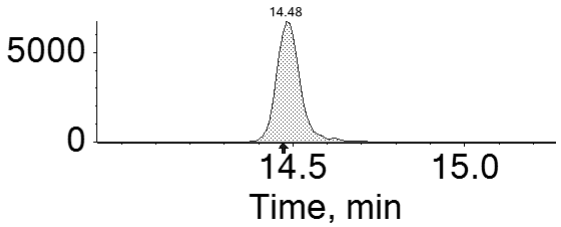
Sample Name	10478022005 D10	**Injection Vial**	7
Sample ID	10478022005	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-24T14:11:51	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190624A.wiff		
Result Table	190624AM		
Sample Comment			

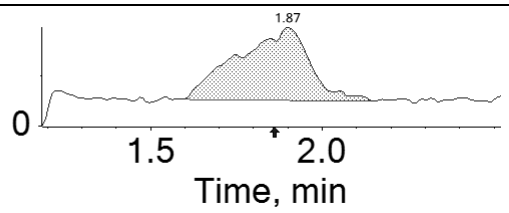
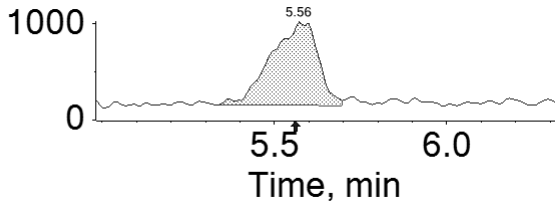
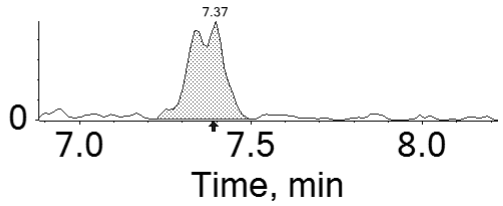
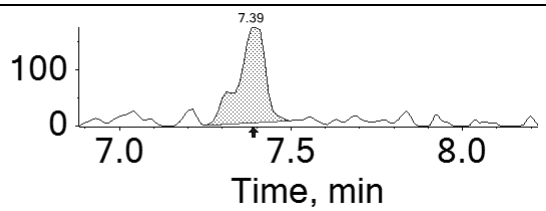
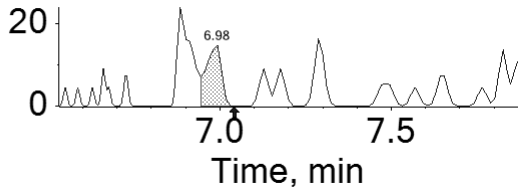
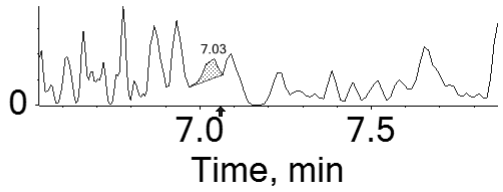
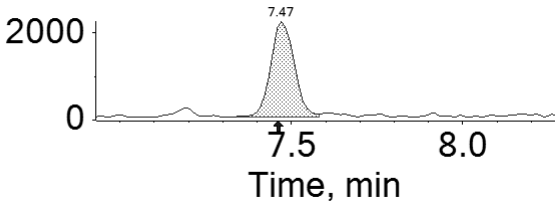
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.265e5	1.86	1.00	-
13C5_PFPeA	9.440e4	5.56	1.00	-
13C3_PFBS	6.994e4	7.37	1.00	-
13C2_4:2FTS	1.629e4	7.06	1.00	-
13C5_PFHxA	8.513e4	7.47	1.00	-
13C4_PFHpA	1.047e5	8.69	1.00	-
13C3_PFHxS	6.734e4	9.94	1.00	-
13C2_6:2FTS	1.274e4	9.31	1.00	-
13C8_PFOA	7.625e4	9.69	1.00	-
13C9_PFNA	6.919e4	10.56	1.00	-
13C8_PFOS	4.350e4	11.77	1.00	-
13C2_8:2FTS	9.910e3	11.00	1.00	-
13C6_PFDA	3.643e4	11.39	1.00	-
d3-MeFOSAA	9.610e3	11.38	1.00	-
13C8_FOSA	5.266e4	12.94	1.00	-
d5-EtFOSAA	8.514e3	11.72	1.00	-
13C7_PFUdA	4.524e4	12.18	1.00	-
13C2_PFDoA	5.515e4	12.97	1.00	-
13C2_PFTeDA	3.243e4	14.48	1.00	-

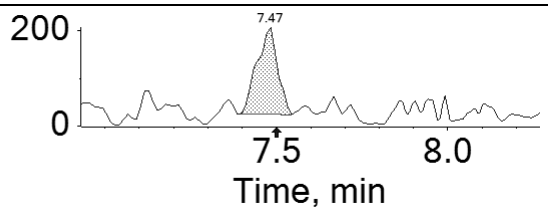
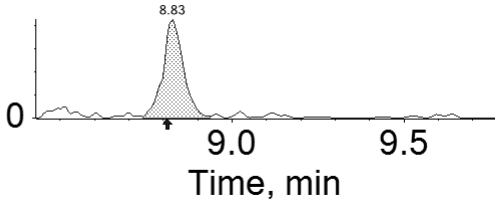
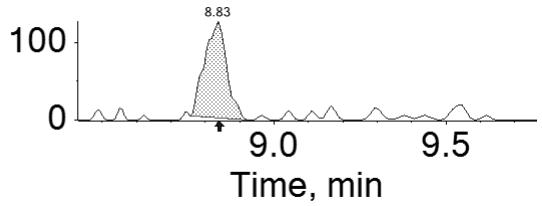
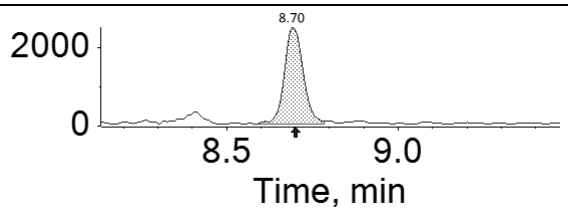
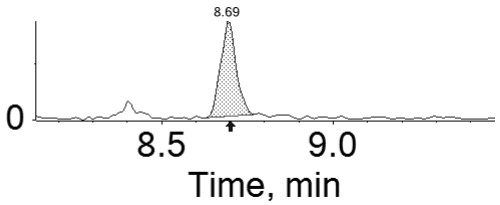
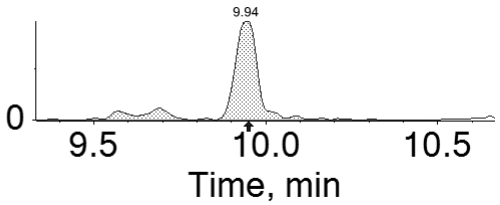
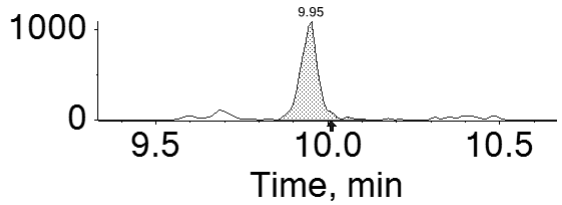
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	2.115e+04	1.87	N/A	0.780
PFPeA	8.261e+03	5.56	N/A	0.424
PFBS	3.422e+03	7.37	N/A	0.228
PFBS_2	9.481e+02	7.39	N/A	0.178
4:2FTS	4.560e+01	6.98	N/A	0.014
4:2FTS_2	2.084e+01	7.03	N/A	0.010
PFHxA	1.053e+04	7.47	N/A	0.674
PFHxA_2	7.648e+02	7.47	N/A	0.589
PFPeS	1.759e+03	8.83	N/A	0.148
PFPeS_2	5.538e+02	8.83	N/A	0.123
PFHpA	9.461e+03	8.70	N/A	0.571
PFHpA_2	2.675e+03	8.69	N/A	0.479
PFHxS	1.090e+04	9.94	N/A	0.726
PFHxS_2	3.891e+03	9.95	N/A	0.646
6:2FTS	1.580e+02	9.33	N/A	0.047
6:2FTS_2	1.192e+02	9.32	N/A	0.047
PFOA	5.281e+04	9.69	N/A	2.718
PFOA_2	1.872e+04	9.69	N/A	2.555
PFHpS	1.284e+03	10.90	N/A	0.090
PFHpS_2	5.314e+02	10.89	N/A	0.128
PFNA	1.223e+03	10.56	N/A	0.113
PFNA_2	3.880e+02	10.57	N/A	0.104
PFOS	2.641e+04	11.59	N/A	2.726
PFOS_2	2.913e+03	11.79	N/A	1.057
8:2FTS	3.289e+01	10.98	N/A	0.017
8:2FTS_2	2.618e+01	11.06	N/A	0.015
PFDA	6.390e+02	11.40	N/A	0.077
PFDA_2	2.671e+01	11.37	N/A	0.013
PFNS	1.173e+01	12.59	N/A	0.001
PFNS_2	2.735e+01	12.43	N/A	0.008
N-MeFOSAA	N/A	N/A	N/A	N/A
N-MeFOSAA_2	2.738e+01	11.35	N/A	0.017
FOSA	3.726e+01	12.96	N/A	0.005
N-EtFOSAA	2.565e+01	11.75	N/A	0.011
N-EtFOSAA_2	1.077e+02	11.33	N/A	0.085
PFUdA	1.548e+02	12.19	N/A	0.023
PFUdA_2	N/A	N/A	N/A	N/A
PFDS	2.159e+01	13.42	N/A	0.003
PFDS_2	4.315e+01	13.44	N/A	0.018
PFDoA	1.450e+02	12.97	N/A	0.020
PFDoA_2	4.334e+01	13.06	N/A	0.035
PFTrDA	N/A	N/A	N/A	N/A
PFTrDA_2	1.754e+01	13.78	N/A	0.012
PFTeDA	N/A	N/A	N/A	N/A
PFTeDA_2	2.102e+01	14.46	N/A	0.029
13C4_PFOA	8.264e+04	9.68	N/A	0.155
13C4_PFOS	4.573e+04	11.77	N/A	0.162

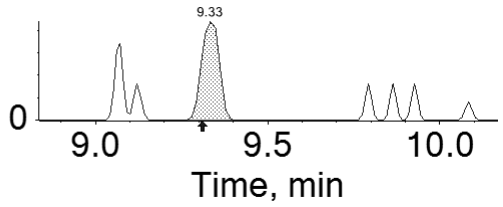
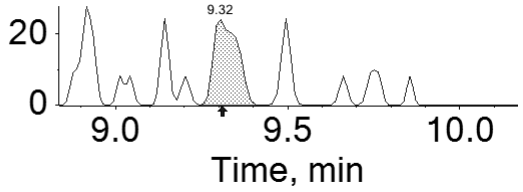
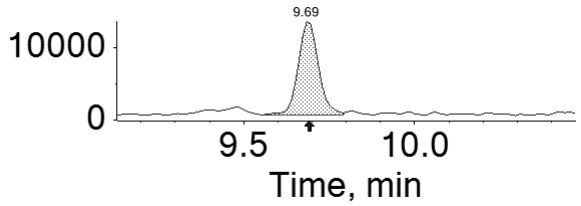
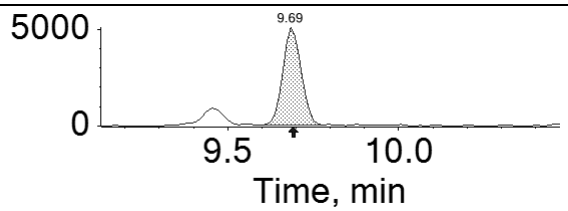
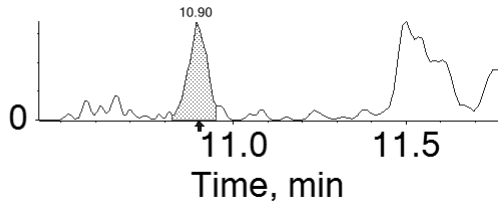
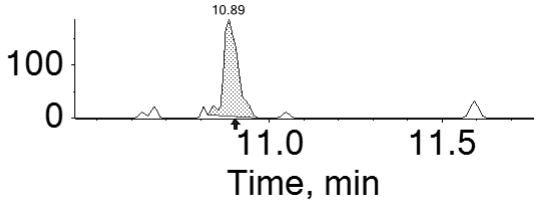
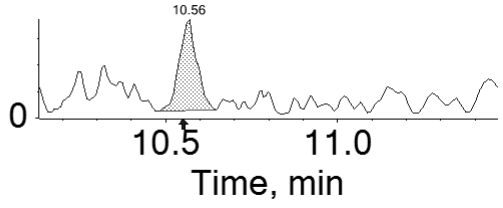
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.56(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.69(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

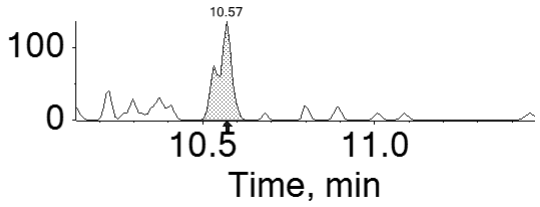
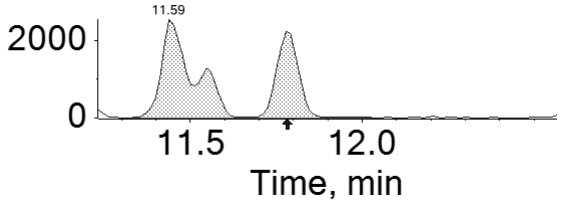
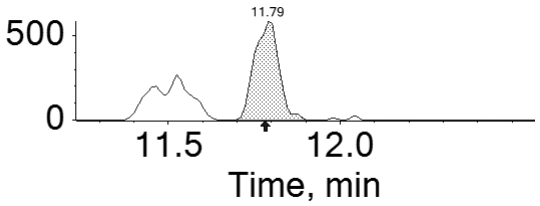
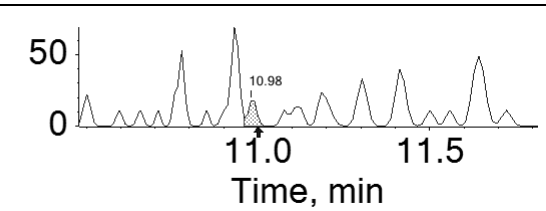
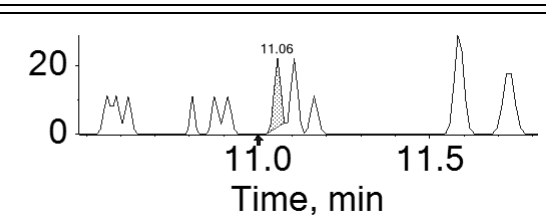
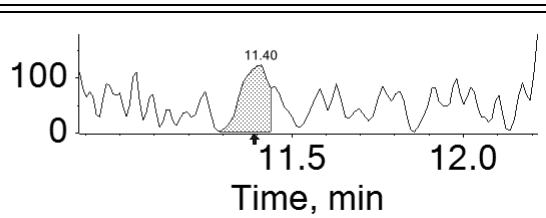
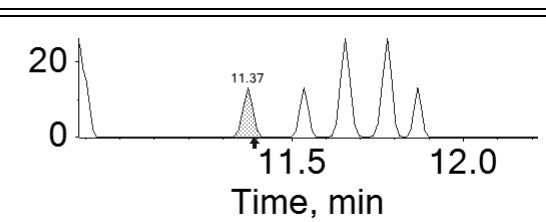
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.39(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

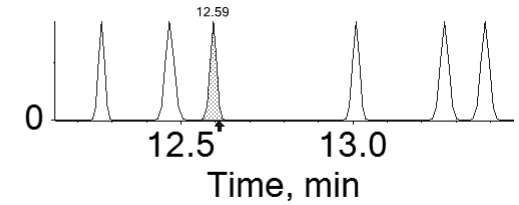
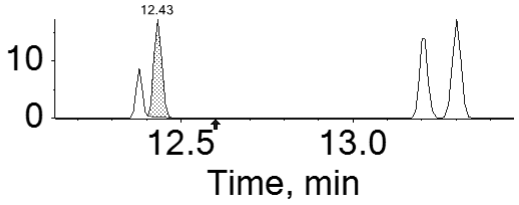
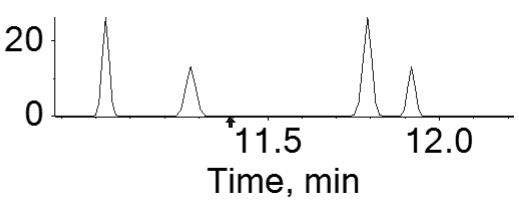
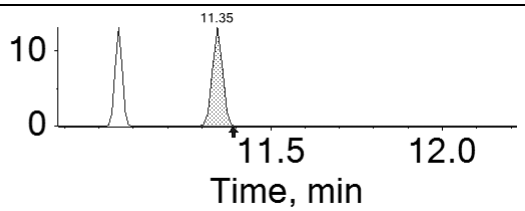
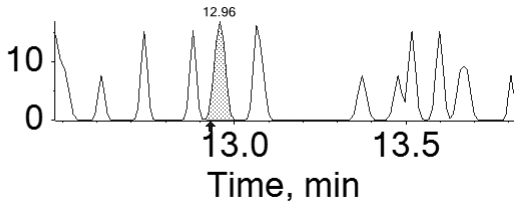
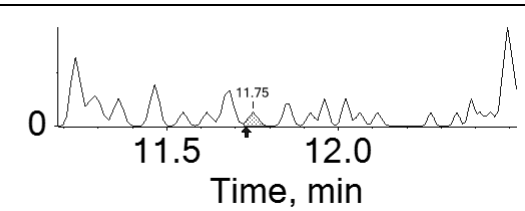
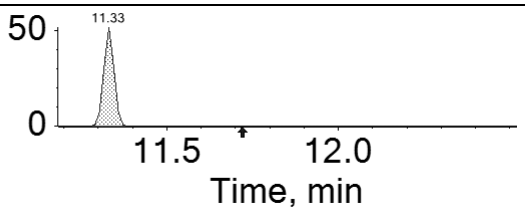
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.72(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.18(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.97(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.48(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

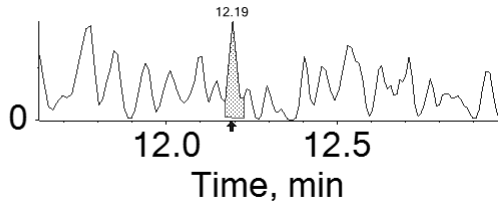
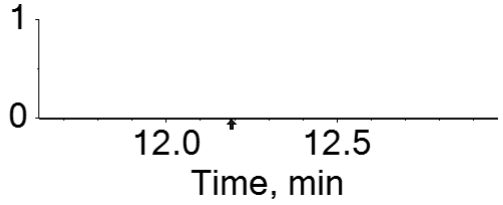
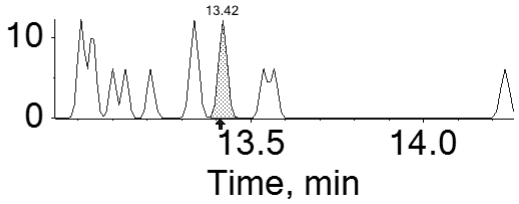
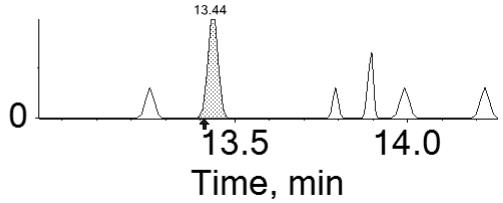
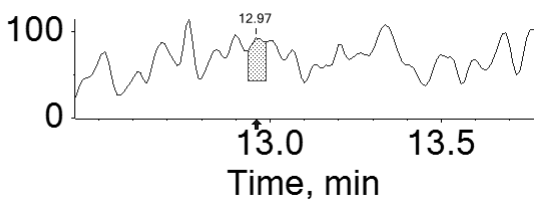
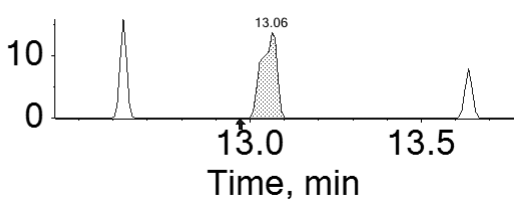
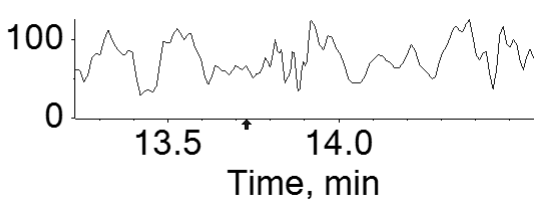
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.86) min Calculated conc: 0.780 Area Ratio: 1.672e-1 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.56) min Calculated conc: 0.424 Area Ratio: 8.751e-2 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 0.228 Area Ratio: 4.894e-2 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.178 Area Ratio: 1.356e-2 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 6.98 (7.04) min Calculated conc: 0.014 Area Ratio: 2.799e-3 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.03 (7.06) min Calculated conc: 0.010 Area Ratio: 1.279e-3 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 0.674 Area Ratio: 1.236e-1 Sample Type: (Unknown)	

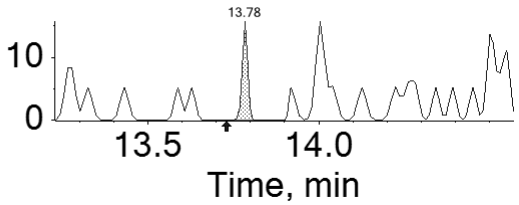
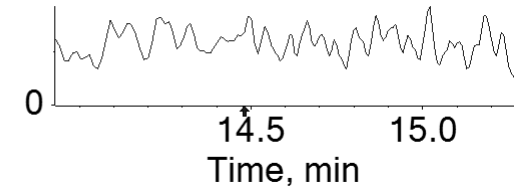
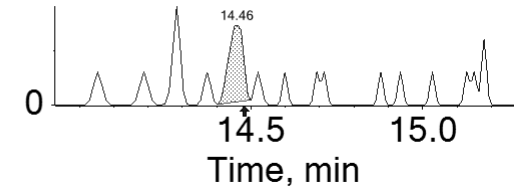
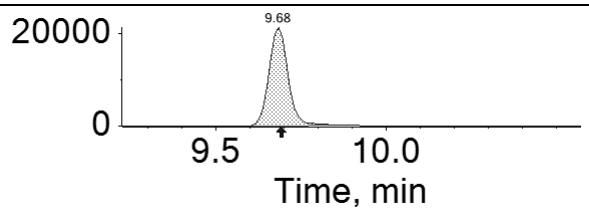
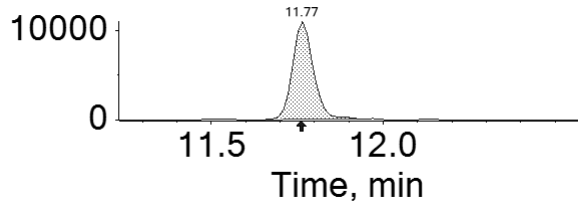
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 0.589 Area Ratio: 8.983e-3 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.83 (8.81) min Calculated conc: 0.148 Area Ratio: 1.680e-2 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 0.123 Area Ratio: 5.290e-3 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 0.571 Area Ratio: 9.037e-2 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 0.479 Area Ratio: 2.555e-2 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 0.726 Area Ratio: 1.619e-1 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.95 (10.01) min Calculated conc: 0.646 Area Ratio: 5.778e-2 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 0.047 Area Ratio: 1.240e-2 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 0.047 Area Ratio: 9.357e-3 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 2.718 Area Ratio: 6.926e-1 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 2.555 Area Ratio: 2.455e-1 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 0.090 Area Ratio: 1.856e-2 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 0.128 Area Ratio: 7.681e-3 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 0.113 Area Ratio: 1.767e-2 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 0.104 Area Ratio: 5.608e-3 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.59 (11.78) min Calculated conc: 2.726 Area Ratio: 6.071e-1 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 1.057 Area Ratio: 6.698e-2 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.98 (11.00) min Calculated conc: 0.017 Area Ratio: 3.319e-3 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.06 (11.00) min Calculated conc: 0.015 Area Ratio: 2.642e-3 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 0.077 Area Ratio: 1.754e-2 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 0.013 Area Ratio: 7.333e-4 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: 0.001 Area Ratio: 1.695e-4 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.43 (12.60) min Calculated conc: 0.008 Area Ratio: 6.046e-4 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): N/A (11.39) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.35 (11.39) min Calculated conc: 0.017 Area Ratio: 2.849e-3 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 0.005 Area Ratio: 7.076e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.75 (11.73) min Calculated conc: 0.011 Area Ratio: 3.013e-3 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.33 (11.72) min Calculated conc: 0.085 Area Ratio: 1.265e-2 Sample Type: (Unknown)	

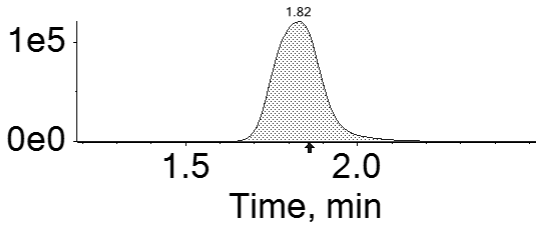
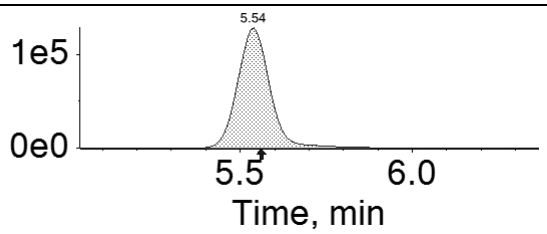
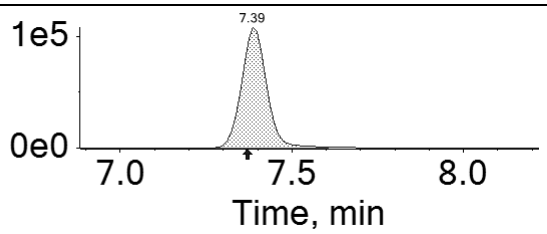
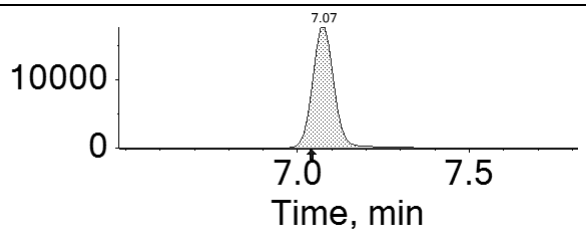
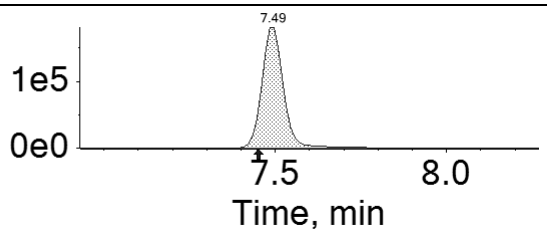
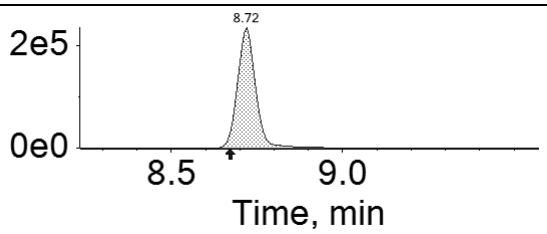
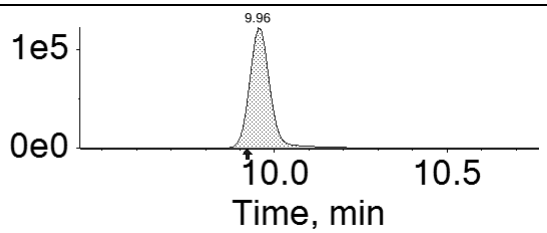
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 0.023 Area Ratio: 3.422e-3 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): N/A (12.19) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.003 Area Ratio: 3.914e-4 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.44 (13.41) min Calculated conc: 0.018 Area Ratio: 7.825e-4 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.97 (12.96) min Calculated conc: 0.020 Area Ratio: 2.630e-3 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.06 (12.97) min Calculated conc: 0.035 Area Ratio: 7.859e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): N/A (13.73) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	

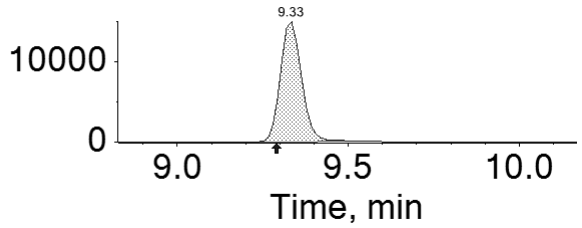
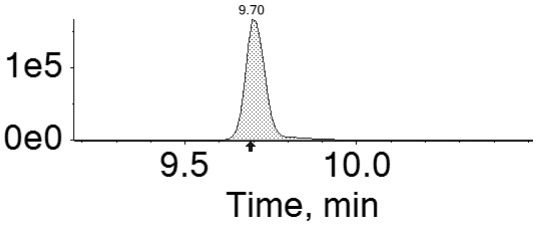
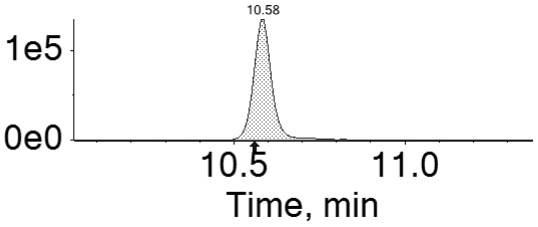
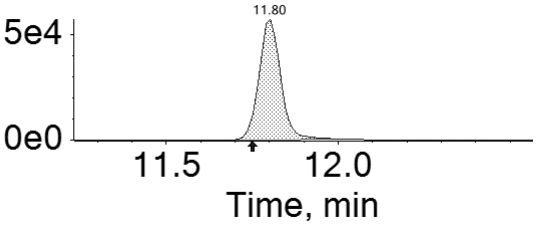
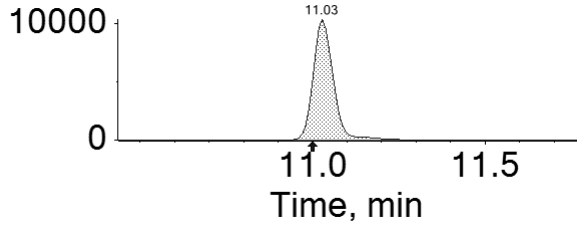
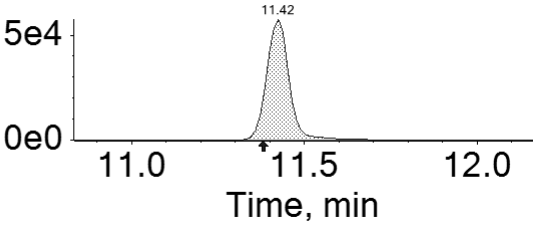
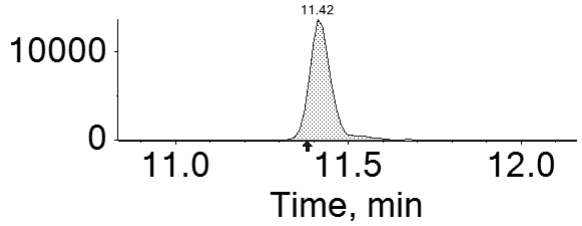
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.78 (13.73) min Calculated conc: 0.012 Area Ratio: 3.180e-4 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): N/A (14.48) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 0.029 Area Ratio: 6.481e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.155 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.77 (11.76) min Calculated conc: 0.162 Area Ratio: N/A Sample Type: (Unknown)	

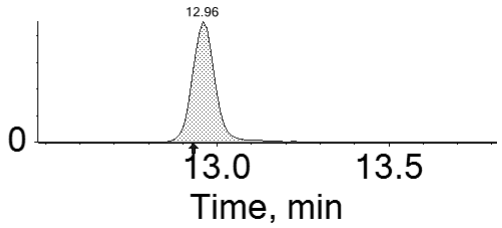
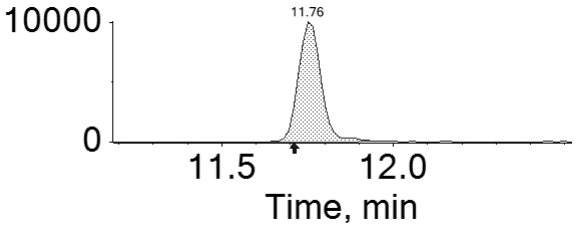
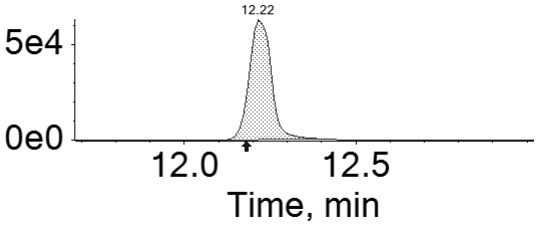
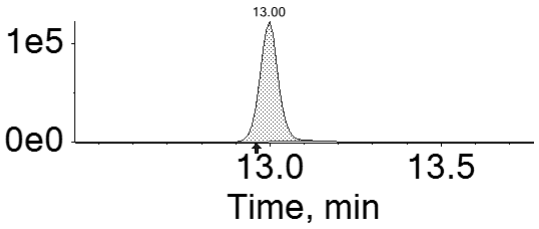
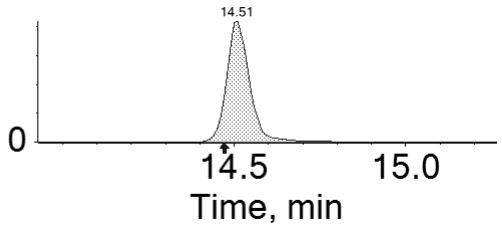
Sample Name	10478022006	**Injection Vial**	4
Sample ID	10478022006	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-07-01T14:00:02	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190701A.wiff		
Result Table	190701AM		
Sample Comment			

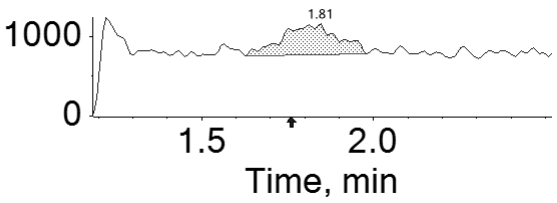
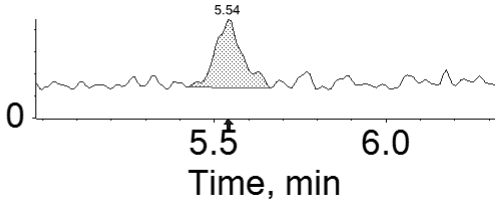
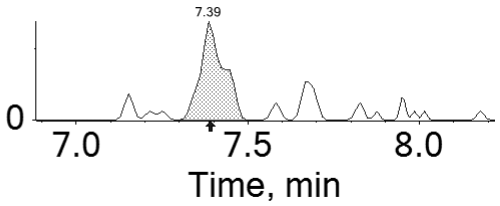
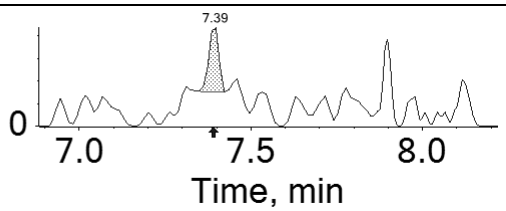
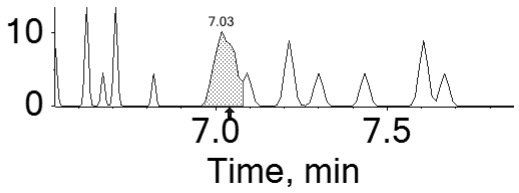
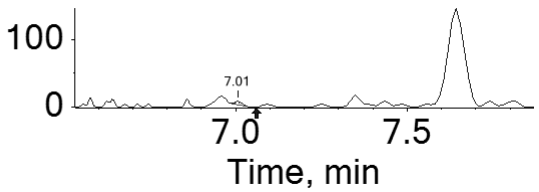
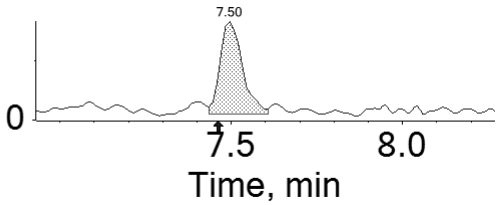
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.182e6	1.82	1.00	-
13C5_PFPeA	8.329e5	5.54	1.00	-
13C3_PFBS	5.432e5	7.39	1.00	-
13C2_4:2FTS	7.742e4	7.07	1.00	-
13C5_PFHxA	7.910e5	7.49	1.00	-
13C4_PFHpA	8.563e5	8.72	1.00	-
13C3_PFHxS	4.969e5	9.96	1.00	-
13C2_6:2FTS	6.496e4	9.33	1.00	-
13C8_PFOA	6.724e5	9.70	1.00	-
13C9_PFNA	5.009e5	10.58	1.00	-
13C8_PFOS	2.503e5	11.80	1.00	-
13C2_8:2FTS	4.160e4	11.03	1.00	-
13C6_PFDA	2.603e5	11.42	1.00	-
d3-MeFOSAA	5.898e4	11.42	1.00	-
13C8_FOSA	2.109e5	12.96	1.00	-
d5-EtFOSAA	4.639e4	11.76	1.00	-
13C7_PFUdA	2.794e5	12.22	1.00	-
13C2_PFDoA	4.616e5	13.00	1.00	-
13C2_PFTeDA	1.942e5	14.51	1.00	-

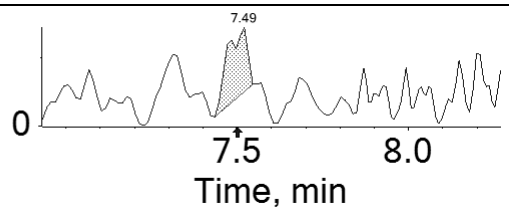
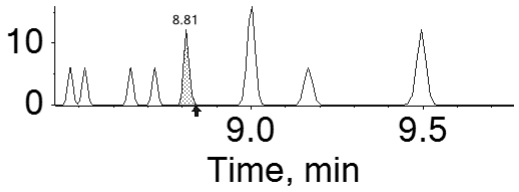
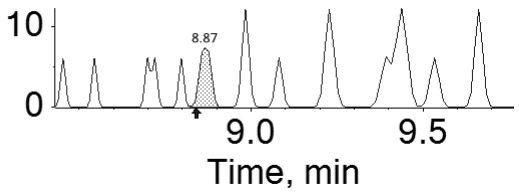
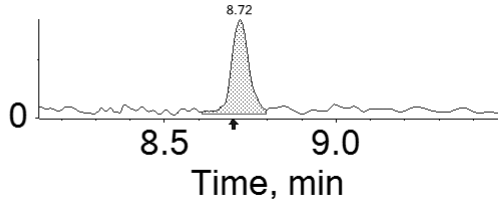
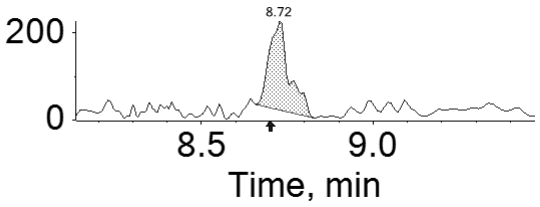
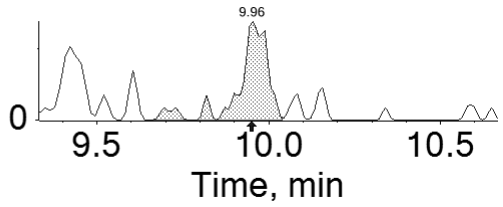
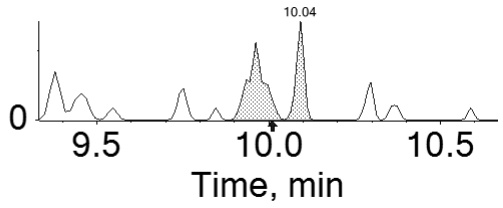
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	4.403e+03	1.81	N/A	0.017
PFPeA	1.692e+03	5.54	N/A	0.010
PFBS	3.296e+02	7.39	N/A	0.003
PFBS_2	5.852e+01	7.39	N/A	0.001
4:2FTS	4.264e+01	7.03	N/A	0.003
4:2FTS_2	7.526e+00	7.01	N/A	0.001
PFHxA	3.587e+03	7.50	N/A	0.024
PFHxA_2	2.025e+02	7.49	N/A	0.016
PFPeS	1.390e+01	8.81	N/A	0.000
PFPeS_2	1.767e+01	8.87	N/A	0.001
PFHpA	2.981e+03	8.72	N/A	0.022
PFHpA_2	8.320e+02	8.72	N/A	0.018
PFHxS	3.959e+02	9.96	N/A	0.004
PFHxS_2	3.048e+02	10.04	N/A	0.007
6:2FTS	2.078e+03	9.34	N/A	0.115
6:2FTS_2	1.818e+03	9.33	N/A	0.139
PFOA	6.056e+03	9.71	N/A	0.034
PFOA_2	2.134e+03	9.70	N/A	0.034
PFHpS	1.288e+01	10.87	N/A	0.000
PFHpS_2	2.288e+01	11.28	N/A	0.001
PFNA	4.303e+02	10.57	N/A	0.005
PFNA_2	9.152e+01	10.57	N/A	0.003
PFOS	1.260e+03	11.60	N/A	0.020
PFOS_2	2.714e+02	11.59	N/A	0.016
8:2FTS	N/A	N/A	N/A	N/A
8:2FTS_2	4.714e+01	11.01	N/A	0.006
PFDA	2.427e+02	11.43	N/A	0.004
PFDA_2	2.063e+02	11.43	N/A	0.014
PFNS	2.308e+01	12.68	N/A	0.000
PFNS_2	2.660e+01	12.58	N/A	0.001
N-MeFOSAA	2.627e+01	11.39	N/A	0.001
N-MeFOSAA_2	2.316e+01	11.80	N/A	0.002
FOSA	3.507e+01	12.98	N/A	0.001
N-EtFOSAA	2.265e+01	11.74	N/A	0.002
N-EtFOSAA_2	2.546e+01	11.66	N/A	0.003
PFUdA	4.164e+01	12.22	N/A	0.001
PFUdA_2	3.117e+01	12.42	N/A	0.004
PFDS	4.272e+01	13.45	N/A	0.001
PFDS_2	3.193e+01	13.44	N/A	0.002
PFDoA	2.706e+02	12.99	N/A	0.005
PFDoA_2	5.795e+01	12.99	N/A	0.006
PFTrDA	2.258e+02	13.75	N/A	0.004
PFTrDA_2	2.651e+01	13.78	N/A	0.002
PFTeDA	3.547e+02	14.52	N/A	0.011
PFTeDA_2	3.538e+01	14.53	N/A	0.008
13C4_PFOA	7.013e+05	9.70	N/A	1.603
13C4_PFOS	3.032e+05	11.80	N/A	1.536

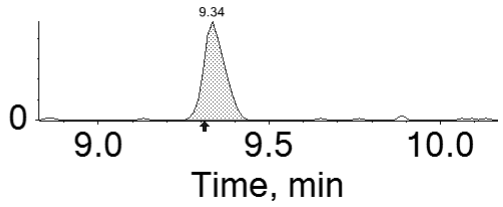
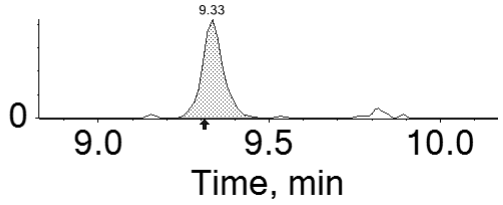
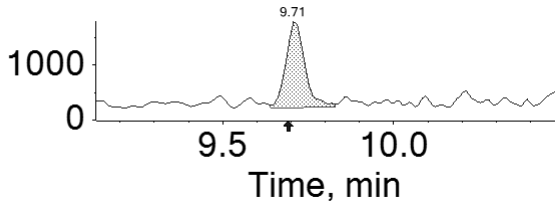
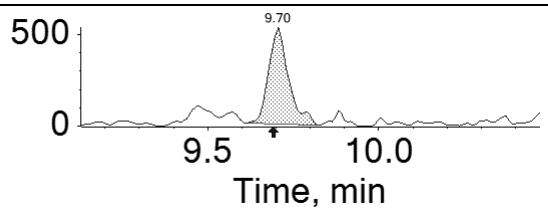
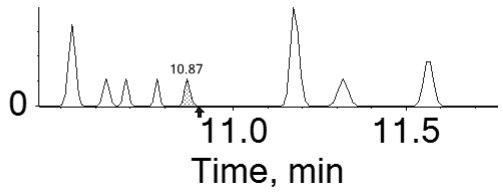
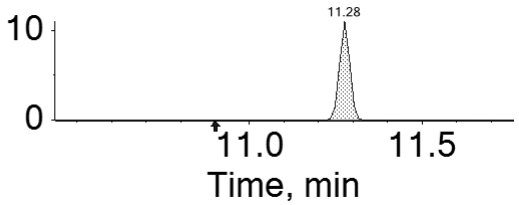
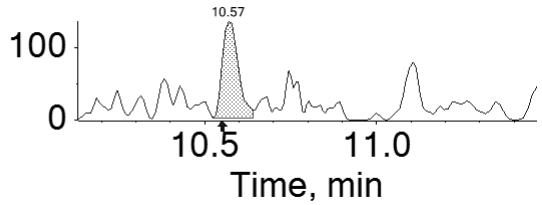
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.82(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.54(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.39(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.49(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.72(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.96(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

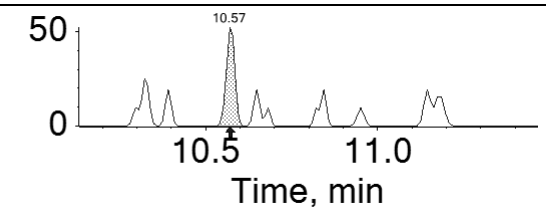
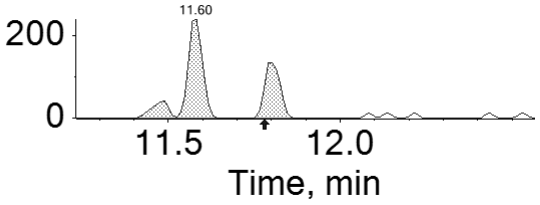
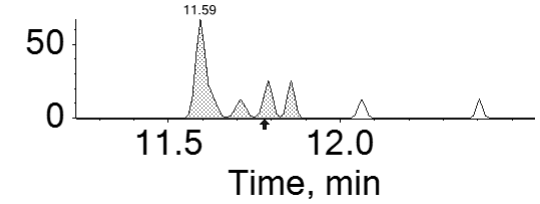
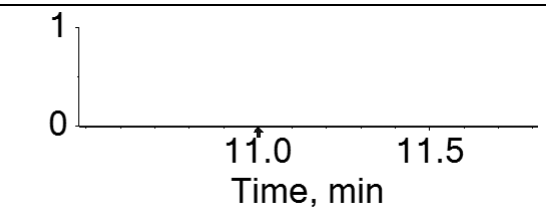
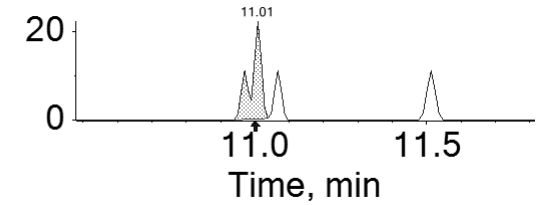
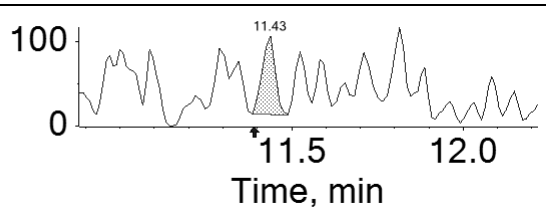
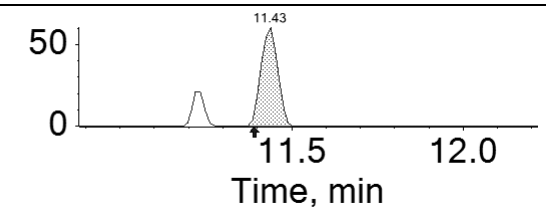
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.33(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.70(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.58(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.80(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.03(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.42(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.42(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

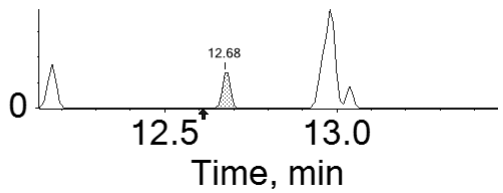
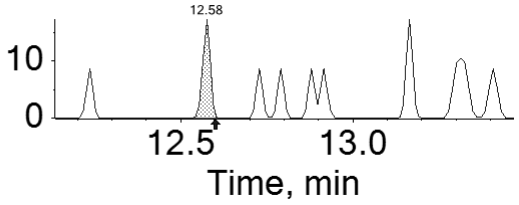
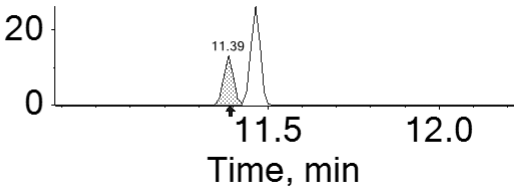
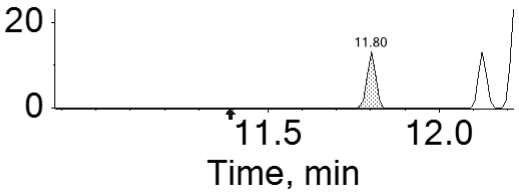
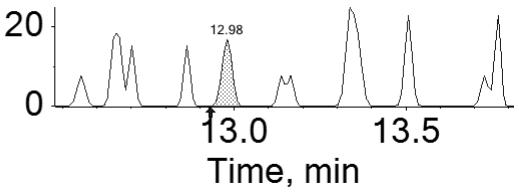
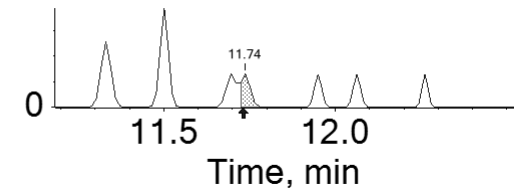
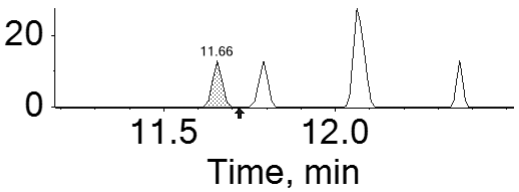
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.76(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.22(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 13.00(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.51(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

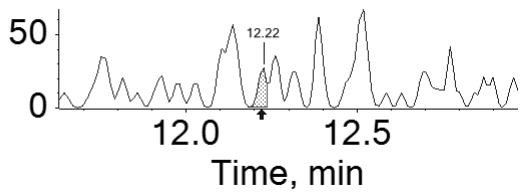
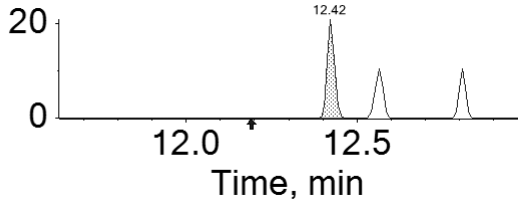
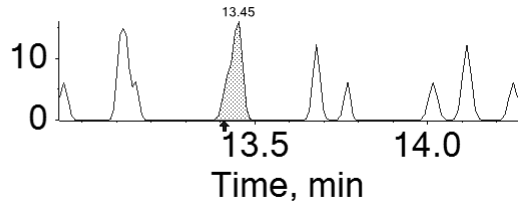
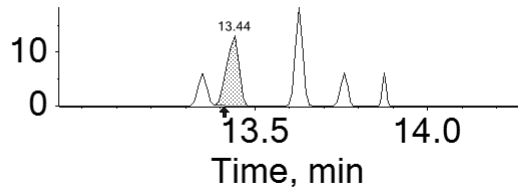
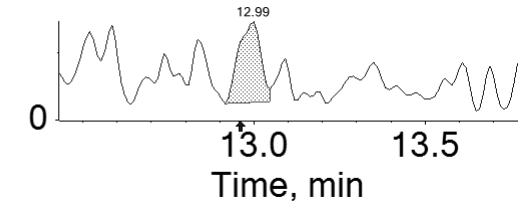
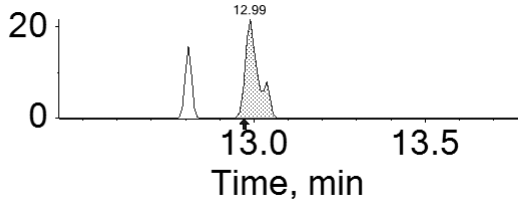
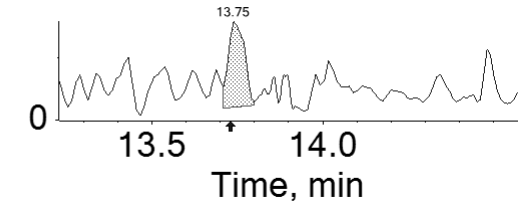
PFBA (213.0 / 169.0) RT (Exp. RT): 1.81 (1.76) min Calculated conc: 0.017 Area Ratio: 3.726e-3 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.54 (5.54) min Calculated conc: 0.010 Area Ratio: 2.032e-3 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.003 Area Ratio: 6.067e-4 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.001 Area Ratio: 1.077e-4 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.03 (7.04) min Calculated conc: 0.003 Area Ratio: 5.508e-4 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.01 (7.06) min Calculated conc: 0.001 Area Ratio: 9.721e-5 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.50 (7.46) min Calculated conc: 0.024 Area Ratio: 4.535e-3 Sample Type: (Unknown)	

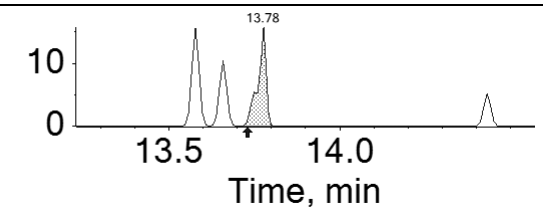
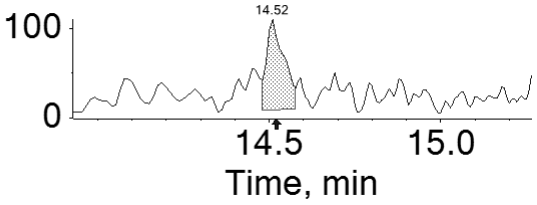
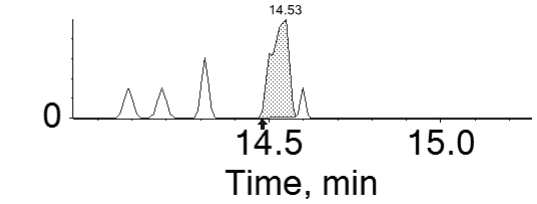
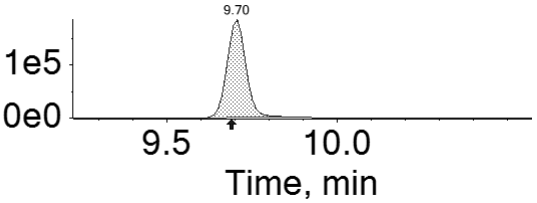
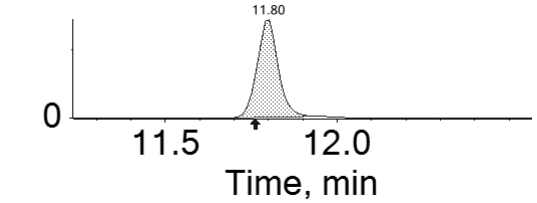
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 0.016 Area Ratio: 2.560e-4 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.81 (8.84) min Calculated conc: 0.000 Area Ratio: 1.623e-5 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.87 (8.84) min Calculated conc: 0.001 Area Ratio: 2.064e-5 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.72 (8.70) min Calculated conc: 0.022 Area Ratio: 3.481e-3 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.72 (8.70) min Calculated conc: 0.018 Area Ratio: 9.717e-4 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.96 (9.95) min Calculated conc: 0.004 Area Ratio: 7.967e-4 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 10.04 (10.01) min Calculated conc: 0.007 Area Ratio: 6.133e-4 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.34 (9.31) min Calculated conc: 0.115 Area Ratio: 3.199e-2 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 0.139 Area Ratio: 2.799e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.71 (9.69) min Calculated conc: 0.034 Area Ratio: 9.007e-3 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.034 Area Ratio: 3.174e-3 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: 0.000 Area Ratio: 2.571e-5 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 11.28 (10.90) min Calculated conc: 0.001 Area Ratio: 4.568e-5 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 0.005 Area Ratio: 8.590e-4 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 0.003 Area Ratio: 1.827e-4 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.60 (11.78) min Calculated conc: 0.020 Area Ratio: 5.033e-3 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.59 (11.78) min Calculated conc: 0.016 Area Ratio: 1.084e-3 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): N/A (11.00) min Calculated conc: N/A Area Ratio: N/A Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 0.006 Area Ratio: 1.133e-3 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.004 Area Ratio: 9.325e-4 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.014 Area Ratio: 7.925e-4 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.68 (12.61) min Calculated conc: 0.000 Area Ratio: 8.261e-5 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.58 (12.60) min Calculated conc: 0.001 Area Ratio: 9.520e-5 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.001 Area Ratio: 4.454e-4 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.80 (11.39) min Calculated conc: 0.002 Area Ratio: 3.927e-4 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.98 (12.93) min Calculated conc: 0.001 Area Ratio: 1.663e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.74 (11.73) min Calculated conc: 0.002 Area Ratio: 4.883e-4 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.66 (11.72) min Calculated conc: 0.003 Area Ratio: 5.489e-4 Sample Type: (Unknown)	

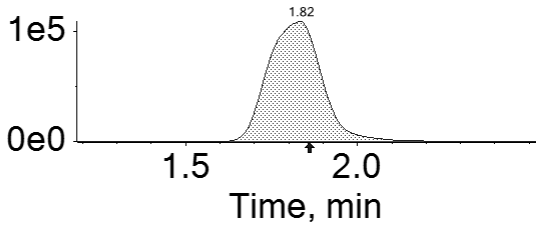
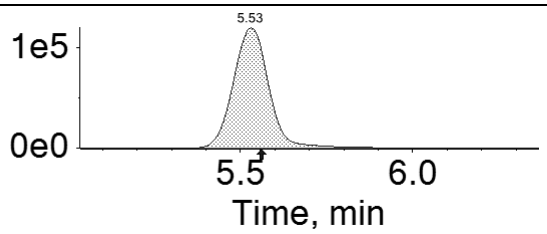
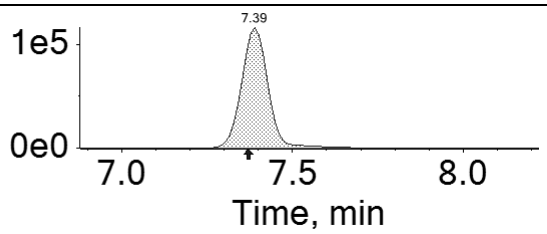
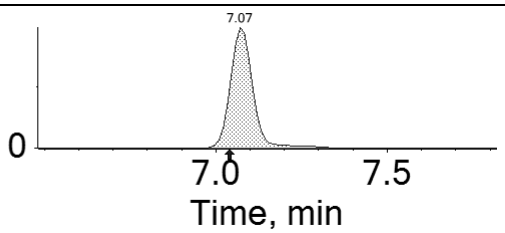
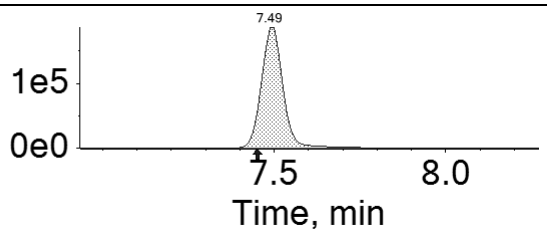
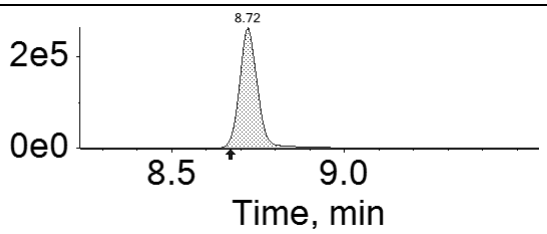
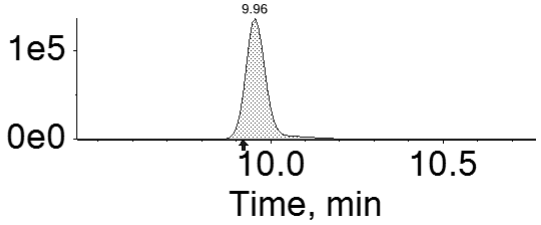
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.22 (12.22) min Calculated conc: 0.001 Area Ratio: 1.490e-4 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.42 (12.19) min Calculated conc: 0.004 Area Ratio: 1.116e-4 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.45 (13.41) min Calculated conc: 0.001 Area Ratio: 9.256e-5 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.44 (13.41) min Calculated conc: 0.002 Area Ratio: 6.918e-5 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.99 (12.96) min Calculated conc: 0.005 Area Ratio: 5.863e-4 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.99 (12.97) min Calculated conc: 0.006 Area Ratio: 1.255e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 0.004 Area Ratio: 4.892e-4 Sample Type: (Unknown)	

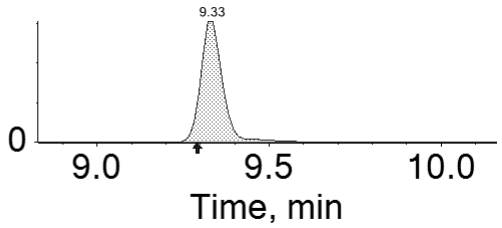
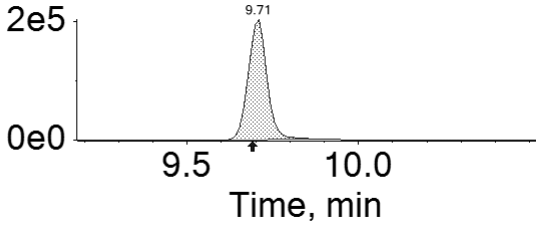
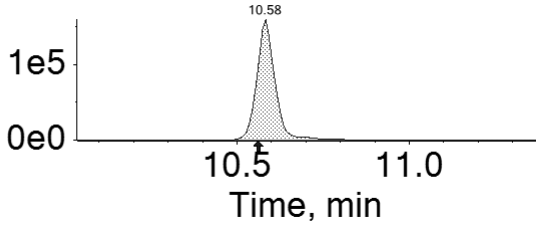
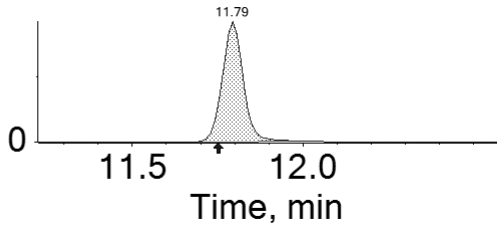
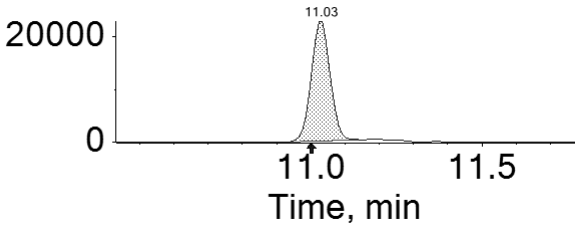
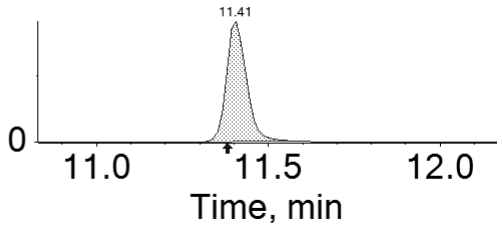
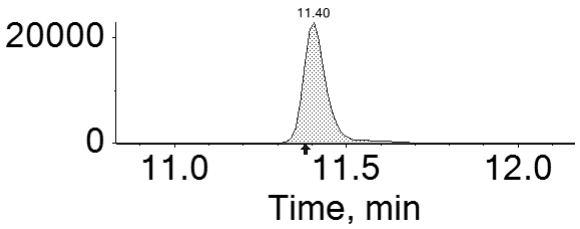
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.78 (13.73) min Calculated conc: 0.002 Area Ratio: 5.742e-5 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.52 (14.52) min Calculated conc: 0.011 Area Ratio: 1.826e-3 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.53 (14.48) min Calculated conc: 0.008 Area Ratio: 1.822e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 1.603 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.80 (11.76) min Calculated conc: 1.536 Area Ratio: N/A Sample Type: (Unknown)	

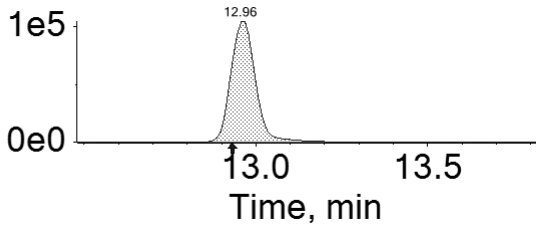
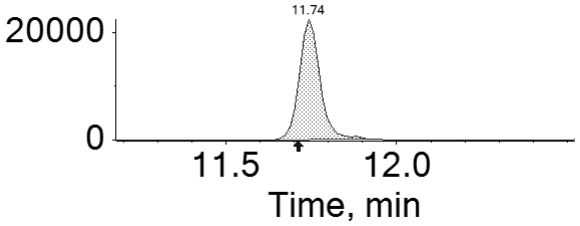
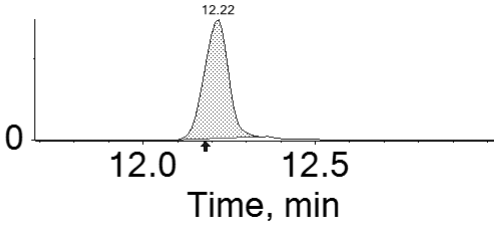
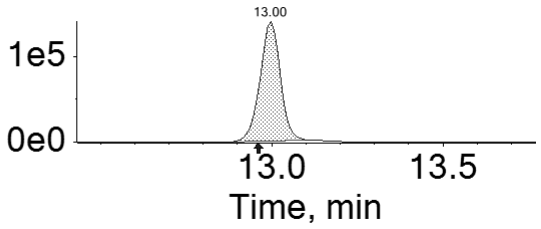
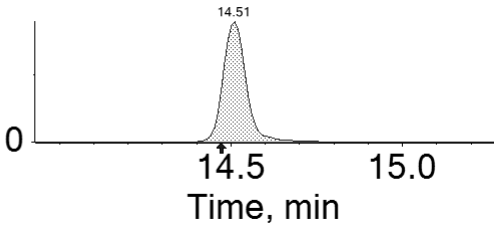
Sample Name	10478022007	**Injection Vial**	5
Sample ID	10478022007	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-07-01T14:26:43	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190701A.wiff		
Result Table	190701AM		
Sample Comment			

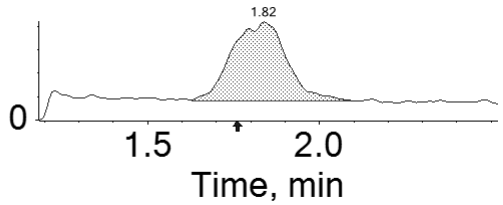
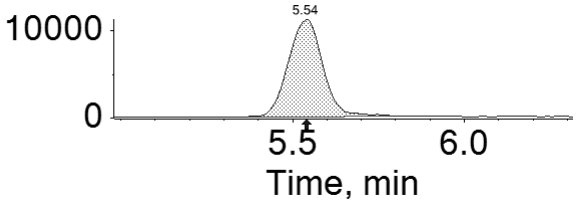
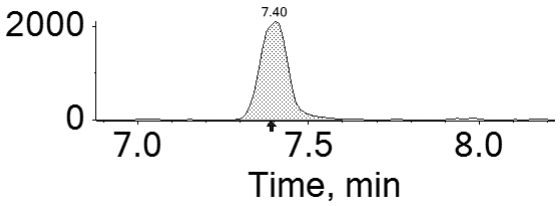
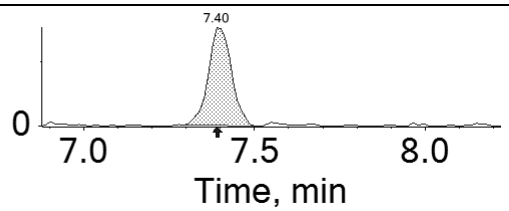
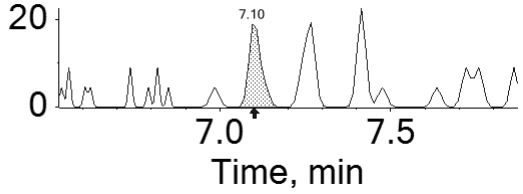
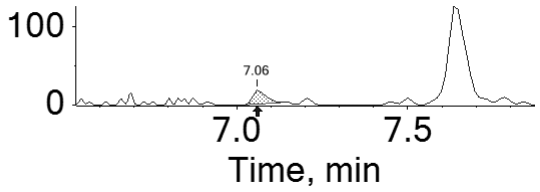
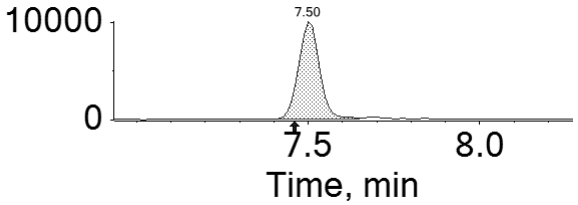
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.186e6	1.82	1.00	-
13C5_PFPeA	8.573e5	5.53	1.00	-
13C3_PFBS	6.258e5	7.39	1.00	-
13C2_4:2FTS	8.865e4	7.07	1.00	-
13C5_PFHxA	8.169e5	7.49	1.00	-
13C4_PFHpA	9.517e5	8.72	1.00	-
13C3_PFHxS	5.588e5	9.96	1.00	-
13C2_6:2FTS	1.334e5	9.33	1.00	-
13C8_PFOA	7.684e5	9.71	1.00	-
13C9_PFNA	5.850e5	10.58	1.00	-
13C8_PFOS	3.934e5	11.79	1.00	-
13C2_8:2FTS	8.741e4	11.03	1.00	-
13C6_PFDA	3.644e5	11.41	1.00	-
d3-MeFOSAA	1.054e5	11.40	1.00	-
13C8_FOSA	5.220e5	12.96	1.00	-
d5-EtFOSAA	9.420e4	11.74	1.00	-
13C7_PFUdA	3.557e5	12.22	1.00	-
13C2_PFDoA	5.742e5	13.00	1.00	-
13C2_PFTeDA	4.224e5	14.51	1.00	-

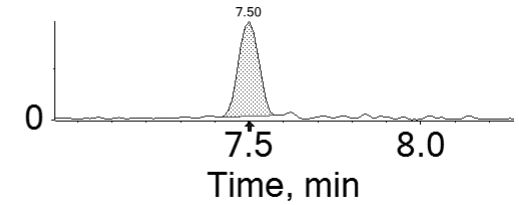
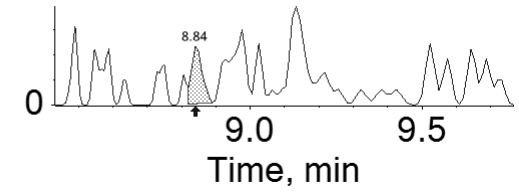
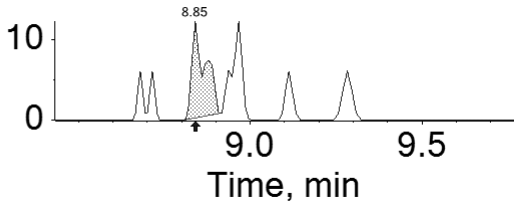
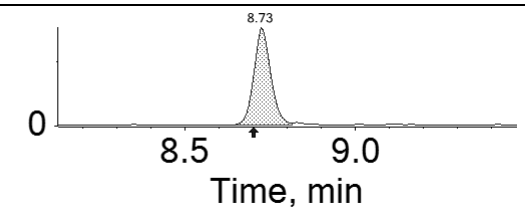
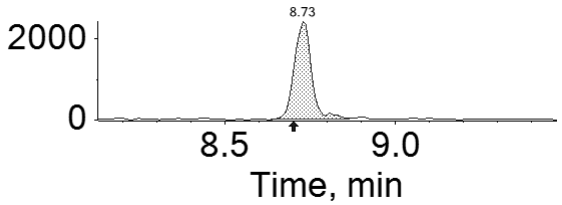
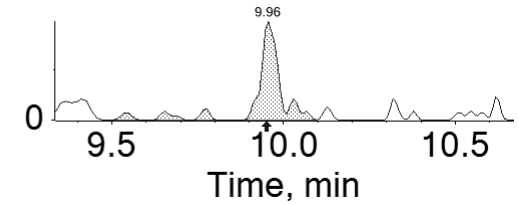
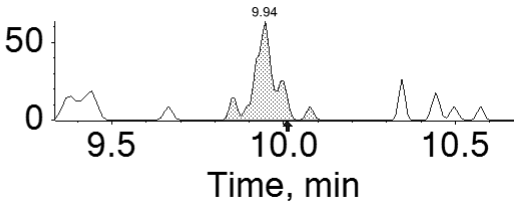
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	3.767e+04	1.82	N/A	0.142
PFPeA	7.856e+04	5.54	N/A	0.445
PFBS	1.229e+04	7.40	N/A	0.092
PFBS_2	3.613e+03	7.40	N/A	0.076
4:2FTS	4.972e+01	7.10	N/A	0.003
4:2FTS_2	4.745e+01	7.06	N/A	0.004
PFHxA	4.274e+04	7.50	N/A	0.274
PFHxA_2	3.811e+03	7.50	N/A	0.300
PFPeS	4.920e+01	8.84	N/A	0.001
PFPeS_2	3.293e+01	8.85	N/A	0.001
PFHpA	2.625e+04	8.73	N/A	0.171
PFHpA_2	8.510e+03	8.73	N/A	0.169
PFHxS	8.345e+02	9.96	N/A	0.007
PFHxS_2	2.726e+02	9.94	N/A	0.006
6:2FTS	5.899e+03	9.34	N/A	0.159
6:2FTS_2	3.928e+03	9.34	N/A	0.146
PFOA	6.778e+04	9.71	N/A	0.329
PFOA_2	2.440e+04	9.71	N/A	0.339
PFHpS	4.518e+01	10.89	N/A	0.000
PFHpS_2	3.146e+01	10.90	N/A	0.001
PFNA	8.808e+03	10.59	N/A	0.093
PFNA_2	3.013e+03	10.59	N/A	0.094
PFOS	4.787e+03	11.80	N/A	0.048
PFOS_2	1.018e+03	11.80	N/A	0.038
8:2FTS	1.613e+02	11.02	N/A	0.009
8:2FTS_2	6.295e+01	11.01	N/A	0.004
PFDA	2.079e+04	11.41	N/A	0.236
PFDA_2	5.040e+03	11.42	N/A	0.237
PFNS	3.458e+01	12.64	N/A	0.001
PFNS_2	6.913e+01	12.61	N/A	0.003
N-MeFOSAA	3.115e+02	11.44	N/A	0.009
N-MeFOSAA_2	7.934e+01	11.38	N/A	0.004
FOSA	5.327e+02	12.96	N/A	0.008
N-EtFOSAA	5.132e+01	11.76	N/A	0.002
N-EtFOSAA_2	7.671e+01	11.73	N/A	0.005
PFUdA	2.746e+03	12.22	N/A	0.056
PFUdA_2	5.552e+02	12.21	N/A	0.052
PFDS	1.163e+02	13.40	N/A	0.002
PFDS_2	1.082e+01	13.42	N/A	0.001
PFDoA	5.059e+03	13.00	N/A	0.068
PFDoA_2	8.665e+02	13.00	N/A	0.067
PFTrDA	8.919e+02	13.78	N/A	0.012
PFTrDA_2	2.368e+02	13.77	N/A	0.017
PFTeDA	7.080e+02	14.51	N/A	0.010
PFTeDA_2	1.256e+02	14.52	N/A	0.014
13C4_PFOA	7.772e+05	9.70	N/A	1.777
13C4_PFOS	4.032e+05	11.79	N/A	2.043

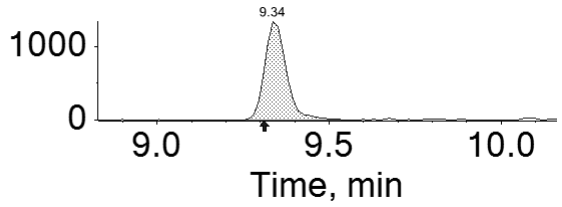
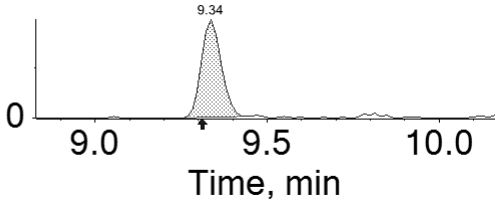
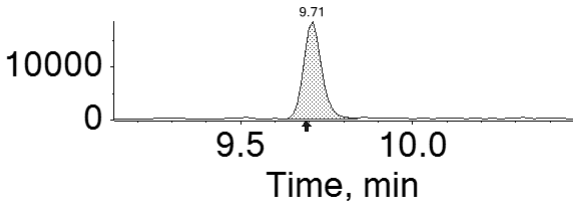
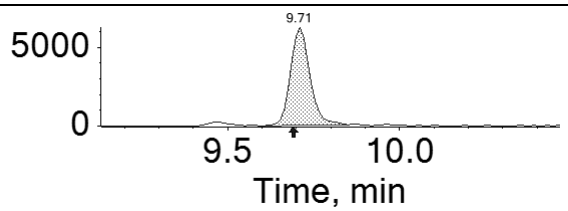
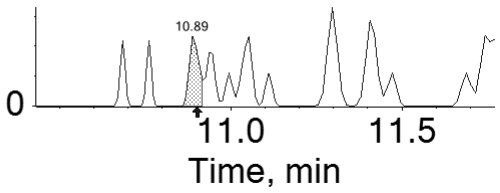
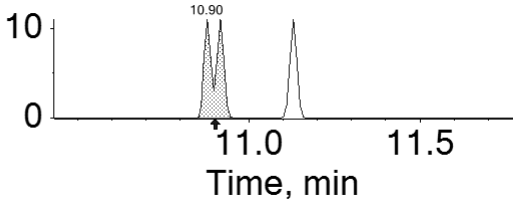
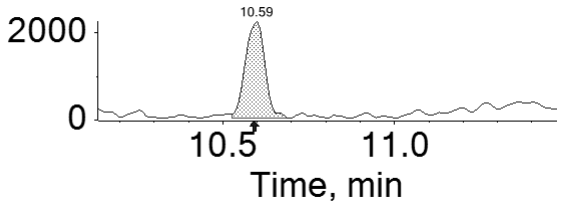
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.82(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.53(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.39(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.49(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.72(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.96(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

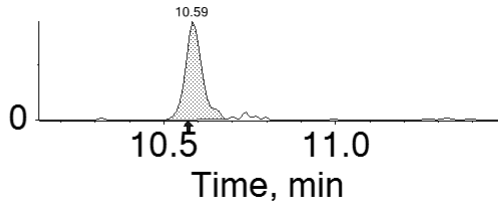
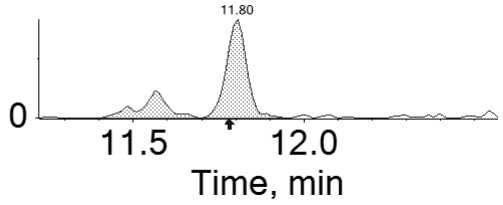
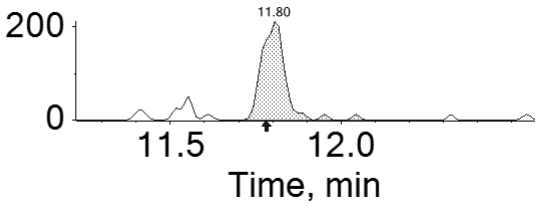
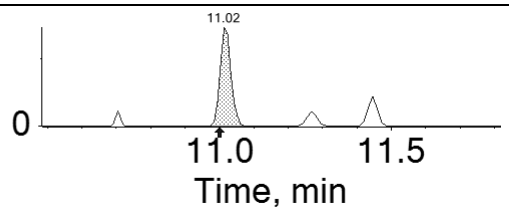
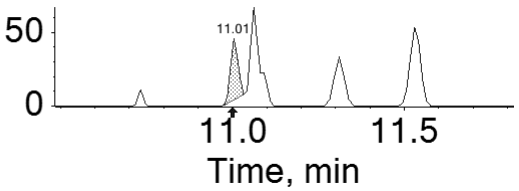
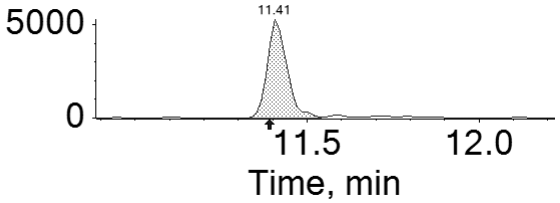
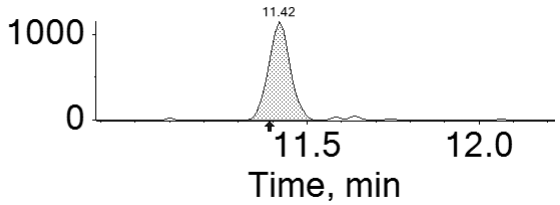
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.33(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.71(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.58(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.79(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.03(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.41(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

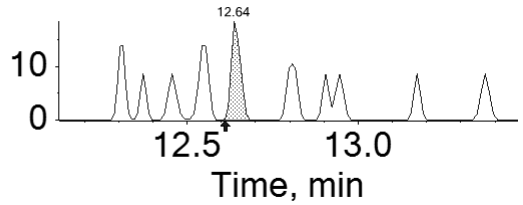
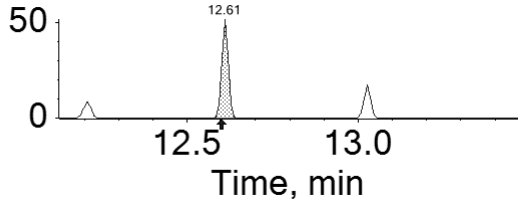
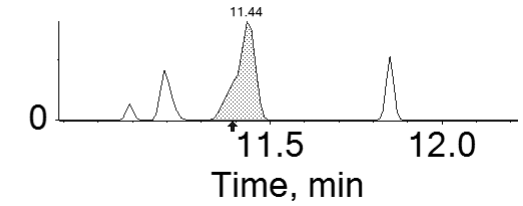
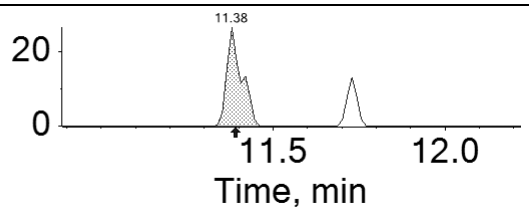
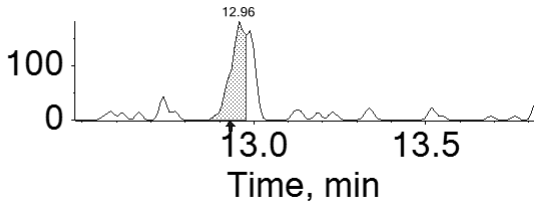
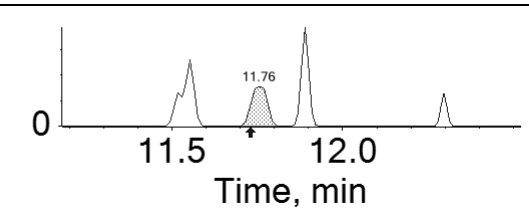
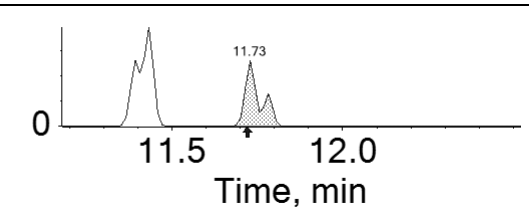
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.74(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.22(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 13.00(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.51(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

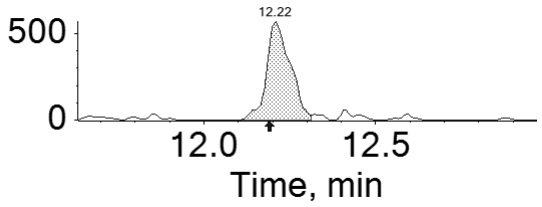
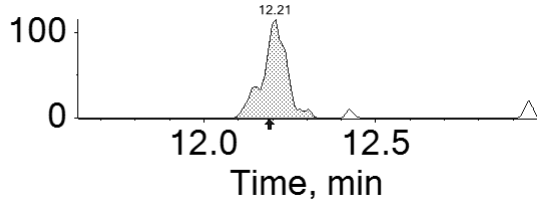
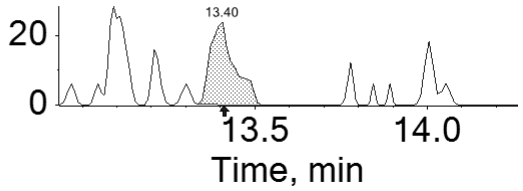
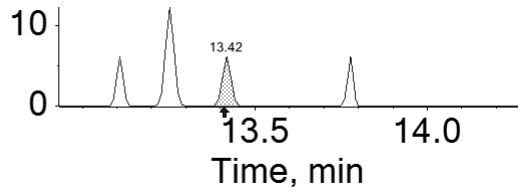
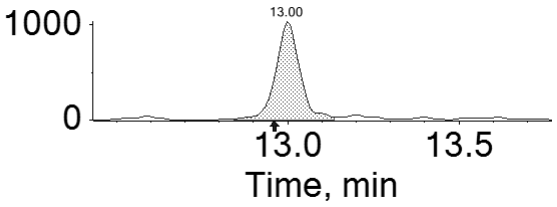
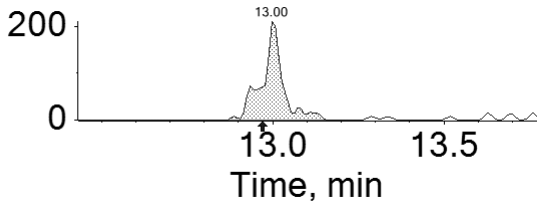
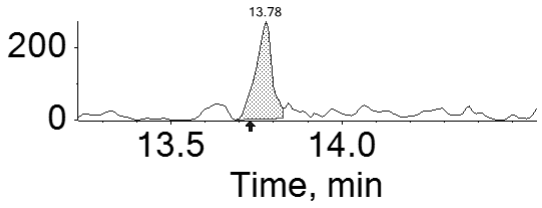
PFBA (213.0 / 169.0) RT (Exp. RT): 1.82 (1.76) min Calculated conc: 0.142 Area Ratio: 3.175e-2 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.54 (5.54) min Calculated conc: 0.445 Area Ratio: 9.163e-2 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 0.092 Area Ratio: 1.964e-2 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 0.076 Area Ratio: 5.774e-3 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.10 (7.10) min Calculated conc: 0.003 Area Ratio: 5.609e-4 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 0.004 Area Ratio: 5.352e-4 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.50 (7.46) min Calculated conc: 0.274 Area Ratio: 5.232e-2 Sample Type: (Unknown)	

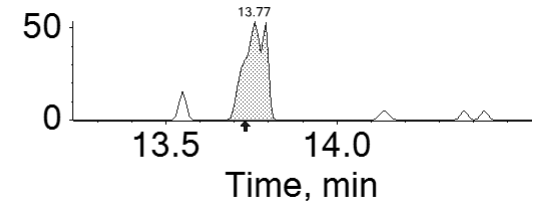
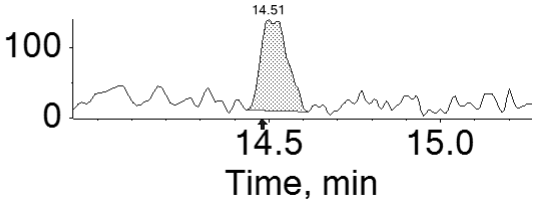
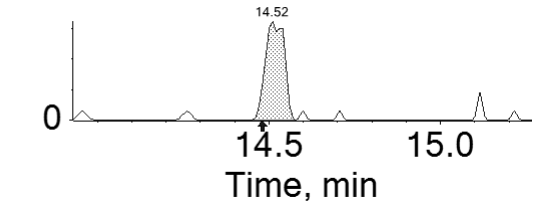
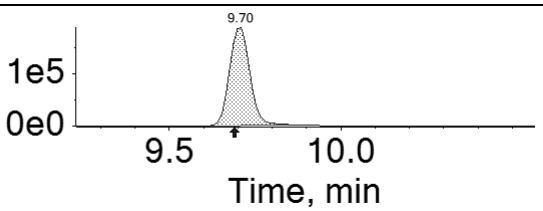
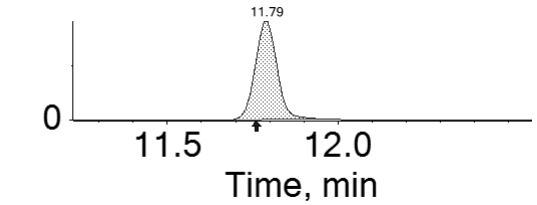
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PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 0.001 Area Ratio: 5.170e-5 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.85 (8.84) min Calculated conc: 0.001 Area Ratio: 3.460e-5 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.73 (8.70) min Calculated conc: 0.171 Area Ratio: 2.758e-2 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.73 (8.70) min Calculated conc: 0.169 Area Ratio: 8.942e-3 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.96 (9.95) min Calculated conc: 0.007 Area Ratio: 1.493e-3 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 0.006 Area Ratio: 4.878e-4 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.34 (9.31) min Calculated conc: 0.159 Area Ratio: 4.422e-2 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.34 (9.31) min Calculated conc: 0.146 Area Ratio: 2.945e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.71 (9.69) min Calculated conc: 0.329 Area Ratio: 8.822e-2 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.71 (9.69) min Calculated conc: 0.339 Area Ratio: 3.175e-2 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 0.000 Area Ratio: 7.723e-5 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 0.001 Area Ratio: 5.378e-5 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.59 (10.59) min Calculated conc: 0.093 Area Ratio: 1.506e-2 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.59 (10.57) min Calculated conc: 0.094 Area Ratio: 5.151e-3 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.80 (11.78) min Calculated conc: 0.048 Area Ratio: 1.217e-2 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.80 (11.78) min Calculated conc: 0.038 Area Ratio: 2.589e-3 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 0.009 Area Ratio: 1.845e-3 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 0.004 Area Ratio: 7.201e-4 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 0.236 Area Ratio: 5.706e-2 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 0.237 Area Ratio: 1.383e-2 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.64 (12.61) min Calculated conc: 0.001 Area Ratio: 9.720e-5 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.61 (12.60) min Calculated conc: 0.003 Area Ratio: 1.943e-4 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.44 (11.39) min Calculated conc: 0.009 Area Ratio: 2.957e-3 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.004 Area Ratio: 7.531e-4 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 0.008 Area Ratio: 1.021e-3 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.76 (11.73) min Calculated conc: 0.002 Area Ratio: 5.448e-4 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.73 (11.72) min Calculated conc: 0.005 Area Ratio: 8.143e-4 Sample Type: (Unknown)	

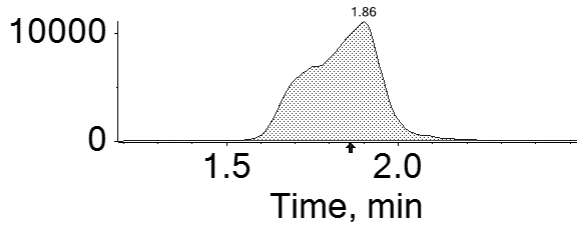
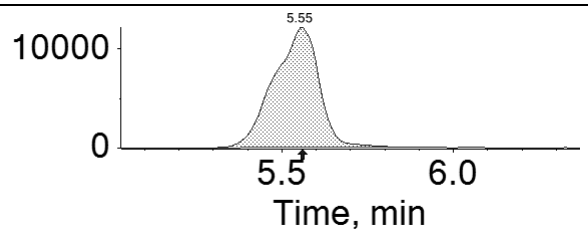
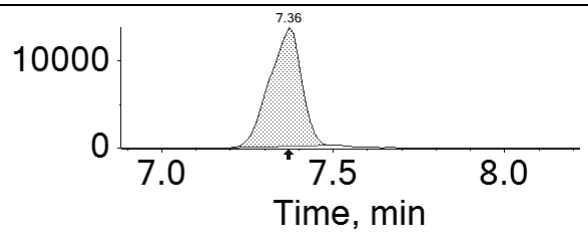
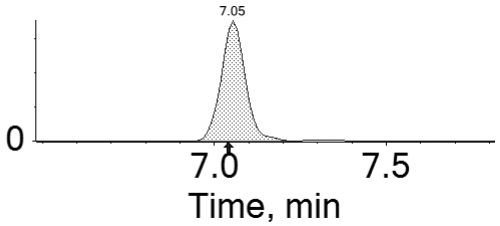
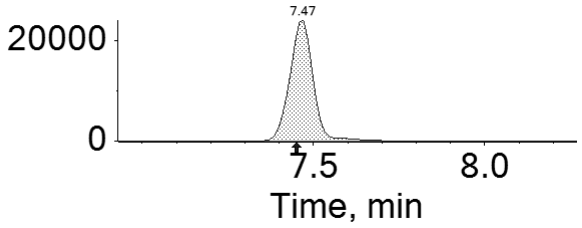
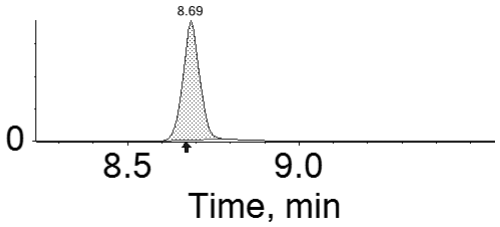
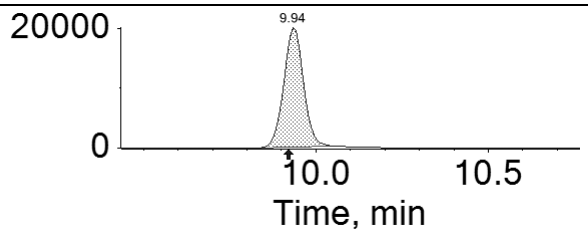
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.22 (12.19) min Calculated conc: 0.056 Area Ratio: 7.718e-3 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 0.052 Area Ratio: 1.561e-3 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 0.002 Area Ratio: 2.026e-4 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.001 Area Ratio: 1.884e-5 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 13.00 (12.96) min Calculated conc: 0.068 Area Ratio: 8.810e-3 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.00 (12.97) min Calculated conc: 0.067 Area Ratio: 1.509e-3 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.78 (13.73) min Calculated conc: 0.012 Area Ratio: 1.553e-3 Sample Type: (Unknown)	

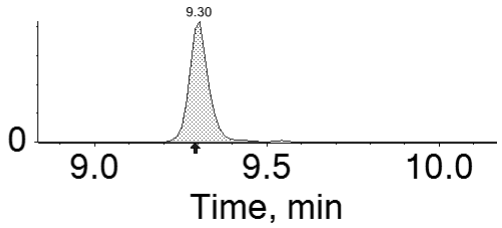
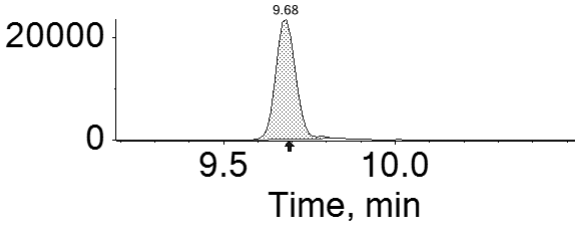
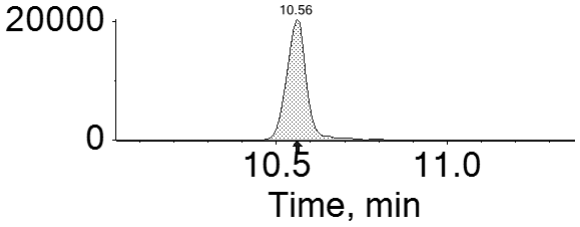
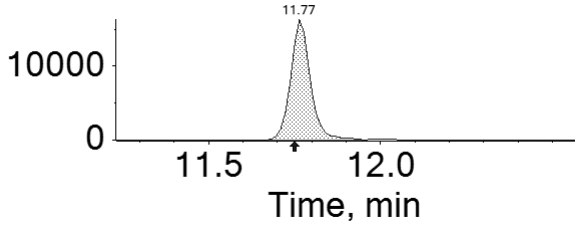
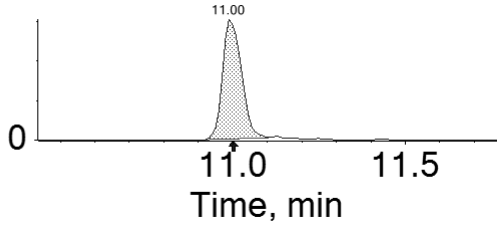
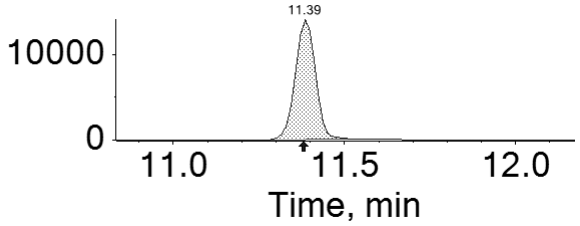
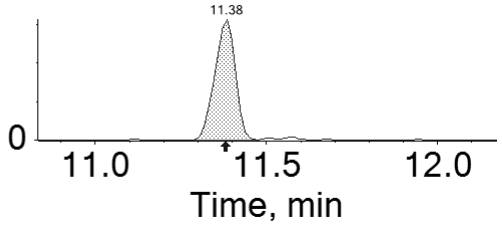
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.77 (13.73) min Calculated conc: 0.017 Area Ratio: 4.125e-4 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.51 (14.48) min Calculated conc: 0.010 Area Ratio: 1.676e-3 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.52 (14.48) min Calculated conc: 0.014 Area Ratio: 2.974e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 1.777 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.79 (11.76) min Calculated conc: 2.043 Area Ratio: N/A Sample Type: (Unknown)	

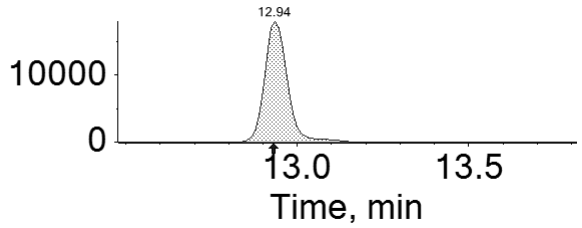
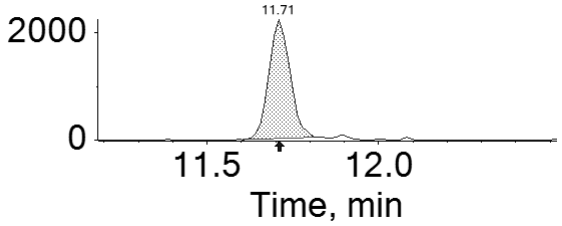
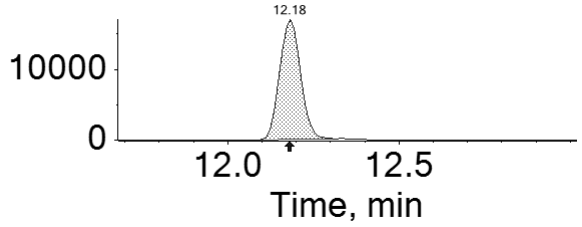
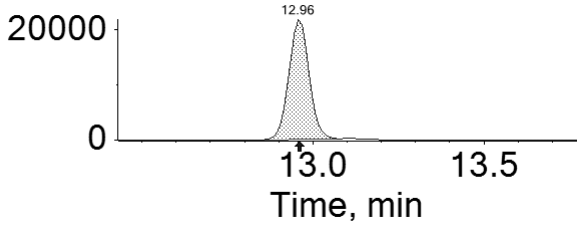
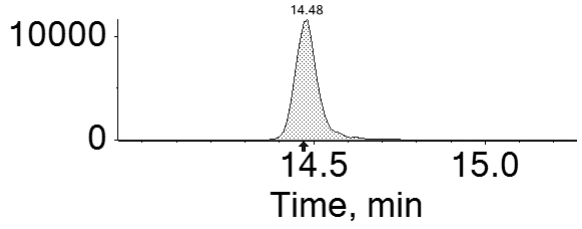
Sample Name	10478022007 D10	**Injection Vial**	8
Sample ID	10478022007	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-24T14:38:32	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190624A.wiff		
Result Table	190624AM		
Sample Comment			

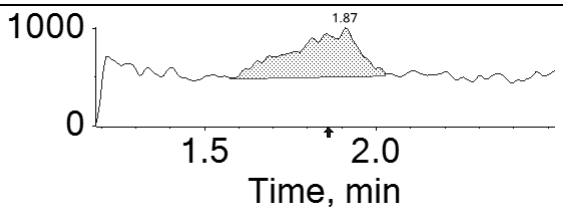
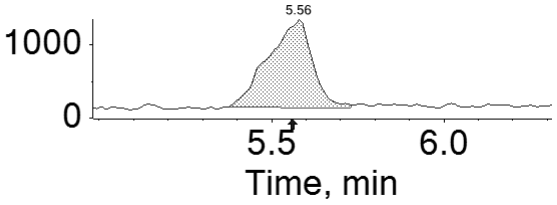
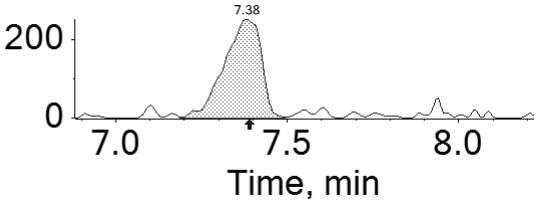
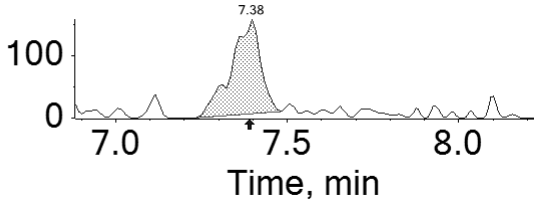
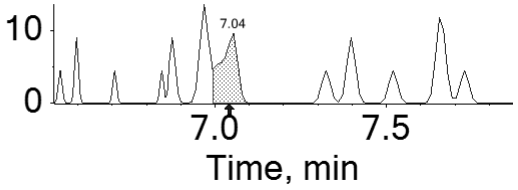
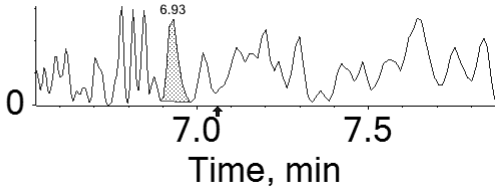
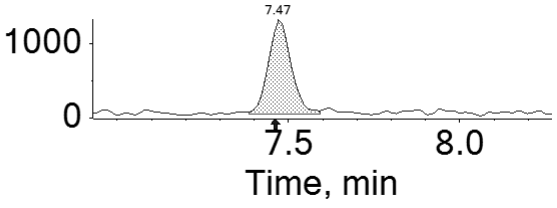
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.587e5	1.86	1.00	-
13C5_PFPeA	1.107e5	5.55	1.00	-
13C3_PFBS	8.869e4	7.36	1.00	-
13C2_4:2FTS	1.718e4	7.05	1.00	-
13C5_PFHxA	1.130e5	7.47	1.00	-
13C4_PFHpA	1.242e5	8.69	1.00	-
13C3_PFHxS	7.916e4	9.94	1.00	-
13C2_6:2FTS	1.626e4	9.30	1.00	-
13C8_PFOA	9.461e4	9.68	1.00	-
13C9_PFNA	8.209e4	10.56	1.00	-
13C8_PFOS	6.459e4	11.77	1.00	-
13C2_8:2FTS	1.148e4	11.00	1.00	-
13C6_PFDA	5.784e4	11.39	1.00	-
d3-MeFOSAA	1.302e4	11.38	1.00	-
13C8_FOSA	8.372e4	12.94	1.00	-
d5-EtFOSAA	9.494e3	11.71	1.00	-
13C7_PFUdA	7.195e4	12.18	1.00	-
13C2_PFDoA	8.972e4	12.96	1.00	-
13C2_PFTeDA	5.392e4	14.48	1.00	-

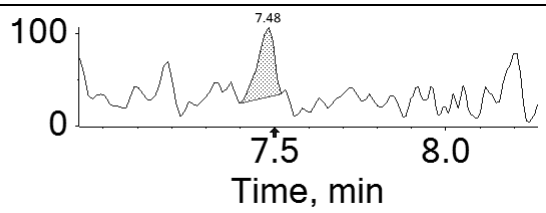
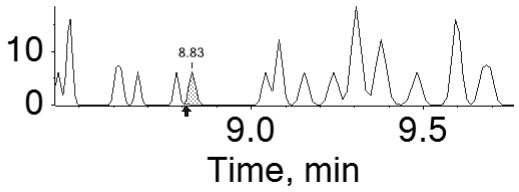
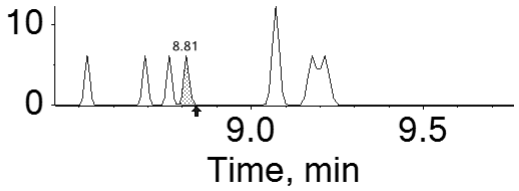
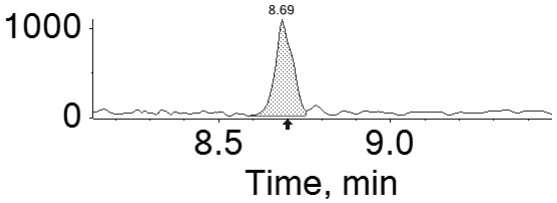
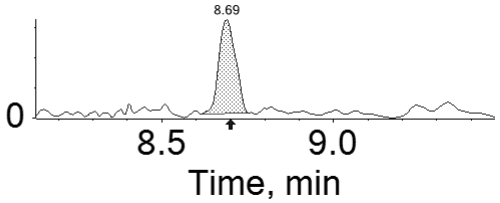
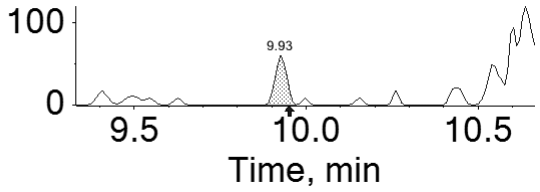
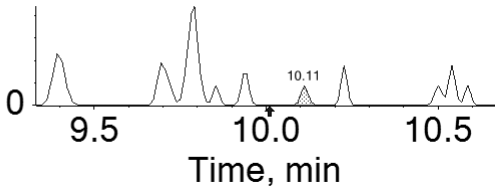
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	6.741e+03	1.87	N/A	0.198
PFPeA	1.070e+04	5.56	N/A	0.468
PFBS	1.889e+03	7.38	N/A	0.099
PFBS_2	9.030e+02	7.38	N/A	0.134
4:2FTS	3.242e+01	7.04	N/A	0.010
4:2FTS_2	5.615e+01	6.93	N/A	0.024
PFHxA	5.863e+03	7.47	N/A	0.283
PFHxA_2	2.512e+02	7.48	N/A	0.146
PFPeS	8.347e+00	8.83	N/A	0.001
PFPeS_2	6.822e+00	8.81	N/A	0.001
PFHpA	3.757e+03	8.69	N/A	0.191
PFHpA_2	1.054e+03	8.69	N/A	0.159
PFHxS	1.404e+02	9.93	N/A	0.008
PFHxS_2	1.328e+01	10.11	N/A	0.002
6:2FTS	8.730e+02	9.31	N/A	0.205
6:2FTS_2	5.167e+02	9.31	N/A	0.160
PFOA	9.558e+03	9.69	N/A	0.396
PFOA_2	2.867e+03	9.68	N/A	0.315
PFHpS	1.596e+01	10.92	N/A	0.001
PFHpS_2	1.381e+01	10.87	N/A	0.003
PFNA	1.560e+03	10.57	N/A	0.122
PFNA_2	4.821e+02	10.56	N/A	0.109
PFOS	5.275e+02	11.74	N/A	0.037
PFOS_2	7.844e+01	11.75	N/A	0.019
8:2FTS	8.147e+01	11.02	N/A	0.035
8:2FTS_2	1.614e+01	11.02	N/A	0.008
PFDA	3.169e+03	11.40	N/A	0.242
PFDA_2	5.216e+02	11.39	N/A	0.155
PFNS	N/A	N/A	N/A	N/A
PFNS_2	1.157e+01	12.60	N/A	0.002
N-MeFOSAA	2.513e+01	11.40	N/A	0.006
N-MeFOSAA_2	5.343e+01	11.37	N/A	0.024
FOSA	1.216e+02	12.94	N/A	0.011
N-EtFOSAA	1.597e+02	11.72	N/A	0.060
N-EtFOSAA_2	5.322e+01	11.71	N/A	0.038
PFUdA	9.284e+02	12.18	N/A	0.087
PFUdA_2	1.409e+02	12.18	N/A	0.060
PFDS	3.239e+01	13.41	N/A	0.003
PFDS_2	1.849e+01	13.63	N/A	0.005
PFDoA	1.295e+03	12.96	N/A	0.109
PFDoA_2	2.003e+02	12.96	N/A	0.099
PFTrDA	1.323e+02	13.74	N/A	0.010
PFTrDA_2	1.553e+01	13.70	N/A	0.006
PFTeDA	2.375e+02	14.50	N/A	0.027
PFTeDA_2	2.995e+01	14.48	N/A	0.025
13C4_PFOA	1.099e+05	9.68	N/A	0.206
13C4_PFOS	5.529e+04	11.77	N/A	0.196

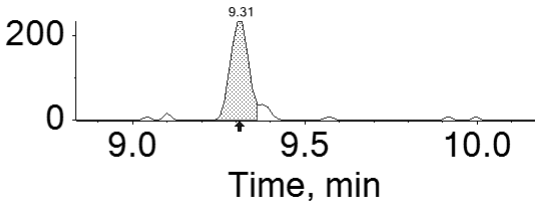
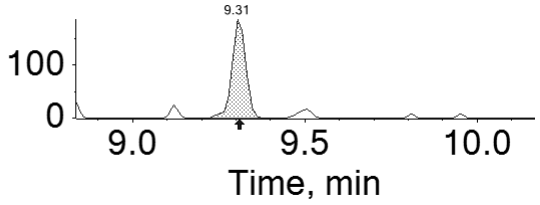
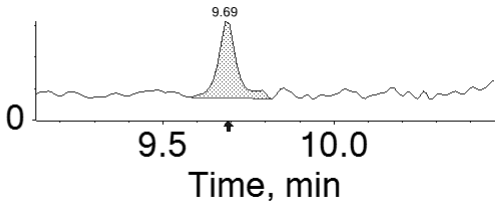
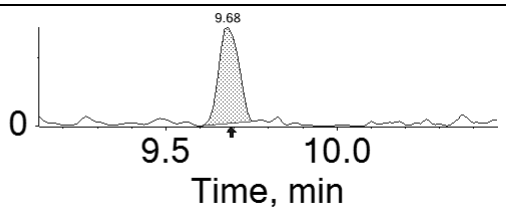
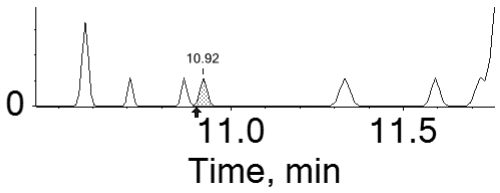
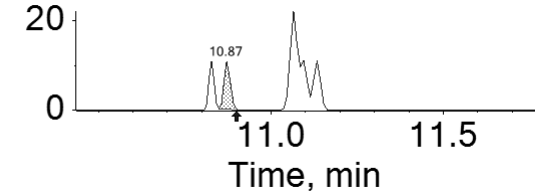
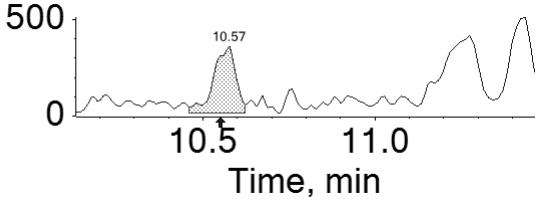
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.69(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

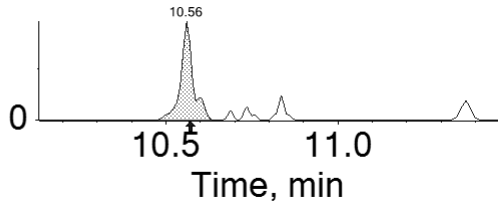
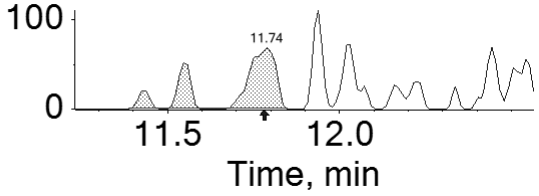
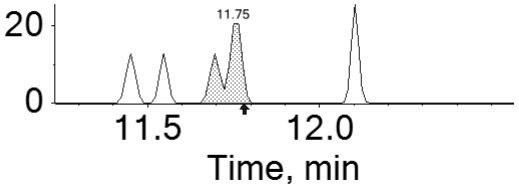
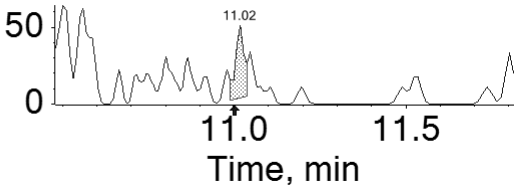
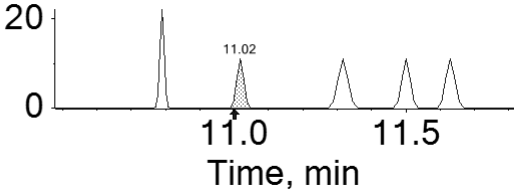
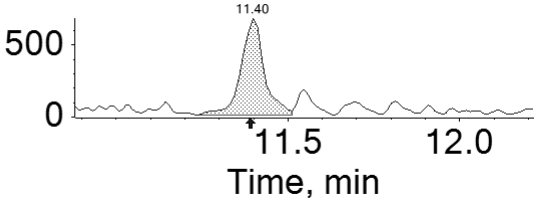
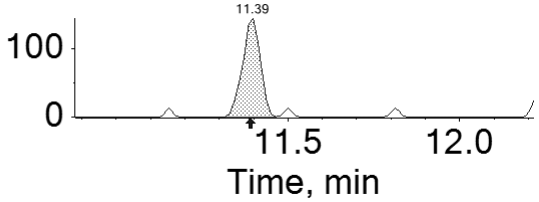
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.39(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

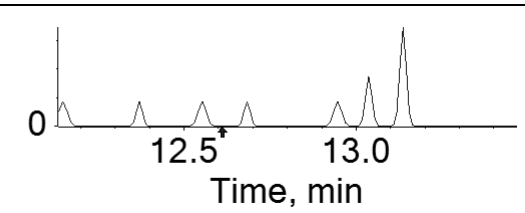
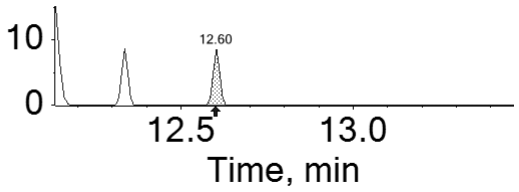
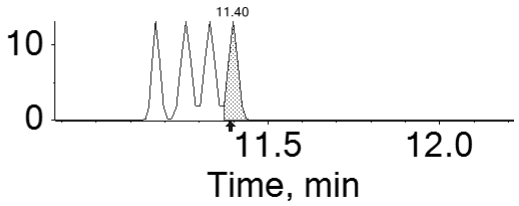
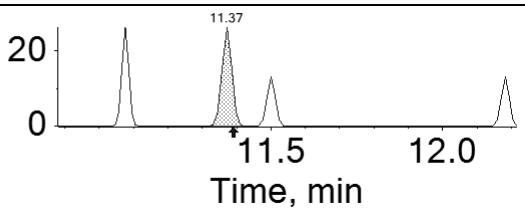
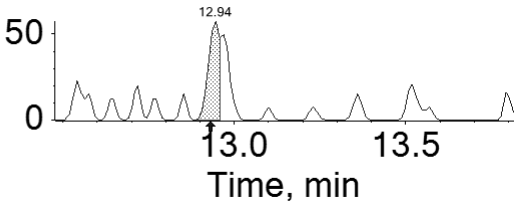
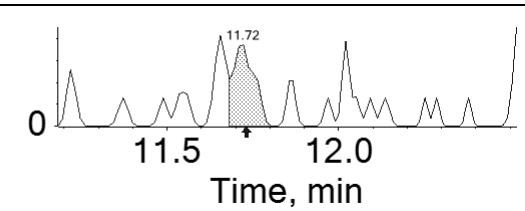
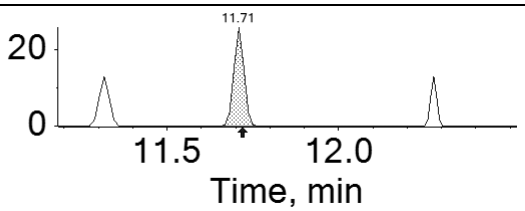
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.18(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.96(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.48(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

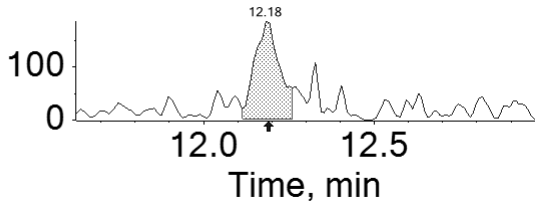
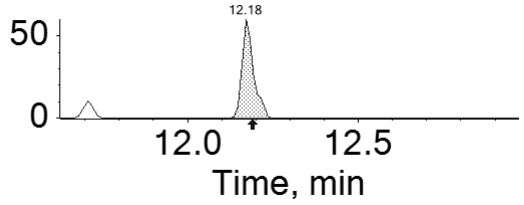
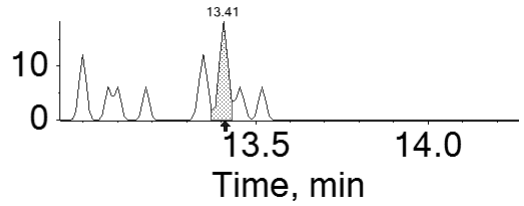
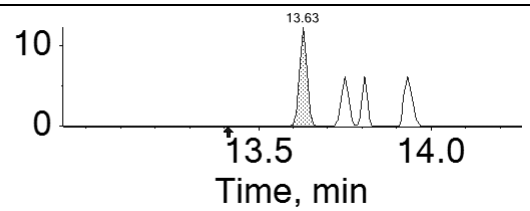
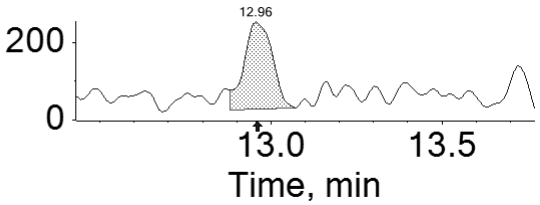
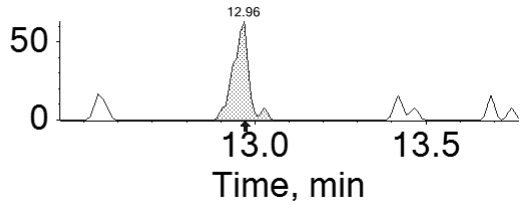
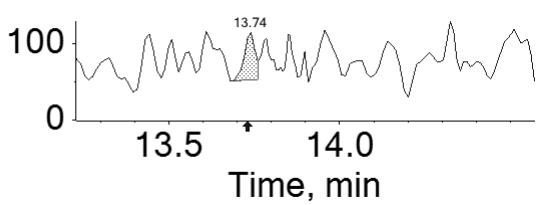
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.86) min Calculated conc: 0.198 Area Ratio: 4.247e-2 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.56) min Calculated conc: 0.468 Area Ratio: 9.667e-2 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.099 Area Ratio: 2.130e-2 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.134 Area Ratio: 1.018e-2 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.04 (7.04) min Calculated conc: 0.010 Area Ratio: 1.887e-3 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 6.93 (7.06) min Calculated conc: 0.024 Area Ratio: 3.268e-3 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 0.283 Area Ratio: 5.186e-2 Sample Type: (Unknown)	

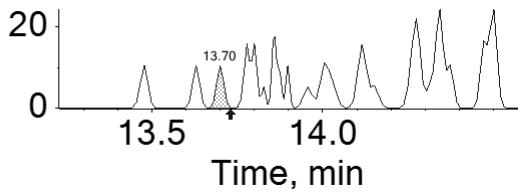
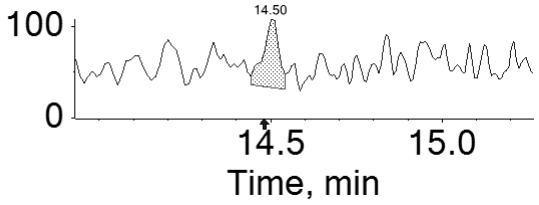
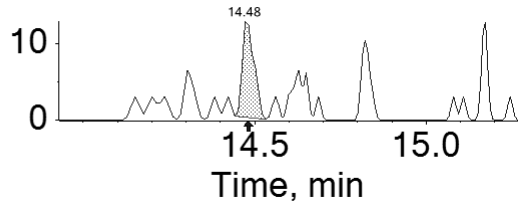
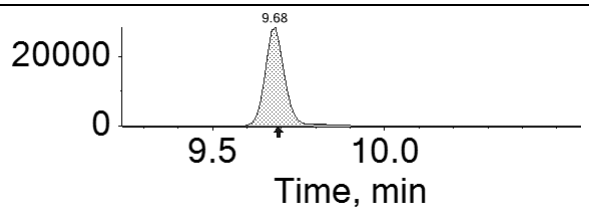
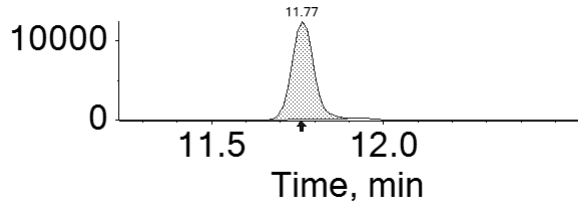
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PFPeS (349.0 / 80.0) RT (Exp. RT): 8.83 (8.81) min Calculated conc: 0.001 Area Ratio: 6.719e-5 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.81 (8.84) min Calculated conc: 0.001 Area Ratio: 5.491e-5 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 0.191 Area Ratio: 3.024e-2 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 0.159 Area Ratio: 8.481e-3 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: 0.008 Area Ratio: 1.774e-3 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 10.11 (10.01) min Calculated conc: 0.002 Area Ratio: 1.678e-4 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 0.205 Area Ratio: 5.369e-2 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 0.160 Area Ratio: 3.178e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 0.396 Area Ratio: 1.010e-1 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.315 Area Ratio: 3.031e-2 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.92 (10.90) min Calculated conc: 0.001 Area Ratio: 1.944e-4 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: 0.003 Area Ratio: 1.682e-4 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 0.122 Area Ratio: 1.901e-2 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 0.109 Area Ratio: 5.873e-3 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.74 (11.78) min Calculated conc: 0.037 Area Ratio: 8.167e-3 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.75 (11.78) min Calculated conc: 0.019 Area Ratio: 1.214e-3 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 0.035 Area Ratio: 7.099e-3 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 0.008 Area Ratio: 1.406e-3 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 0.242 Area Ratio: 5.479e-2 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.155 Area Ratio: 9.018e-3 Sample Type: (Unknown)	

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PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.60 (12.60) min Calculated conc: 0.002 Area Ratio: 1.608e-4 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 0.006 Area Ratio: 1.930e-3 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 0.024 Area Ratio: 4.103e-3 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.94 (12.93) min Calculated conc: 0.011 Area Ratio: 1.452e-3 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: 0.060 Area Ratio: 1.682e-2 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.71 (11.72) min Calculated conc: 0.038 Area Ratio: 5.606e-3 Sample Type: (Unknown)	

PFUdA (563.0 / 519.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 0.087 Area Ratio: 1.290e-2 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 0.060 Area Ratio: 1.958e-3 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 0.003 Area Ratio: 3.610e-4 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.63 (13.41) min Calculated conc: 0.005 Area Ratio: 2.060e-4 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.96 (12.96) min Calculated conc: 0.109 Area Ratio: 1.444e-2 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.96 (12.97) min Calculated conc: 0.099 Area Ratio: 2.232e-3 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 0.010 Area Ratio: 1.475e-3 Sample Type: (Unknown)	

PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: 0.006 Area Ratio: 1.730e-4 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.50 (14.48) min Calculated conc: 0.027 Area Ratio: 4.404e-3 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 0.025 Area Ratio: 5.555e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.206 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.77 (11.76) min Calculated conc: 0.196 Area Ratio: N/A Sample Type: (Unknown)	

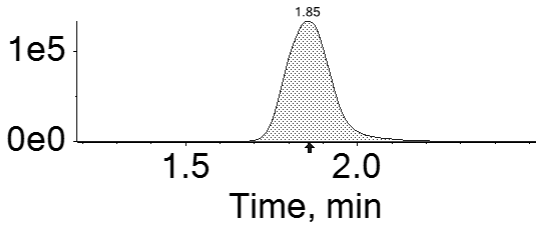
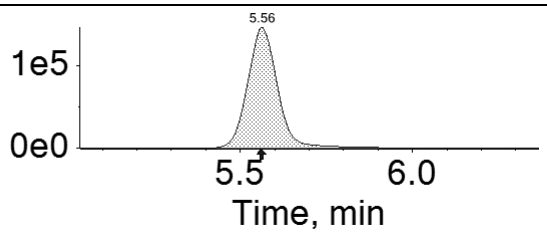
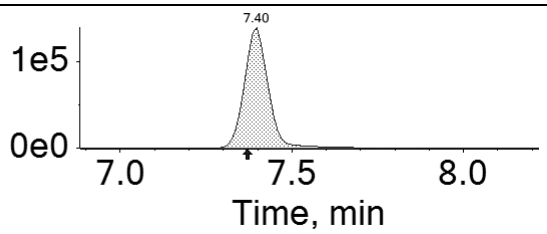
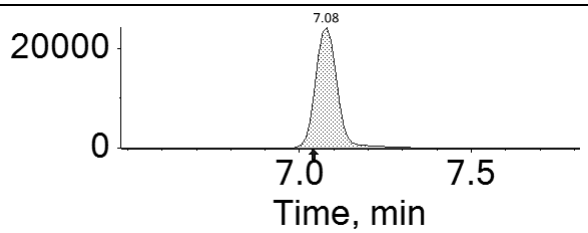
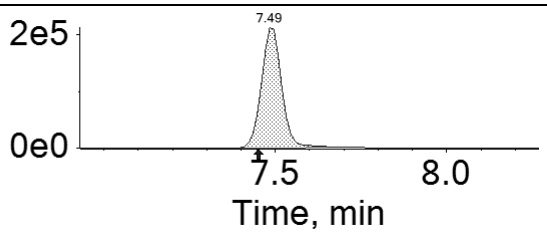
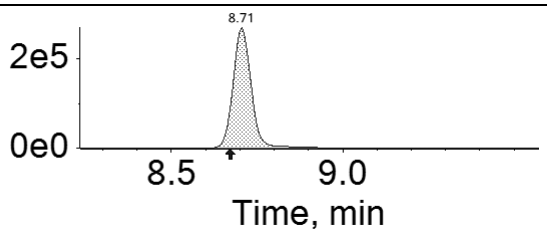
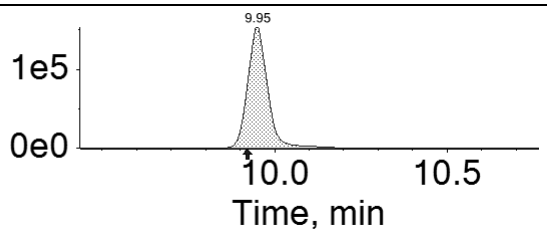
Appendix E

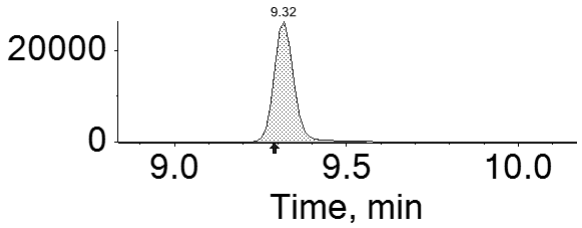
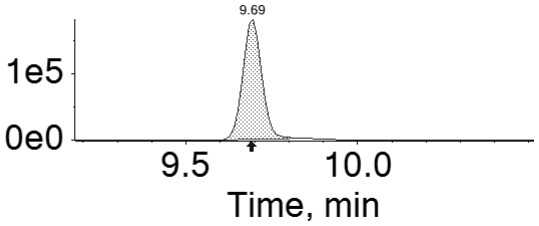
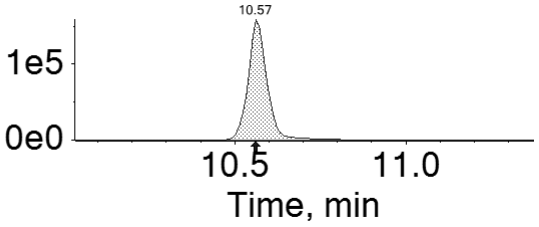
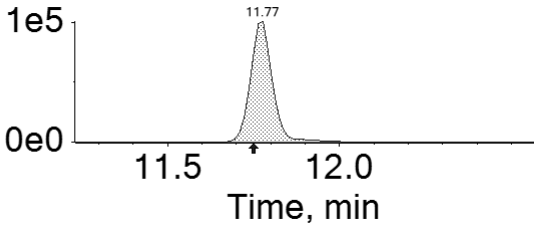
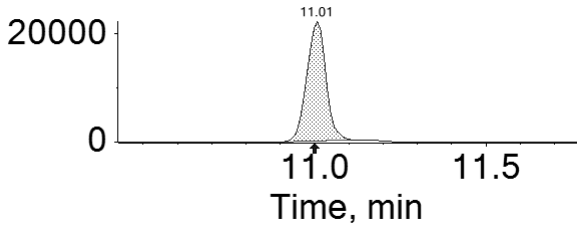
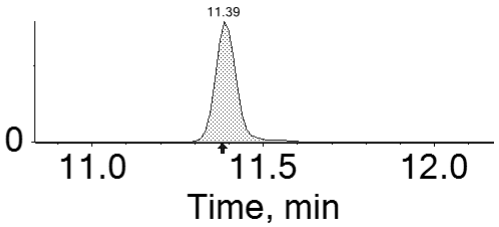
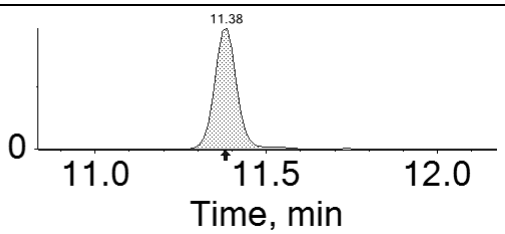
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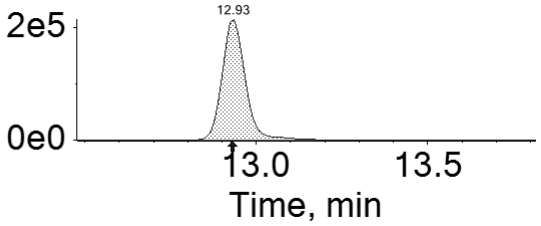
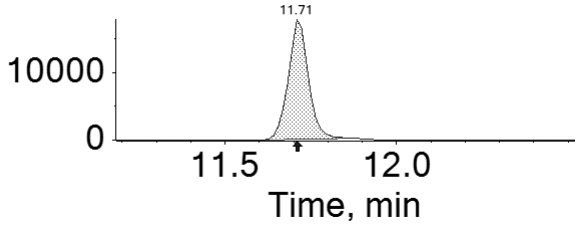
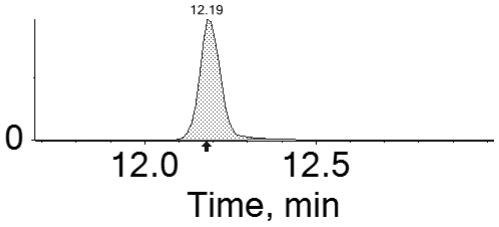
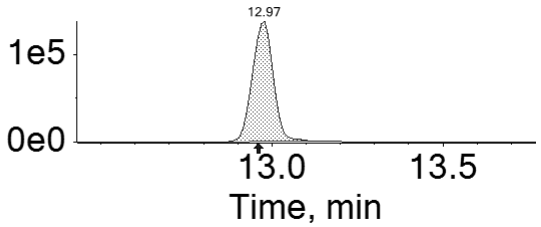
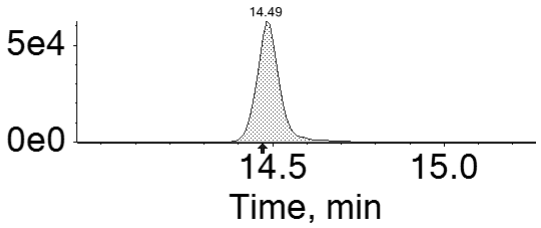
Sample Name	CAL-19206-006-01	**Injection Vial**	2
Sample ID	CAL-19206-006-01	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T16:24:47	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

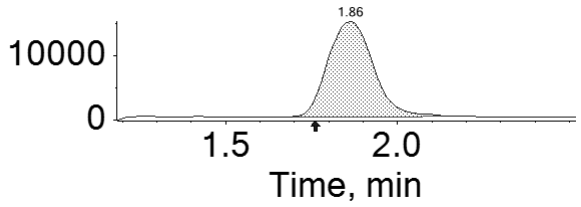
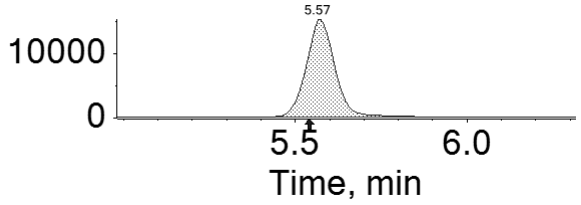
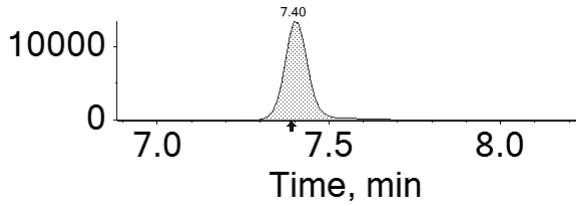
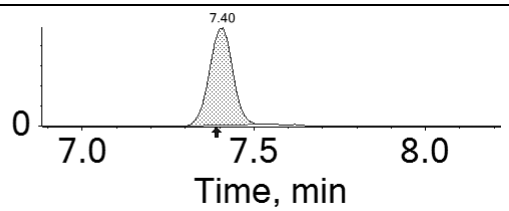
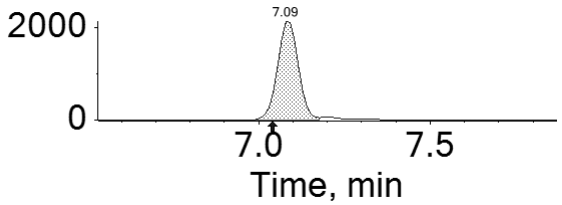
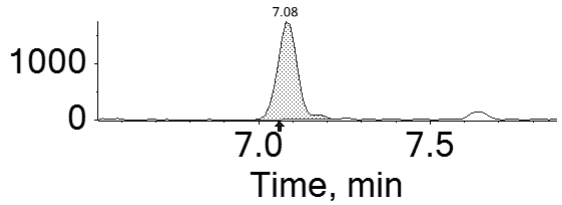
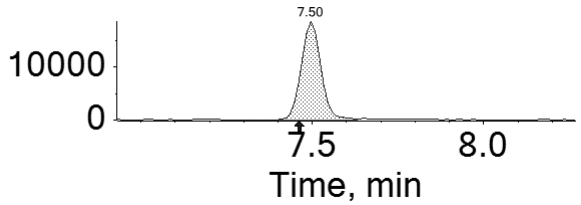
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.232e6	1.85	1.00	-
13C5_PFPeA	8.799e5	5.56	1.00	-
13C3_PFBS	6.661e5	7.40	1.00	-
13C2_4:2FTS	1.055e5	7.08	1.00	-
13C5_PFHxA	8.745e5	7.49	1.00	-
13C4_PFHpA	9.951e5	8.71	1.00	-
13C3_PFHxS	6.090e5	9.95	1.00	-
13C2_6:2FTS	1.051e5	9.32	1.00	-
13C8_PFOA	6.997e5	9.69	1.00	-
13C9_PFNA	6.071e5	10.57	1.00	-
13C8_PFOS	4.455e5	11.77	1.00	-
13C2_8:2FTS	8.565e4	11.01	1.00	-
13C6_PFDA	3.361e5	11.39	1.00	-
d3-MeFOSAA	8.789e4	11.38	1.00	-
13C8_FOSA	1.011e6	12.93	1.00	-
d5-EtFOSAA	7.203e4	11.71	1.00	-
13C7_PFUdA	4.139e5	12.19	1.00	-
13C2_PFDoA	5.780e5	12.97	1.00	-
13C2_PFTeDA	2.850e5	14.49	1.00	-

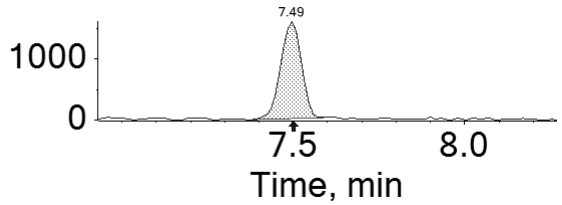
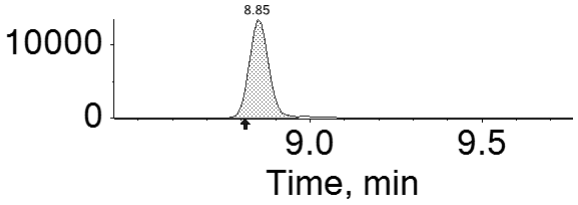
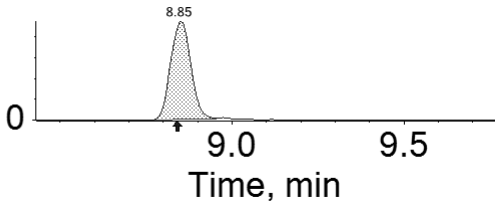
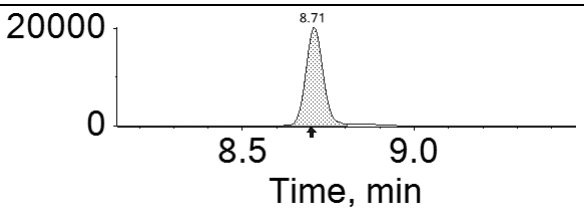
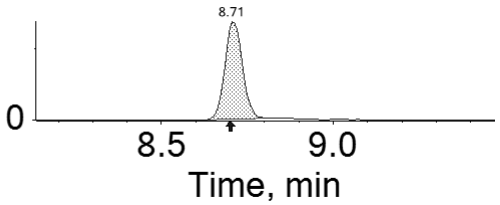
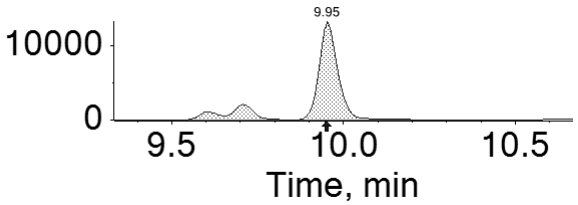
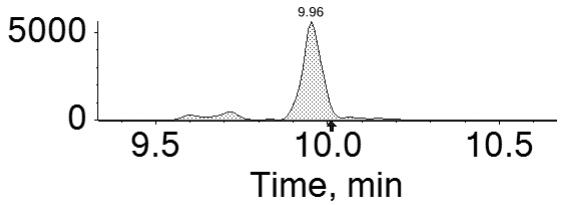
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.356e+05	1.86	0.50	0.514
PFPeA	8.806e+04	5.57	0.50	0.484
PFBS	6.639e+04	7.40	0.50	0.465
PFBS_2	2.286e+04	7.40	0.50	0.451
4:2FTS	9.022e+03	7.09	0.50	0.442
4:2FTS_2	7.011e+03	7.08	0.50	0.497
PFHxA	7.379e+04	7.50	0.50	0.460
PFHxA_2	6.690e+03	7.49	0.50	0.501
PFPeS	5.322e+04	8.85	0.50	0.471
PFPeS_2	1.917e+04	8.85	0.50	0.446
PFHpA	7.065e+04	8.71	0.50	0.449
PFHpA_2	2.440e+04	8.71	0.50	0.460
PFHxS	6.319e+04	9.95	0.50	0.465
PFHxS_2	2.644e+04	9.96	0.50	0.486
6:2FTS	1.310e+04	9.32	0.50	0.477
6:2FTS_2	9.815e+03	9.32	0.50	0.470
PFOA	9.175e+04	9.70	0.50	0.515
PFOA_2	3.437e+04	9.70	0.50	0.511
PFHpS	5.833e+04	10.91	0.50	0.464
PFHpS_2	1.794e+04	10.90	0.50	0.492
PFNA	4.802e+04	10.57	0.50	0.506
PFNA_2	1.534e+04	10.57	0.50	0.468
PFOS	4.094e+04	11.78	0.50	0.416
PFOS_2	1.304e+04	11.78	0.50	0.462
8:2FTS	7.758e+03	11.01	0.50	0.451
8:2FTS_2	7.383e+03	11.01	0.50	0.480
PFDA	3.765e+04	11.40	0.50	0.495
PFDA_2	1.115e+04	11.40	0.50	0.570
PFNS	4.828e+04	12.62	0.50	0.481
PFNS_2	1.411e+04	12.62	0.50	0.428
N-MeFOSAA	1.224e+04	11.39	0.50	0.434
N-MeFOSAA_2	6.753e+03	11.39	0.50	0.457
FOSA	6.260e+04	12.93	0.50	0.452
N-EtFOSAA	9.964e+03	11.73	0.50	0.496
N-EtFOSAA_2	4.775e+03	11.73	0.50	0.447
PFUdA	2.849e+04	12.20	0.50	0.466
PFUdA_2	6.662e+03	12.20	0.50	0.491
PFDS	3.361e+04	13.42	0.50	0.444
PFDS_2	1.171e+04	13.42	0.50	0.454
PFDoA	3.608e+04	12.98	0.50	0.473
PFDoA_2	6.180e+03	12.97	0.50	0.474
PFTrDA	3.712e+04	13.74	0.50	0.446
PFTrDA_2	6.110e+03	13.74	0.50	0.396
PFTeDA	2.301e+04	14.49	0.50	0.491
PFTeDA_2	3.034e+03	14.49	0.50	0.472
13C4_PFOA	9.706e+05	9.69	1.00	1.062
13C4_PFOS	5.217e+05	11.77	1.00	1.060

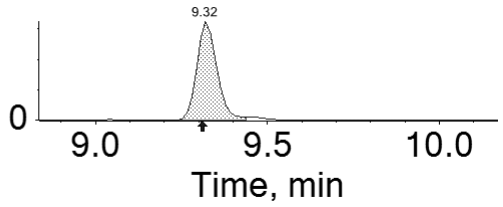
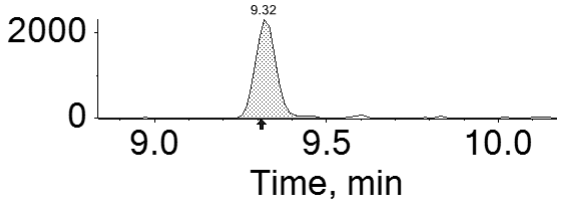
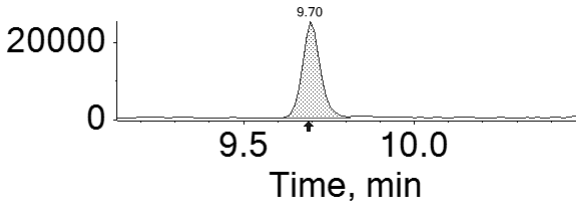
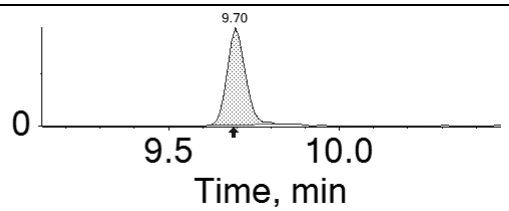
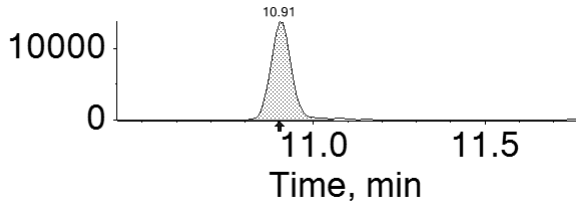
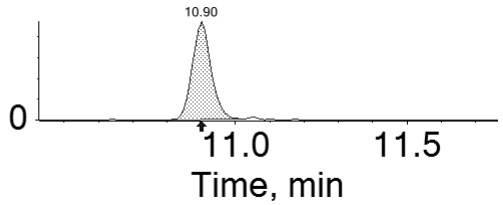
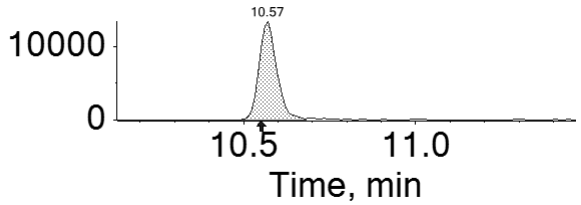
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.85(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.56(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.40(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.08(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.49(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.71(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.95(9.92) min Concentration: 1.00 Sample Type: (Standard)	

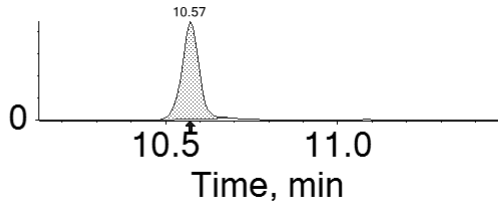
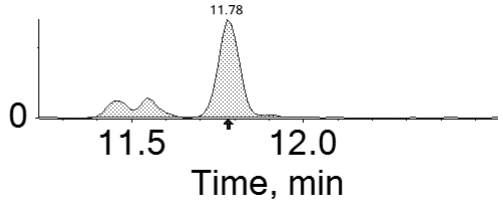
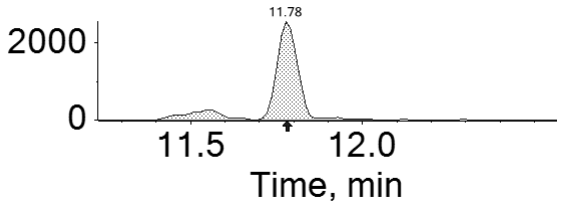
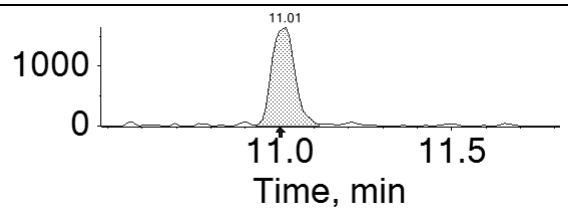
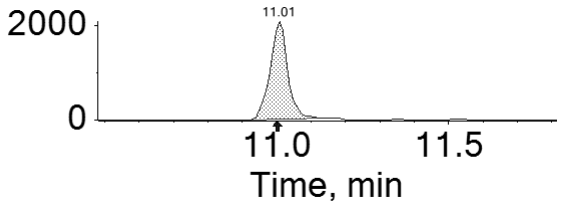
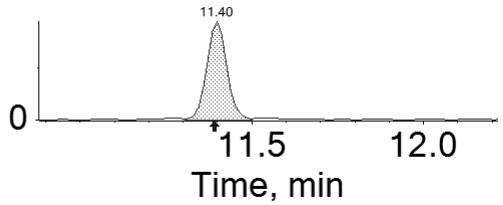
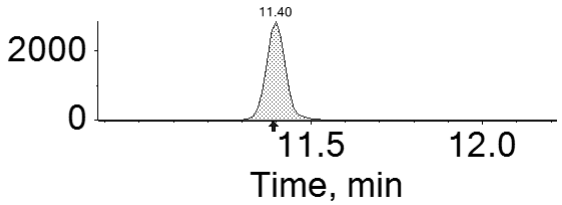
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.57(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.01(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.39(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Standard)	

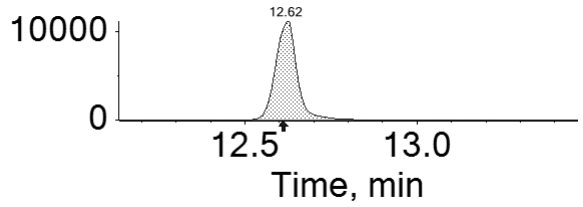
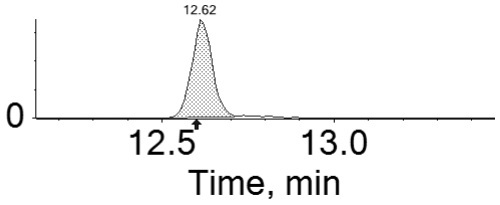
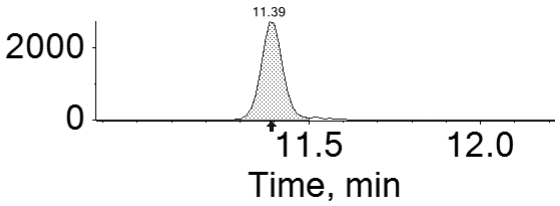
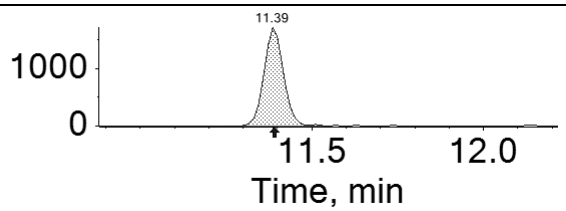
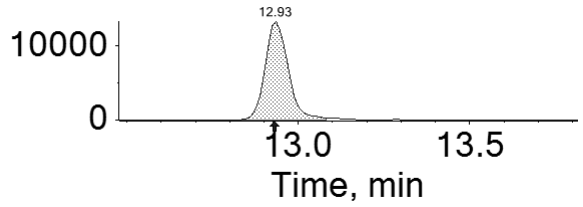
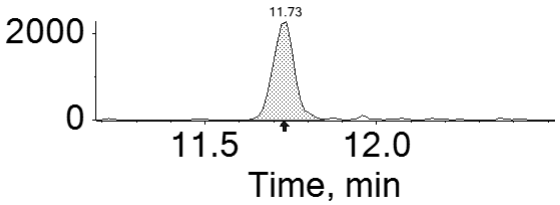
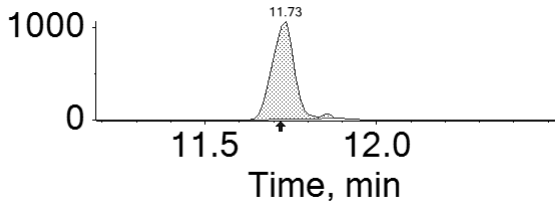
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.93(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.19(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.97(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.49(14.47) min Concentration: 1.00 Sample Type: (Standard)	

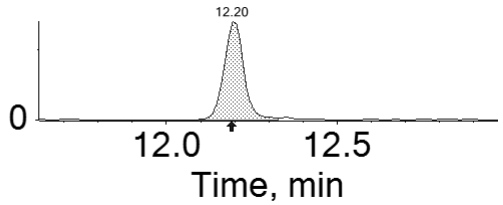
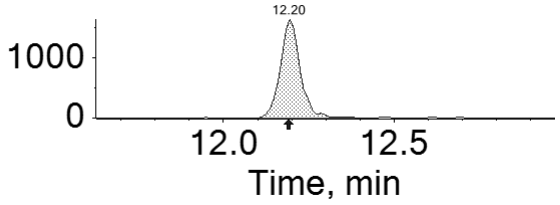
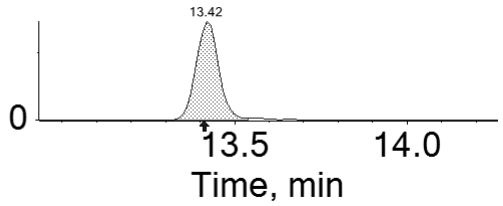
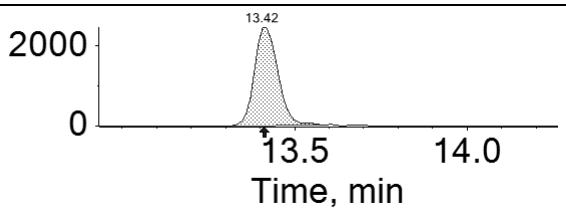
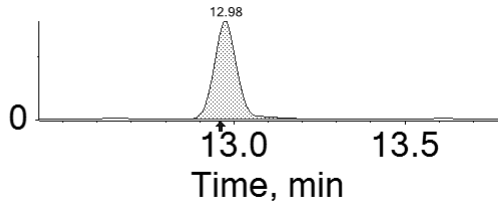
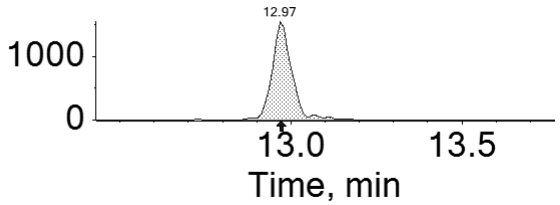
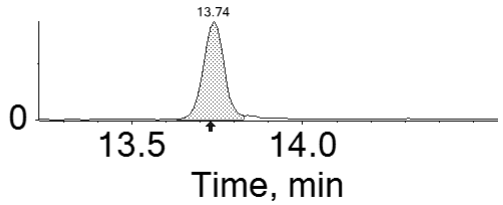
PFBA (213.0 / 169.0) RT (Exp. RT): 1.86 (1.76) min Calculated conc: 0.514 Area Ratio: 1.101e-1 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.57 (5.54) min Calculated conc: 0.484 Area Ratio: 1.001e-1 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 0.465 Area Ratio: 9.966e-2 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 0.451 Area Ratio: 3.432e-2 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.09 (7.04) min Calculated conc: 0.442 Area Ratio: 8.549e-2 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.08 (7.06) min Calculated conc: 0.497 Area Ratio: 6.644e-2 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.50 (7.46) min Calculated conc: 0.460 Area Ratio: 8.438e-2 Sample Type: (Standard)	

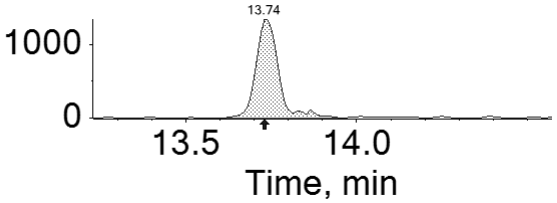
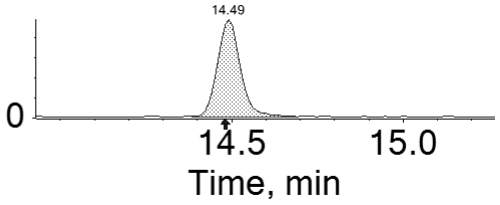
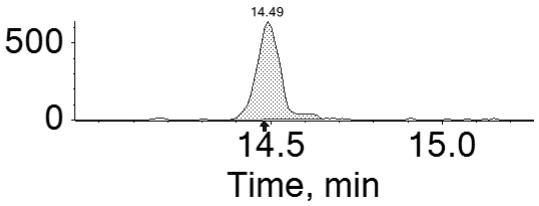
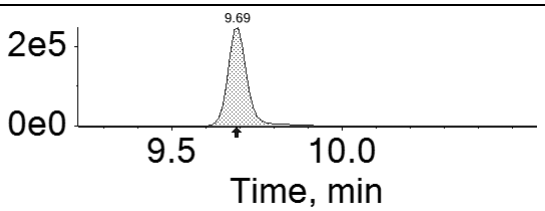
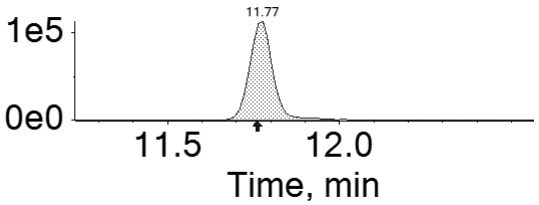
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 0.501 Area Ratio: 7.650e-3 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.85 (8.81) min Calculated conc: 0.471 Area Ratio: 5.349e-2 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.85 (8.84) min Calculated conc: 0.446 Area Ratio: 1.927e-2 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 0.449 Area Ratio: 7.099e-2 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 0.460 Area Ratio: 2.452e-2 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 0.465 Area Ratio: 1.038e-1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.96 (10.01) min Calculated conc: 0.486 Area Ratio: 4.342e-2 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 0.477 Area Ratio: 1.247e-1 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 0.470 Area Ratio: 9.339e-2 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.515 Area Ratio: 1.311e-1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.511 Area Ratio: 4.912e-2 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.91 (10.90) min Calculated conc: 0.464 Area Ratio: 9.609e-2 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 0.492 Area Ratio: 2.955e-2 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 0.506 Area Ratio: 7.910e-2 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 0.468 Area Ratio: 2.526e-2 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 0.416 Area Ratio: 9.189e-2 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 0.462 Area Ratio: 2.926e-2 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 0.451 Area Ratio: 9.057e-2 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 0.480 Area Ratio: 8.620e-2 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 0.495 Area Ratio: 1.120e-1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 0.570 Area Ratio: 3.319e-2 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.62 (12.61) min Calculated conc: 0.481 Area Ratio: 1.167e-1 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.62 (12.60) min Calculated conc: 0.428 Area Ratio: 3.409e-2 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.434 Area Ratio: 1.393e-1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.457 Area Ratio: 7.684e-2 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: 0.452 Area Ratio: 6.194e-2 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.73 (11.73) min Calculated conc: 0.496 Area Ratio: 1.383e-1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.73 (11.72) min Calculated conc: 0.447 Area Ratio: 6.629e-2 Sample Type: (Standard)	

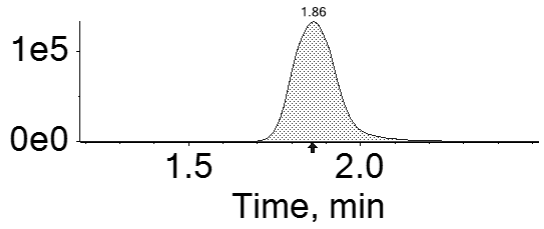
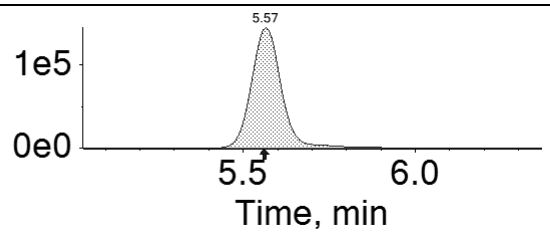
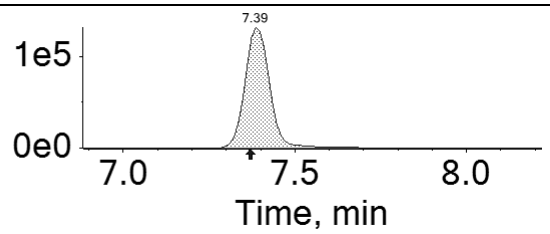
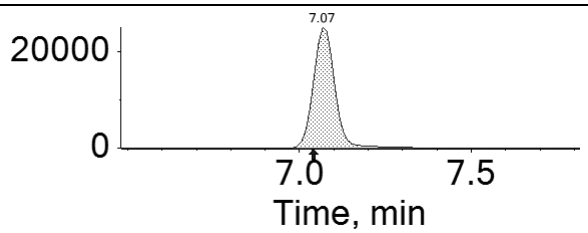
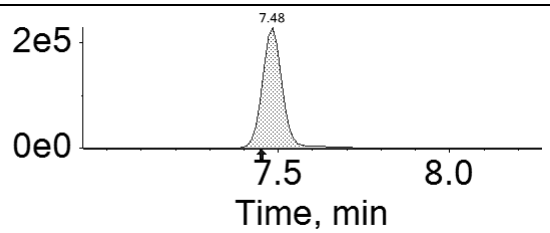
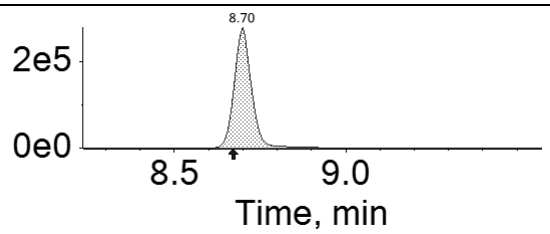
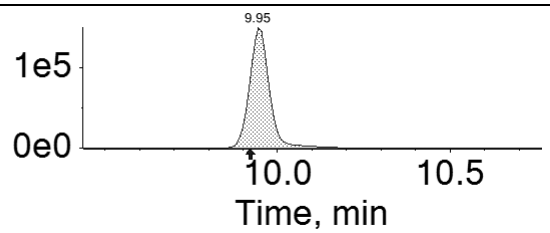
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.20 (12.19) min Calculated conc: 0.466 Area Ratio: 6.883e-2 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.20 (12.19) min Calculated conc: 0.491 Area Ratio: 1.609e-2 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.444 Area Ratio: 5.814e-2 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 0.454 Area Ratio: 2.026e-2 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.98 (12.96) min Calculated conc: 0.473 Area Ratio: 6.243e-2 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.97 (12.97) min Calculated conc: 0.474 Area Ratio: 1.069e-2 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 0.446 Area Ratio: 6.423e-2 Sample Type: (Standard)	

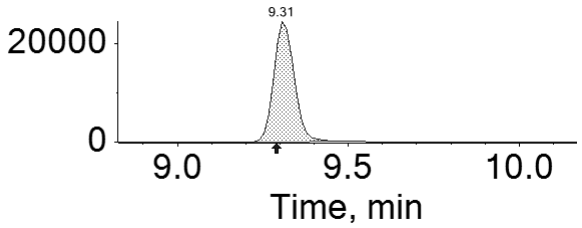
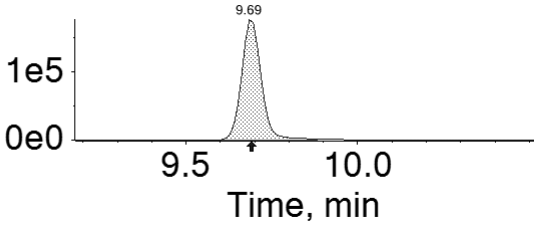
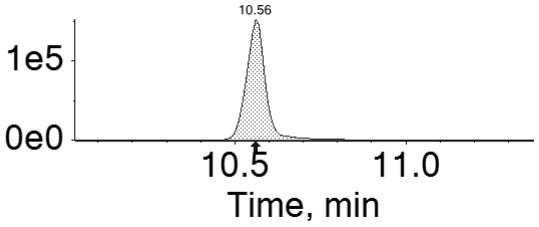
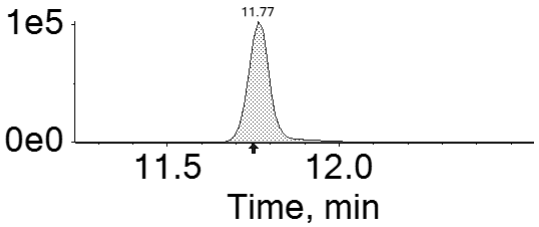
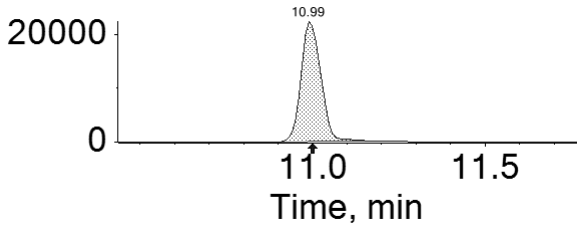
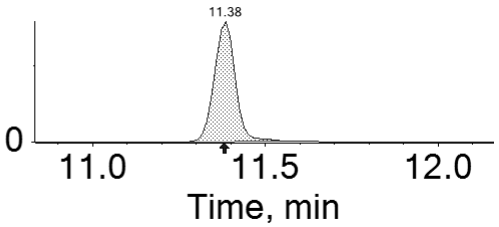
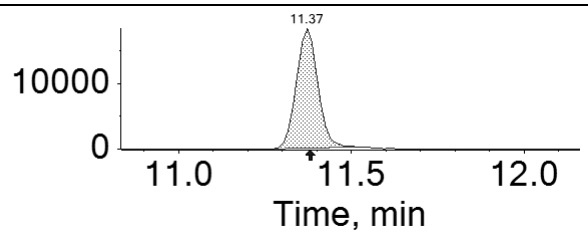
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 0.396 Area Ratio: 1.057e-2 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 0.491 Area Ratio: 8.075e-2 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 0.472 Area Ratio: 1.065e-2 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.062 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.77 (11.76) min Calculated conc: 1.060 Area Ratio: N/A Sample Type: (Standard)	

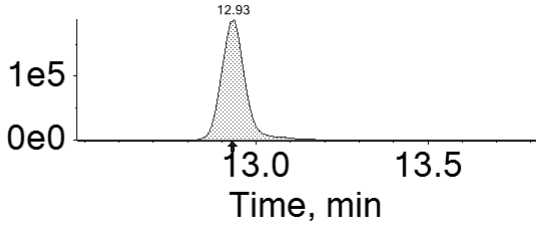
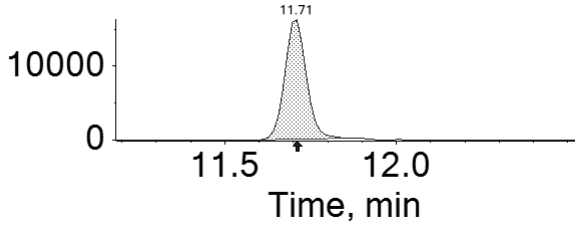
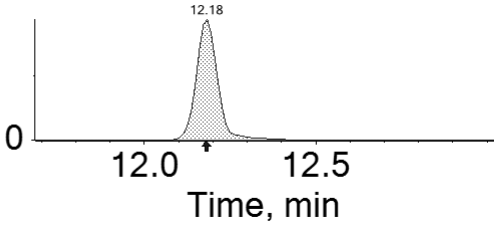
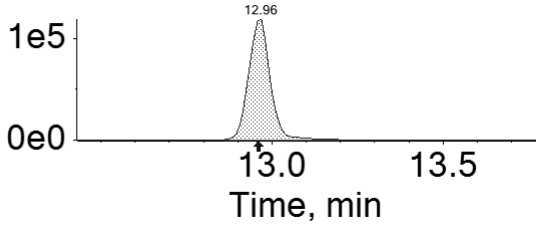
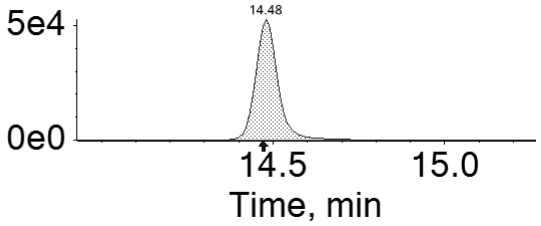
Sample Name	CAL-19206-006-02	**Injection Vial**	3
Sample ID	CAL-19206-006-02	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T16:51:27	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

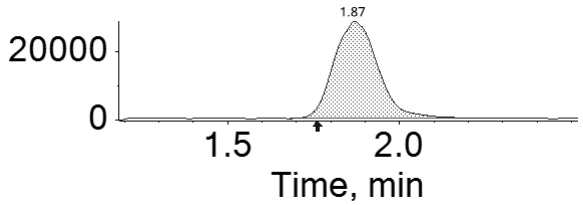
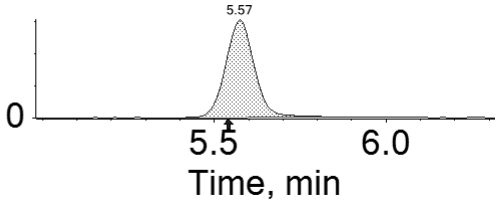
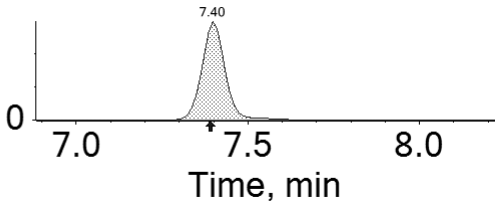
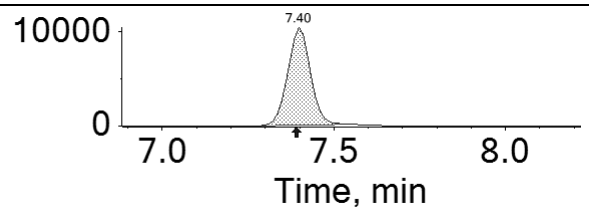
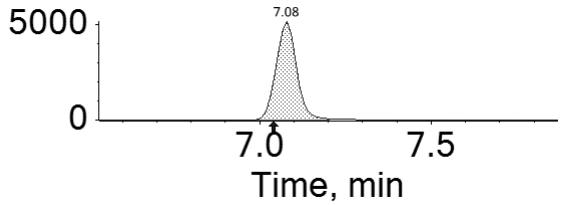
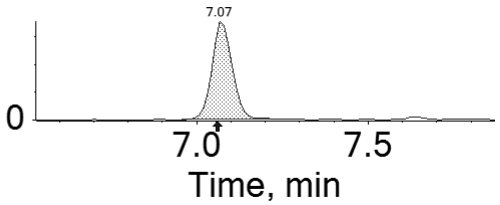
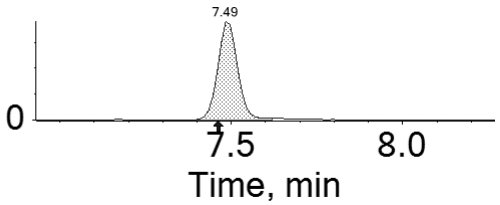
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.204e6	1.86	1.00	-
13C5_PFPeA	8.702e5	5.57	1.00	-
13C3_PFBS	6.589e5	7.39	1.00	-
13C2_4:2FTS	1.076e5	7.07	1.00	-
13C5_PFHxA	9.266e5	7.48	1.00	-
13C4_PFHpA	9.753e5	8.70	1.00	-
13C3_PFHxS	5.898e5	9.95	1.00	-
13C2_6:2FTS	1.018e5	9.31	1.00	-
13C8_PFOA	7.039e5	9.69	1.00	-
13C9_PFNA	5.895e5	10.56	1.00	-
13C8_PFOS	4.511e5	11.77	1.00	-
13C2_8:2FTS	8.838e4	10.99	1.00	-
13C6_PFDA	3.333e5	11.38	1.00	-
d3-MeFOSAA	7.853e4	11.37	1.00	-
13C8_FOSA	9.087e5	12.93	1.00	-
d5-EtFOSAA	7.083e4	11.71	1.00	-
13C7_PFUdA	4.071e5	12.18	1.00	-
13C2_PFDoA	5.242e5	12.96	1.00	-
13C2_PFTeDA	2.379e5	14.48	1.00	-

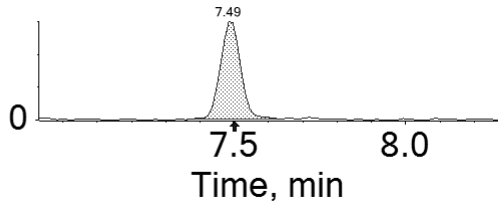
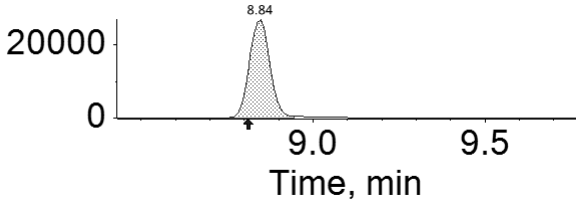
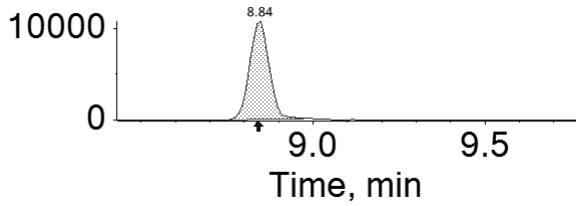
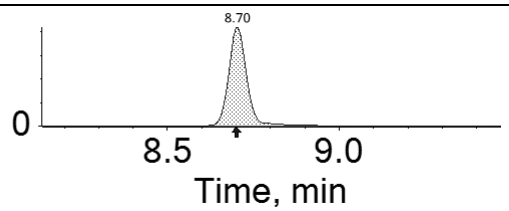
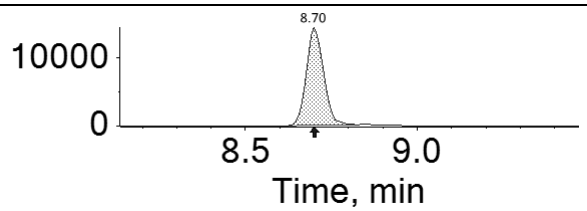
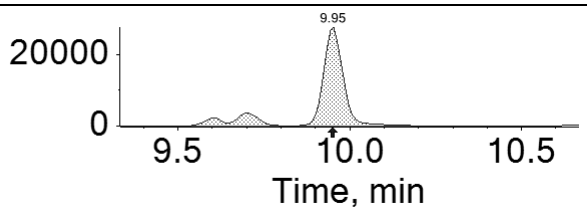
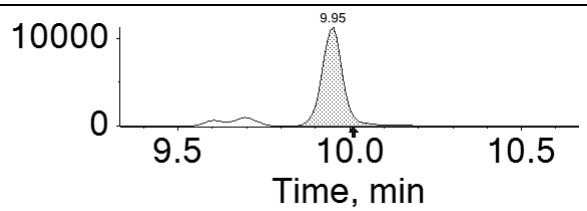
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	2.545e+05	1.87	1.00	0.986
PFPeA	1.773e+05	5.57	1.00	0.986
PFBS	1.406e+05	7.40	1.00	0.995
PFBS_2	4.776e+04	7.40	1.00	0.952
4:2FTS	2.139e+04	7.08	1.00	1.026
4:2FTS_2	1.436e+04	7.07	1.00	0.999
PFHxA	1.524e+05	7.49	1.00	0.897
PFHxA_2	1.231e+04	7.49	1.00	0.871
PFPeS	1.116e+05	8.84	1.00	1.008
PFPeS_2	4.213e+04	8.84	1.00	1.001
PFHpA	1.529e+05	8.70	1.00	0.991
PFHpA_2	5.009e+04	8.70	1.00	0.963
PFHxS	1.347e+05	9.95	1.00	1.024
PFHxS_2	4.830e+04	9.95	1.00	0.916
6:2FTS	2.542e+04	9.31	1.00	0.956
6:2FTS_2	2.039e+04	9.32	1.00	1.009
PFOA	1.745e+05	9.70	1.00	0.973
PFOA_2	6.407e+04	9.69	1.00	0.947
PFHpS	1.293e+05	10.90	1.00	1.059
PFHpS_2	3.583e+04	10.89	1.00	1.013
PFNA	9.400e+04	10.56	1.00	1.021
PFNA_2	3.098e+04	10.57	1.00	0.974
PFOS	9.319e+04	11.78	1.00	0.935
PFOS_2	2.639e+04	11.77	1.00	0.923
8:2FTS	1.606e+04	11.00	1.00	0.904
8:2FTS_2	1.460e+04	11.00	1.00	0.919
PFDA	7.706e+04	11.39	1.00	1.021
PFDA_2	1.763e+04	11.39	1.00	0.909
PFNS	9.526e+04	12.61	1.00	0.966
PFNS_2	3.325e+04	12.61	1.00	1.026
N-MeFOSAA	2.554e+04	11.39	1.00	1.013
N-MeFOSAA_2	1.290e+04	11.38	1.00	0.977
FOSA	1.254e+05	12.93	1.00	1.006
N-EtFOSAA	1.979e+04	11.72	1.00	1.001
N-EtFOSAA_2	9.250e+03	11.72	1.00	0.881
PFUdA	5.577e+04	12.19	1.00	0.927
PFUdA_2	1.308e+04	12.19	1.00	0.981
PFDS	7.140e+04	13.41	1.00	1.040
PFDS_2	2.257e+04	13.41	1.00	0.964
PFDoA	6.683e+04	12.97	1.00	0.966
PFDoA_2	1.212e+04	12.97	1.00	1.024
PFTrDA	7.153e+04	13.73	1.00	0.948
PFTrDA_2	1.402e+04	13.73	1.00	1.003
PFTeDA	3.856e+04	14.49	1.00	0.985
PFTeDA_2	5.306e+03	14.48	1.00	0.989
13C4_PFOA	9.785e+05	9.69	1.00	1.071
13C4_PFOS	4.913e+05	11.76	1.00	0.998

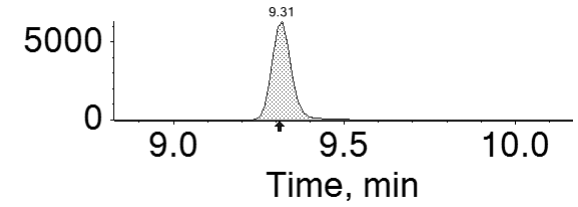
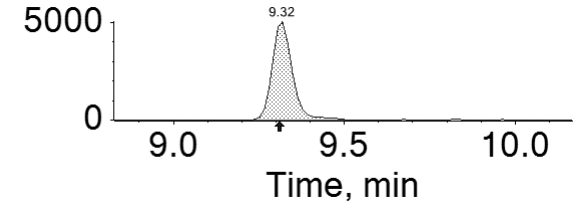
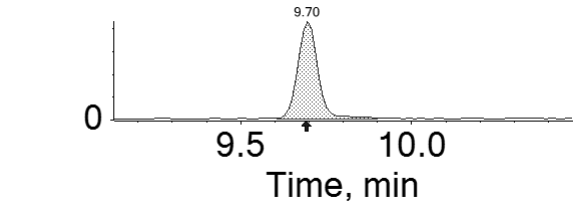
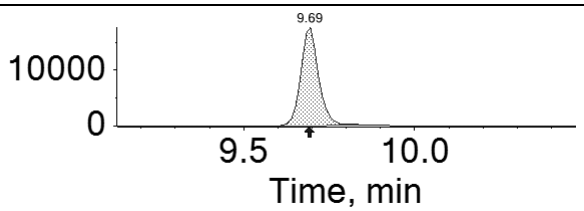
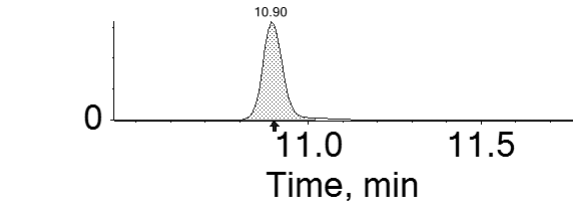
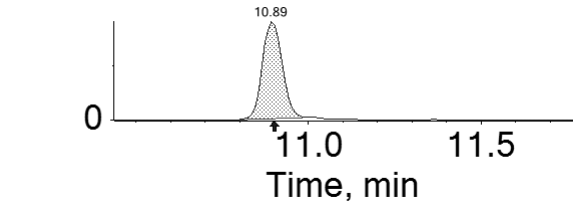
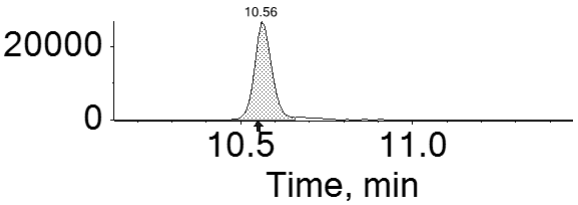
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.57(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.39(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.95(9.92) min Concentration: 1.00 Sample Type: (Standard)	

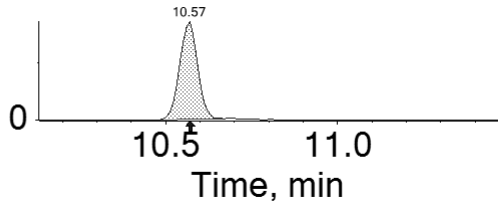
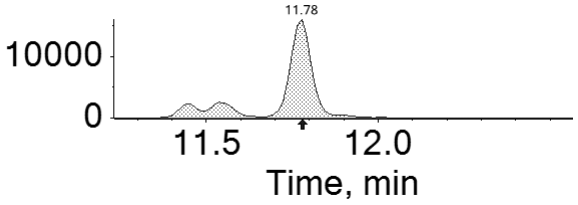
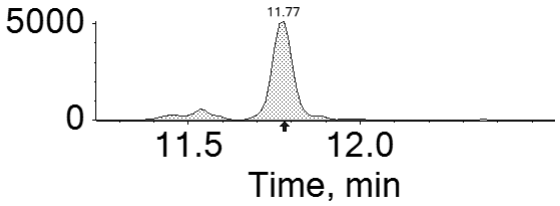
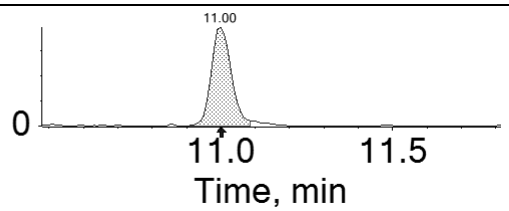
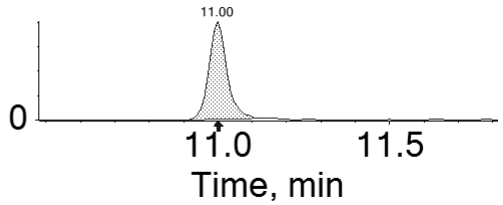
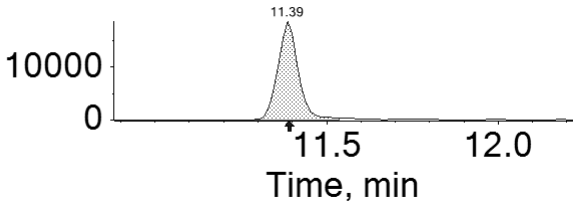
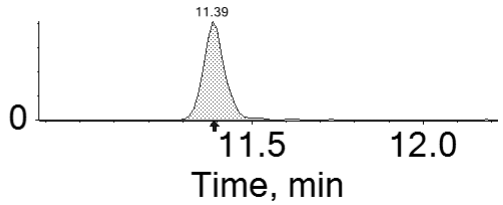
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Standard)	

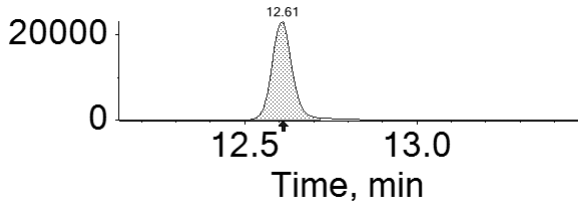
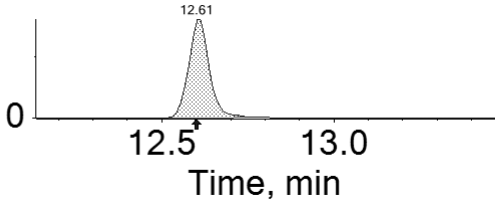
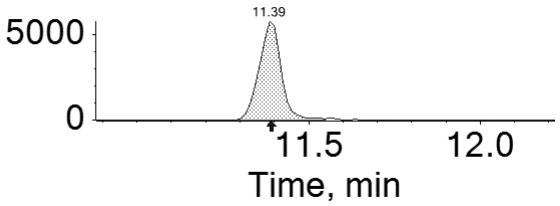
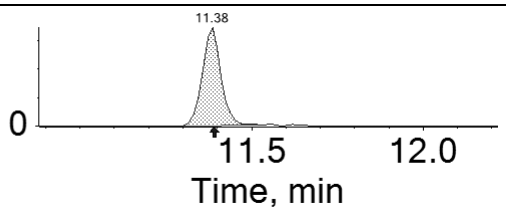
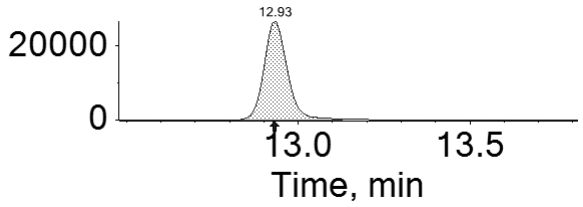
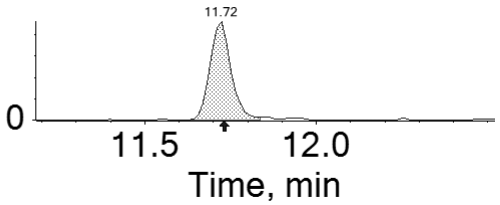
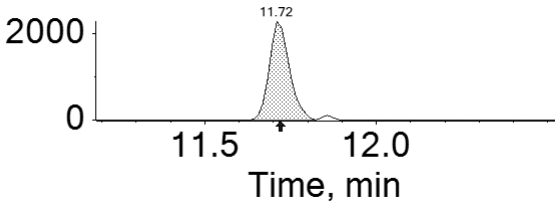
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.93(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.18(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.96(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.48(14.47) min Concentration: 1.00 Sample Type: (Standard)	

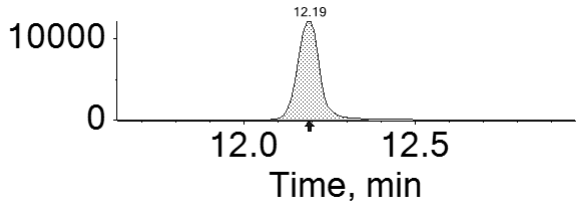
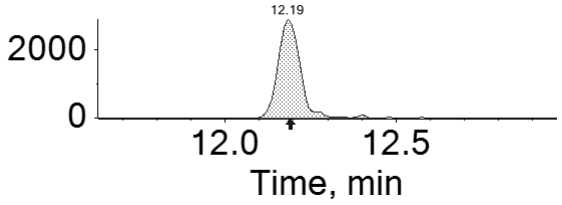
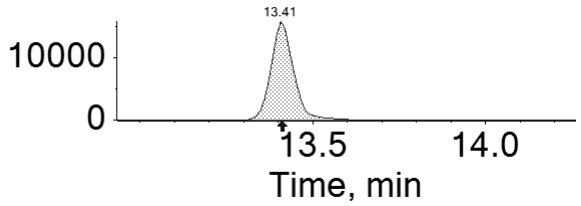
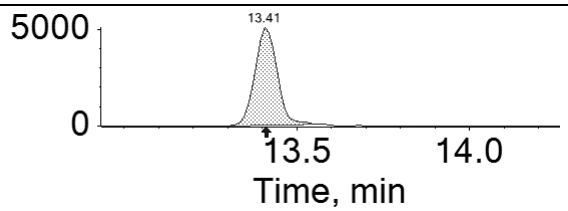
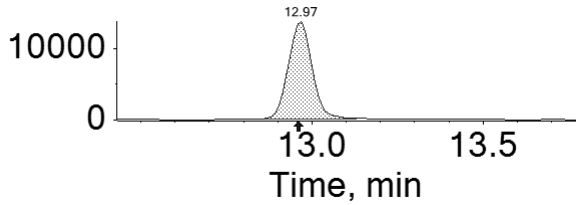
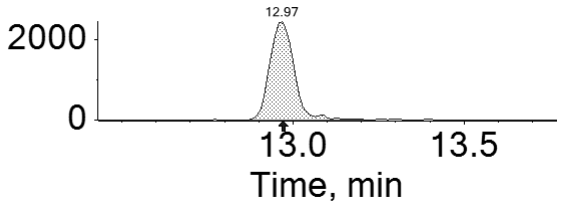
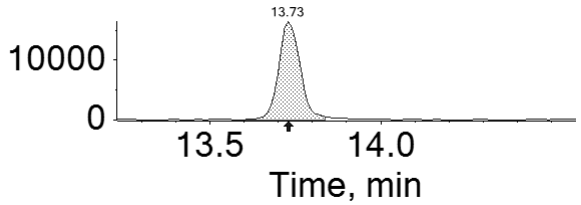
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.76) min Calculated conc: 0.986 Area Ratio: 2.113e-1 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.57 (5.54) min Calculated conc: 0.986 Area Ratio: 2.038e-1 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 0.995 Area Ratio: 2.133e-1 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 0.952 Area Ratio: 7.248e-2 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.08 (7.04) min Calculated conc: 1.026 Area Ratio: 1.988e-1 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 0.999 Area Ratio: 1.334e-1 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 0.897 Area Ratio: 1.645e-1 Sample Type: (Standard)	

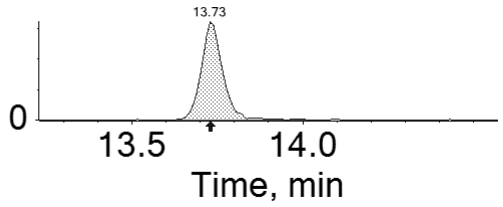
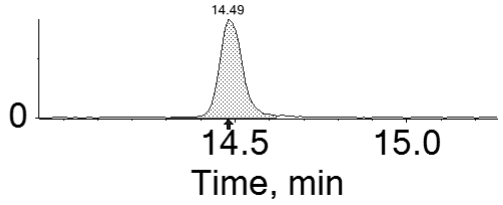
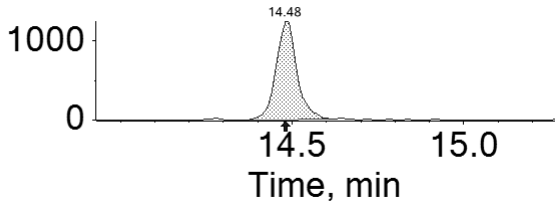
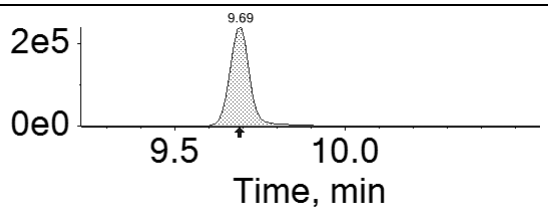
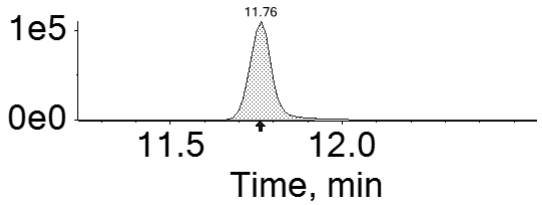
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 0.871 Area Ratio: 1.328e-2 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.81) min Calculated conc: 1.008 Area Ratio: 1.144e-1 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 1.001 Area Ratio: 4.320e-2 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 0.991 Area Ratio: 1.568e-1 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 0.963 Area Ratio: 5.135e-2 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 1.024 Area Ratio: 2.284e-1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.95 (10.01) min Calculated conc: 0.916 Area Ratio: 8.190e-2 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 0.956 Area Ratio: 2.498e-1 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 1.009 Area Ratio: 2.004e-1 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.973 Area Ratio: 2.479e-1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 0.947 Area Ratio: 9.102e-2 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 1.059 Area Ratio: 2.193e-1 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 1.013 Area Ratio: 6.078e-2 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 1.021 Area Ratio: 1.594e-1 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 0.974 Area Ratio: 5.254e-2 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 0.935 Area Ratio: 2.066e-1 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 0.923 Area Ratio: 5.850e-2 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 0.904 Area Ratio: 1.817e-1 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 0.919 Area Ratio: 1.651e-1 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 1.021 Area Ratio: 2.312e-1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.909 Area Ratio: 5.289e-2 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.61 (12.61) min Calculated conc: 0.966 Area Ratio: 2.340e-1 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.61 (12.60) min Calculated conc: 1.026 Area Ratio: 8.168e-2 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 1.013 Area Ratio: 3.252e-1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.977 Area Ratio: 1.642e-1 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: 1.006 Area Ratio: 1.380e-1 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: 1.001 Area Ratio: 2.794e-1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: 0.881 Area Ratio: 1.306e-1 Sample Type: (Standard)	

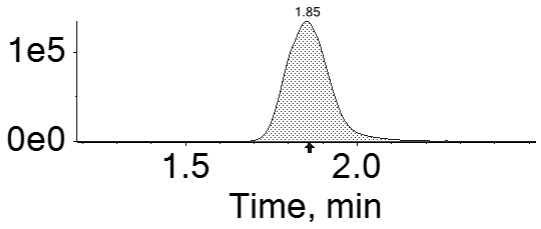
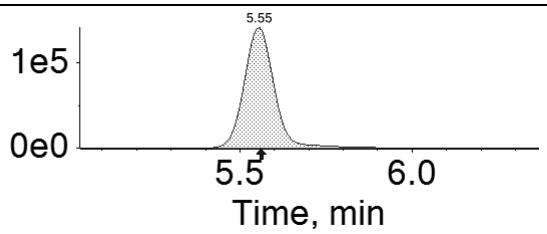
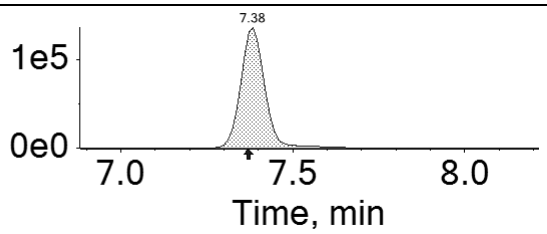
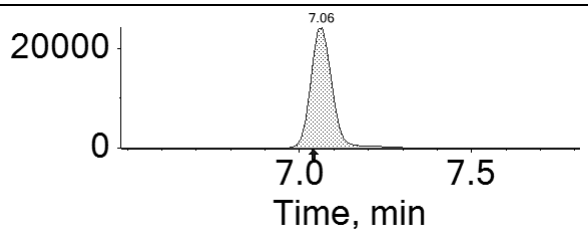
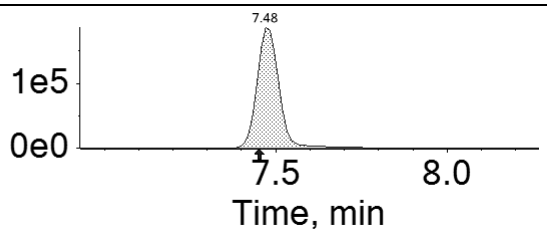
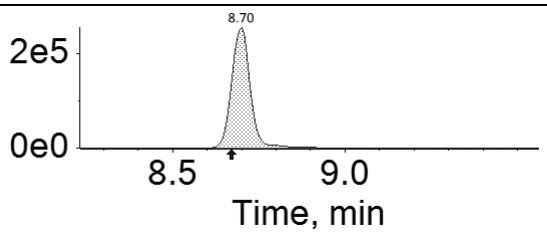
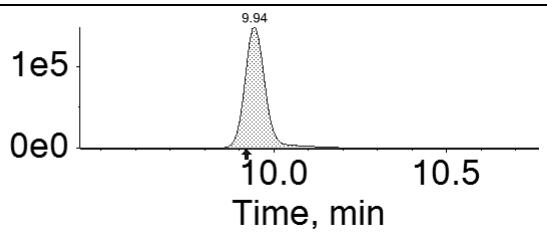
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 0.927 Area Ratio: 1.370e-1 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 0.981 Area Ratio: 3.214e-2 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 1.040 Area Ratio: 1.362e-1 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 0.964 Area Ratio: 4.306e-2 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.97 (12.96) min Calculated conc: 0.966 Area Ratio: 1.275e-1 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.97 (12.97) min Calculated conc: 1.024 Area Ratio: 2.311e-2 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.73 (13.73) min Calculated conc: 0.948 Area Ratio: 1.365e-1 Sample Type: (Standard)	

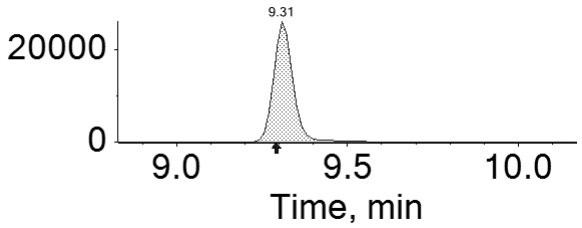
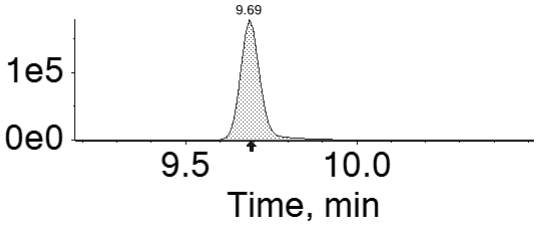
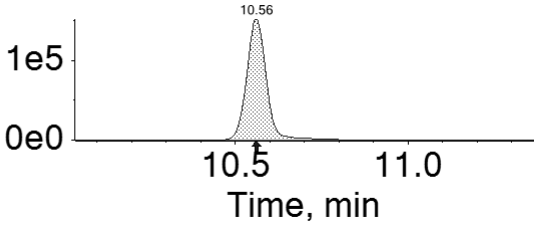
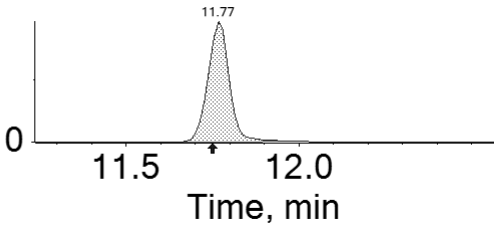
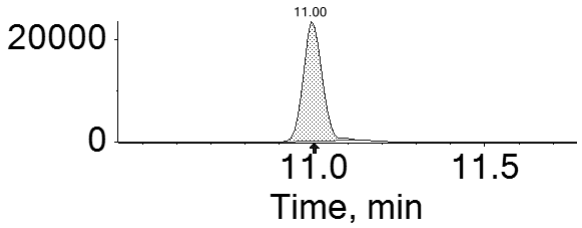
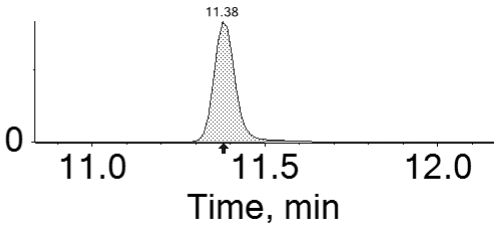
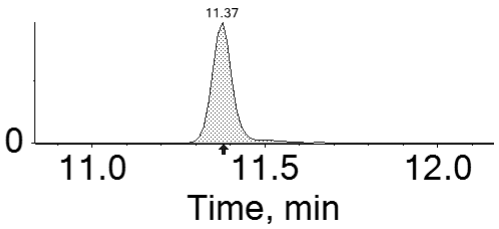
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.73 (13.73) min Calculated conc: 1.003 Area Ratio: 2.675e-2 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 0.985 Area Ratio: 1.621e-1 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 0.989 Area Ratio: 2.231e-2 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.071 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.76 (11.76) min Calculated conc: 0.998 Area Ratio: N/A Sample Type: (Standard)	

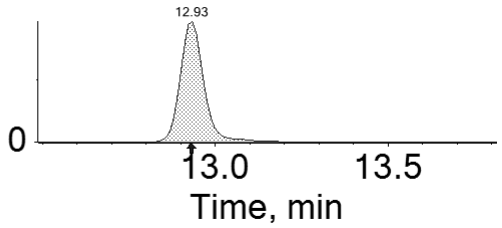
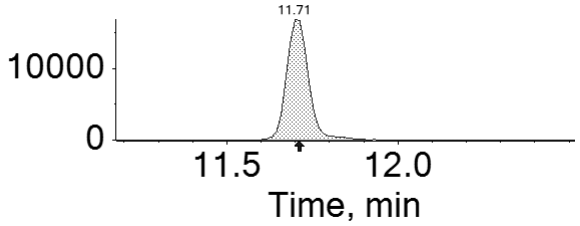
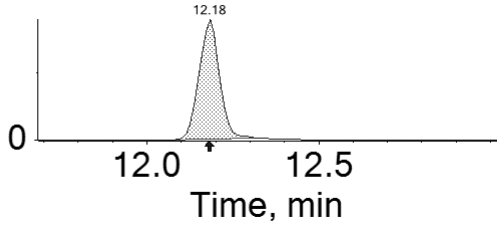
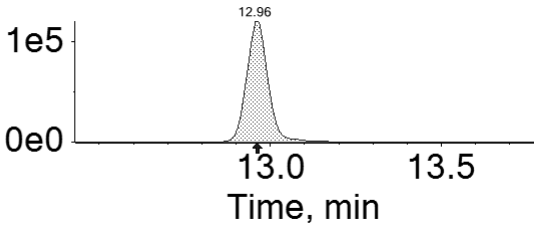
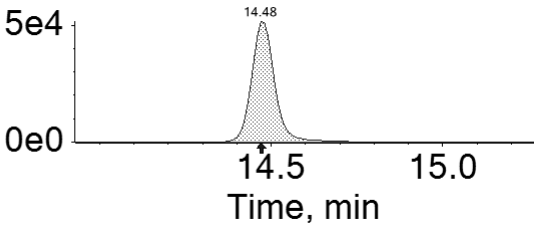
Sample Name	CAL-19206-006-03	**Injection Vial**	4
Sample ID	CAL-19206-006-03	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T17:18:08	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

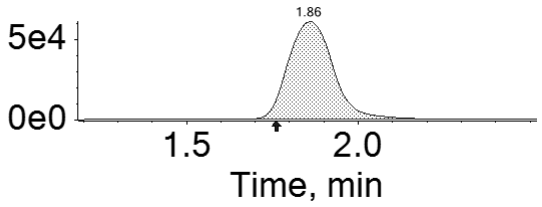
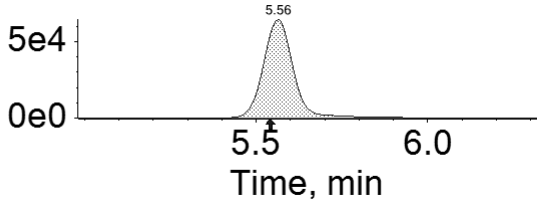
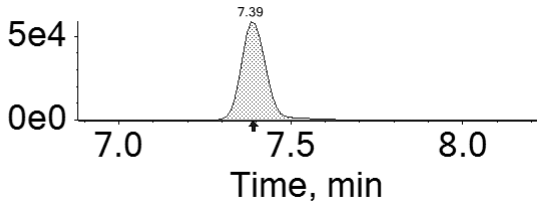
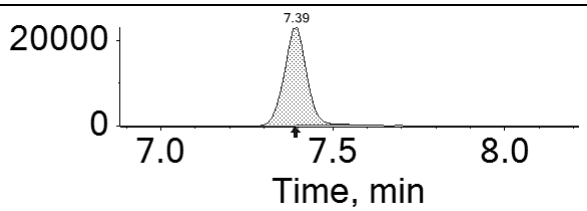
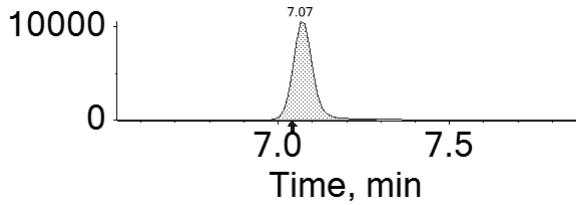
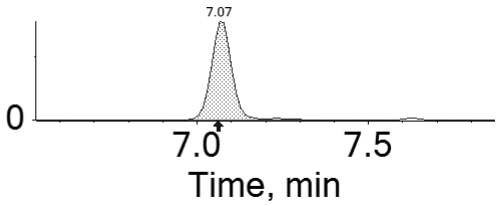
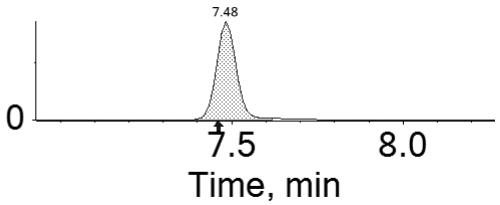
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.195e6	1.85	1.00	-
13C5_PFPeA	8.529e5	5.55	1.00	-
13C3_PFBS	6.533e5	7.38	1.00	-
13C2_4:2FTS	1.037e5	7.06	1.00	-
13C5_PFHxA	8.189e5	7.48	1.00	-
13C4_PFHpA	9.594e5	8.70	1.00	-
13C3_PFHxS	6.067e5	9.94	1.00	-
13C2_6:2FTS	1.027e5	9.31	1.00	-
13C8_PFOA	7.165e5	9.69	1.00	-
13C9_PFNA	6.046e5	10.56	1.00	-
13C8_PFOS	4.116e5	11.77	1.00	-
13C2_8:2FTS	8.891e4	11.00	1.00	-
13C6_PFDA	3.575e5	11.38	1.00	-
d3-MeFOSAA	8.106e4	11.37	1.00	-
13C8_FOSA	9.245e5	12.93	1.00	-
d5-EtFOSAA	7.501e4	11.71	1.00	-
13C7_PFUdA	3.669e5	12.18	1.00	-
13C2_PFDoA	5.199e5	12.96	1.00	-
13C2_PFTeDA	2.416e5	14.48	1.00	-

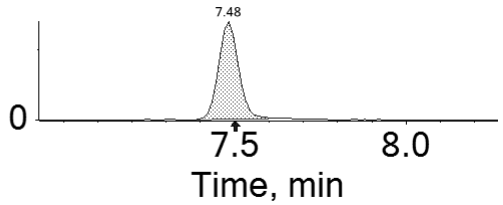
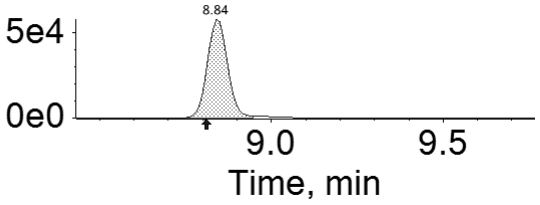
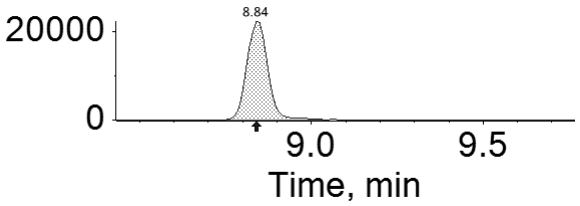
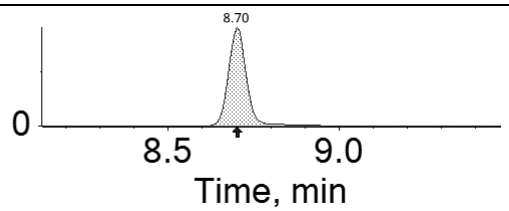
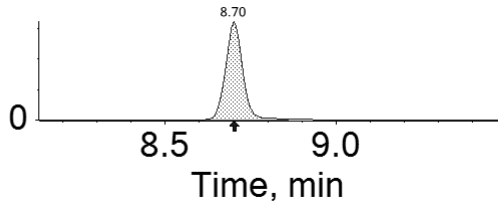
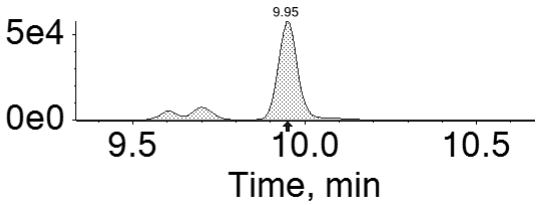
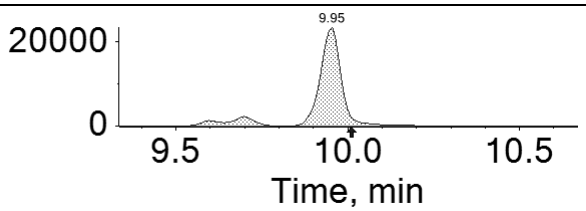
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	5.518e+05	1.86	2.00	2.156
PFPeA	3.864e+05	5.56	2.00	2.193
PFBS	2.964e+05	7.39	2.00	2.116
PFBS_2	1.038e+05	7.39	2.00	2.087
4:2FTS	4.352e+04	7.07	2.00	2.167
4:2FTS_2	3.274e+04	7.07	2.00	2.363
PFHxA	3.438e+05	7.48	2.00	2.289
PFHxA_2	2.798e+04	7.48	2.00	2.239
PFPeS	2.381e+05	8.84	2.00	2.188
PFPeS_2	9.430e+04	8.84	2.00	2.277
PFHpA	3.360e+05	8.70	2.00	2.214
PFHpA_2	1.116e+05	8.70	2.00	2.181
PFHxS	2.858e+05	9.95	2.00	2.113
PFHxS_2	1.146e+05	9.95	2.00	2.113
6:2FTS	5.608e+04	9.31	2.00	2.089
6:2FTS_2	4.325e+04	9.31	2.00	2.119
PFOA	3.821e+05	9.69	2.00	2.093
PFOA_2	1.304e+05	9.69	2.00	1.894
PFHpS	2.808e+05	10.90	2.00	2.242
PFHpS_2	7.754e+04	10.90	2.00	2.137
PFNA	1.934e+05	10.57	2.00	2.048
PFNA_2	7.283e+04	10.57	2.00	2.232
PFOS	2.043e+05	11.78	2.00	2.246
PFOS_2	5.388e+04	11.78	2.00	2.066
8:2FTS	3.835e+04	11.00	2.00	2.147
8:2FTS_2	3.523e+04	11.00	2.00	2.206
PFDA	1.618e+05	11.39	2.00	1.998
PFDA_2	4.037e+04	11.39	2.00	1.940
PFNS	2.094e+05	12.61	2.00	2.356
PFNS_2	6.487e+04	12.60	2.00	2.220
N-MeFOSAA	5.451e+04	11.39	2.00	2.094
N-MeFOSAA_2	2.869e+04	11.39	2.00	2.106
FOSA	2.714e+05	12.93	2.00	2.141
N-EtFOSAA	4.149e+04	11.73	2.00	1.982
N-EtFOSAA_2	2.071e+04	11.72	2.00	1.863
PFUdA	1.215e+05	12.19	2.00	2.242
PFUdA_2	2.672e+04	12.19	2.00	2.224
PFDS	1.472e+05	13.41	2.00	2.162
PFDS_2	5.246e+04	13.41	2.00	2.260
PFDoA	1.443e+05	12.96	2.00	2.104
PFDoA_2	2.453e+04	12.97	2.00	2.089
PFTrDA	1.593e+05	13.73	2.00	2.127
PFTrDA_2	2.911e+04	13.73	2.00	2.100
PFTeDA	8.292e+04	14.48	2.00	2.085
PFTeDA_2	1.155e+04	14.48	2.00	2.118
13C4_PFOA	9.542e+05	9.69	1.00	1.044
13C4_PFOS	5.219e+05	11.76	1.00	1.060

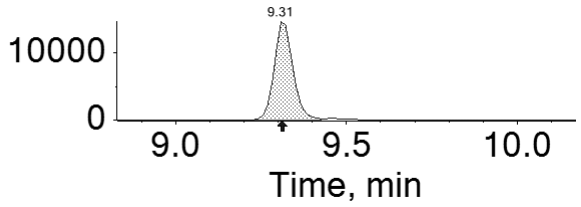
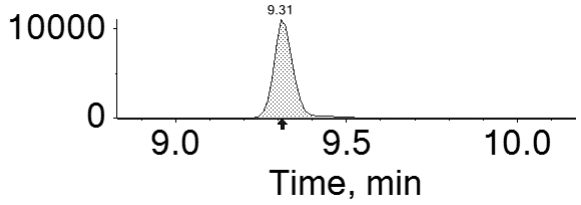
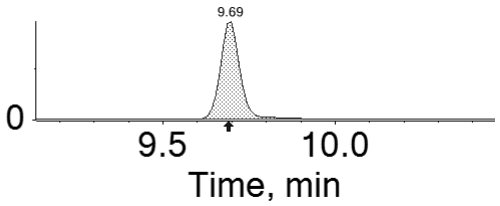
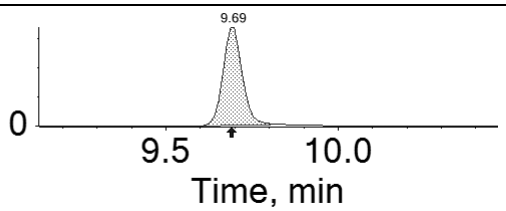
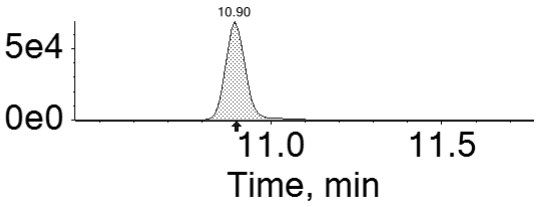
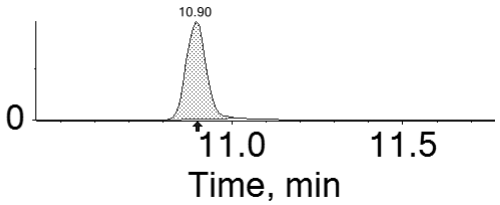
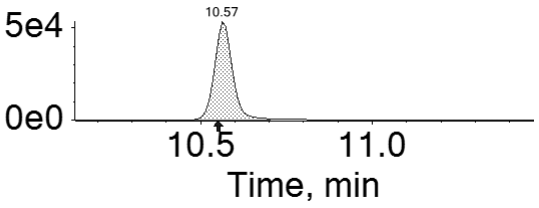
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.85(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

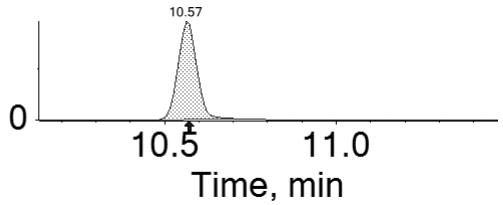
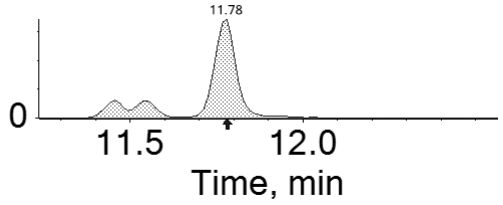
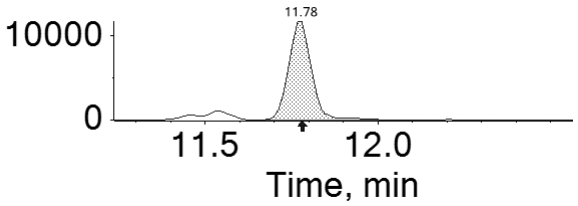
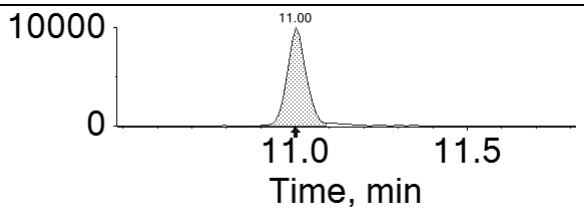
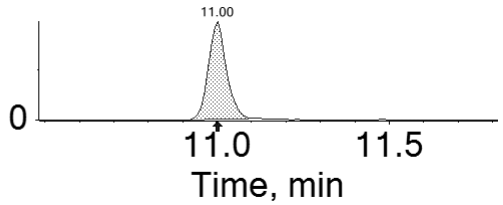
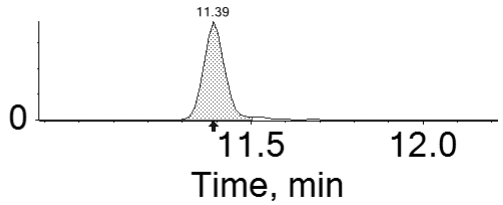
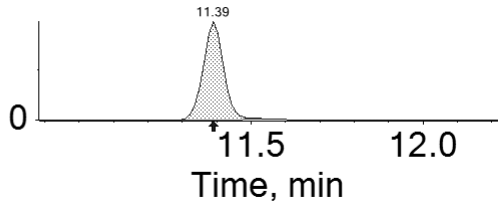
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Standard)	

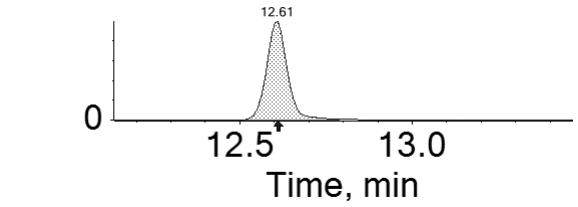
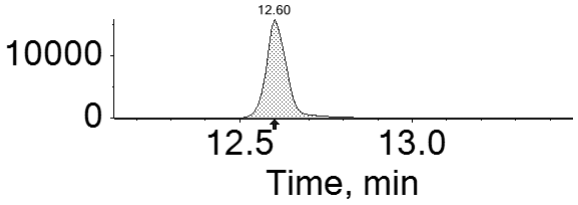
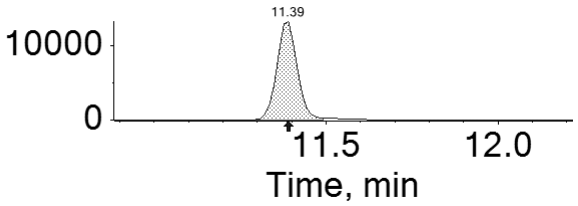
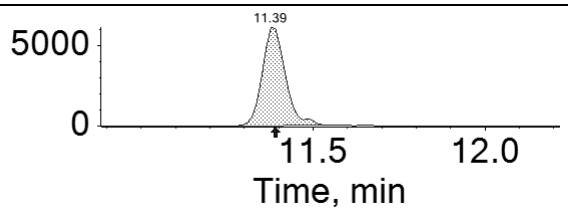
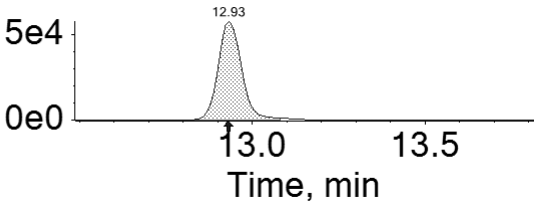
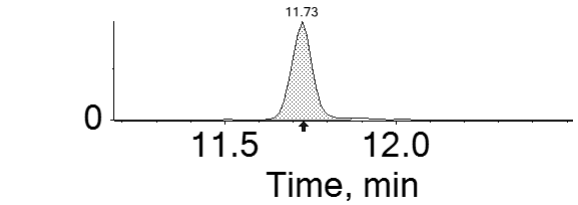
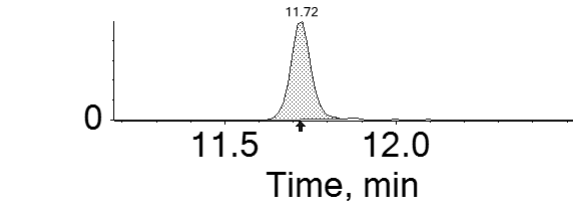
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.93(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.18(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.96(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.48(14.47) min Concentration: 1.00 Sample Type: (Standard)	

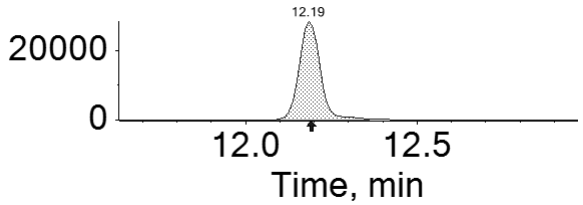
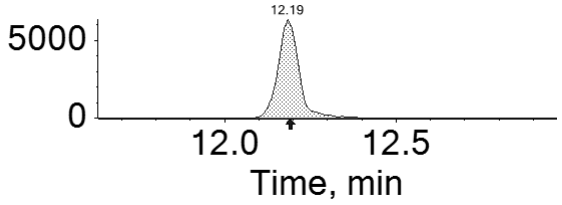
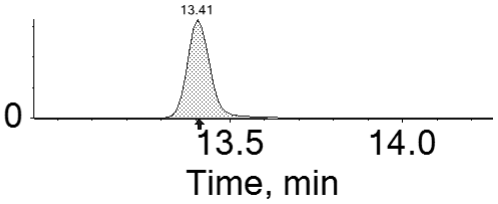
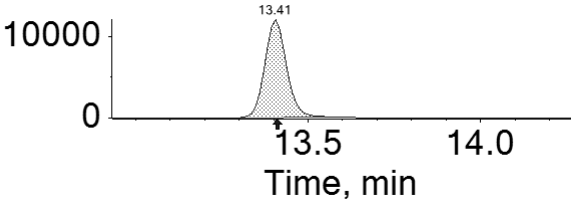
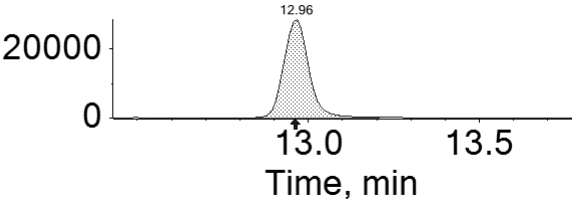
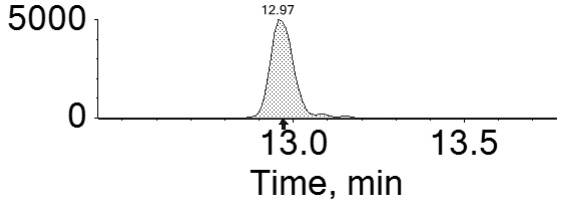
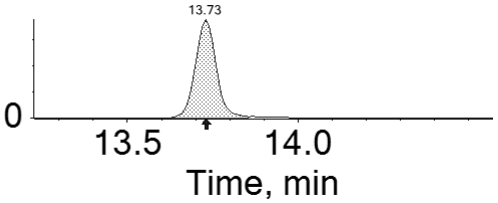
PFBA (213.0 / 169.0) RT (Exp. RT): 1.86 (1.76) min Calculated conc: 2.156 Area Ratio: 4.619e-1 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.54) min Calculated conc: 2.193 Area Ratio: 4.531e-1 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 2.116 Area Ratio: 4.536e-1 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 2.087 Area Ratio: 1.589e-1 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.07 (7.04) min Calculated conc: 2.167 Area Ratio: 4.196e-1 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 2.363 Area Ratio: 3.157e-1 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 2.289 Area Ratio: 4.199e-1 Sample Type: (Standard)	

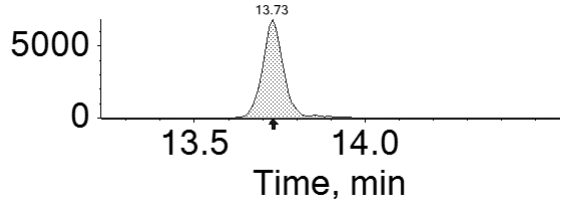
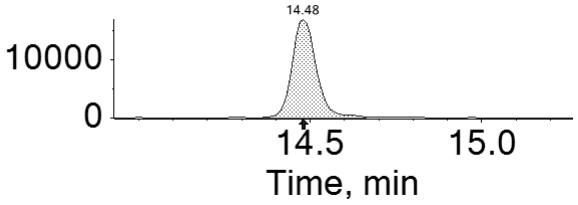
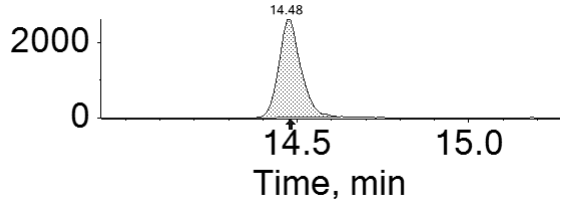
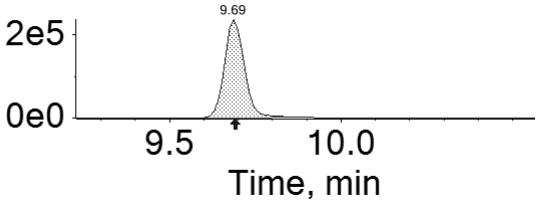
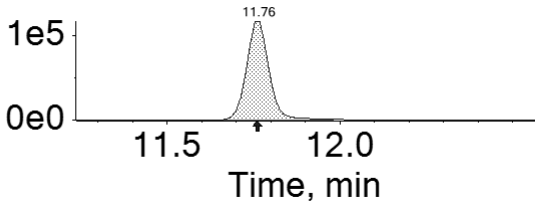
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 2.239 Area Ratio: 3.416e-2 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.81) min Calculated conc: 2.188 Area Ratio: 2.482e-1 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 2.277 Area Ratio: 9.829e-2 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 2.214 Area Ratio: 3.502e-1 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 2.181 Area Ratio: 1.163e-1 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 2.113 Area Ratio: 4.711e-1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.95 (10.01) min Calculated conc: 2.113 Area Ratio: 1.889e-1 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 2.089 Area Ratio: 5.459e-1 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 2.119 Area Ratio: 4.210e-1 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 2.093 Area Ratio: 5.333e-1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.894 Area Ratio: 1.820e-1 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 2.242 Area Ratio: 4.645e-1 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 2.137 Area Ratio: 1.283e-1 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 2.048 Area Ratio: 3.199e-1 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 2.232 Area Ratio: 1.205e-1 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 2.246 Area Ratio: 4.964e-1 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 2.066 Area Ratio: 1.309e-1 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 2.147 Area Ratio: 4.314e-1 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 2.206 Area Ratio: 3.963e-1 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 1.998 Area Ratio: 4.525e-1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 1.940 Area Ratio: 1.129e-1 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.61 (12.61) min Calculated conc: 2.356 Area Ratio: 5.708e-1 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.60 (12.60) min Calculated conc: 2.220 Area Ratio: 1.768e-1 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 2.094 Area Ratio: 6.724e-1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 2.106 Area Ratio: 3.539e-1 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: 2.141 Area Ratio: 2.936e-1 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.73 (11.73) min Calculated conc: 1.982 Area Ratio: 5.532e-1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: 1.863 Area Ratio: 2.761e-1 Sample Type: (Standard)	

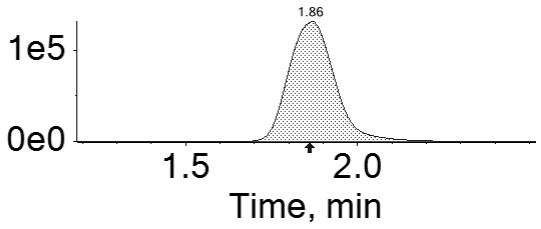
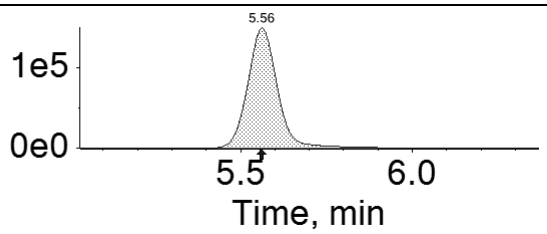
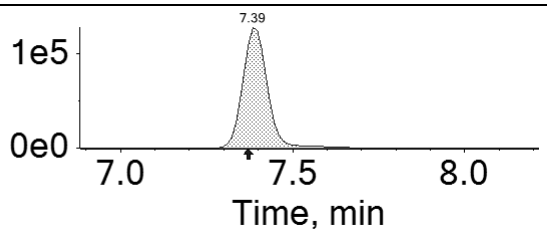
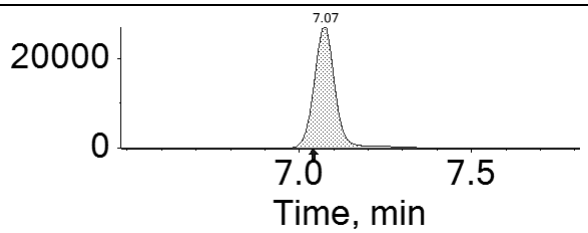
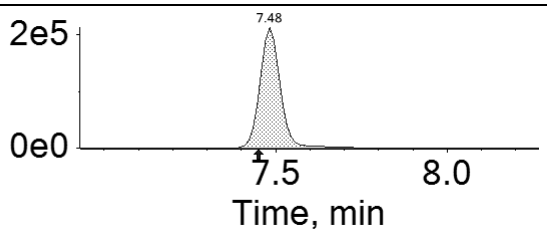
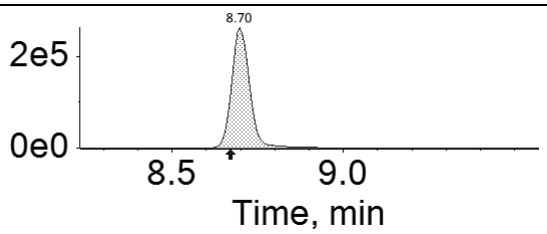
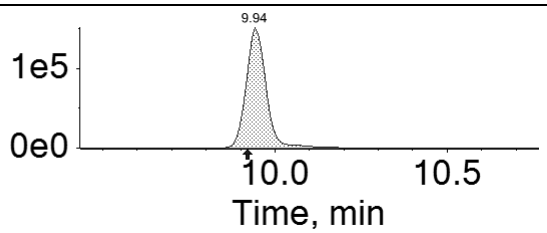
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 2.242 Area Ratio: 3.313e-1 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 2.224 Area Ratio: 7.283e-2 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 2.162 Area Ratio: 2.832e-1 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 2.260 Area Ratio: 1.009e-1 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.96 (12.96) min Calculated conc: 2.104 Area Ratio: 2.776e-1 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.97 (12.97) min Calculated conc: 2.089 Area Ratio: 4.718e-2 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.73 (13.73) min Calculated conc: 2.127 Area Ratio: 3.064e-1 Sample Type: (Standard)	

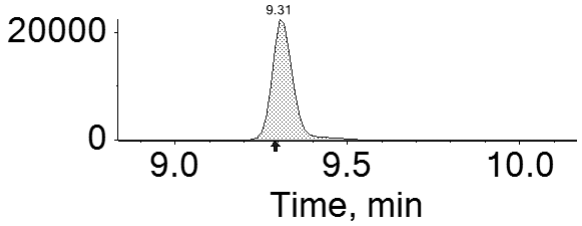
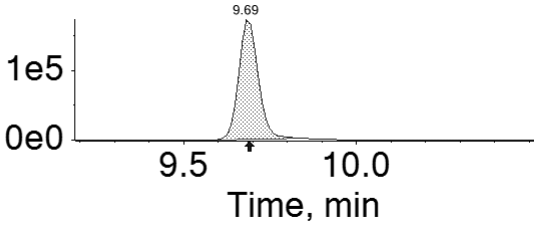
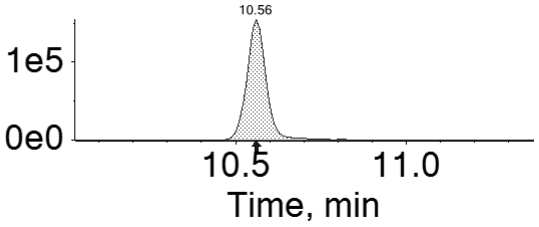
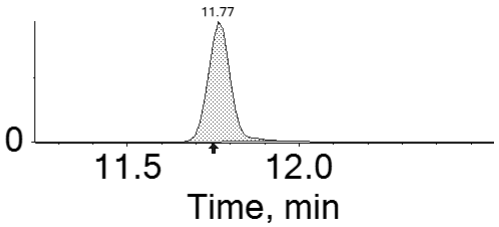
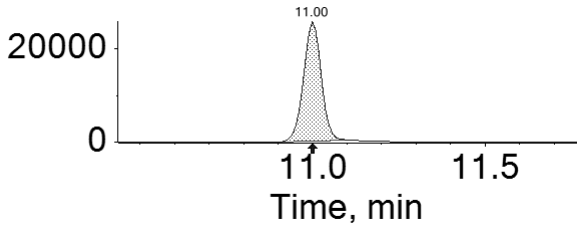
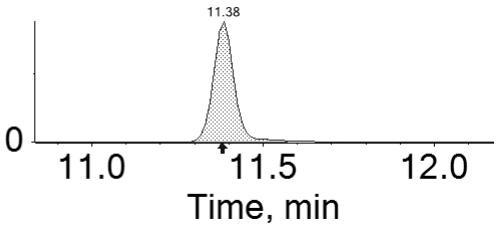
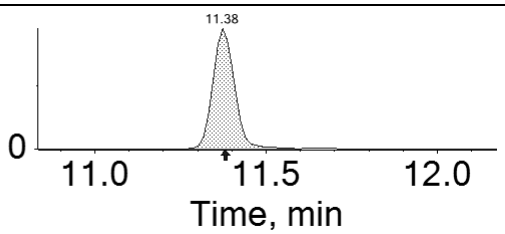
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.73 (13.73) min Calculated conc: 2.100 Area Ratio: 5.600e-2 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 2.085 Area Ratio: 3.432e-1 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 2.118 Area Ratio: 4.779e-2 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.044 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.76 (11.76) min Calculated conc: 1.060 Area Ratio: N/A Sample Type: (Standard)	

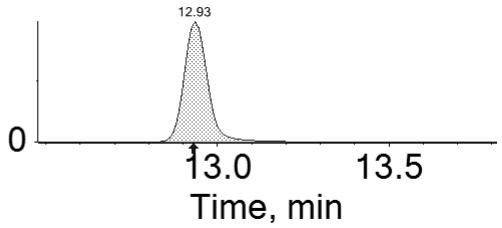
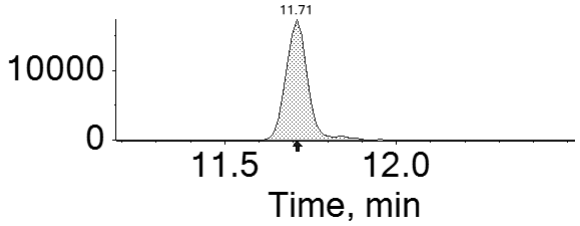
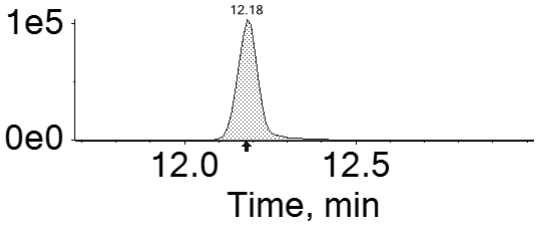
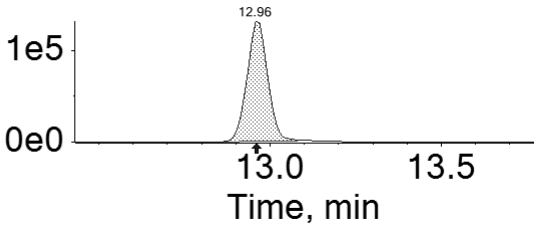
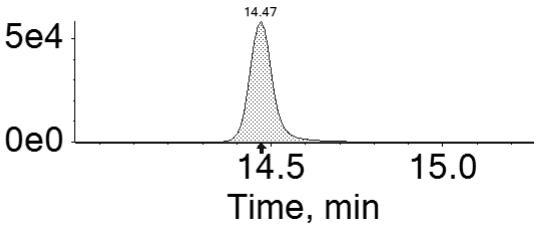
Sample Name	CAL-19206-006-04	**Injection Vial**	5
Sample ID	CAL-19206-006-04	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T17:44:48	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

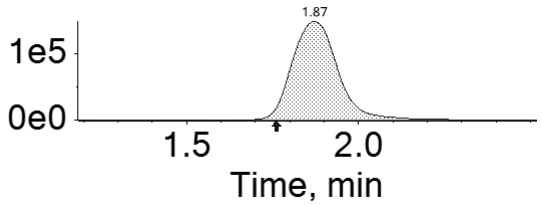
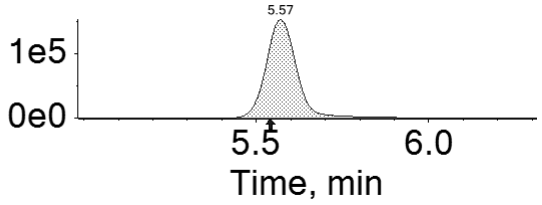
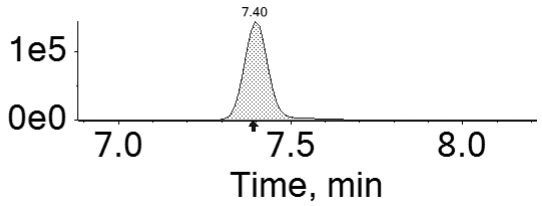
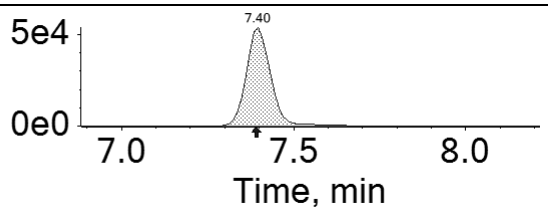
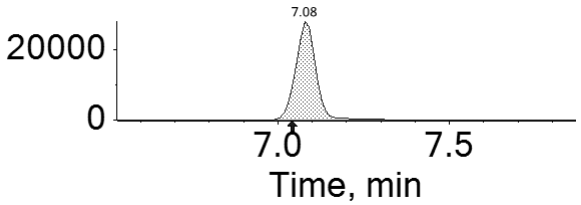
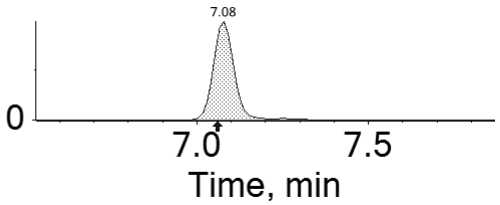
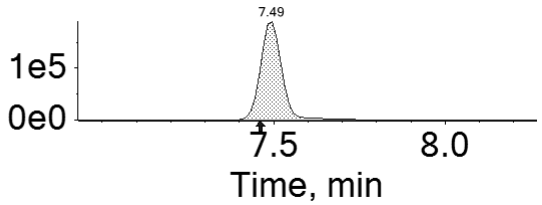
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.216e6	1.86	1.00	-
13C5_PFPeA	8.842e5	5.56	1.00	-
13C3_PFBS	6.347e5	7.39	1.00	-
13C2_4:2FTS	1.139e5	7.07	1.00	-
13C5_PFHxA	8.837e5	7.48	1.00	-
13C4_PFHpA	9.653e5	8.70	1.00	-
13C3_PFHxS	6.098e5	9.94	1.00	-
13C2_6:2FTS	9.339e4	9.31	1.00	-
13C8_PFOA	6.739e5	9.69	1.00	-
13C9_PFNA	6.149e5	10.56	1.00	-
13C8_PFOS	4.174e5	11.77	1.00	-
13C2_8:2FTS	9.164e4	11.00	1.00	-
13C6_PFDA	3.699e5	11.38	1.00	-
d3-MeFOSAA	8.370e4	11.38	1.00	-
13C8_FOSA	9.434e5	12.93	1.00	-
d5-EtFOSAA	7.586e4	11.71	1.00	-
13C7_PFUdA	4.407e5	12.18	1.00	-
13C2_PFDoA	5.480e5	12.96	1.00	-
13C2_PFTeDA	2.778e5	14.47	1.00	-

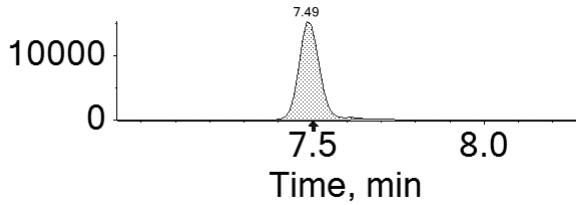
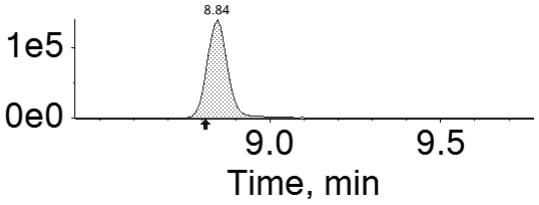
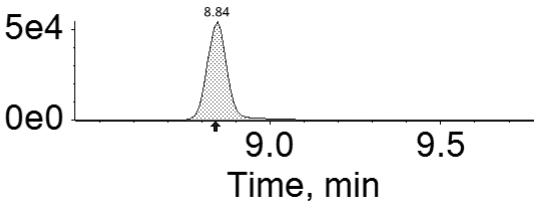
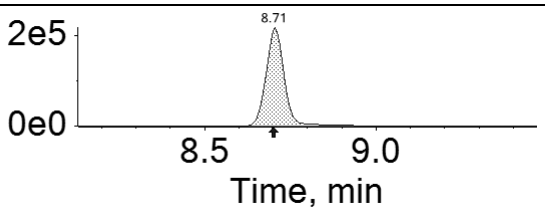
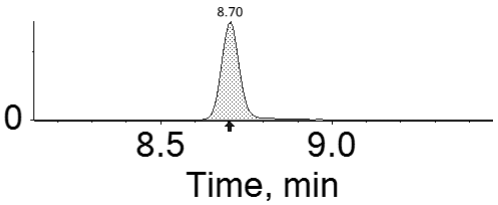
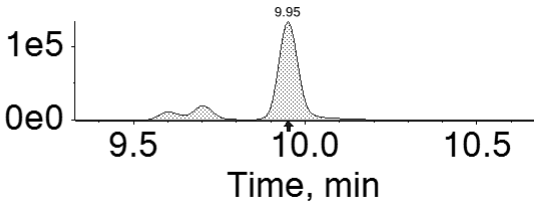
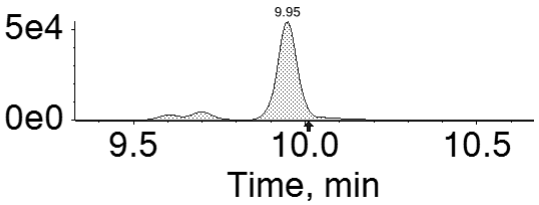
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.347e+06	1.87	5.00	5.169
PFPeA	9.335e+05	5.57	5.00	5.110
PFBS	7.130e+05	7.40	5.00	5.240
PFBS_2	2.616e+05	7.40	5.00	5.415
4:2FTS	1.147e+05	7.08	5.00	5.200
4:2FTS_2	8.152e+04	7.08	5.00	5.358
PFHxA	8.208e+05	7.49	5.00	5.064
PFHxA_2	6.465e+04	7.49	5.00	4.794
PFPeS	5.836e+05	8.84	5.00	5.328
PFPeS_2	2.212e+05	8.84	5.00	5.308
PFHpA	7.953e+05	8.71	5.00	5.209
PFHpA_2	2.652e+05	8.70	5.00	5.151
PFHxS	6.885e+05	9.95	5.00	5.063
PFHxS_2	2.670e+05	9.95	5.00	4.899
6:2FTS	1.472e+05	9.31	5.00	6.032
6:2FTS_2	1.057e+05	9.31	5.00	5.699
PFOA	9.410e+05	9.69	5.00	5.479
PFOA_2	3.512e+05	9.69	5.00	5.424
PFHpS	6.627e+05	10.90	5.00	5.202
PFHpS_2	1.853e+05	10.90	5.00	5.020
PFNA	4.562e+05	10.57	5.00	4.750
PFNA_2	1.652e+05	10.57	5.00	4.979
PFOS	4.824e+05	11.78	5.00	5.230
PFOS_2	1.379e+05	11.78	5.00	5.215
8:2FTS	1.028e+05	11.00	5.00	5.580
8:2FTS_2	8.656e+04	11.00	5.00	5.258
PFDA	4.500e+05	11.39	5.00	5.372
PFDA_2	1.044e+05	11.39	5.00	4.851
PFNS	5.063e+05	12.61	5.00	4.741
PFNS_2	1.735e+05	12.61	5.00	4.942
N-MeFOSAA	1.337e+05	11.39	5.00	4.974
N-MeFOSAA_2	6.604e+04	11.39	5.00	4.695
FOSA	6.673e+05	12.94	5.00	5.158
N-EtFOSAA	9.588e+04	11.72	5.00	4.529
N-EtFOSAA_2	5.657e+04	11.72	5.00	5.033
PFUdA	2.939e+05	12.19	5.00	4.512
PFUdA_2	6.684e+04	12.19	5.00	4.631
PFDS	3.662e+05	13.41	5.00	5.101
PFDS_2	1.291e+05	13.40	5.00	5.276
PFDoA	3.550e+05	12.97	5.00	4.910
PFDoA_2	6.680e+04	12.97	5.00	5.398
PFTrDA	3.914e+05	13.72	5.00	4.959
PFTrDA_2	7.767e+04	13.72	5.00	5.313
PFTeDA	2.454e+05	14.47	5.00	5.366
PFTeDA_2	3.174e+04	14.47	5.00	5.064
13C4_PFOA	9.440e+05	9.69	1.00	1.033
13C4_PFOS	4.968e+05	11.76	1.00	1.009

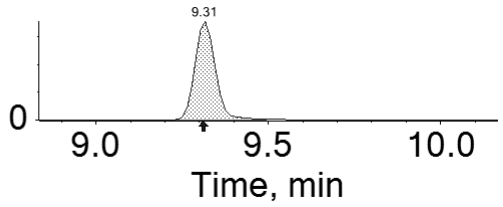
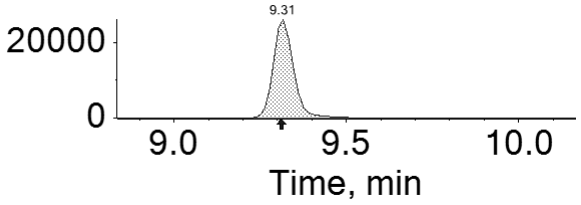
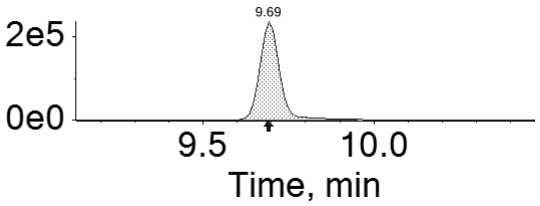
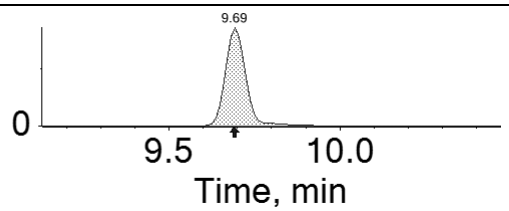
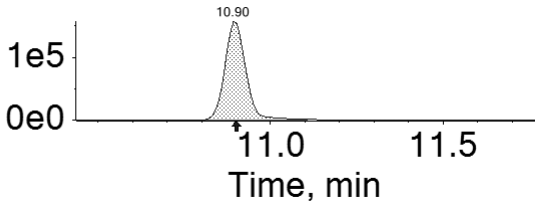
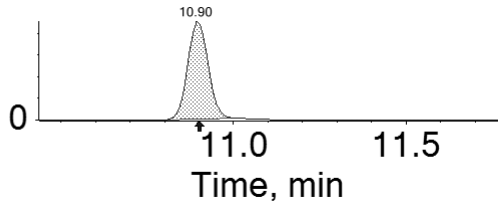
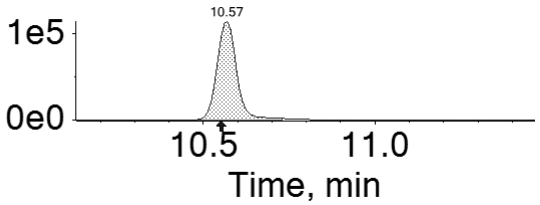
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.56(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.39(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

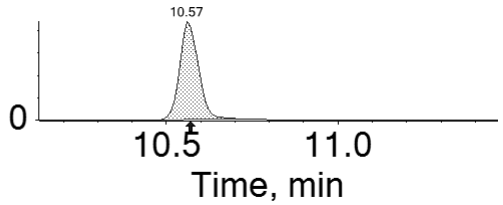
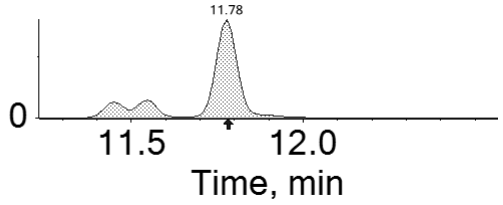
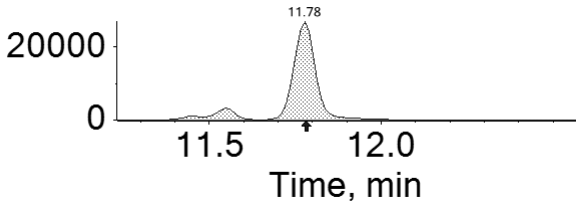
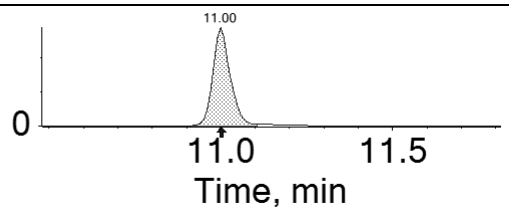
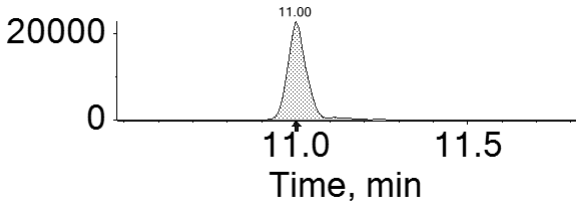
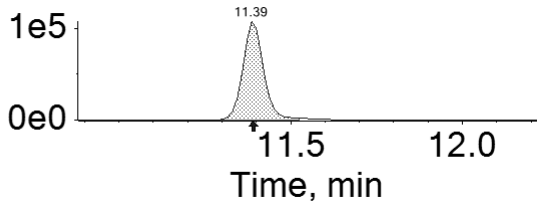
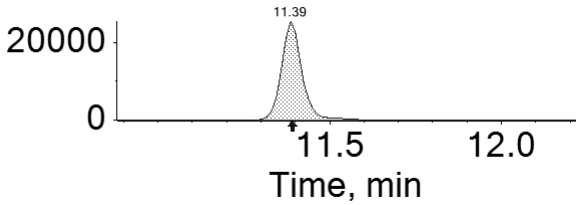
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Standard)	

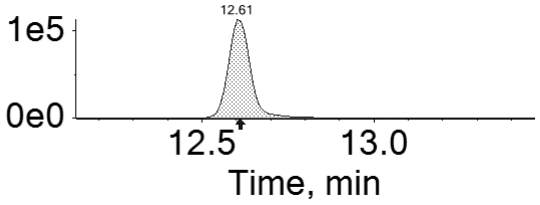
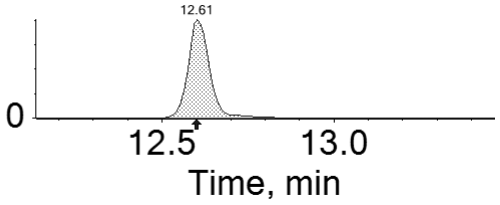
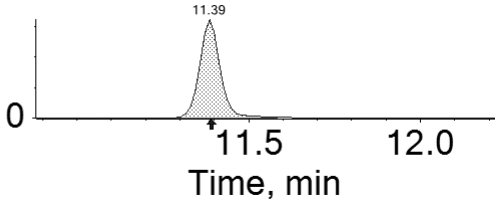
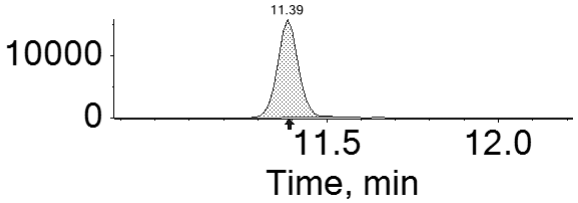
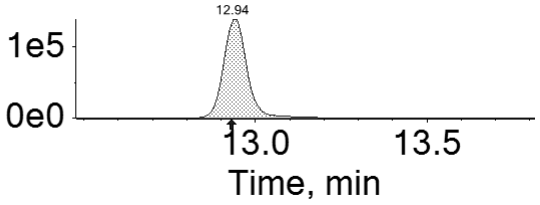
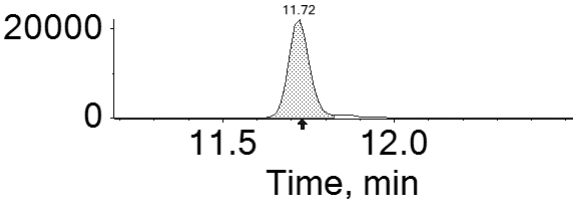
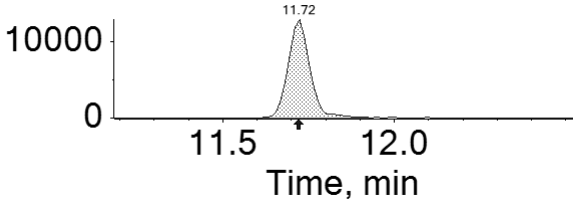
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.93(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.18(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.96(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.47(14.47) min Concentration: 1.00 Sample Type: (Standard)	

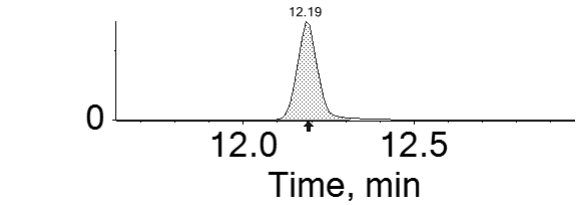
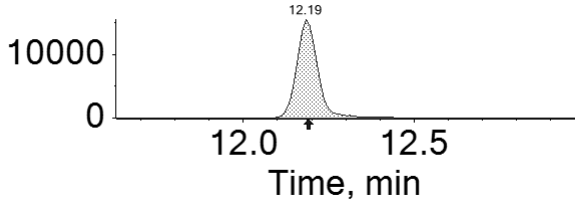
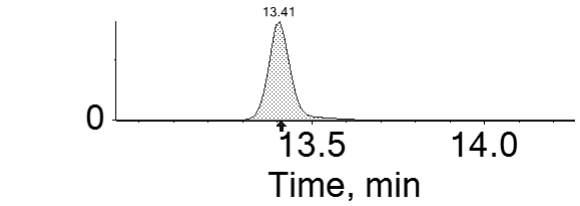
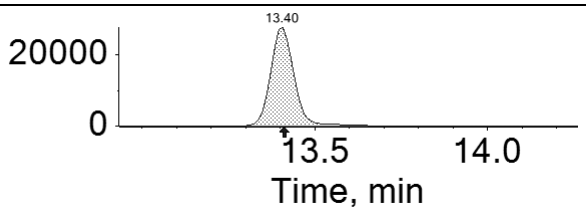
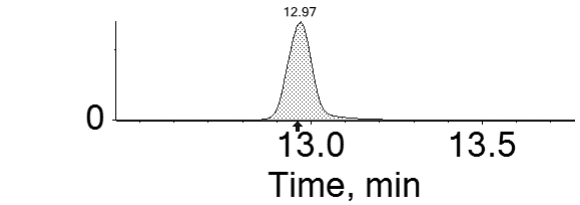
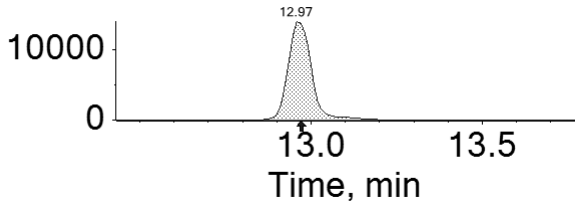
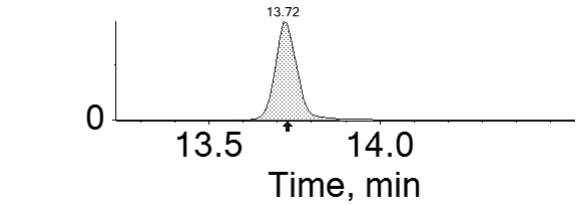
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.76) min Calculated conc: 5.169 Area Ratio: 1.108e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.57 (5.54) min Calculated conc: 5.110 Area Ratio: 1.056e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 5.240 Area Ratio: 1.123e0 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.40 (7.39) min Calculated conc: 5.415 Area Ratio: 4.121e-1 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.08 (7.04) min Calculated conc: 5.200 Area Ratio: 1.007e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.08 (7.06) min Calculated conc: 5.358 Area Ratio: 7.157e-1 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 5.064 Area Ratio: 9.288e-1 Sample Type: (Standard)	

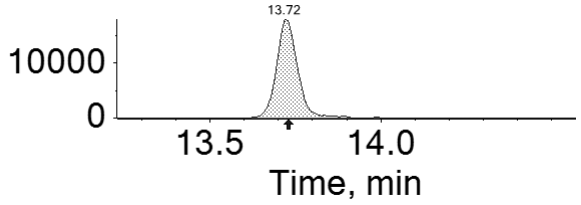
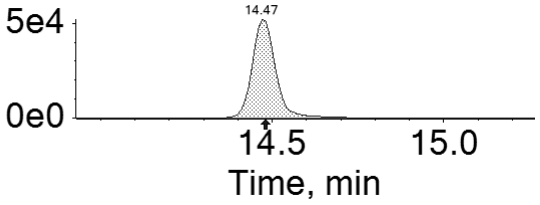
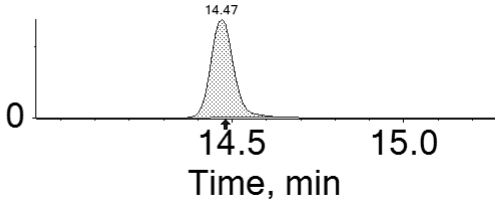
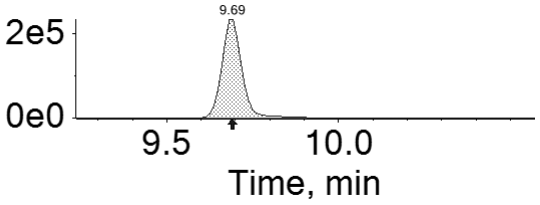
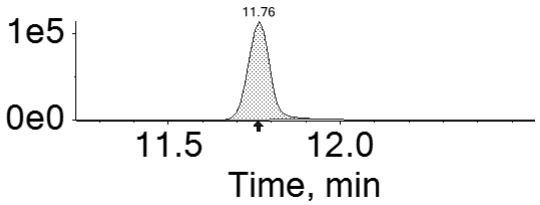
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 4.794 Area Ratio: 7.316e-2 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.81) min Calculated conc: 5.328 Area Ratio: 6.046e-1 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 5.308 Area Ratio: 2.291e-1 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 5.209 Area Ratio: 8.239e-1 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 5.151 Area Ratio: 2.748e-1 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 5.063 Area Ratio: 1.129e0 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.95 (10.01) min Calculated conc: 4.899 Area Ratio: 4.378e-1 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 6.032 Area Ratio: 1.576e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 5.699 Area Ratio: 1.132e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 5.479 Area Ratio: 1.396e0 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 5.424 Area Ratio: 5.211e-1 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 5.202 Area Ratio: 1.078e0 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 5.020 Area Ratio: 3.013e-1 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 4.750 Area Ratio: 7.419e-1 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 4.979 Area Ratio: 2.687e-1 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 5.230 Area Ratio: 1.156e0 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 5.215 Area Ratio: 3.305e-1 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 5.580 Area Ratio: 1.121e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 5.258 Area Ratio: 9.445e-1 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 5.372 Area Ratio: 1.217e0 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 4.851 Area Ratio: 2.823e-1 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.61 (12.61) min Calculated conc: 4.741 Area Ratio: 1.149e0 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.61 (12.60) min Calculated conc: 4.942 Area Ratio: 3.937e-1 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 4.974 Area Ratio: 1.597e0 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 4.695 Area Ratio: 7.890e-1 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.94 (12.93) min Calculated conc: 5.158 Area Ratio: 7.074e-1 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: 4.529 Area Ratio: 1.264e0 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: 5.033 Area Ratio: 7.457e-1 Sample Type: (Standard)	

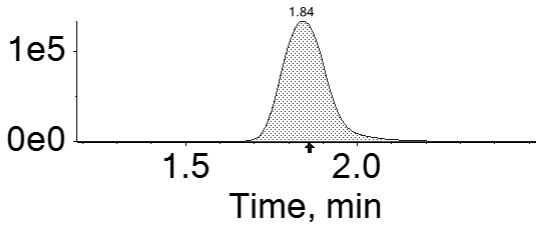
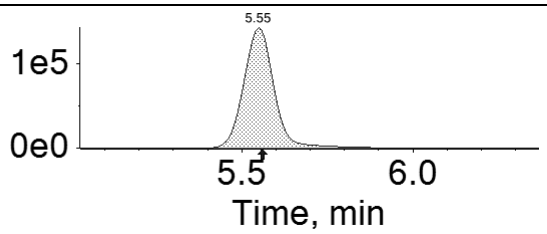
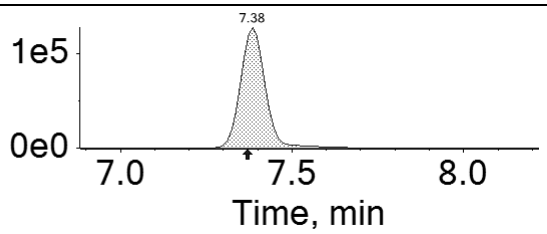
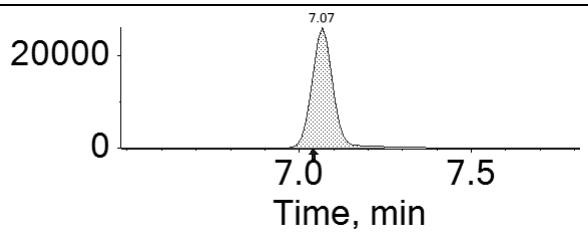
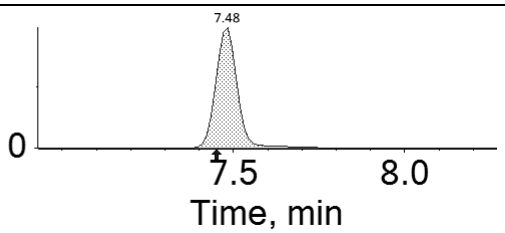
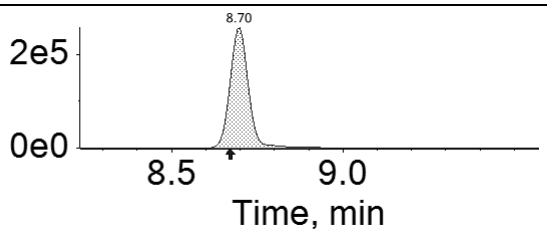
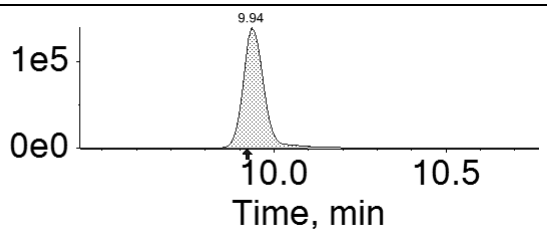
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 4.512 Area Ratio: 6.668e-1 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 4.631 Area Ratio: 1.517e-1 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 5.101 Area Ratio: 6.681e-1 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 5.276 Area Ratio: 2.356e-1 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.97 (12.96) min Calculated conc: 4.910 Area Ratio: 6.477e-1 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.97 (12.97) min Calculated conc: 5.398 Area Ratio: 1.219e-1 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: 4.959 Area Ratio: 7.142e-1 Sample Type: (Standard)	

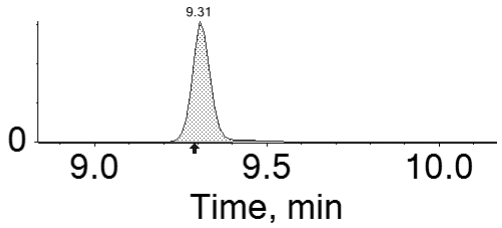
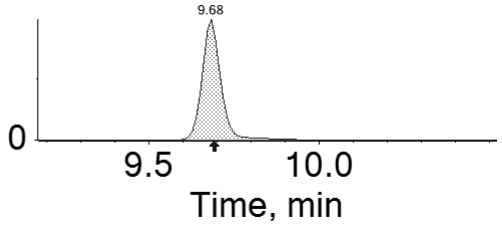
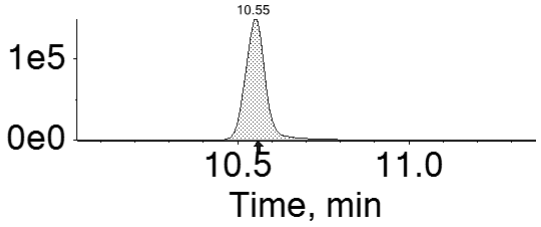
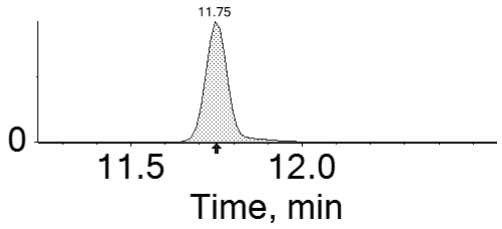
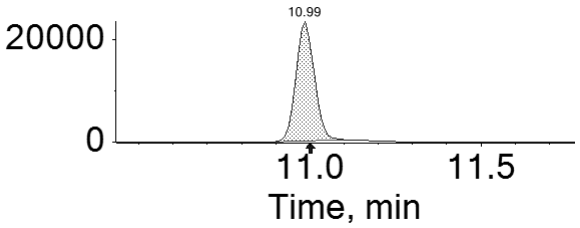
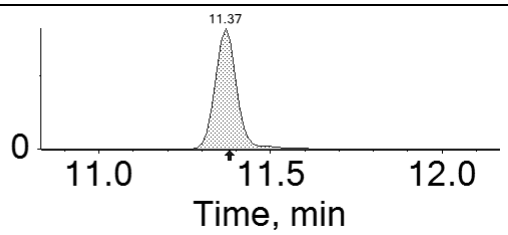
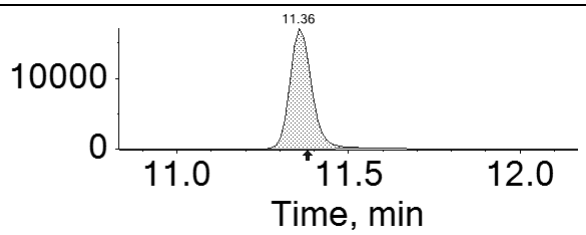
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: 5.313 Area Ratio: 1.417e-1 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.47 (14.48) min Calculated conc: 5.366 Area Ratio: 8.834e-1 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.47 (14.48) min Calculated conc: 5.064 Area Ratio: 1.143e-1 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.033 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.76 (11.76) min Calculated conc: 1.009 Area Ratio: N/A Sample Type: (Standard)	

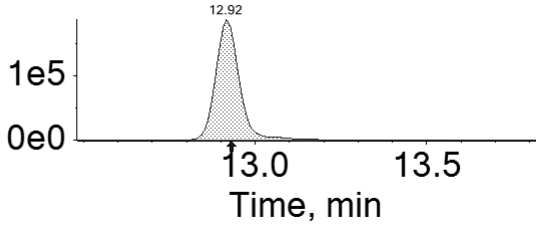
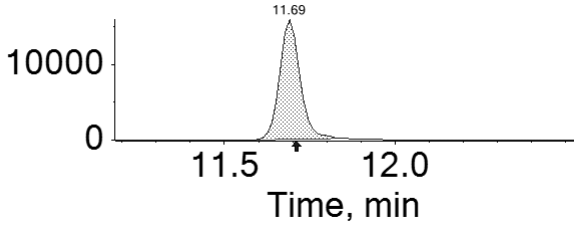
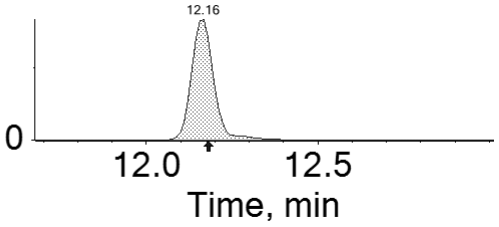
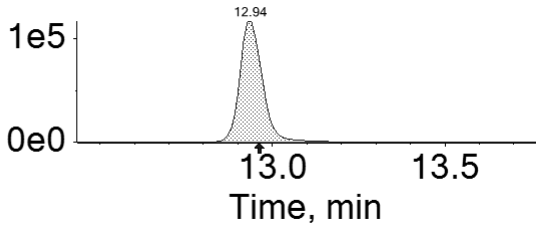
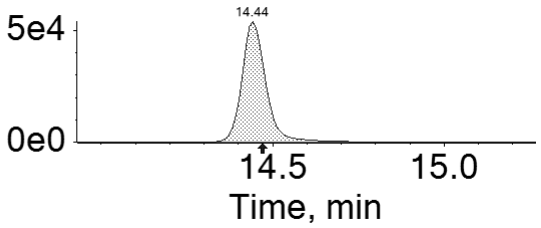
Sample Name	CAL-19206-006-05	**Injection Vial**	6
Sample ID	CAL-19206-006-05	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T18:11:28	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

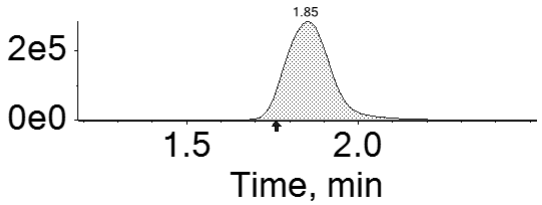
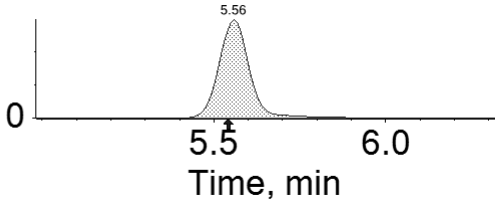
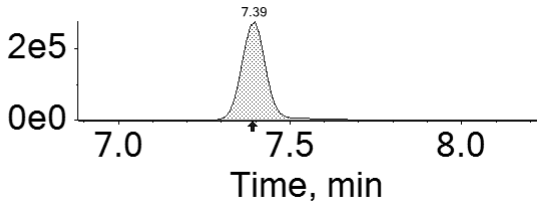
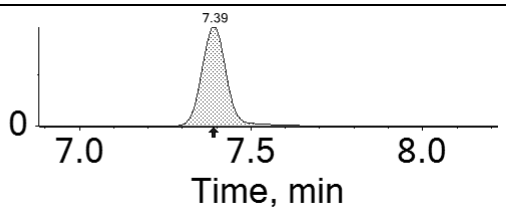
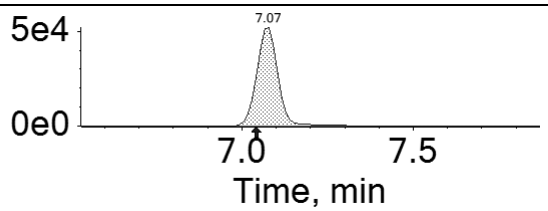
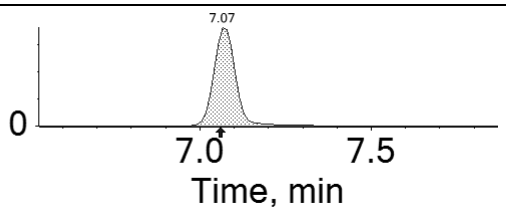
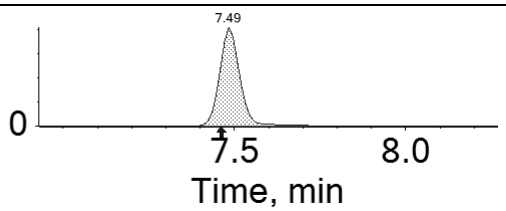
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.218e6	1.84	1.00	-
13C5_PFPeA	8.693e5	5.55	1.00	-
13C3_PFBS	6.341e5	7.38	1.00	-
13C2_4:2FTS	1.092e5	7.07	1.00	-
13C5_PFHxA	8.527e5	7.48	1.00	-
13C4_PFHpA	9.570e5	8.70	1.00	-
13C3_PFHxS	5.755e5	9.94	1.00	-
13C2_6:2FTS	1.146e5	9.31	1.00	-
13C8_PFOA	7.431e5	9.68	1.00	-
13C9_PFNA	6.128e5	10.55	1.00	-
13C8_PFOS	4.189e5	11.75	1.00	-
13C2_8:2FTS	8.667e4	10.99	1.00	-
13C6_PFDA	3.572e5	11.37	1.00	-
d3-MeFOSAA	7.529e4	11.36	1.00	-
13C8_FOSA	8.939e5	12.92	1.00	-
d5-EtFOSAA	6.582e4	11.69	1.00	-
13C7_PFUdA	3.770e5	12.16	1.00	-
13C2_PFDoA	5.327e5	12.94	1.00	-
13C2_PFTeDA	2.621e5	14.44	1.00	-

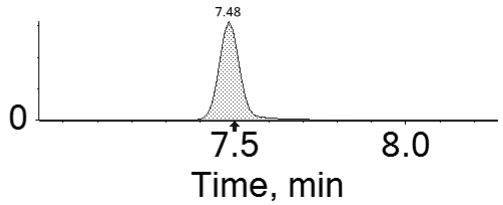
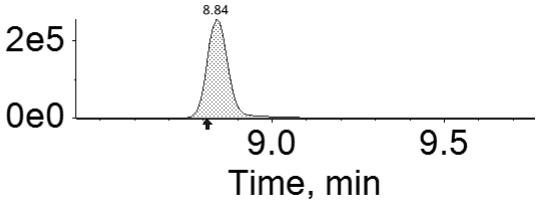
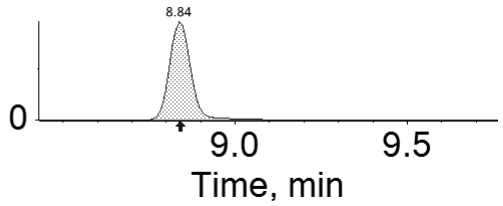
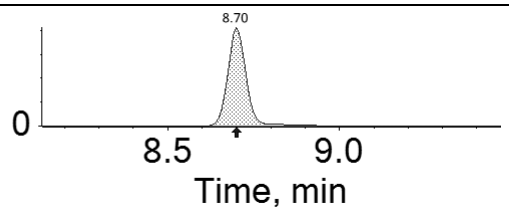
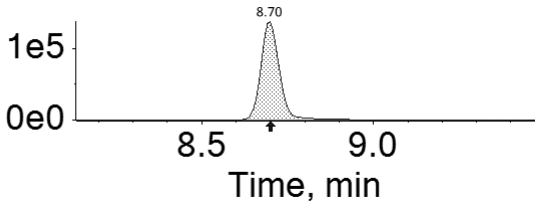
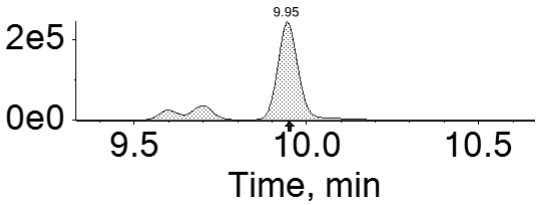
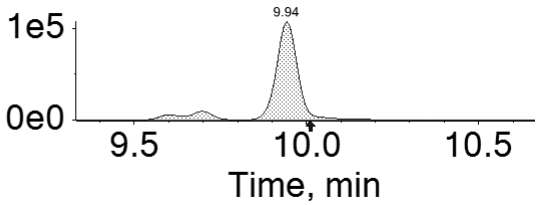
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	2.597e+06	1.85	10.00	9.947
PFPeA	1.822e+06	5.56	10.00	10.147
PFBS	1.375e+06	7.39	10.00	10.114
PFBS_2	4.756e+05	7.39	10.00	9.856
4:2FTS	2.231e+05	7.07	10.00	10.549
4:2FTS_2	1.593e+05	7.07	10.00	10.916
PFHxA	1.665e+06	7.49	10.00	10.646
PFHxA_2	1.325e+05	7.48	10.00	10.180
PFPeS	1.110e+06	8.84	10.00	10.223
PFPeS_2	4.146e+05	8.84	10.00	10.038
PFHpA	1.532e+06	8.70	10.00	10.122
PFHpA_2	5.124e+05	8.70	10.00	10.036
PFHxS	1.290e+06	9.95	10.00	10.053
PFHxS_2	5.335e+05	9.94	10.00	10.371
6:2FTS	2.713e+05	9.31	10.00	9.061
6:2FTS_2	2.087e+05	9.31	10.00	9.168
PFOA	1.807e+06	9.69	10.00	9.544
PFOA_2	6.548e+05	9.69	10.00	9.171
PFHpS	1.292e+06	10.88	10.00	10.177
PFHpS_2	3.617e+05	10.88	10.00	9.833
PFNA	1.011e+06	10.56	10.00	10.558
PFNA_2	3.407e+05	10.56	10.00	10.302
PFOS	9.267e+05	11.76	10.00	10.010
PFOS_2	2.826e+05	11.76	10.00	10.647
8:2FTS	1.947e+05	10.99	10.00	11.178
8:2FTS_2	1.753e+05	10.99	10.00	11.260
PFDA	7.372e+05	11.38	10.00	9.114
PFDA_2	2.254e+05	11.38	10.00	10.844
PFNS	9.474e+05	12.59	10.00	10.372
PFNS_2	3.224e+05	12.59	10.00	10.738
N-MeFOSAA	2.624e+05	11.37	10.00	10.853
N-MeFOSAA_2	1.342e+05	11.37	10.00	10.607
FOSA	1.289e+06	12.92	10.00	10.511
N-EtFOSAA	2.083e+05	11.71	10.00	11.339
N-EtFOSAA_2	1.157e+05	11.70	10.00	11.859
PFUdA	6.091e+05	12.17	10.00	10.934
PFUdA_2	1.294e+05	12.17	10.00	10.484
PFDS	7.175e+05	13.38	10.00	10.283
PFDS_2	2.412e+05	13.38	10.00	10.137
PFDoA	7.295e+05	12.94	10.00	10.379
PFDoA_2	1.148e+05	12.94	10.00	9.544
PFTrDA	7.753e+05	13.70	10.00	10.105
PFTrDA_2	1.396e+05	13.70	10.00	9.827
PFTeDA	4.364e+05	14.45	10.00	10.113
PFTeDA_2	6.145e+04	14.45	10.00	10.389
13C4_PFOA	9.346e+05	9.68	1.00	1.023
13C4_PFOS	4.829e+05	11.75	1.00	0.981

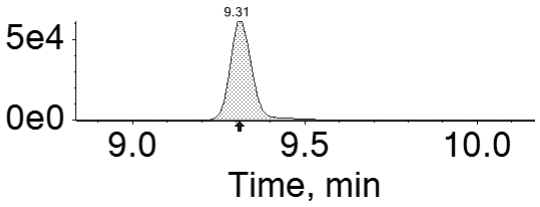
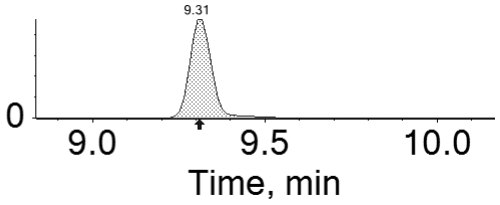
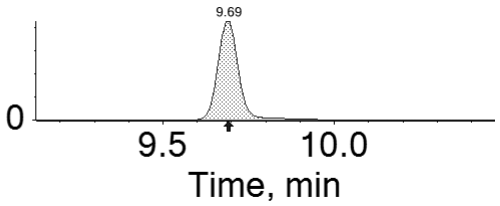
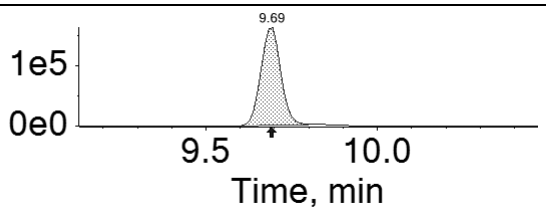
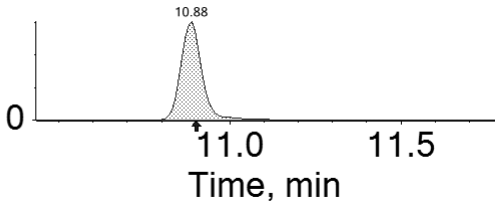
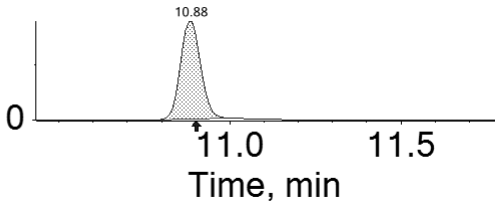
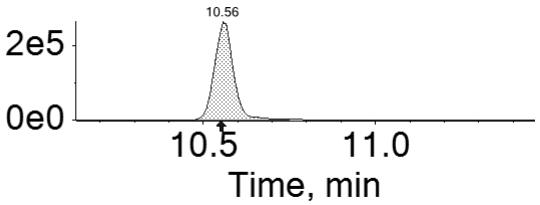
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.84(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

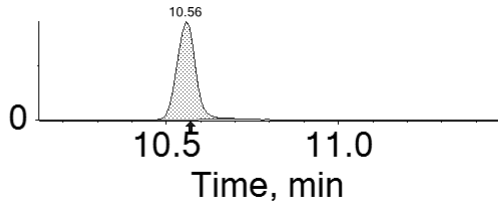
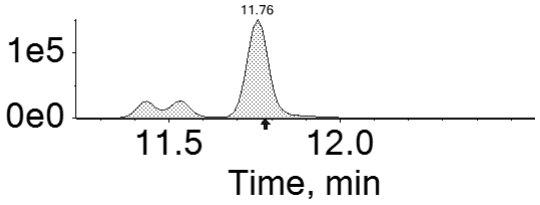
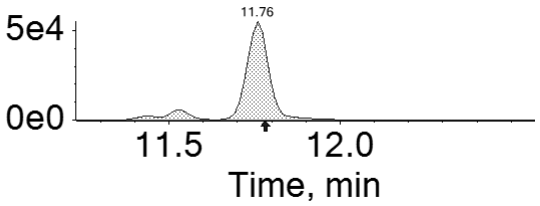
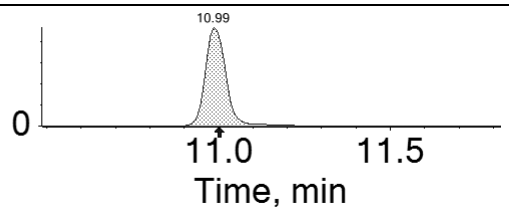
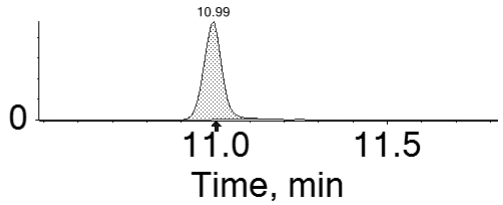
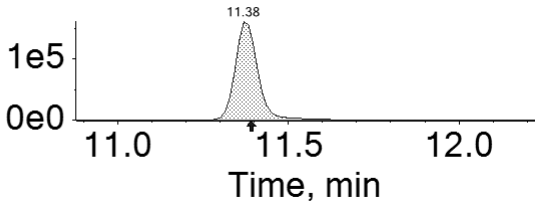
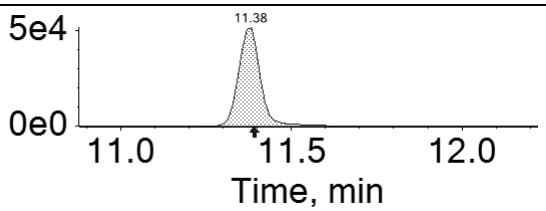
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.36(11.38) min Concentration: 1.00 Sample Type: (Standard)	

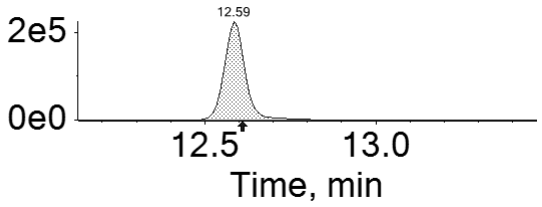
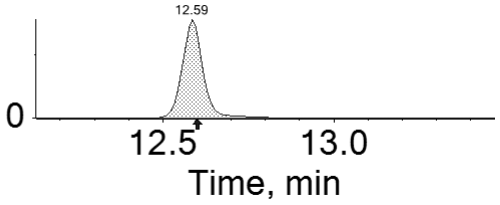
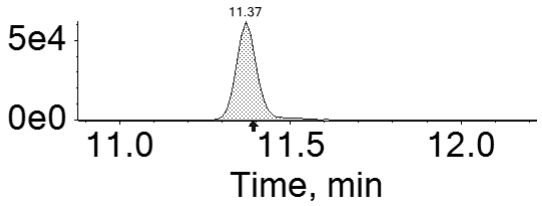
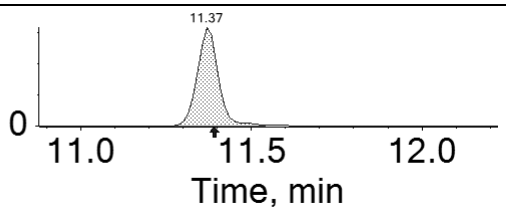
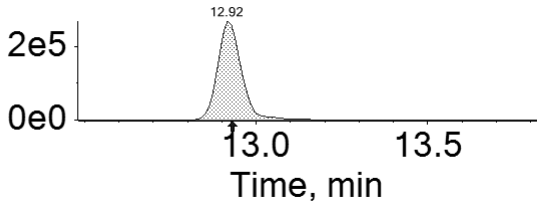
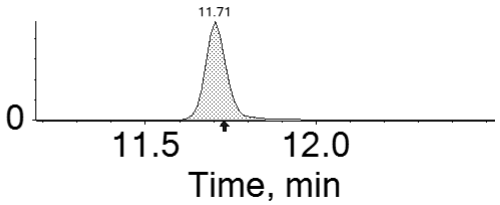
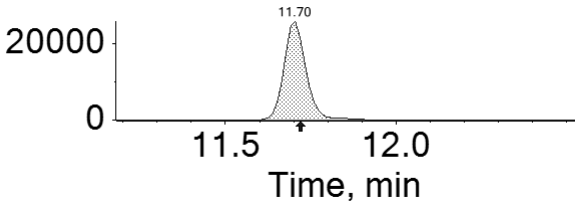
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.92(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.69(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.16(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.44(14.47) min Concentration: 1.00 Sample Type: (Standard)	

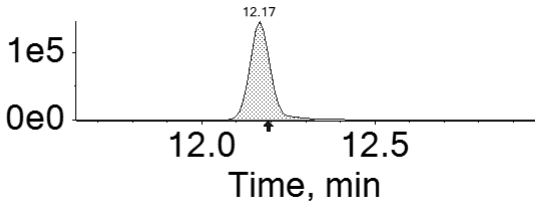
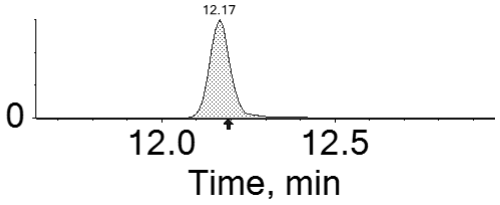
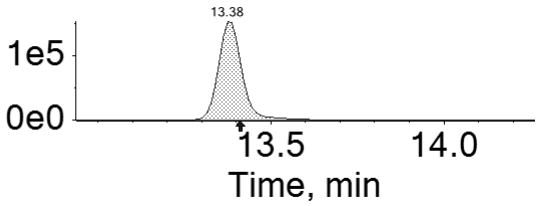
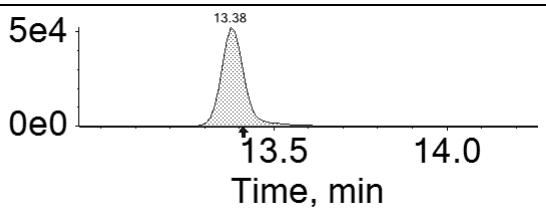
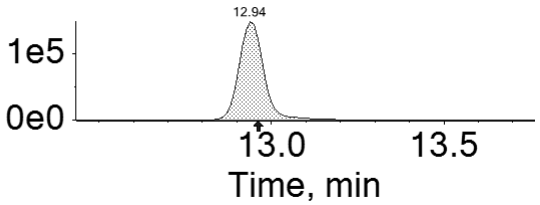
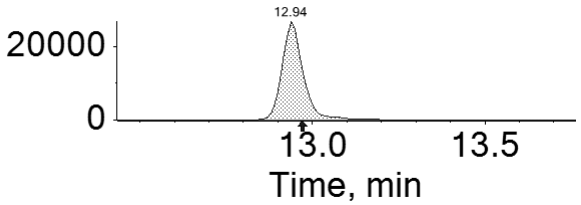
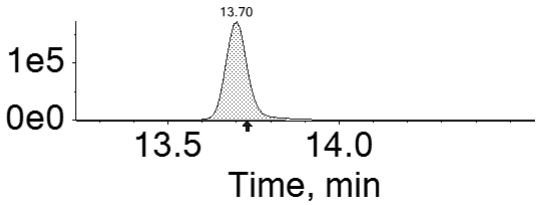
PFBA (213.0 / 169.0) RT (Exp. RT): 1.85 (1.76) min Calculated conc: 9.947 Area Ratio: 2.131e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.54) min Calculated conc: 10.147 Area Ratio: 2.096e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 10.114 Area Ratio: 2.168e0 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 9.856 Area Ratio: 7.502e-1 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.07 (7.04) min Calculated conc: 10.549 Area Ratio: 2.043e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 10.916 Area Ratio: 1.458e0 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 10.646 Area Ratio: 1.953e0 Sample Type: (Standard)	

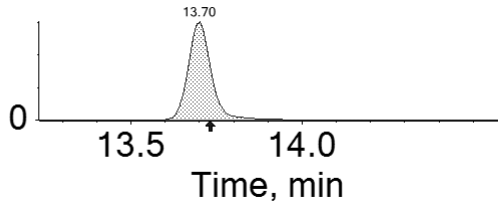
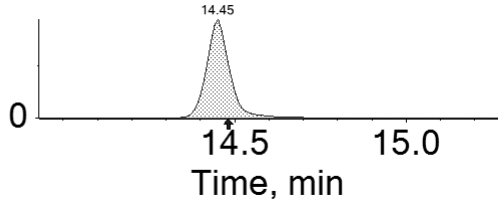
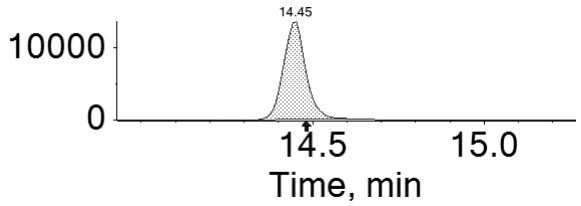
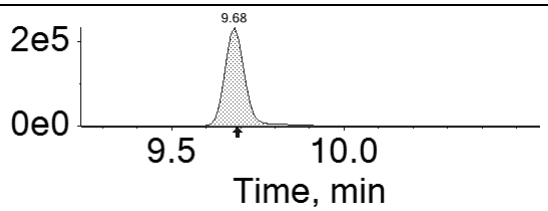
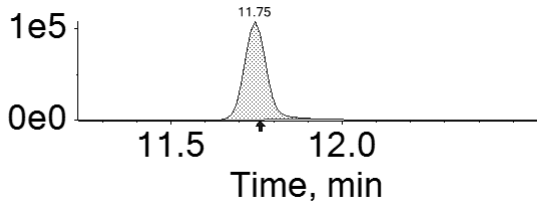
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 10.180 Area Ratio: 1.553e-1 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.81) min Calculated conc: 10.223 Area Ratio: 1.160e0 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 10.038 Area Ratio: 4.333e-1 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 10.122 Area Ratio: 1.601e0 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 10.036 Area Ratio: 5.354e-1 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 10.053 Area Ratio: 2.242e0 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 10.371 Area Ratio: 9.269e-1 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 9.061 Area Ratio: 2.368e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 9.168 Area Ratio: 1.821e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 9.544 Area Ratio: 2.432e0 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 9.171 Area Ratio: 8.812e-1 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 10.177 Area Ratio: 2.108e0 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 9.833 Area Ratio: 5.902e-1 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 10.558 Area Ratio: 1.649e0 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 10.302 Area Ratio: 5.559e-1 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 10.010 Area Ratio: 2.212e0 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 10.647 Area Ratio: 6.746e-1 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 11.178 Area Ratio: 2.246e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 11.260 Area Ratio: 2.023e0 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 9.114 Area Ratio: 2.064e0 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 10.844 Area Ratio: 6.310e-1 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: 10.372 Area Ratio: 2.513e0 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: 10.738 Area Ratio: 8.553e-1 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 10.853 Area Ratio: 3.485e0 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 10.607 Area Ratio: 1.783e0 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.92 (12.93) min Calculated conc: 10.511 Area Ratio: 1.441e0 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.71 (11.73) min Calculated conc: 11.339 Area Ratio: 3.165e0 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.70 (11.72) min Calculated conc: 11.859 Area Ratio: 1.757e0 Sample Type: (Standard)	

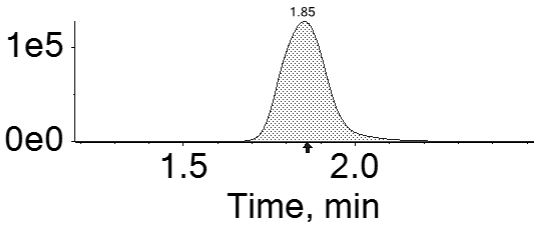
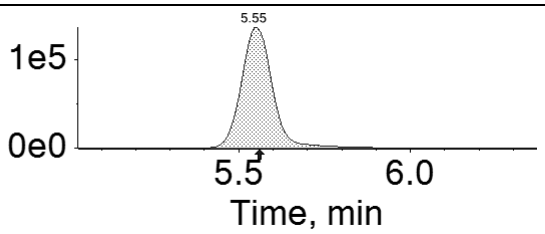
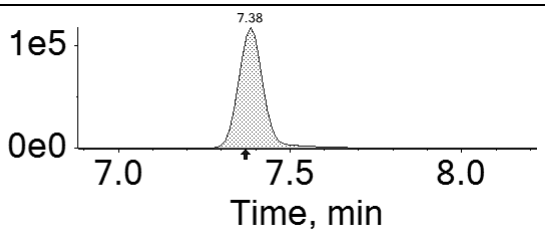
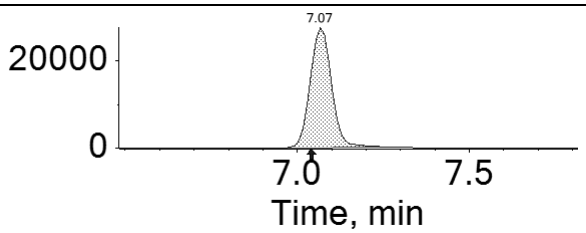
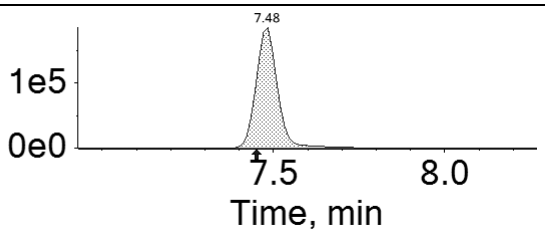
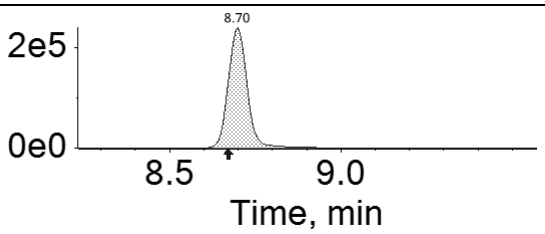
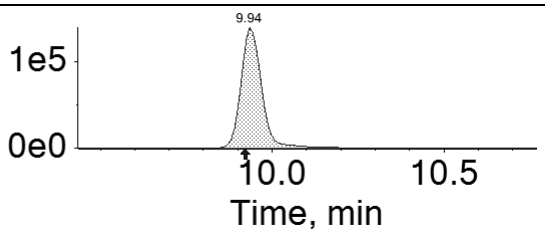
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 10.934 Area Ratio: 1.616e0 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 10.484 Area Ratio: 3.433e-1 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.38 (13.41) min Calculated conc: 10.283 Area Ratio: 1.347e0 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.38 (13.41) min Calculated conc: 10.137 Area Ratio: 4.527e-1 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.94 (12.96) min Calculated conc: 10.379 Area Ratio: 1.369e0 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.94 (12.97) min Calculated conc: 9.544 Area Ratio: 2.155e-1 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: 10.105 Area Ratio: 1.455e0 Sample Type: (Standard)	

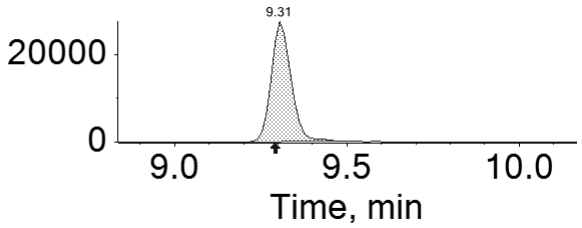
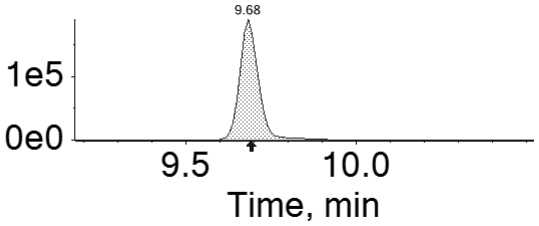
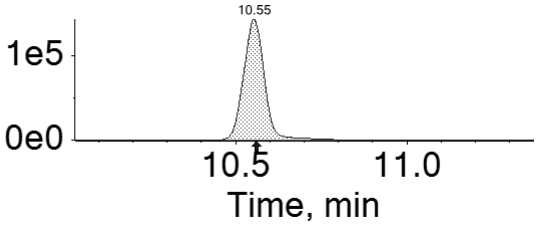
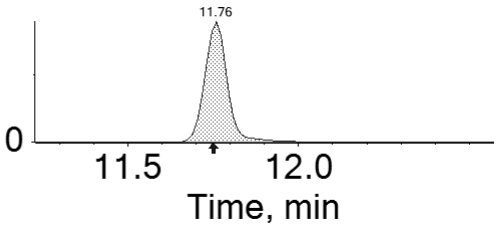
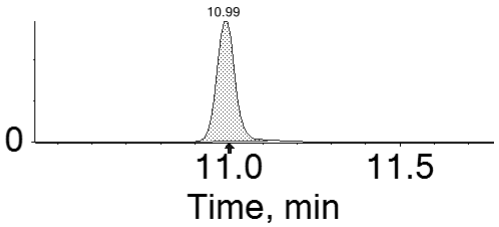
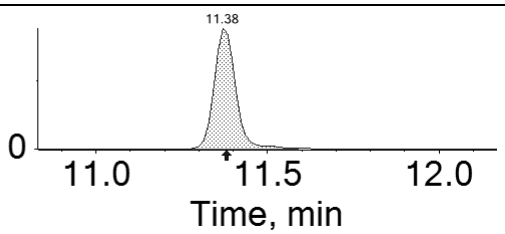
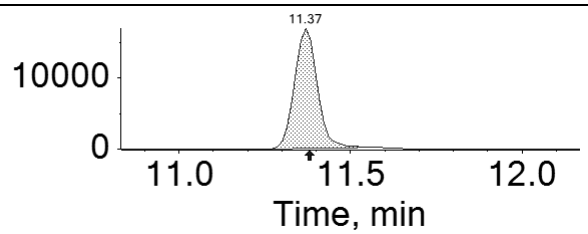
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: 9.827 Area Ratio: 2.621e-1 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 10.113 Area Ratio: 1.665e0 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 10.389 Area Ratio: 2.344e-1 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 1.023 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 0.981 Area Ratio: N/A Sample Type: (Standard)	

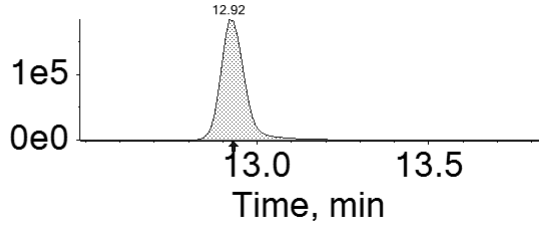
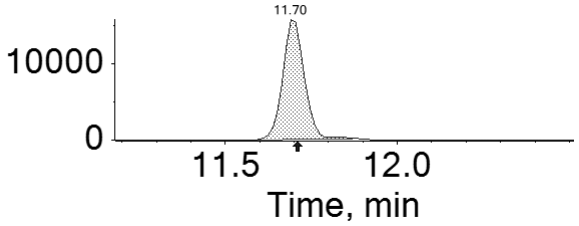
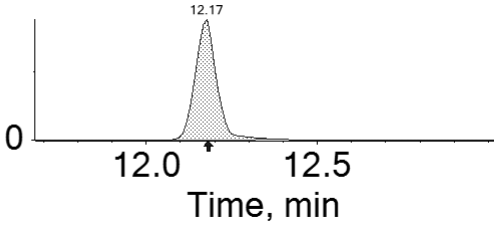
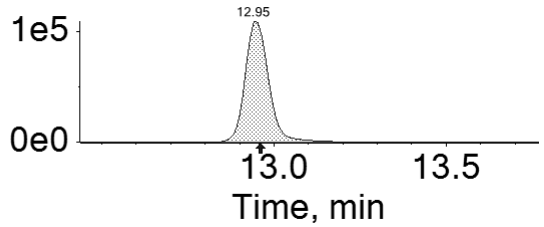
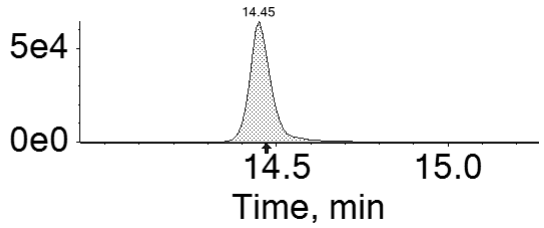
Sample Name	CAL-19206-006-06	**Injection Vial**	7
Sample ID	CAL-19206-006-06	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T18:38:08	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

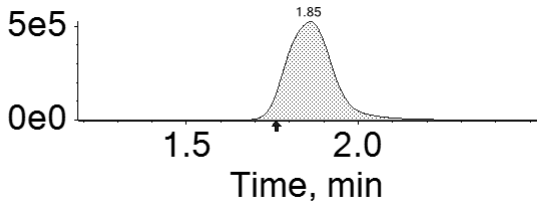
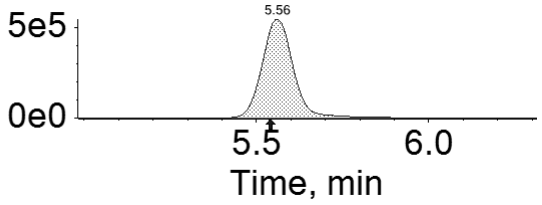
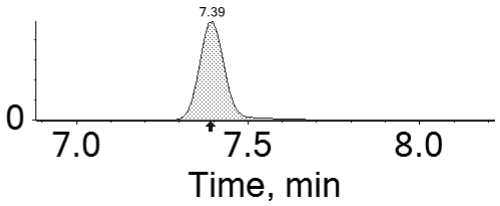
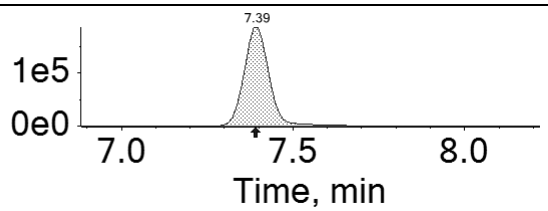
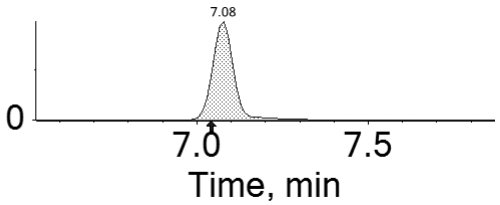
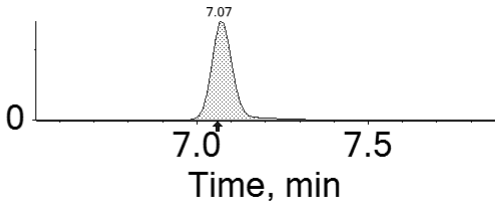
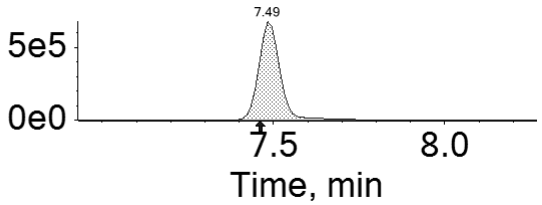
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.191e6	1.85	1.00	-
13C5_PFPeA	8.524e5	5.55	1.00	-
13C3_PFBS	5.871e5	7.38	1.00	-
13C2_4:2FTS	1.186e5	7.07	1.00	-
13C5_PFHxA	8.026e5	7.48	1.00	-
13C4_PFHpA	9.151e5	8.70	1.00	-
13C3_PFHxS	5.770e5	9.94	1.00	-
13C2_6:2FTS	1.091e5	9.31	1.00	-
13C8_PFOA	7.203e5	9.68	1.00	-
13C9_PFNA	6.091e5	10.55	1.00	-
13C8_PFOS	4.045e5	11.76	1.00	-
13C2_8:2FTS	1.095e5	10.99	1.00	-
13C6_PFDA	3.842e5	11.38	1.00	-
d3-MeFOSAA	7.763e4	11.37	1.00	-
13C8_FOSA	9.022e5	12.92	1.00	-
d5-EtFOSAA	6.864e4	11.70	1.00	-
13C7_PFUdA	3.841e5	12.17	1.00	-
13C2_PFDoA	5.117e5	12.95	1.00	-
13C2_PFTeDA	2.821e5	14.45	1.00	-

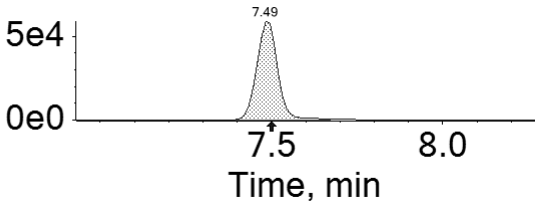
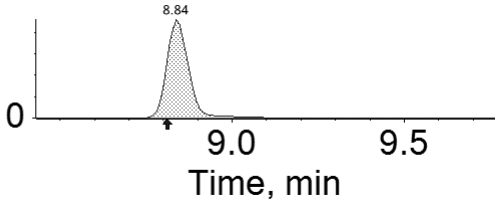
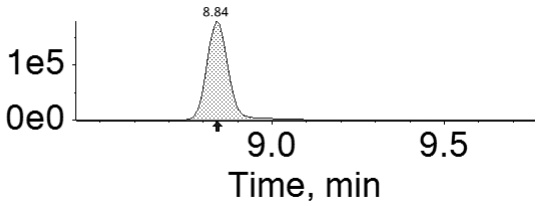
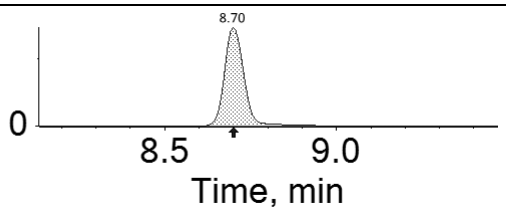
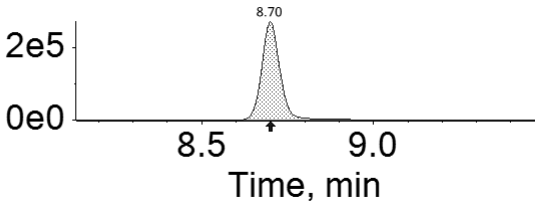
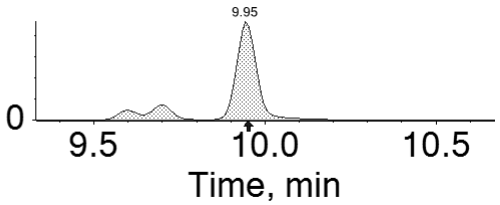
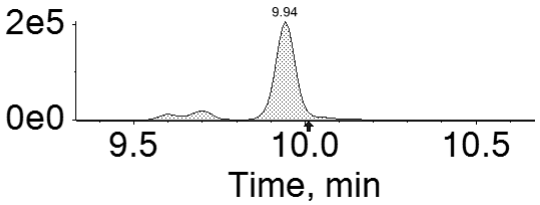
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	4.937e+06	1.85	20.00	19.340
PFPeA	3.441e+06	5.56	20.00	19.541
PFBS	2.545e+06	7.39	20.00	20.216
PFBS_2	9.435e+05	7.39	20.00	21.114
4:2FTS	4.189e+05	7.08	20.00	18.244
4:2FTS_2	3.073e+05	7.07	20.00	19.402
PFHxA	2.901e+06	7.49	20.00	19.705
PFHxA_2	2.497e+05	7.49	20.00	20.392
PFPeS	2.021e+06	8.84	20.00	19.464
PFPeS_2	7.843e+05	8.84	20.00	19.856
PFHpA	2.884e+06	8.70	20.00	19.927
PFHpA_2	9.972e+05	8.70	20.00	20.426
PFHxS	2.455e+06	9.95	20.00	19.079
PFHxS_2	1.027e+06	9.94	20.00	19.923
6:2FTS	5.318e+05	9.32	20.00	18.656
6:2FTS_2	4.050e+05	9.31	20.00	18.693
PFOA	3.478e+06	9.69	20.00	18.947
PFOA_2	1.283e+06	9.69	20.00	18.536
PFHpS	2.367e+06	10.89	20.00	18.755
PFHpS_2	7.173e+05	10.88	20.00	19.623
PFNA	1.855e+06	10.56	20.00	19.503
PFNA_2	6.630e+05	10.56	20.00	20.172
PFOS	1.820e+06	11.77	20.00	20.354
PFOS_2	5.053e+05	11.77	20.00	19.716
8:2FTS	3.905e+05	10.99	20.00	17.744
8:2FTS_2	3.306e+05	10.99	20.00	16.806
PFDA	1.599e+06	11.38	20.00	18.375
PFDA_2	3.906e+05	11.38	20.00	17.471
PFNS	1.731e+06	12.60	20.00	18.594
PFNS_2	5.841e+05	12.59	20.00	19.089
N-MeFOSAA	5.090e+05	11.38	20.00	20.417
N-MeFOSAA_2	2.722e+05	11.38	20.00	20.866
FOSA	2.453e+06	12.93	20.00	19.827
N-EtFOSAA	3.873e+05	11.71	20.00	20.215
N-EtFOSAA_2	2.237e+05	11.71	20.00	21.991
PFUdA	1.116e+06	12.18	20.00	19.654
PFUdA_2	2.378e+05	12.18	20.00	18.905
PFDS	1.348e+06	13.39	20.00	20.118
PFDS_2	4.573e+05	13.39	20.00	20.013
PFDoA	1.446e+06	12.95	20.00	21.419
PFDoA_2	2.315e+05	12.95	20.00	20.032
PFTrDA	1.542e+06	13.71	20.00	20.917
PFTrDA_2	2.948e+05	13.71	20.00	21.599
PFTeDA	8.736e+05	14.46	20.00	18.810
PFTeDA_2	1.195e+05	14.46	20.00	18.777
13C4_PFOA	8.638e+05	9.69	1.00	0.945
13C4_PFOS	4.733e+05	11.75	1.00	0.962

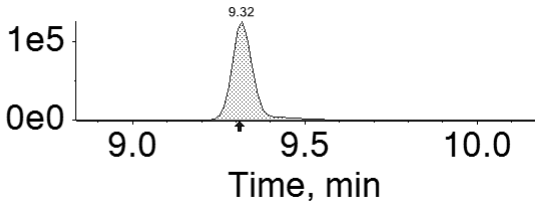
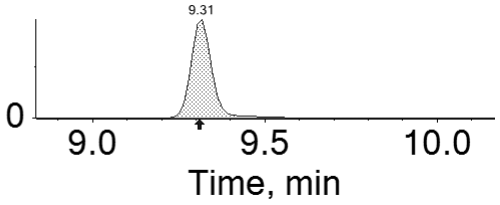
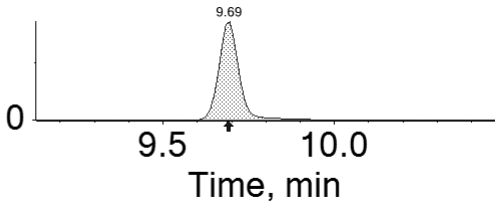
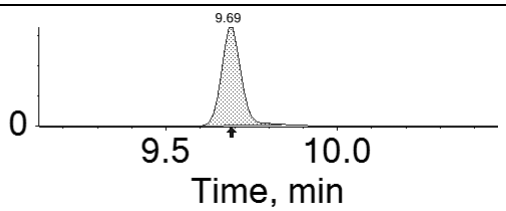
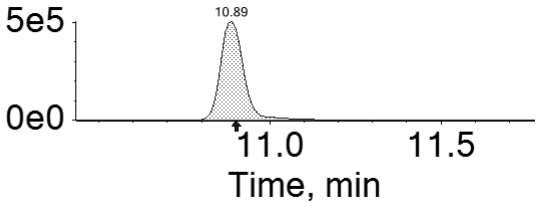
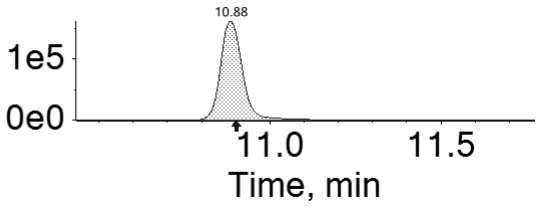
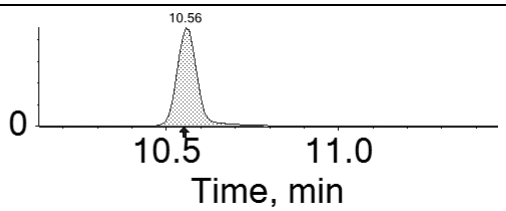
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.85(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

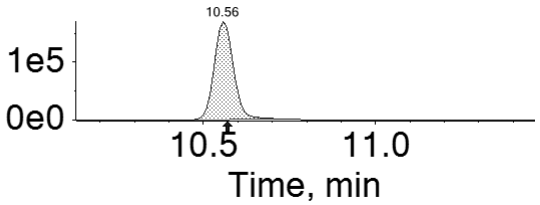
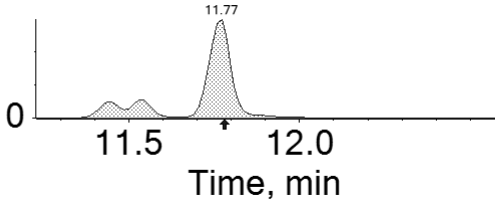
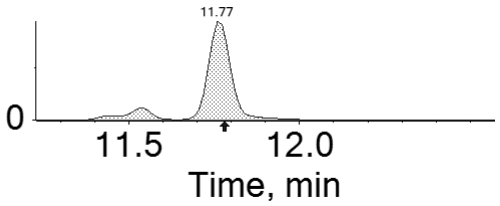
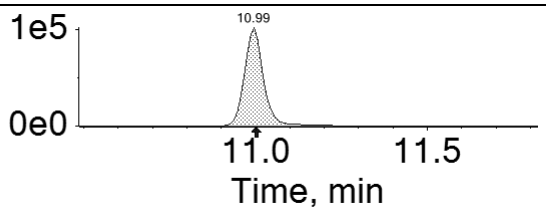
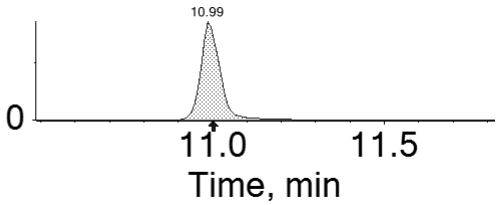
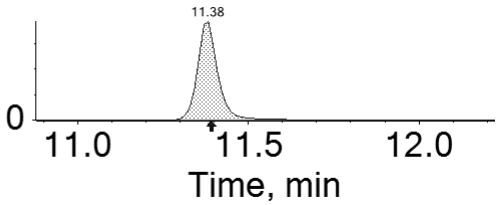
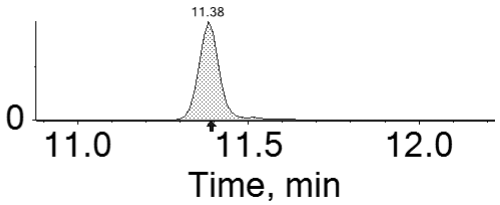
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Standard)	

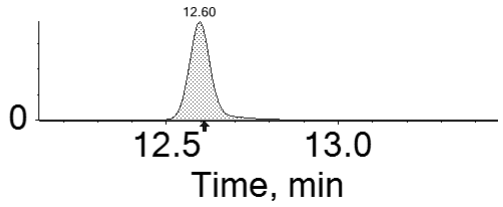
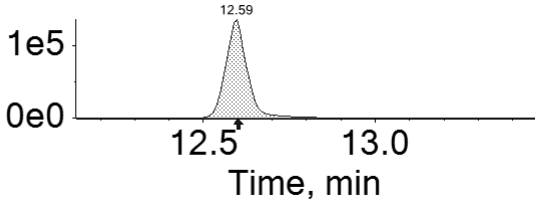
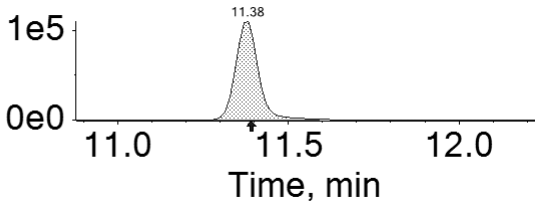
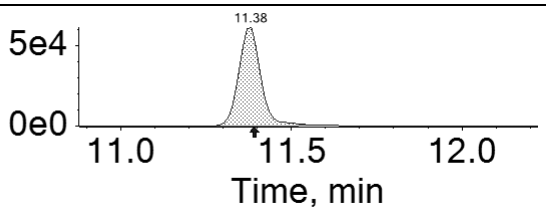
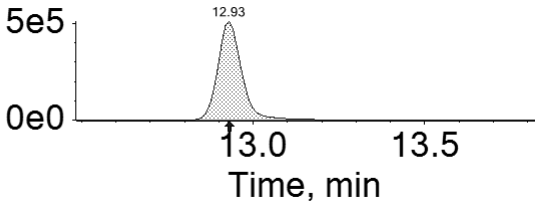
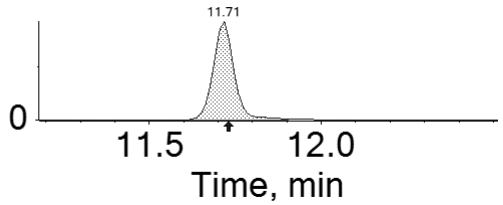
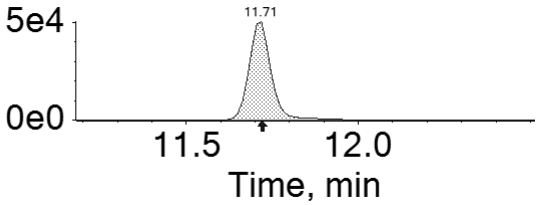
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.92(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.95(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Standard)	

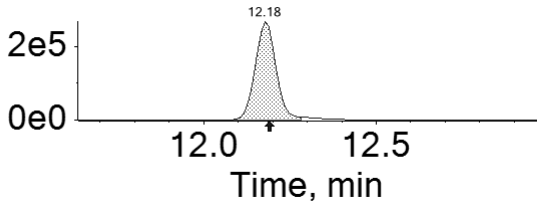
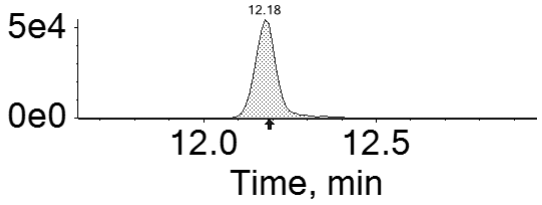
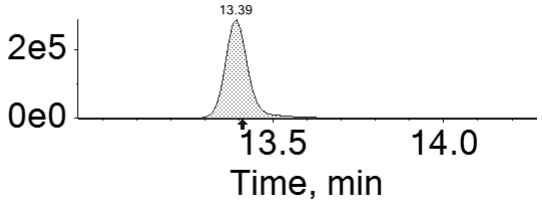
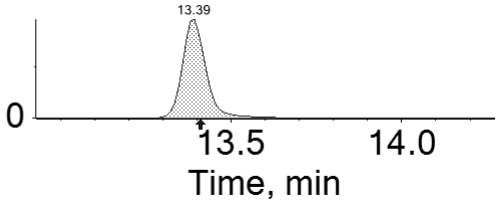
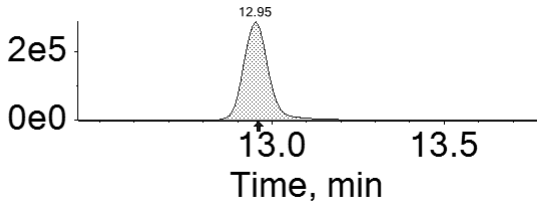
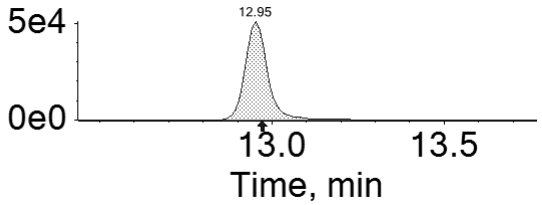
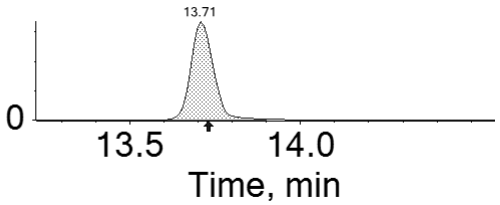
PFBA (213.0 / 169.0) RT (Exp. RT): 1.85 (1.76) min Calculated conc: 19.340 Area Ratio: 4.144e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.54) min Calculated conc: 19.541 Area Ratio: 4.037e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 20.216 Area Ratio: 4.334e0 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 21.114 Area Ratio: 1.607e0 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.08 (7.04) min Calculated conc: 18.244 Area Ratio: 3.533e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 19.402 Area Ratio: 2.592e0 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 19.705 Area Ratio: 3.614e0 Sample Type: (Standard)	

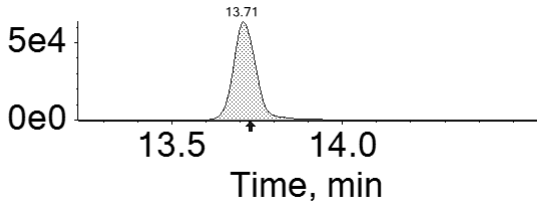
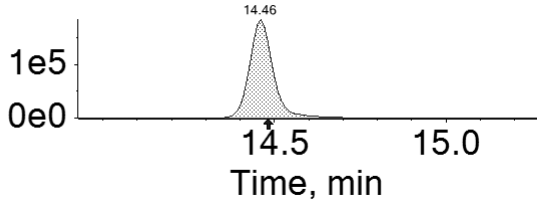
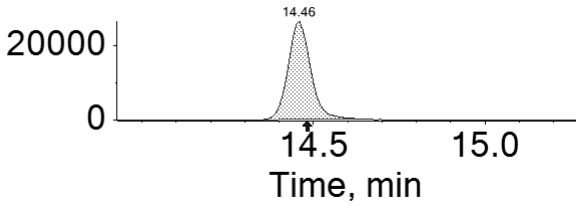
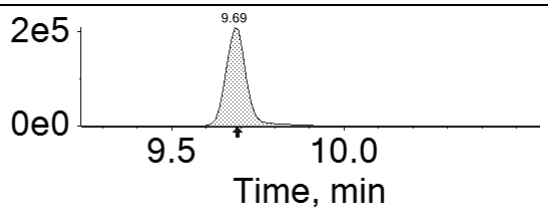
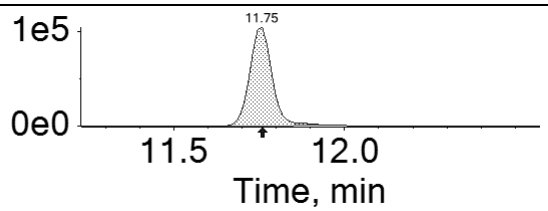
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 20.392 Area Ratio: 3.112e-1 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.81) min Calculated conc: 19.464 Area Ratio: 2.209e0 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 19.856 Area Ratio: 8.570e-1 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 19.927 Area Ratio: 3.152e0 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 20.426 Area Ratio: 1.090e0 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 19.079 Area Ratio: 4.255e0 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 19.923 Area Ratio: 1.781e0 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 18.656 Area Ratio: 4.876e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 18.693 Area Ratio: 3.713e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 18.947 Area Ratio: 4.829e0 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 18.536 Area Ratio: 1.781e0 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 18.755 Area Ratio: 3.886e0 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 19.623 Area Ratio: 1.178e0 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 19.503 Area Ratio: 3.046e0 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 20.172 Area Ratio: 1.089e0 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 20.354 Area Ratio: 4.498e0 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 19.716 Area Ratio: 1.249e0 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 17.744 Area Ratio: 3.566e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 16.806 Area Ratio: 3.019e0 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 18.375 Area Ratio: 4.161e0 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 17.471 Area Ratio: 1.017e0 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.60 (12.61) min Calculated conc: 18.594 Area Ratio: 4.505e0 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: 19.089 Area Ratio: 1.520e0 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 20.417 Area Ratio: 6.557e0 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 20.866 Area Ratio: 3.507e0 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: 19.827 Area Ratio: 2.719e0 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.71 (11.73) min Calculated conc: 20.215 Area Ratio: 5.642e0 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.71 (11.72) min Calculated conc: 21.991 Area Ratio: 3.259e0 Sample Type: (Standard)	

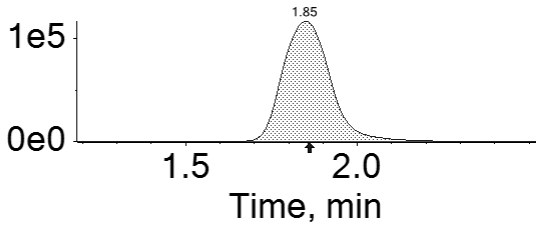
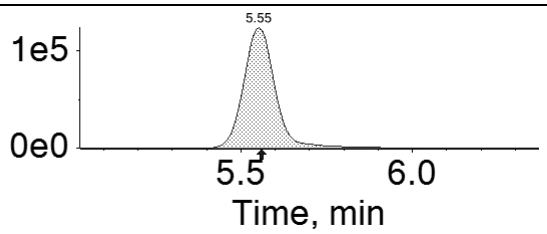
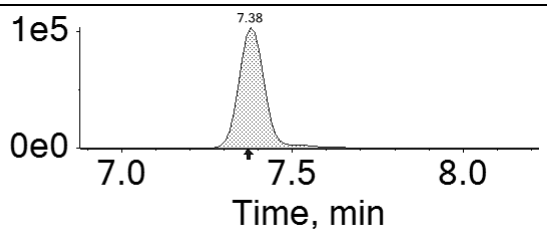
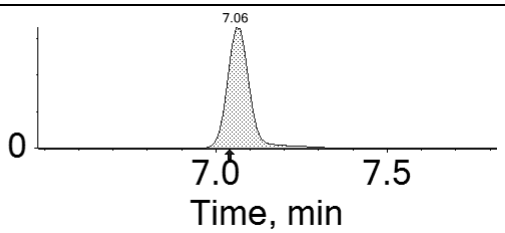
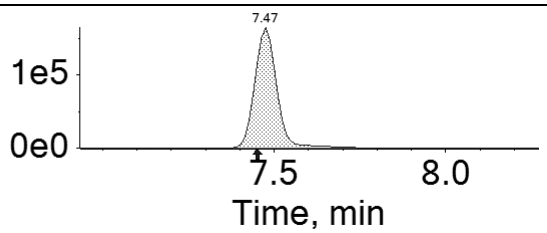
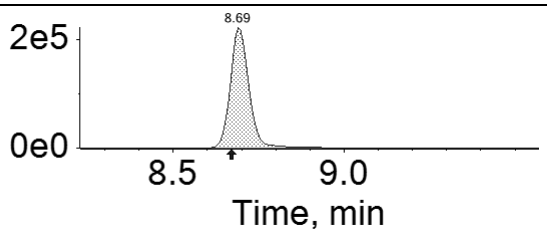
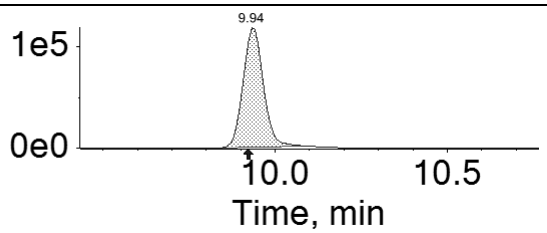
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 19.654 Area Ratio: 2.905e0 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 18.905 Area Ratio: 6.191e-1 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 20.118 Area Ratio: 2.635e0 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 20.013 Area Ratio: 8.937e-1 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.95 (12.96) min Calculated conc: 21.419 Area Ratio: 2.826e0 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: 20.032 Area Ratio: 4.524e-1 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 20.917 Area Ratio: 3.012e0 Sample Type: (Standard)	

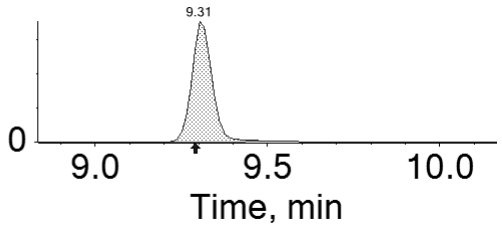
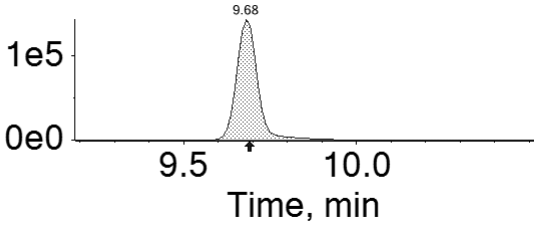
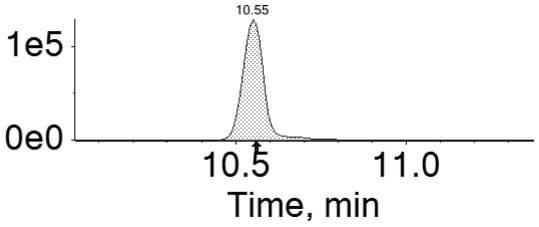
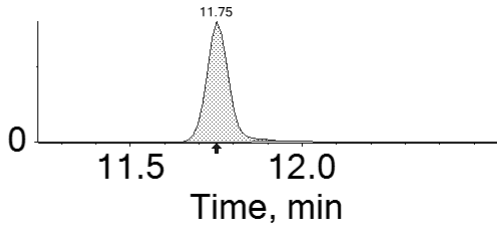
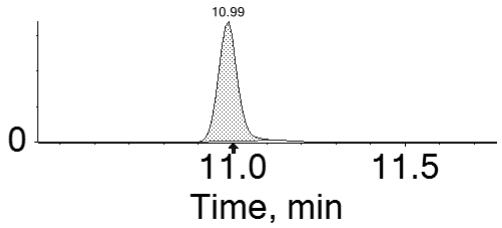
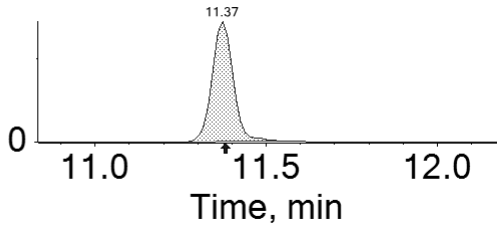
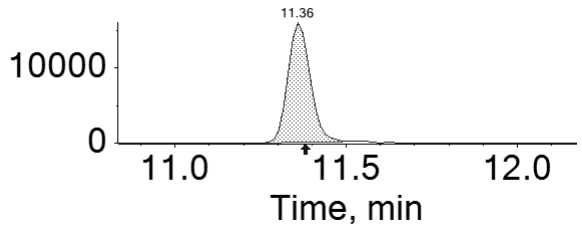
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 21.599 Area Ratio: 5.761e-1 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 18.810 Area Ratio: 3.096e0 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 18.777 Area Ratio: 4.237e-1 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 0.945 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 0.962 Area Ratio: N/A Sample Type: (Standard)	

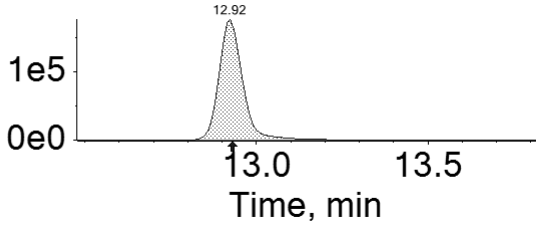
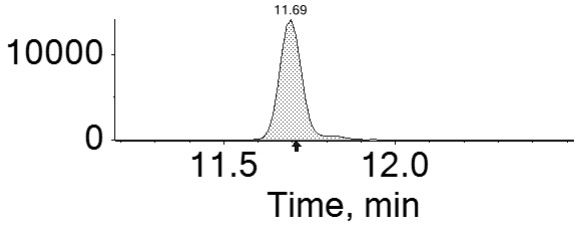
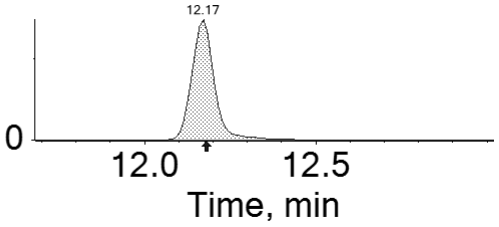
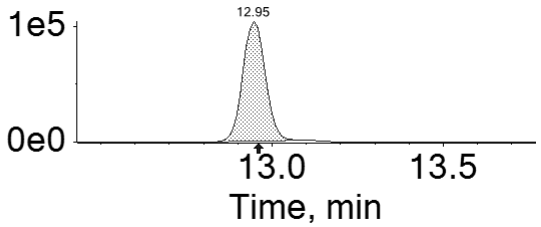
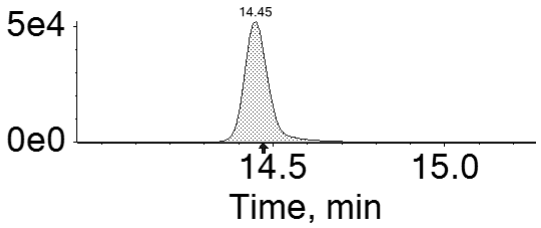
Sample Name	CAL-19206-006-07	**Injection Vial**	8
Sample ID	CAL-19206-006-07	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T19:04:49	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

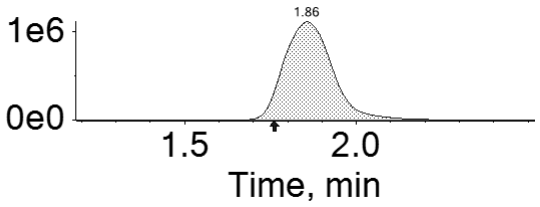
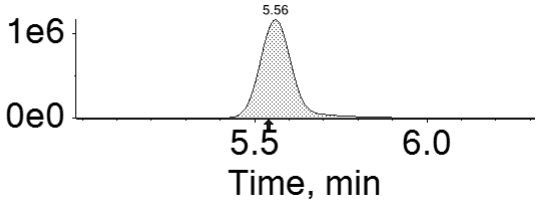
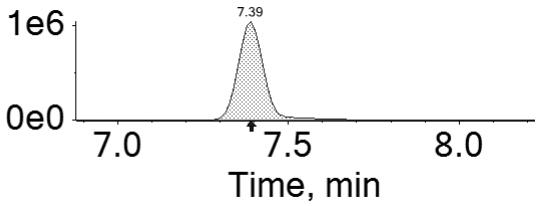
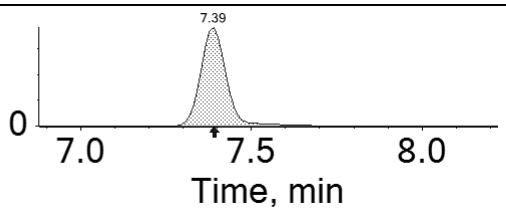
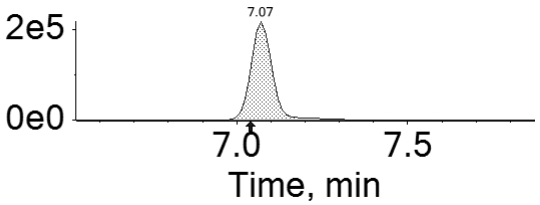
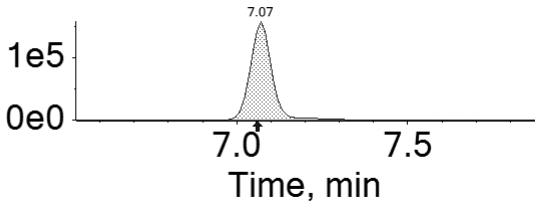
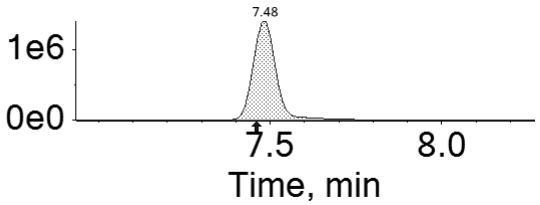
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.115e6	1.85	1.00	-
13C5_PFPeA	7.871e5	5.55	1.00	-
13C3_PFBS	5.377e5	7.38	1.00	-
13C2_4:2FTS	1.483e5	7.06	1.00	-
13C5_PFHxA	7.214e5	7.47	1.00	-
13C4_PFHpA	8.417e5	8.69	1.00	-
13C3_PFHxS	4.837e5	9.94	1.00	-
13C2_6:2FTS	1.446e5	9.31	1.00	-
13C8_PFOA	6.031e5	9.68	1.00	-
13C9_PFNA	5.524e5	10.55	1.00	-
13C8_PFOS	3.594e5	11.75	1.00	-
13C2_8:2FTS	1.295e5	10.99	1.00	-
13C6_PFDA	3.068e5	11.37	1.00	-
d3-MeFOSAA	7.211e4	11.36	1.00	-
13C8_FOSA	8.460e5	12.92	1.00	-
d5-EtFOSAA	6.521e4	11.69	1.00	-
13C7_PFUdA	3.361e5	12.17	1.00	-
13C2_PFDoA	4.763e5	12.95	1.00	-
13C2_PFTeDA	2.563e5	14.45	1.00	-

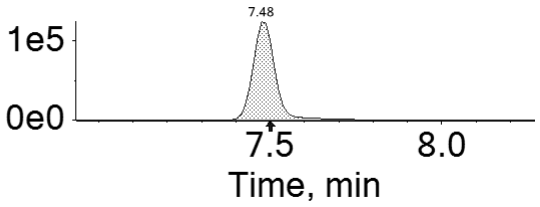
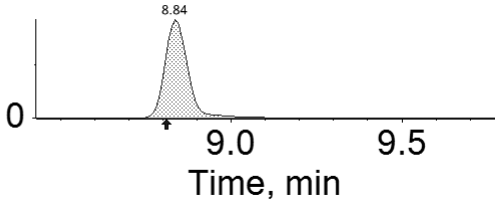
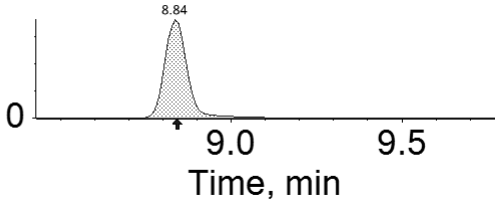
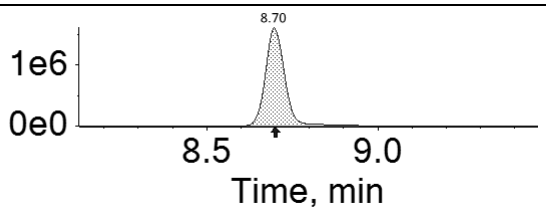
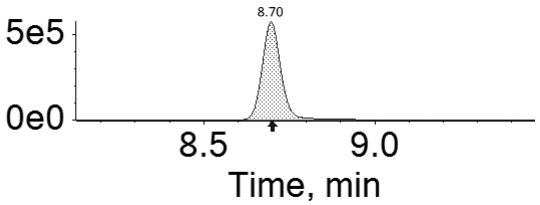
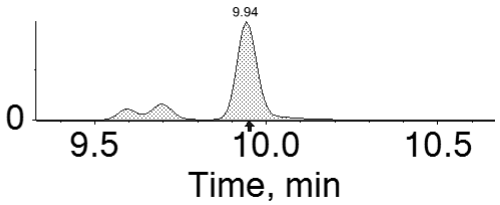
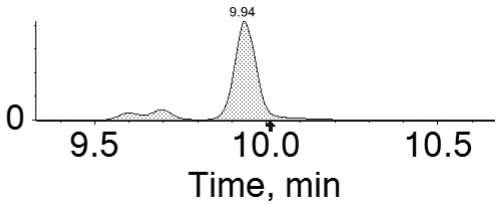
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.091e+07	1.86	50.00	45.647
PFPeA	7.598e+06	5.56	50.00	46.726
PFBS	5.460e+06	7.39	50.00	47.362
PFBS_2	2.001e+06	7.39	50.00	48.888
4:2FTS	9.458e+05	7.07	50.00	32.947
4:2FTS_2	6.849e+05	7.07	50.00	34.582
PFHxA	6.456e+06	7.48	50.00	48.791
PFHxA_2	5.564e+05	7.48	50.00	50.544
PFPeS	4.269e+06	8.84	50.00	44.695
PFPeS_2	1.652e+06	8.84	50.00	45.478
PFHpA	6.348e+06	8.70	50.00	47.680
PFHpA_2	2.184e+06	8.70	50.00	48.635
PFHxS	5.484e+06	9.94	50.00	50.849
PFHxS_2	2.253e+06	9.94	50.00	52.115
6:2FTS	1.288e+06	9.31	50.00	34.101
6:2FTS_2	9.007e+05	9.31	50.00	31.364
PFOA	7.332e+06	9.69	50.00	47.709
PFOA_2	2.939e+06	9.69	50.00	50.714
PFHpS	5.134e+06	10.88	50.00	44.859
PFHpS_2	1.601e+06	10.88	50.00	48.291
PFNA	4.147e+06	10.56	50.00	48.064
PFNA_2	1.400e+06	10.55	50.00	46.959
PFOS	4.154e+06	11.76	50.00	52.297
PFOS_2	1.169e+06	11.76	50.00	51.317
8:2FTS	9.314e+05	10.99	50.00	35.791
8:2FTS_2	7.624e+05	10.99	50.00	32.775
PFDA	3.773e+06	11.38	50.00	54.308
PFDA_2	9.393e+05	11.38	50.00	52.613
PFNS	3.984e+06	12.59	50.00	48.928
PFNS_2	1.328e+06	12.59	50.00	49.595
N-MeFOSAA	1.125e+06	11.37	50.00	48.602
N-MeFOSAA_2	6.135e+05	11.37	50.00	50.623
FOSA	5.488e+06	12.93	50.00	47.306
N-EtFOSAA	8.792e+05	11.71	50.00	48.310
N-EtFOSAA_2	4.833e+05	11.71	50.00	50.014
PFUdA	2.588e+06	12.17	50.00	52.110
PFUdA_2	5.523e+05	12.17	50.00	50.189
PFDS	2.921e+06	13.39	50.00	46.830
PFDS_2	9.880e+05	13.39	50.00	46.453
PFDoA	2.968e+06	12.95	50.00	47.231
PFDoA_2	5.104e+05	12.95	50.00	47.454
PFTrDA	3.596e+06	13.71	50.00	52.423
PFTrDA_2	6.539e+05	13.71	50.00	51.472
PFTeDA	2.039e+06	14.46	50.00	48.337
PFTeDA_2	2.944e+05	14.45	50.00	50.915
13C4_PFOA	7.524e+05	9.68	1.00	0.823
13C4_PFOS	4.572e+05	11.75	1.00	0.929

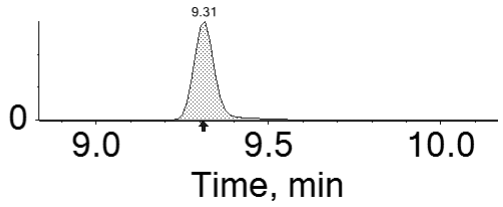
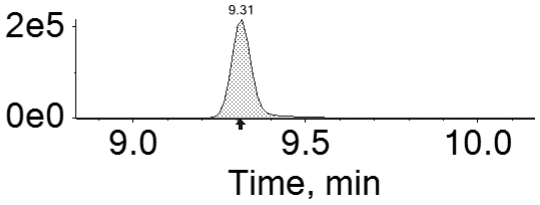
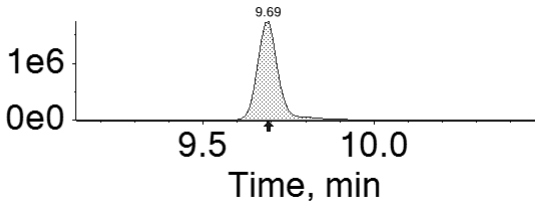
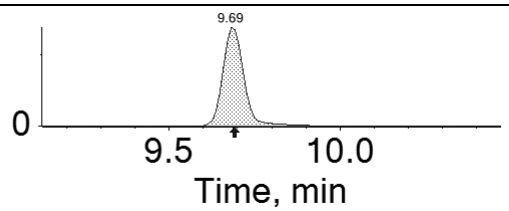
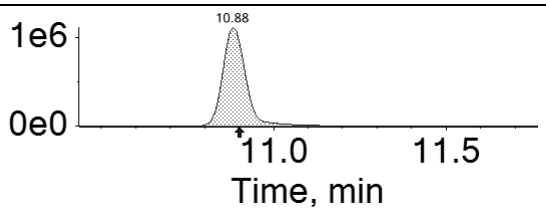
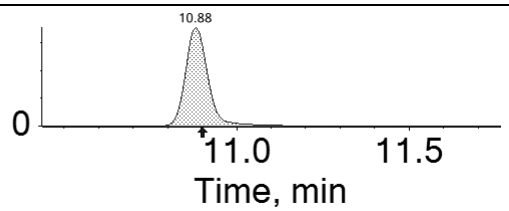
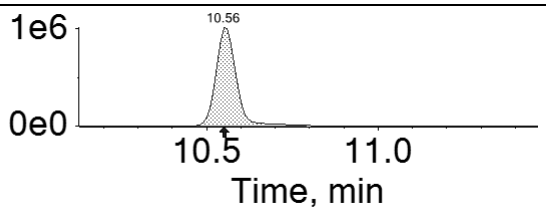
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.85(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.69(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

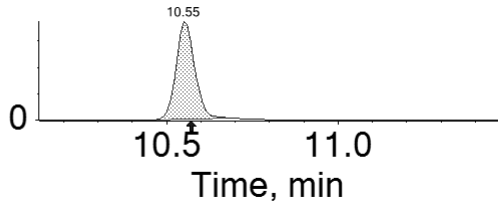
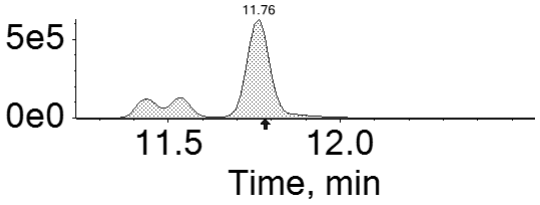
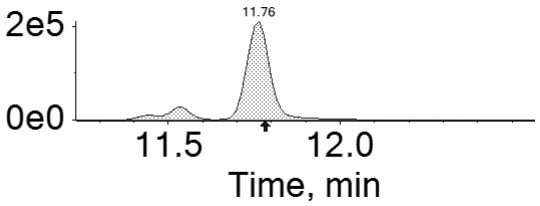
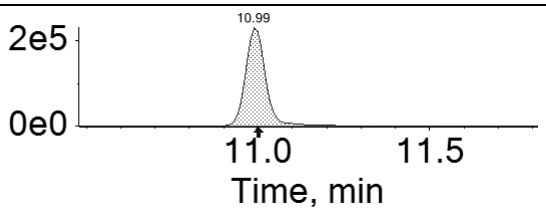
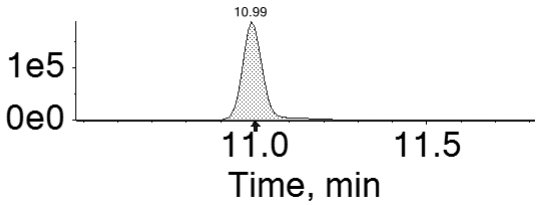
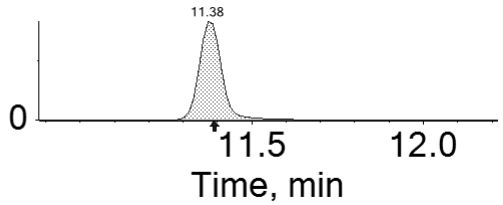
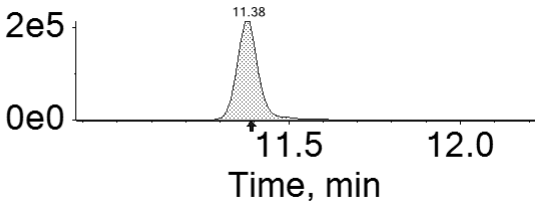
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.36(11.38) min Concentration: 1.00 Sample Type: (Standard)	

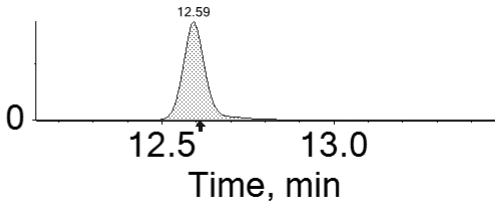
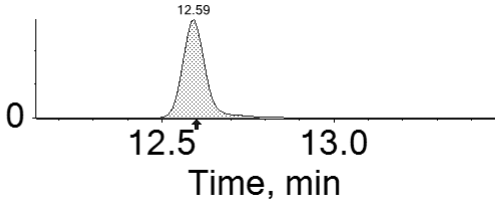
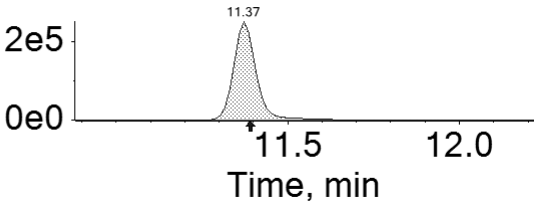
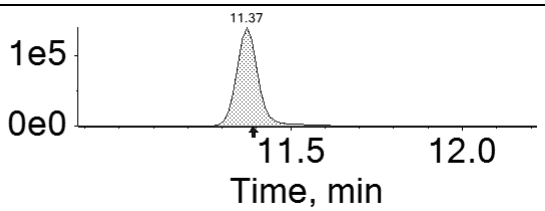
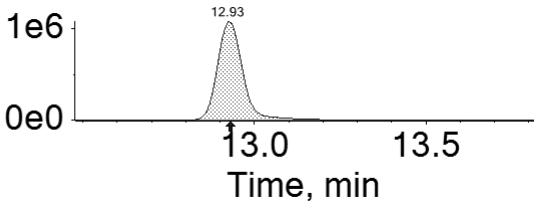
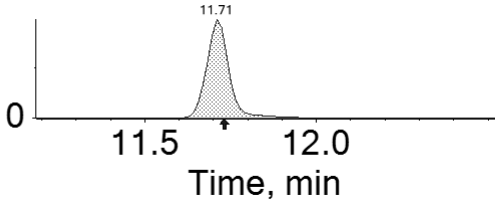
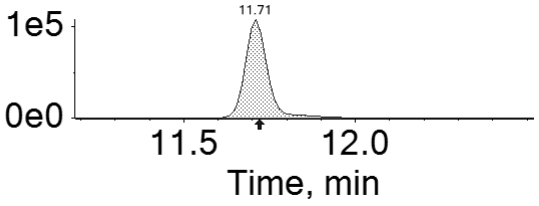
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.92(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.69(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.95(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Standard)	

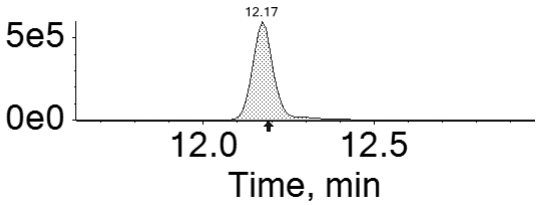
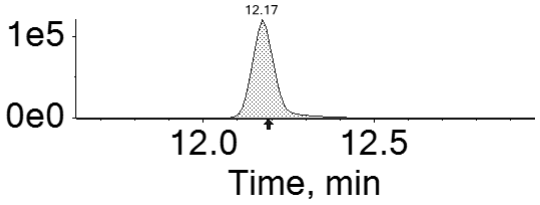
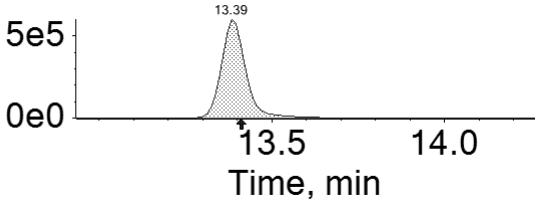
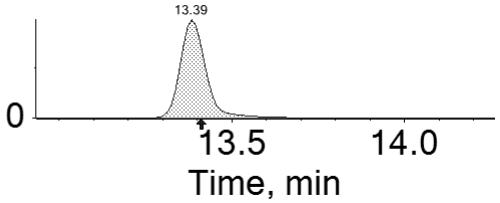
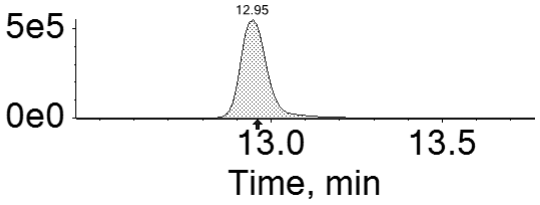
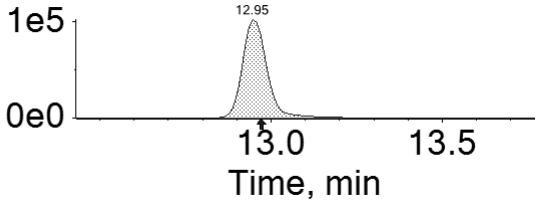
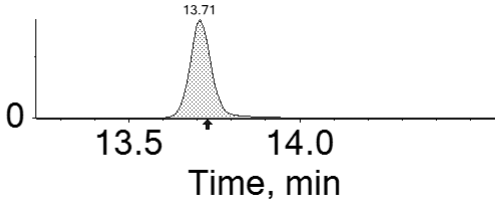
PFBA (213.0 / 169.0) RT (Exp. RT): 1.86 (1.76) min Calculated conc: 45.647 Area Ratio: 9.781e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.54) min Calculated conc: 46.726 Area Ratio: 9.653e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 47.362 Area Ratio: 1.015e1 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 48.888 Area Ratio: 3.721e0 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.07 (7.04) min Calculated conc: 32.947 Area Ratio: 6.380e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 34.582 Area Ratio: 4.620e0 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 48.791 Area Ratio: 8.949e0 Sample Type: (Standard)	

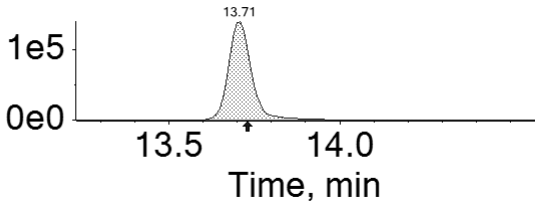
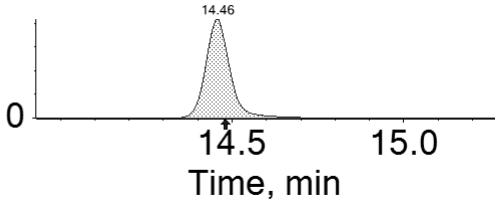
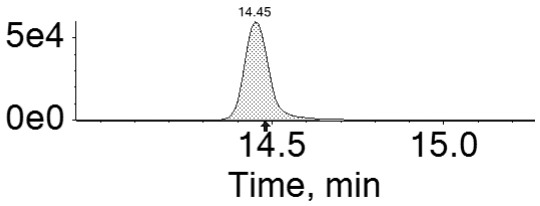
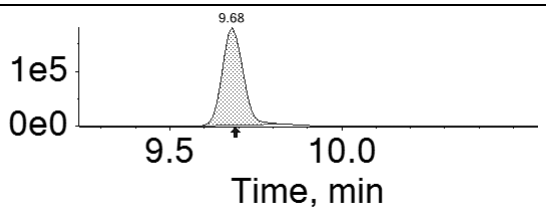
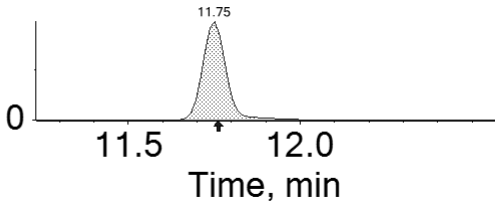
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 50.544 Area Ratio: 7.713e-1 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.81) min Calculated conc: 44.695 Area Ratio: 5.071e0 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 45.478 Area Ratio: 1.963e0 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 47.680 Area Ratio: 7.541e0 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 48.635 Area Ratio: 2.594e0 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 50.849 Area Ratio: 1.134e1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 52.115 Area Ratio: 4.658e0 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 34.101 Area Ratio: 8.912e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 31.364 Area Ratio: 6.230e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 47.709 Area Ratio: 1.216e1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 50.714 Area Ratio: 4.873e0 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 44.859 Area Ratio: 9.294e0 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 48.291 Area Ratio: 2.898e0 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 48.064 Area Ratio: 7.507e0 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.55 (10.57) min Calculated conc: 46.959 Area Ratio: 2.534e0 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 52.297 Area Ratio: 1.156e1 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 51.317 Area Ratio: 3.252e0 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 35.791 Area Ratio: 7.192e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 32.775 Area Ratio: 5.887e0 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 54.308 Area Ratio: 1.230e1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 52.613 Area Ratio: 3.062e0 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: 48.928 Area Ratio: 1.186e1 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: 49.595 Area Ratio: 3.950e0 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 48.602 Area Ratio: 1.561e1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 50.623 Area Ratio: 8.508e0 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: 47.306 Area Ratio: 6.487e0 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.71 (11.73) min Calculated conc: 48.310 Area Ratio: 1.348e1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.71 (11.72) min Calculated conc: 50.014 Area Ratio: 7.411e0 Sample Type: (Standard)	

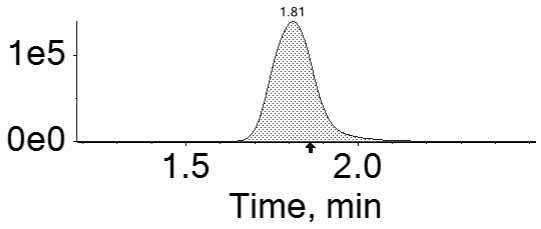
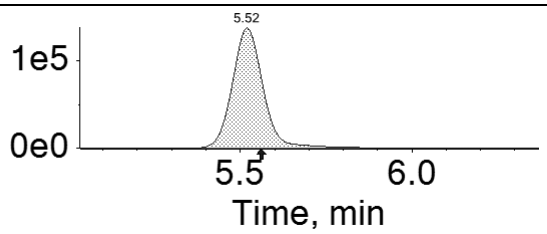
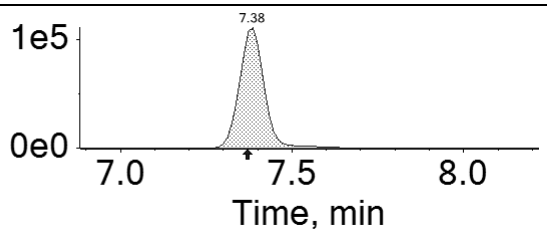
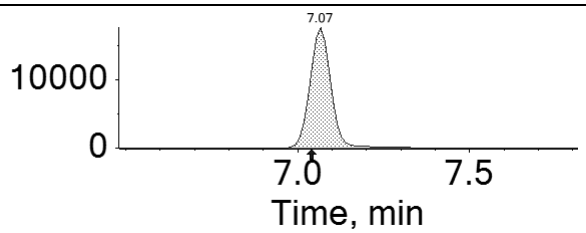
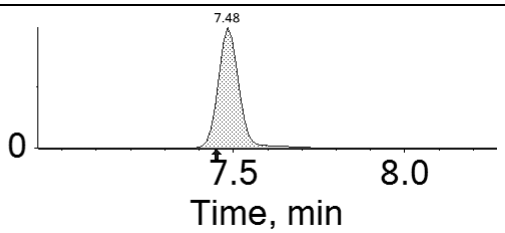
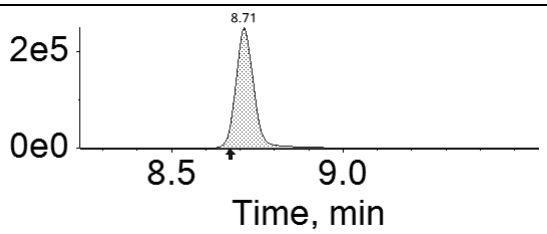
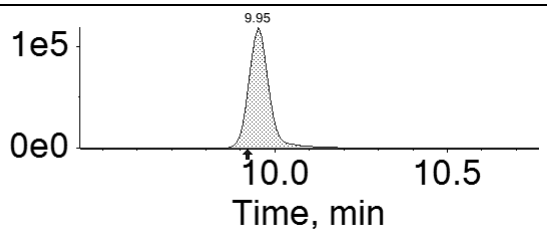
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 52.110 Area Ratio: 7.701e0 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 50.189 Area Ratio: 1.644e0 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 46.830 Area Ratio: 6.133e0 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 46.453 Area Ratio: 2.074e0 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.95 (12.96) min Calculated conc: 47.231 Area Ratio: 6.231e0 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: 47.454 Area Ratio: 1.072e0 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 52.423 Area Ratio: 7.550e0 Sample Type: (Standard)	

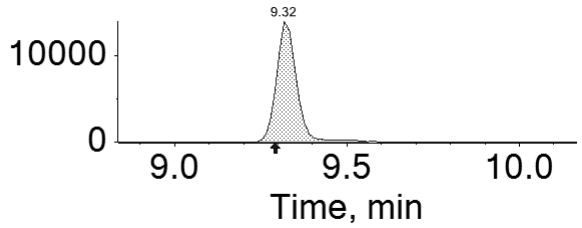
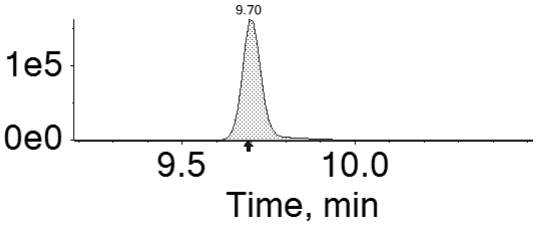
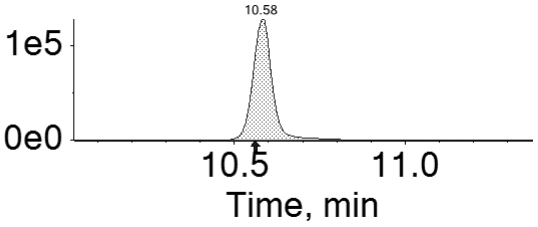
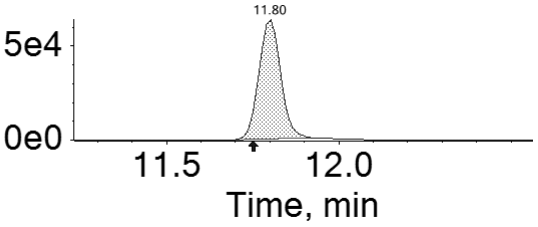
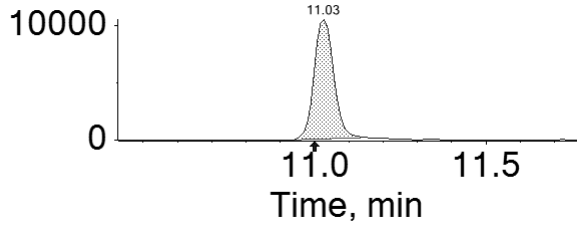
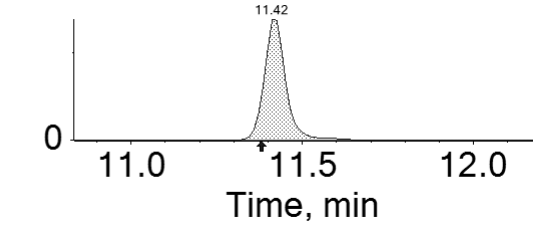
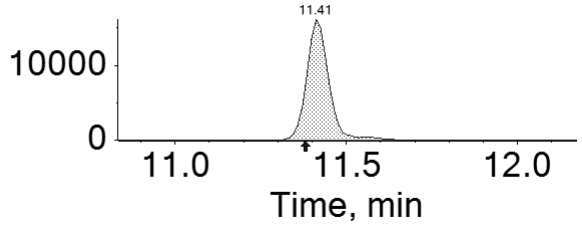
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 51.472 Area Ratio: 1.373e0 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 48.337 Area Ratio: 7.957e0 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 50.915 Area Ratio: 1.149e0 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.823 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 0.929 Area Ratio: N/A Sample Type: (Standard)	

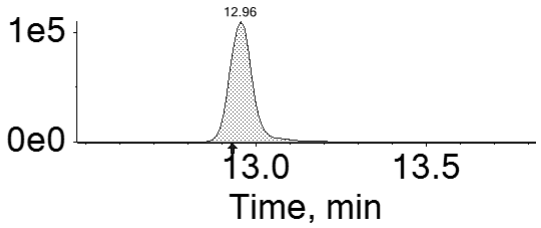
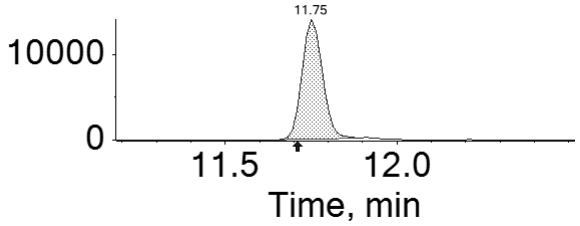
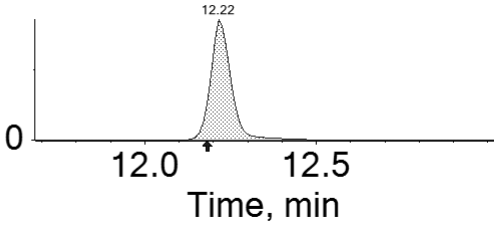
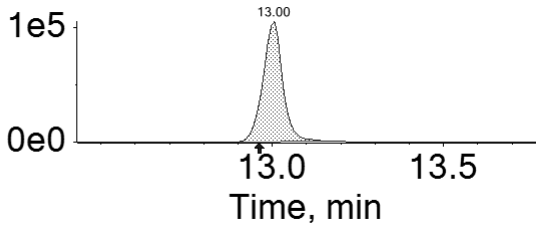
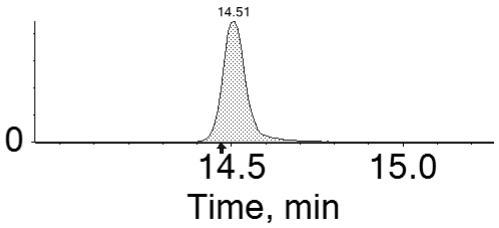
Sample Name	CAL-19206-006-01	**Injection Vial**	2
Sample ID	CAL-19206-006-01	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T11:21:59	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

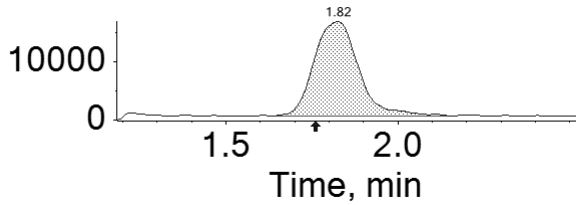
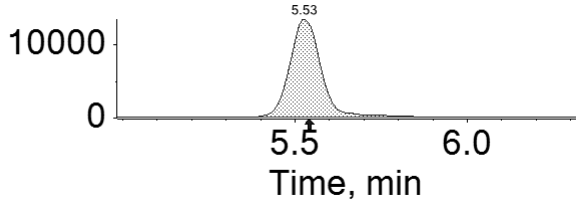
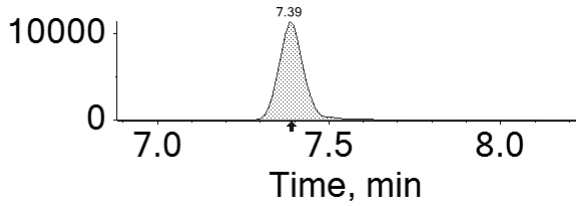
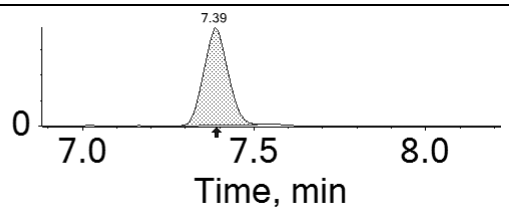
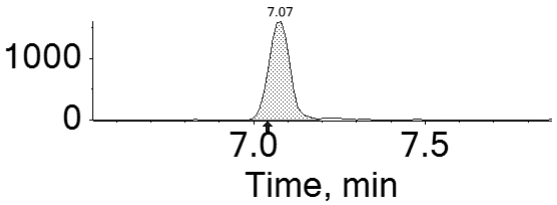
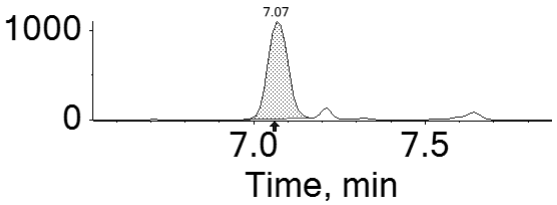
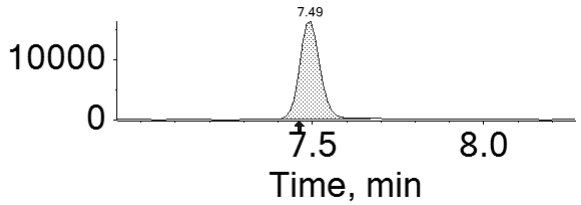
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.221e6	1.81	1.00	-
13C5_PFPeA	8.564e5	5.52	1.00	-
13C3_PFBS	5.485e5	7.38	1.00	-
13C2_4:2FTS	7.447e4	7.07	1.00	-
13C5_PFHxA	8.308e5	7.48	1.00	-
13C4_PFHpA	9.076e5	8.71	1.00	-
13C3_PFHxS	4.759e5	9.95	1.00	-
13C2_6:2FTS	5.612e4	9.32	1.00	-
13C8_PFOA	6.451e5	9.70	1.00	-
13C9_PFNA	5.005e5	10.58	1.00	-
13C8_PFOS	2.783e5	11.80	1.00	-
13C2_8:2FTS	4.172e4	11.03	1.00	-
13C6_PFDA	2.997e5	11.42	1.00	-
d3-MeFOSAA	7.176e4	11.41	1.00	-
13C8_FOSA	5.222e5	12.96	1.00	-
d5-EtFOSAA	5.790e4	11.75	1.00	-
13C7_PFUdA	3.526e5	12.22	1.00	-
13C2_PFDoA	4.200e5	13.00	1.00	-
13C2_PFTeDA	2.139e5	14.51	1.00	-

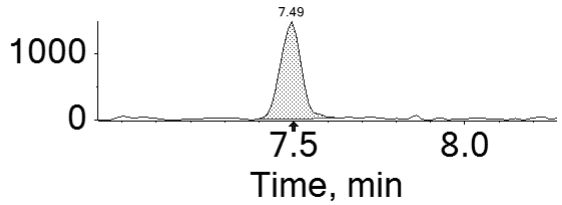
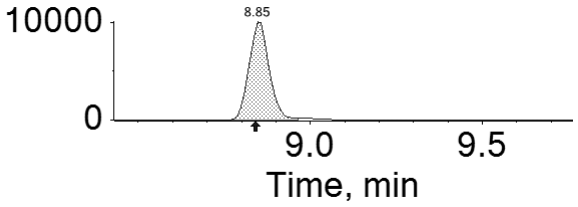
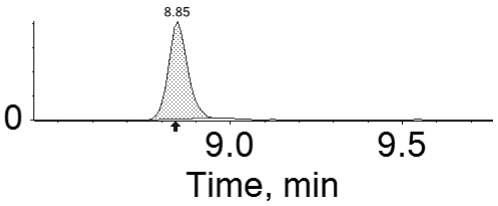
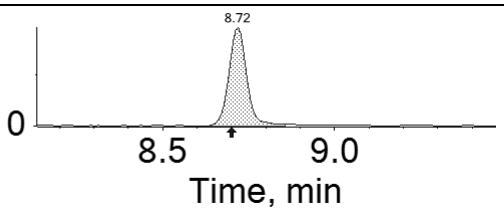
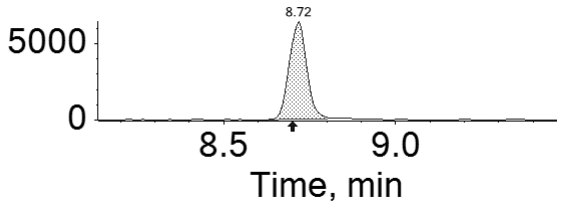
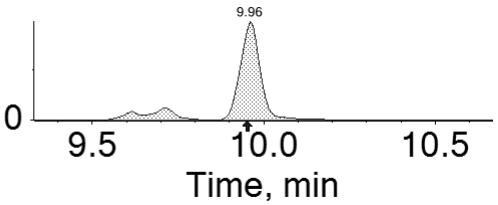
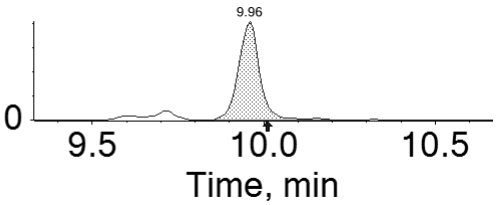
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.450e+05	1.82	0.50	0.533
PFPeA	8.337e+04	5.53	0.50	0.473
PFBS	5.697e+04	7.39	0.50	0.488
PFBS_2	1.871e+04	7.39	0.50	0.452
4:2FTS	6.957e+03	7.07	0.50	0.487
4:2FTS_2	4.432e+03	7.07	0.50	0.465
PFHxA	6.859e+04	7.49	0.50	0.433
PFHxA_2	6.244e+03	7.49	0.50	0.483
PFPeS	4.098e+04	8.85	0.50	0.462
PFPeS_2	1.569e+04	8.85	0.50	0.478
PFHpA	6.843e+04	8.72	0.50	0.468
PFHpA_2	2.251e+04	8.72	0.50	0.470
PFHxS	4.780e+04	9.96	0.50	0.451
PFHxS_2	1.776e+04	9.96	0.50	0.429
6:2FTS	7.071e+03	9.33	0.50	0.452
6:2FTS_2	6.203e+03	9.33	0.50	0.548
PFOA	7.830e+04	9.70	0.50	0.452
PFOA_2	2.859e+04	9.70	0.50	0.474
PFHpS	4.606e+04	10.92	0.50	0.505
PFHpS_2	1.415e+04	10.92	0.50	0.530
PFNA	4.295e+04	10.59	0.50	0.530
PFNA_2	1.286e+04	10.59	0.50	0.471
PFOS	3.414e+04	11.81	0.50	0.484
PFOS_2	9.701e+03	11.81	0.50	0.509
8:2FTS	4.198e+03	11.03	0.50	0.497
8:2FTS_2	3.864e+03	11.03	0.50	0.524
PFDA	3.470e+04	11.43	0.50	0.479
PFDA_2	8.113e+03	11.43	0.50	0.463
PFNS	3.069e+04	12.64	0.50	0.449
PFNS_2	1.091e+04	12.64	0.50	0.482
N-MeFOSAA	9.754e+03	11.43	0.50	0.395
N-MeFOSAA_2	5.331e+03	11.43	0.50	0.412
FOSA	3.194e+04	12.96	0.50	0.453
N-EtFOSAA	7.704e+03	11.77	0.50	0.452
N-EtFOSAA_2	3.835e+03	11.77	0.50	0.403
PFUdA	2.295e+04	12.23	0.50	0.469
PFUdA_2	5.035e+03	12.23	0.50	0.477
PFDS	2.346e+04	13.44	0.50	0.515
PFDS_2	8.149e+03	13.44	0.50	0.540
PFDoA	2.688e+04	13.01	0.50	0.494
PFDoA_2	4.696e+03	13.01	0.50	0.497
PFTrDA	2.575e+04	13.77	0.50	0.483
PFTrDA_2	5.704e+03	13.77	0.50	0.553
PFTeDA	1.823e+04	14.51	0.50	0.505
PFTeDA_2	2.044e+03	14.51	0.50	0.444
13C4_PFOA	7.933e+05	9.70	0.50	1.813
13C4_PFOS	3.696e+05	11.80	0.50	1.873

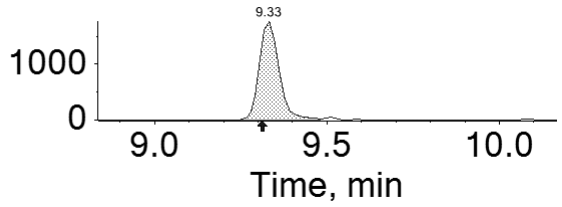
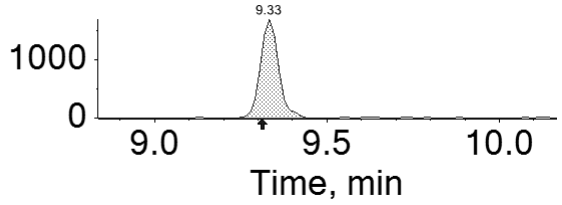
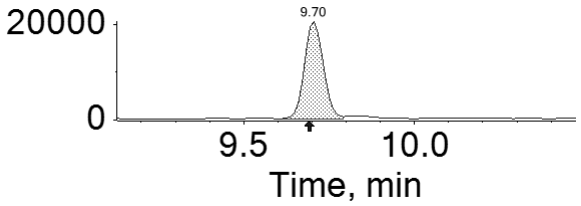
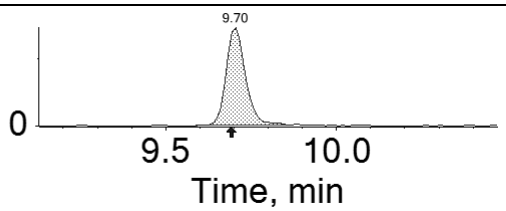
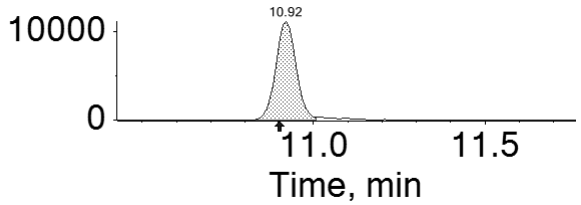
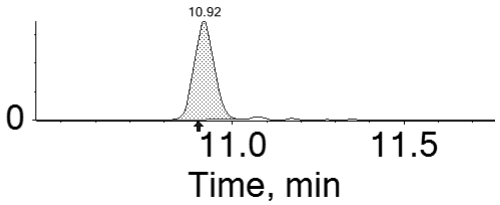
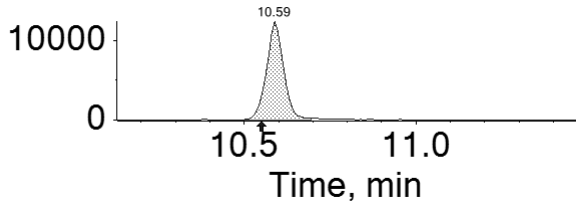
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.81(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.52(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.71(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.95(9.92) min Concentration: 1.00 Sample Type: (Standard)	

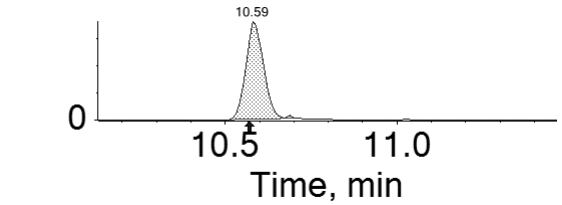
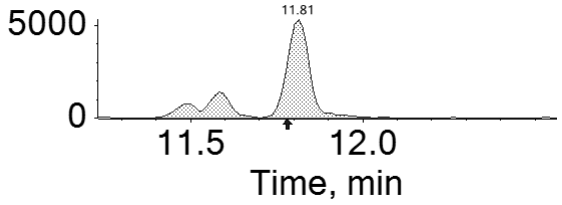
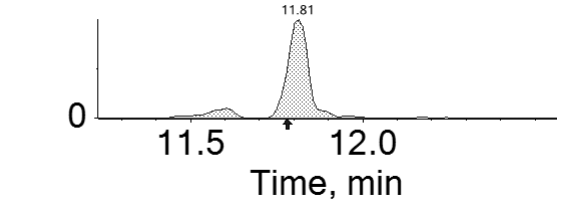
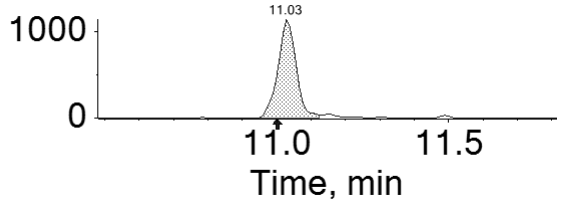
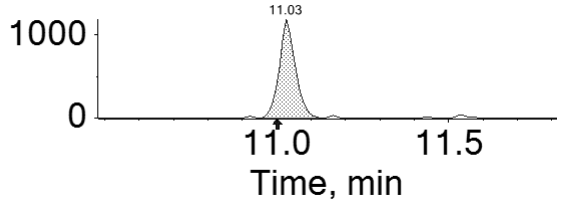
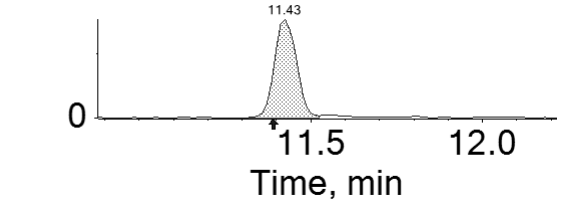
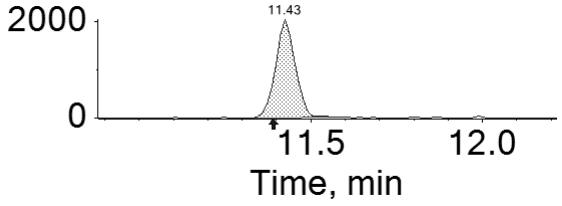
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.70(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.58(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.80(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.03(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.42(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.41(11.38) min Concentration: 1.00 Sample Type: (Standard)	

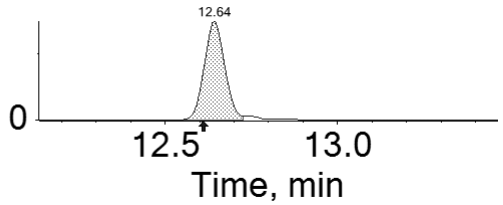
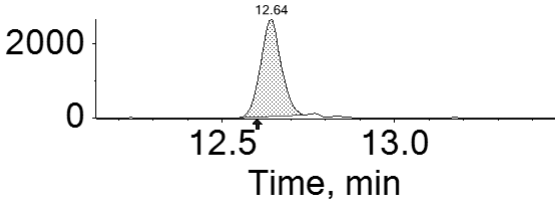
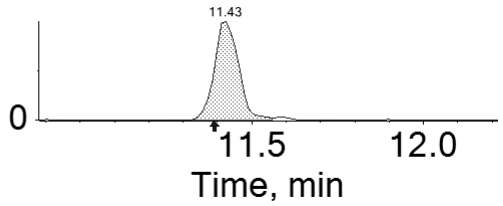
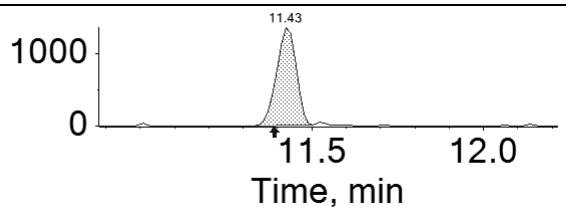
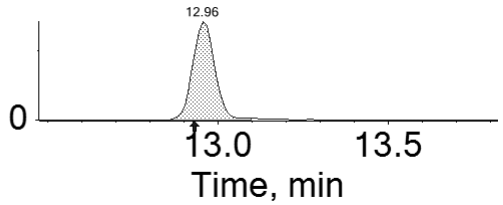
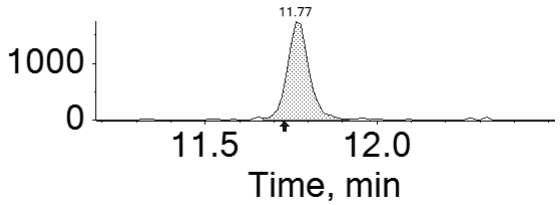
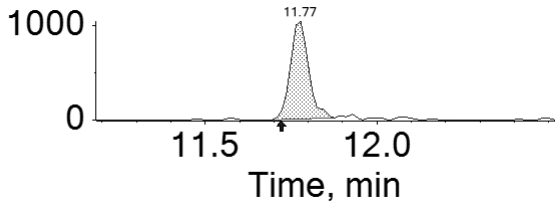
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.75(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.22(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 13.00(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.51(14.47) min Concentration: 1.00 Sample Type: (Standard)	

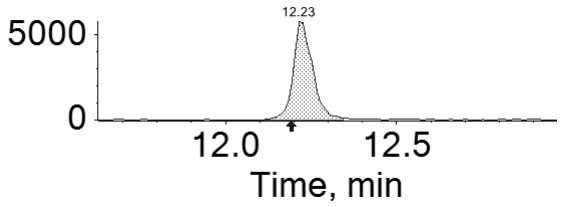
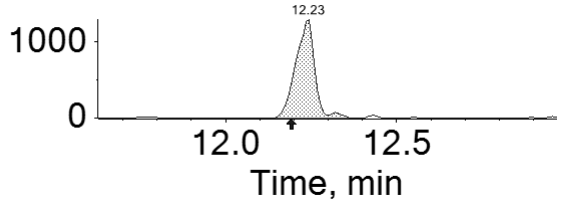
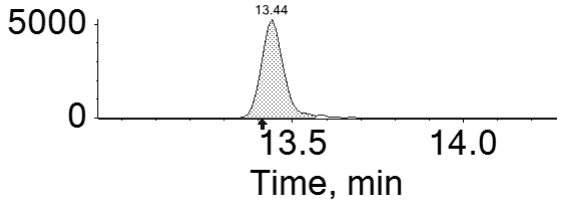
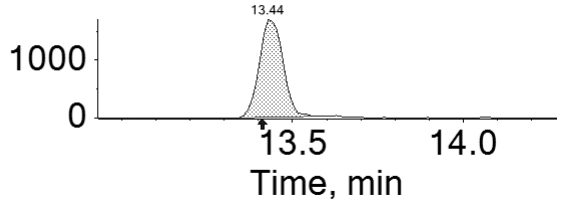
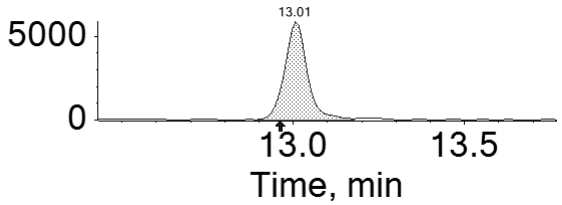
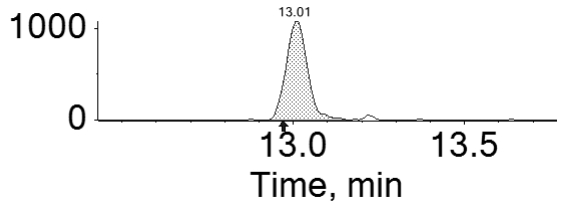
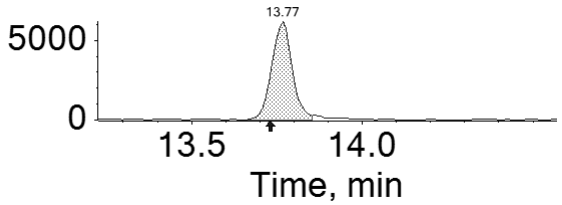
PFBA (213.0 / 169.0) RT (Exp. RT): 1.82 (1.76) min Calculated conc: 0.533 Area Ratio: 1.188e-1 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.53 (5.54) min Calculated conc: 0.473 Area Ratio: 9.736e-2 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.488 Area Ratio: 1.039e-1 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.452 Area Ratio: 3.412e-2 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.07 (7.04) min Calculated conc: 0.487 Area Ratio: 9.341e-2 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 0.465 Area Ratio: 5.951e-2 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 0.433 Area Ratio: 8.255e-2 Sample Type: (Standard)	

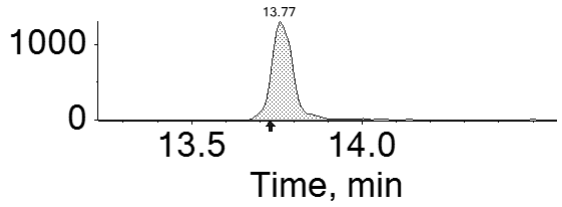
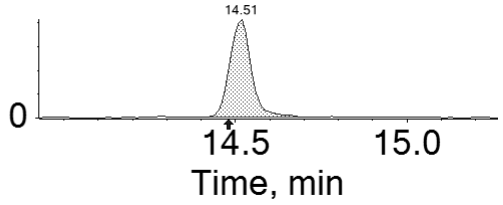
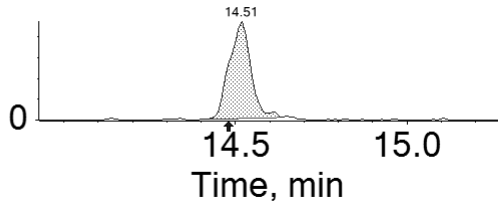
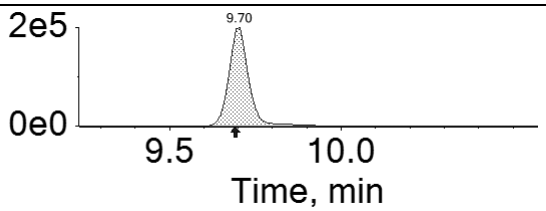
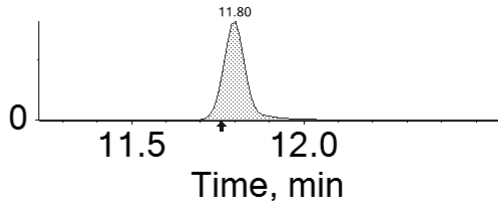
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 0.483 Area Ratio: 7.516e-3 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.85 (8.84) min Calculated conc: 0.462 Area Ratio: 4.515e-2 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.85 (8.84) min Calculated conc: 0.478 Area Ratio: 1.728e-2 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.72 (8.70) min Calculated conc: 0.468 Area Ratio: 7.540e-2 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.72 (8.70) min Calculated conc: 0.470 Area Ratio: 2.480e-2 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.96 (9.95) min Calculated conc: 0.451 Area Ratio: 1.004e-1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.96 (10.01) min Calculated conc: 0.429 Area Ratio: 3.731e-2 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 0.452 Area Ratio: 1.260e-1 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 0.548 Area Ratio: 1.105e-1 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.452 Area Ratio: 1.214e-1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.474 Area Ratio: 4.432e-2 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.92 (10.90) min Calculated conc: 0.505 Area Ratio: 9.201e-2 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.92 (10.90) min Calculated conc: 0.530 Area Ratio: 2.828e-2 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.59 (10.55) min Calculated conc: 0.530 Area Ratio: 8.580e-2 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.59 (10.57) min Calculated conc: 0.471 Area Ratio: 2.569e-2 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.81 (11.78) min Calculated conc: 0.484 Area Ratio: 1.227e-1 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.81 (11.78) min Calculated conc: 0.509 Area Ratio: 3.486e-2 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.03 (11.00) min Calculated conc: 0.497 Area Ratio: 1.006e-1 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.03 (11.00) min Calculated conc: 0.524 Area Ratio: 9.262e-2 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.479 Area Ratio: 1.158e-1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.463 Area Ratio: 2.707e-2 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.64 (12.61) min Calculated conc: 0.449 Area Ratio: 8.706e-2 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.64 (12.60) min Calculated conc: 0.482 Area Ratio: 3.094e-2 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.395 Area Ratio: 1.359e-1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.412 Area Ratio: 7.429e-2 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 0.453 Area Ratio: 6.117e-2 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.77 (11.73) min Calculated conc: 0.452 Area Ratio: 1.331e-1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.77 (11.72) min Calculated conc: 0.403 Area Ratio: 6.623e-2 Sample Type: (Standard)	

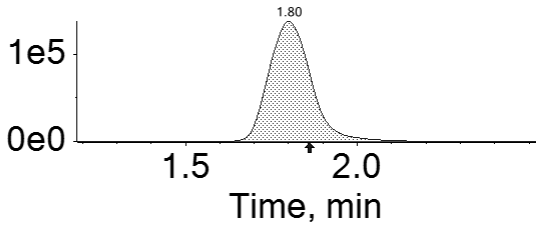
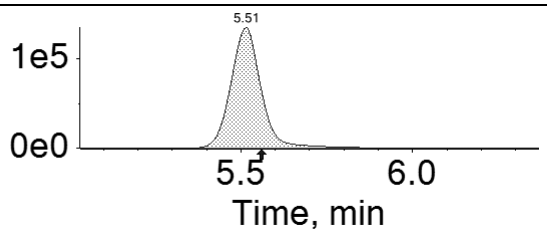
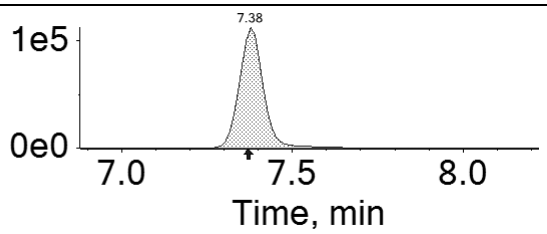
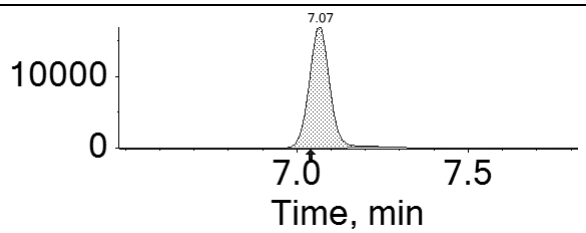
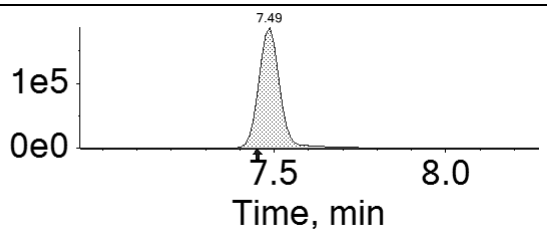
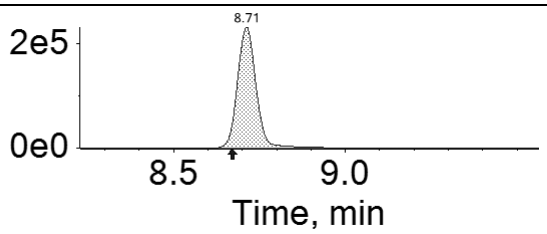
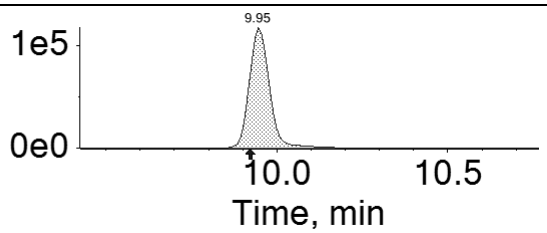
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.23 (12.19) min Calculated conc: 0.469 Area Ratio: 6.508e-2 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.23 (12.19) min Calculated conc: 0.477 Area Ratio: 1.428e-2 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.44 (13.41) min Calculated conc: 0.515 Area Ratio: 5.585e-2 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.44 (13.41) min Calculated conc: 0.540 Area Ratio: 1.940e-2 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 13.01 (12.96) min Calculated conc: 0.494 Area Ratio: 6.401e-2 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.01 (12.97) min Calculated conc: 0.497 Area Ratio: 1.118e-2 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.77 (13.73) min Calculated conc: 0.483 Area Ratio: 6.132e-2 Sample Type: (Standard)	

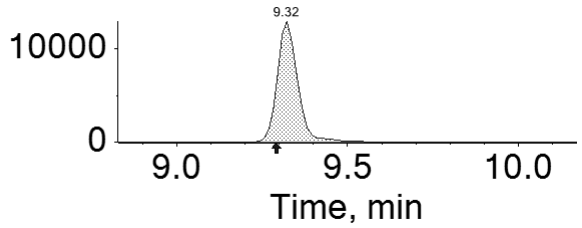
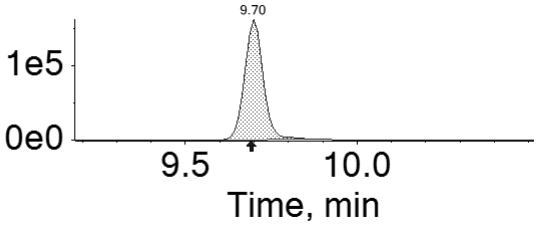
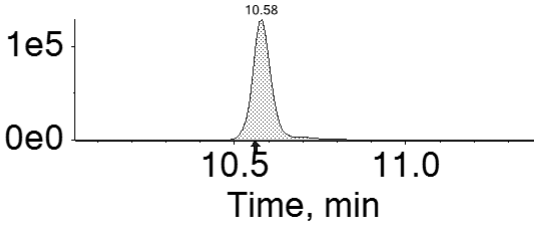
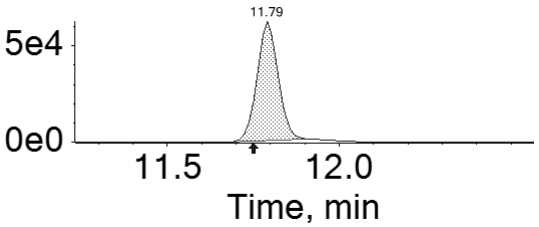
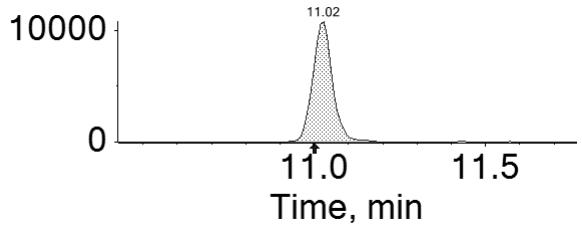
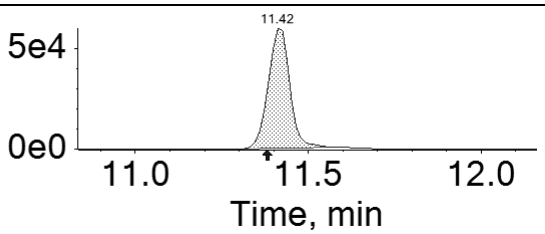
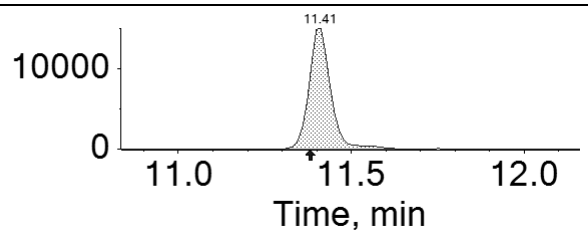
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.77 (13.73) min Calculated conc: 0.553 Area Ratio: 1.358e-2 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.51 (14.48) min Calculated conc: 0.505 Area Ratio: 8.525e-2 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.51 (14.48) min Calculated conc: 0.444 Area Ratio: 9.559e-3 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 1.813 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.80 (11.76) min Calculated conc: 1.873 Area Ratio: N/A Sample Type: (Standard)	

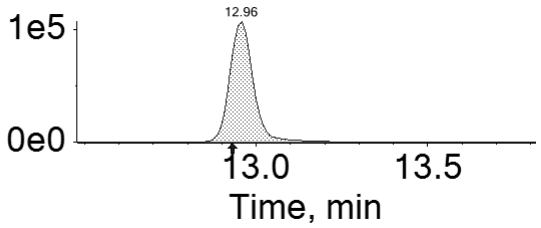
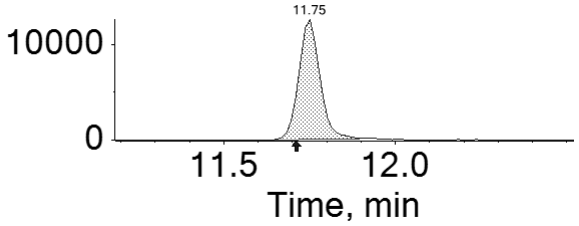
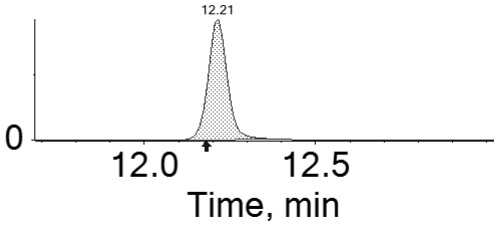
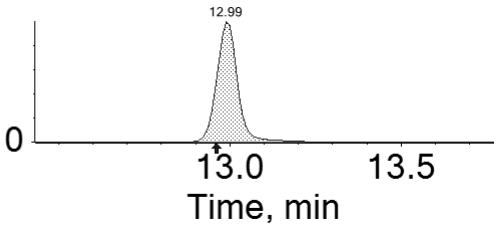
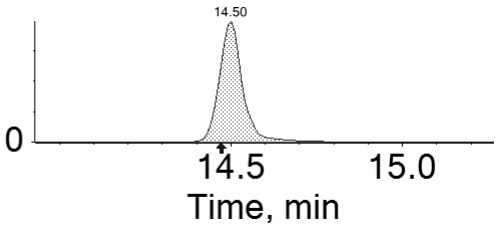
Sample Name	CAL-19206-006-02	**Injection Vial**	3
Sample ID	CAL-19206-006-02	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T11:48:40	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

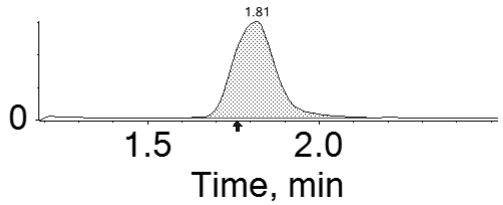
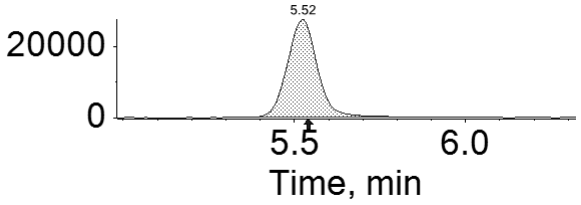
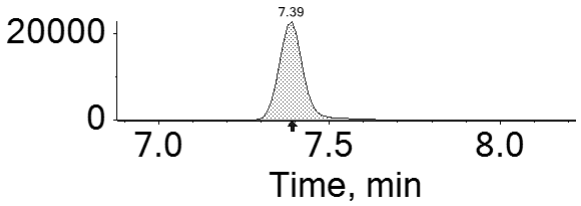
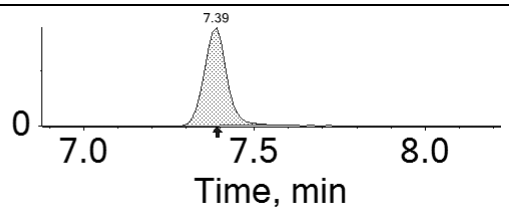
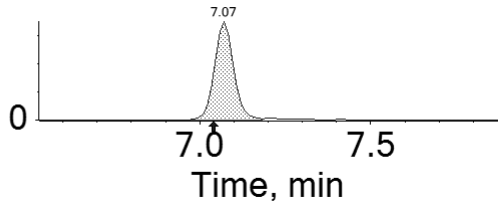
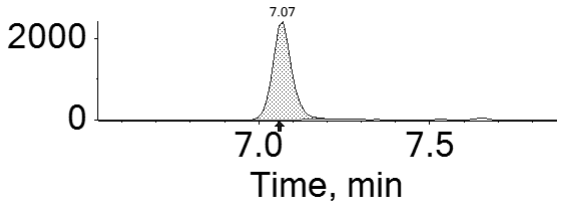
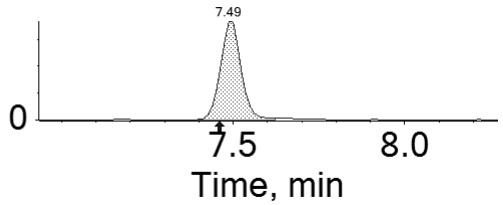
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.172e6	1.80	1.00	-
13C5_PFPeA	8.249e5	5.51	1.00	-
13C3_PFBS	5.482e5	7.38	1.00	-
13C2_4:2FTS	7.001e4	7.07	1.00	-
13C5_PFHxA	7.887e5	7.49	1.00	-
13C4_PFHpA	8.736e5	8.71	1.00	-
13C3_PFHxS	4.751e5	9.95	1.00	-
13C2_6:2FTS	5.324e4	9.32	1.00	-
13C8_PFOA	6.086e5	9.70	1.00	-
13C9_PFNA	5.028e5	10.58	1.00	-
13C8_PFOS	2.624e5	11.79	1.00	-
13C2_8:2FTS	4.330e4	11.02	1.00	-
13C6_PFDA	2.568e5	11.42	1.00	-
d3-MeFOSAA	6.531e4	11.41	1.00	-
13C8_FOSA	5.146e5	12.96	1.00	-
d5-EtFOSAA	5.365e4	11.75	1.00	-
13C7_PFUdA	3.577e5	12.21	1.00	-
13C2_PFDoA	4.158e5	12.99	1.00	-
13C2_PFTeDA	1.863e5	14.50	1.00	-

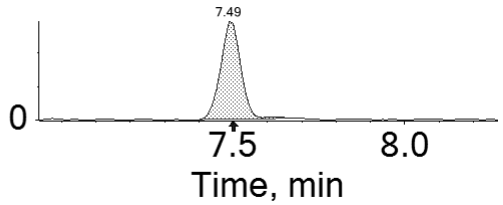
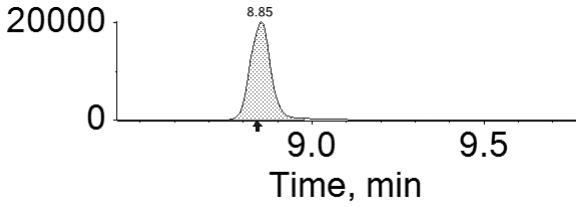
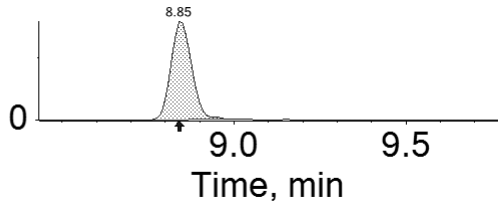
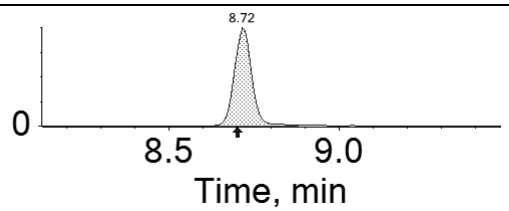
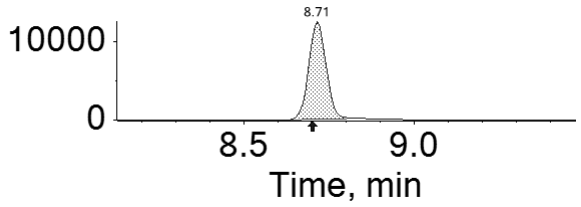
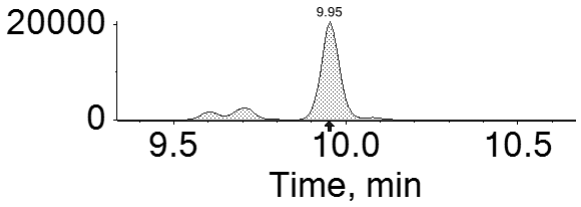
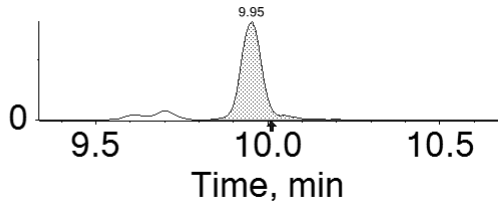
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	2.550e+05	1.81	1.00	0.975
PFPeA	1.691e+05	5.52	1.00	0.996
PFBS	1.125e+05	7.39	1.00	0.963
PFBS_2	4.044e+04	7.39	1.00	0.977
4:2FTS	1.369e+04	7.07	1.00	1.020
4:2FTS_2	9.434e+03	7.07	1.00	1.052
PFHxA	1.528e+05	7.49	1.00	1.016
PFHxA_2	1.198e+04	7.49	1.00	0.977
PFPeS	8.465e+04	8.85	1.00	0.992
PFPeS_2	3.328e+04	8.85	1.00	1.054
PFHpA	1.423e+05	8.72	1.00	1.010
PFHpA_2	4.374e+04	8.71	1.00	0.949
PFHxS	9.880e+04	9.95	1.00	0.933
PFHxS_2	3.624e+04	9.95	1.00	0.877
6:2FTS	1.519e+04	9.33	1.00	1.023
6:2FTS_2	1.077e+04	9.33	1.00	1.003
PFOA	1.562e+05	9.70	1.00	0.956
PFOA_2	5.957e+04	9.70	1.00	1.046
PFHpS	9.283e+04	10.91	1.00	1.014
PFHpS_2	2.890e+04	10.91	1.00	1.078
PFNA	8.426e+04	10.59	1.00	1.036
PFNA_2	2.794e+04	10.59	1.00	1.019
PFOS	6.762e+04	11.80	1.00	1.017
PFOS_2	2.023e+04	11.80	1.00	1.126
8:2FTS	8.138e+03	11.03	1.00	0.927
8:2FTS_2	8.559e+03	11.03	1.00	1.119
PFDA	6.526e+04	11.42	1.00	1.052
PFDA_2	1.577e+04	11.42	1.00	1.050
PFNS	6.354e+04	12.63	1.00	0.917
PFNS_2	2.069e+04	12.63	1.00	0.900
N-MeFOSAA	2.214e+04	11.42	1.00	0.984
N-MeFOSAA_2	1.240e+04	11.42	1.00	1.052
FOSA	6.467e+04	12.96	1.00	0.930
N-EtFOSAA	1.531e+04	11.76	1.00	0.970
N-EtFOSAA_2	9.237e+03	11.76	1.00	1.048
PFUdA	4.603e+04	12.22	1.00	0.927
PFUdA_2	9.503e+03	12.22	1.00	0.887
PFDS	4.740e+04	13.43	1.00	1.052
PFDS_2	1.506e+04	13.43	1.00	1.008
PFDoA	5.267e+04	13.00	1.00	0.976
PFDoA_2	9.177e+03	13.00	1.00	0.981
PFTrDA	5.059e+04	13.76	1.00	0.958
PFTrDA_2	1.033e+04	13.76	1.00	1.012
PFTeDA	3.243e+04	14.50	1.00	1.031
PFTeDA_2	4.064e+03	14.50	1.00	1.014
13C4_PFOA	7.893e+05	9.70	1.00	1.804
13C4_PFOS	3.434e+05	11.79	1.00	1.740

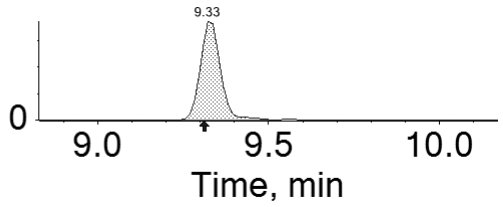
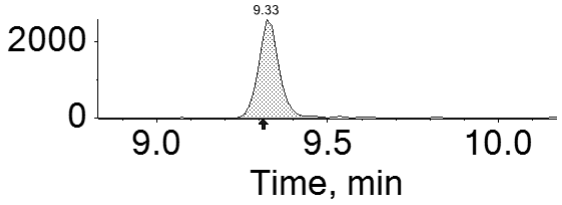
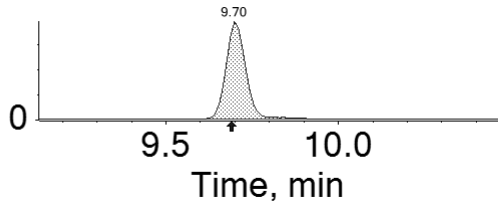
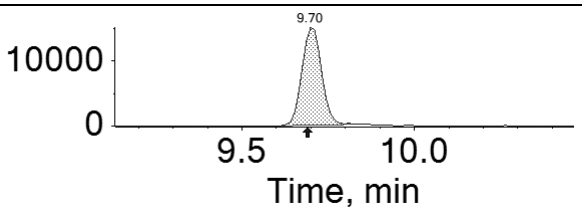
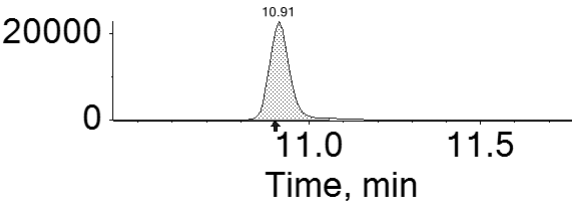
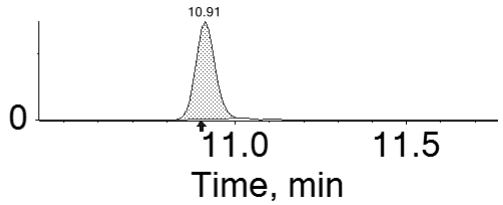
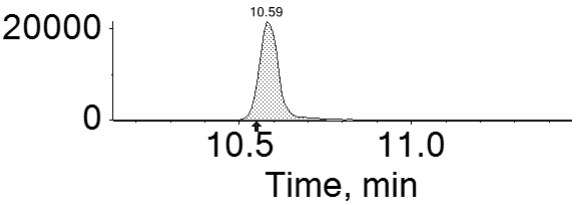
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.80(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.51(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.49(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.71(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.95(9.92) min Concentration: 1.00 Sample Type: (Standard)	

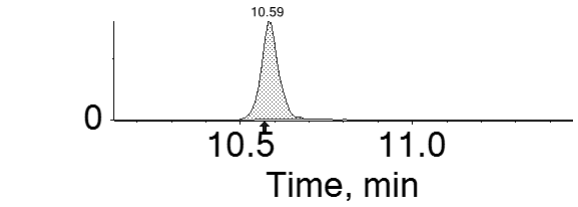
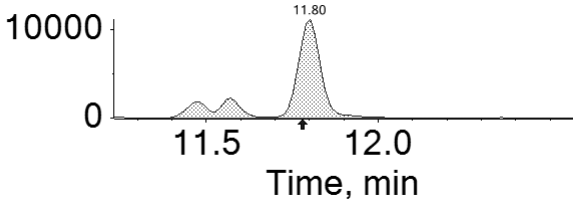
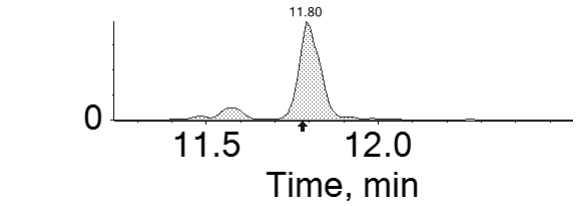
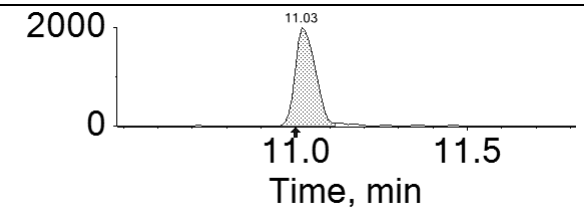
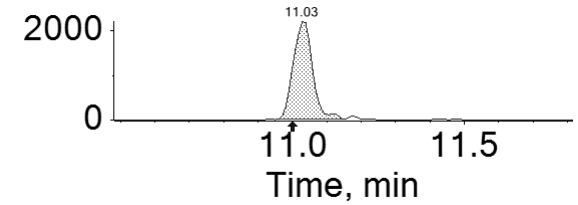
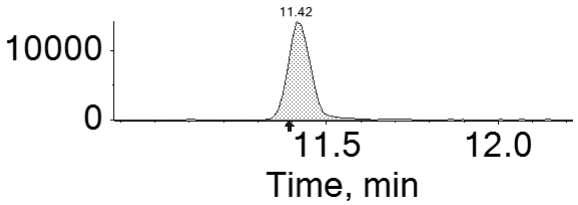
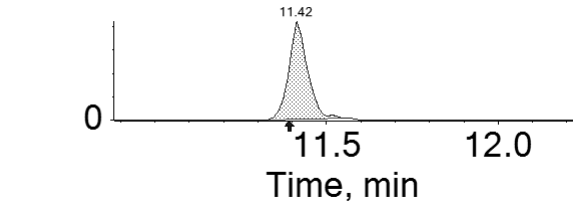
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.70(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.58(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.79(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.02(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.42(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.41(11.38) min Concentration: 1.00 Sample Type: (Standard)	

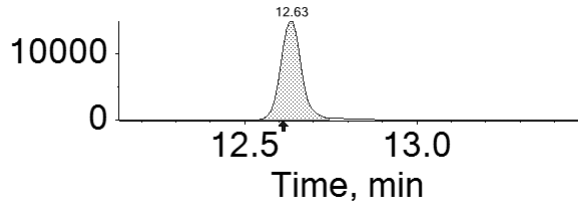
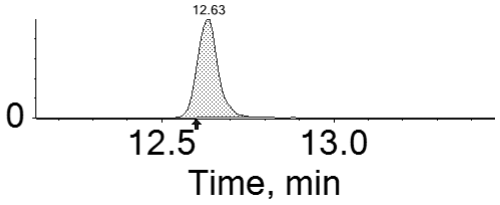
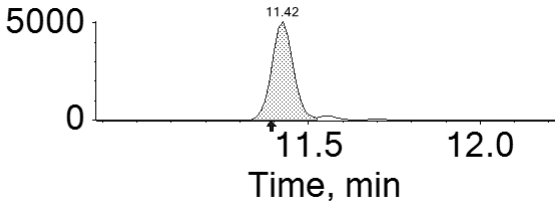
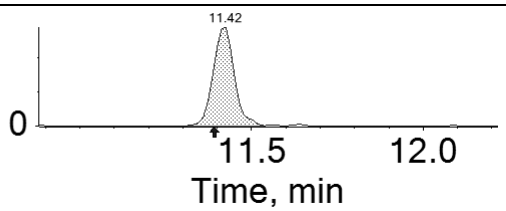
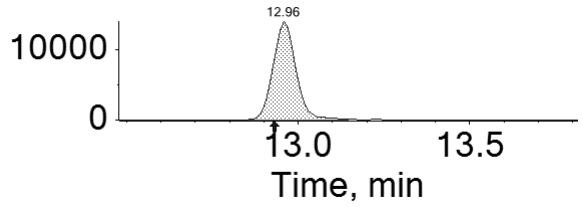
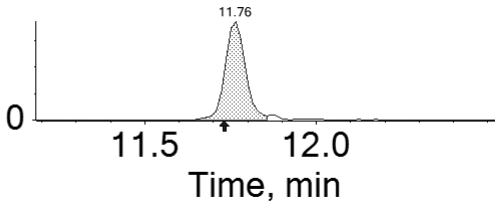
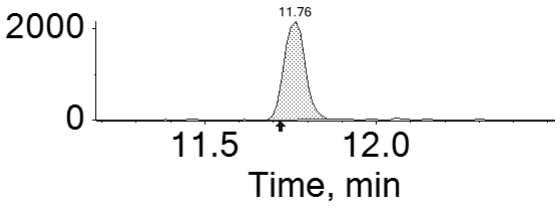
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.75(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.21(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.99(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.50(14.47) min Concentration: 1.00 Sample Type: (Standard)	

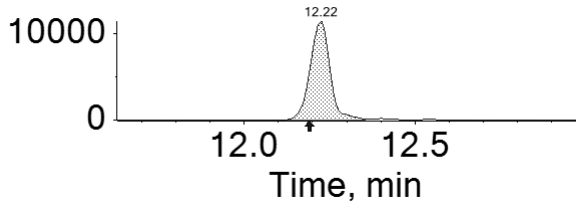
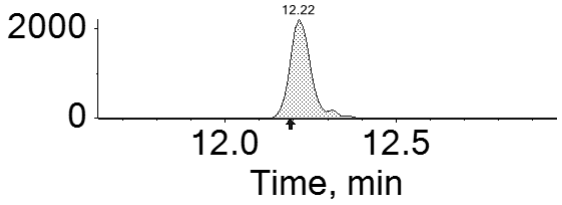
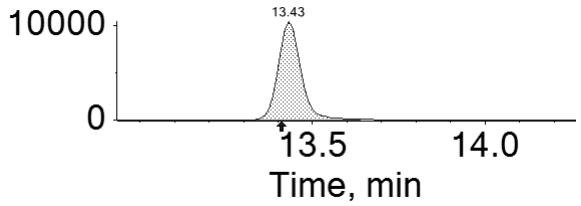
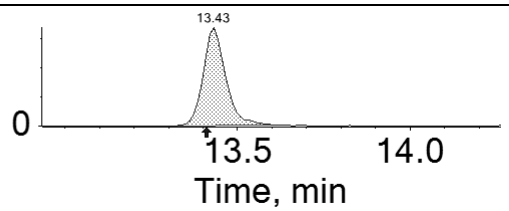
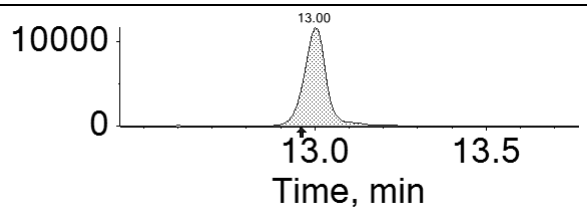
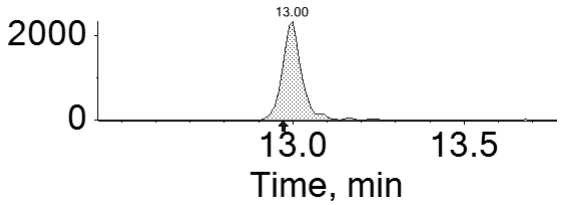
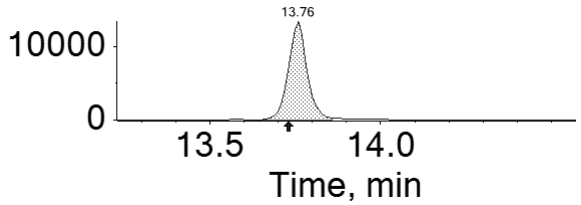
PFBA (213.0 / 169.0) RT (Exp. RT): 1.81 (1.76) min Calculated conc: 0.975 Area Ratio: 2.175e-1 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.52 (5.54) min Calculated conc: 0.996 Area Ratio: 2.050e-1 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.963 Area Ratio: 2.052e-1 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.39 (7.39) min Calculated conc: 0.977 Area Ratio: 7.376e-2 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.07 (7.04) min Calculated conc: 1.020 Area Ratio: 1.955e-1 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 1.052 Area Ratio: 1.347e-1 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 1.016 Area Ratio: 1.937e-1 Sample Type: (Standard)	

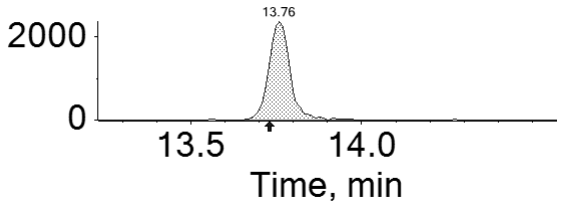
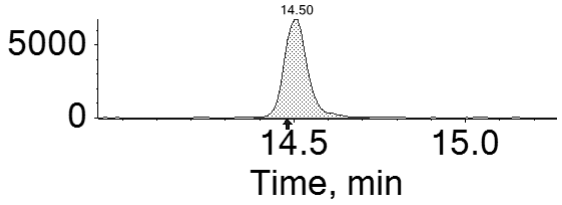
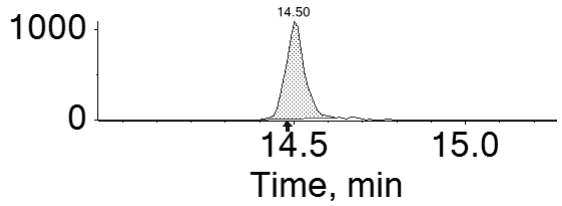
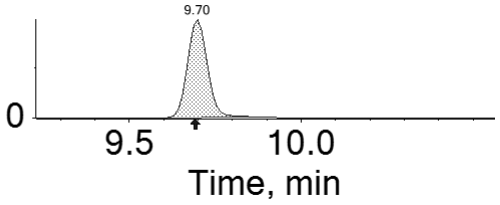
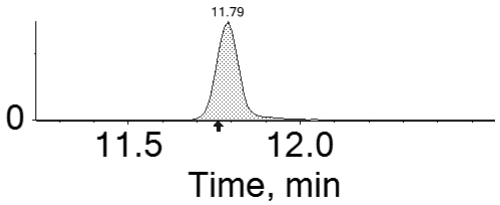
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 0.977 Area Ratio: 1.519e-2 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.85 (8.84) min Calculated conc: 0.992 Area Ratio: 9.690e-2 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.85 (8.84) min Calculated conc: 1.054 Area Ratio: 3.809e-2 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.72 (8.70) min Calculated conc: 1.010 Area Ratio: 1.629e-1 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 0.949 Area Ratio: 5.007e-2 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 0.933 Area Ratio: 2.080e-1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.95 (10.01) min Calculated conc: 0.877 Area Ratio: 7.628e-2 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 1.023 Area Ratio: 2.854e-1 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 1.003 Area Ratio: 2.022e-1 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 0.956 Area Ratio: 2.567e-1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 1.046 Area Ratio: 9.787e-2 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.91 (10.90) min Calculated conc: 1.014 Area Ratio: 1.846e-1 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.91 (10.90) min Calculated conc: 1.078 Area Ratio: 5.748e-2 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.59 (10.55) min Calculated conc: 1.036 Area Ratio: 1.676e-1 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.59 (10.57) min Calculated conc: 1.019 Area Ratio: 5.557e-2 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.80 (11.78) min Calculated conc: 1.017 Area Ratio: 2.576e-1 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.80 (11.78) min Calculated conc: 1.126 Area Ratio: 7.710e-2 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.03 (11.00) min Calculated conc: 0.927 Area Ratio: 1.879e-1 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.03 (11.00) min Calculated conc: 1.119 Area Ratio: 1.977e-1 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 1.052 Area Ratio: 2.541e-1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 1.050 Area Ratio: 6.142e-2 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.63 (12.61) min Calculated conc: 0.917 Area Ratio: 1.776e-1 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.63 (12.60) min Calculated conc: 0.900 Area Ratio: 5.784e-2 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 0.984 Area Ratio: 3.389e-1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 1.052 Area Ratio: 1.898e-1 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 0.930 Area Ratio: 1.257e-1 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.76 (11.73) min Calculated conc: 0.970 Area Ratio: 2.854e-1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.76 (11.72) min Calculated conc: 1.048 Area Ratio: 1.722e-1 Sample Type: (Standard)	

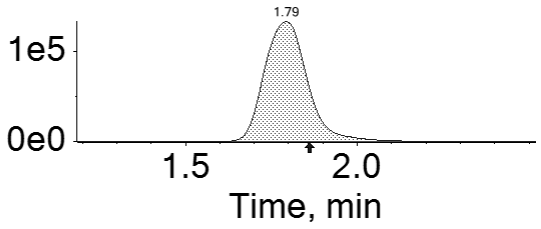
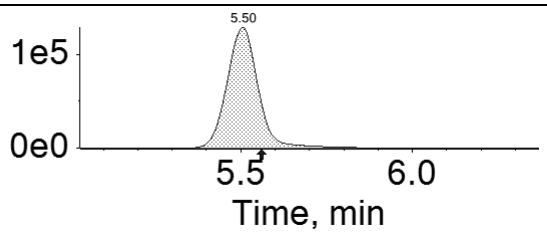
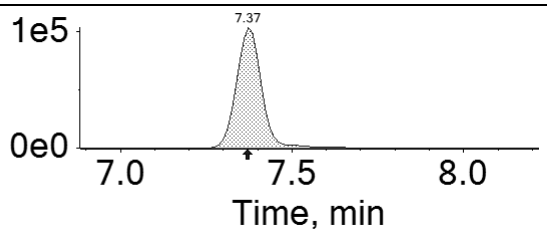
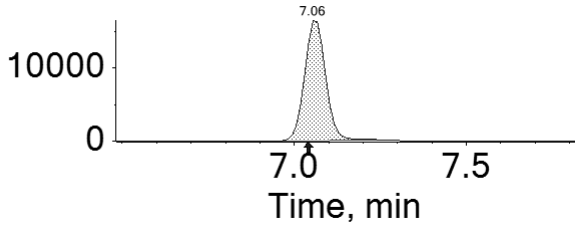
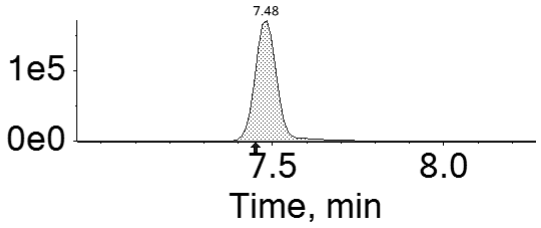
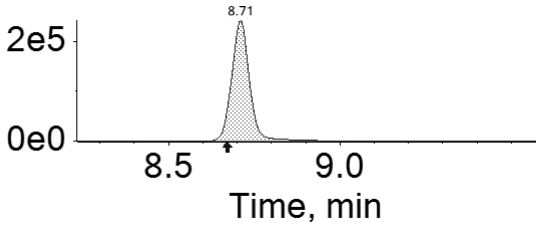
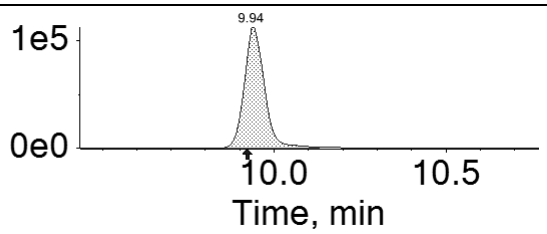
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.22 (12.19) min Calculated conc: 0.927 Area Ratio: 1.287e-1 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.22 (12.19) min Calculated conc: 0.887 Area Ratio: 2.657e-2 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.43 (13.41) min Calculated conc: 1.052 Area Ratio: 1.140e-1 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.43 (13.41) min Calculated conc: 1.008 Area Ratio: 3.621e-2 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 13.00 (12.96) min Calculated conc: 0.976 Area Ratio: 1.267e-1 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.00 (12.97) min Calculated conc: 0.981 Area Ratio: 2.207e-2 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.76 (13.73) min Calculated conc: 0.958 Area Ratio: 1.217e-1 Sample Type: (Standard)	

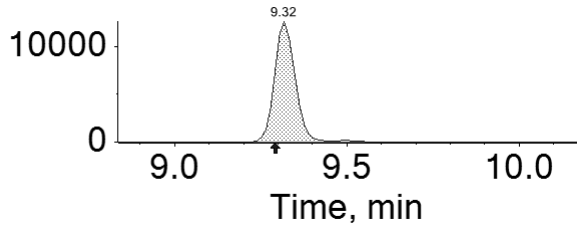
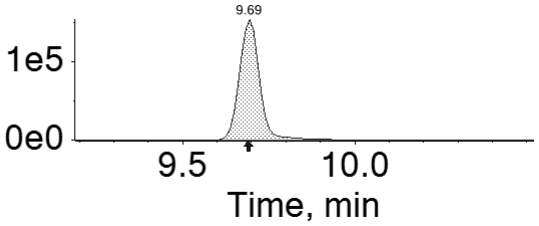
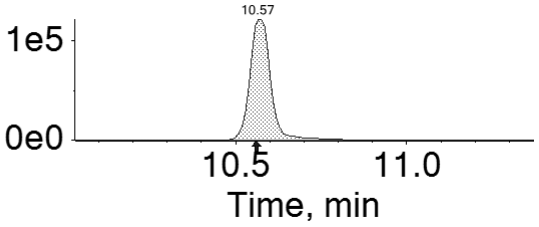
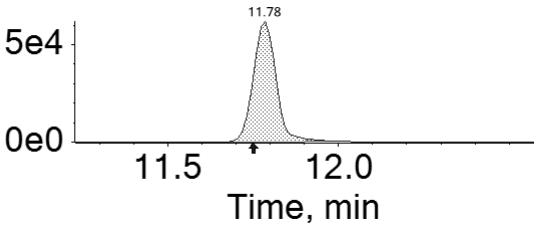
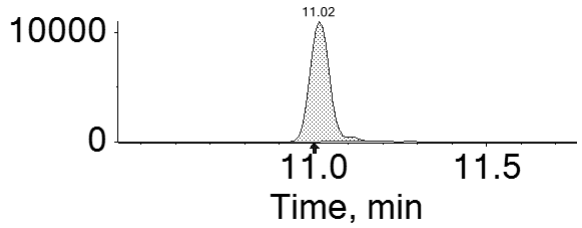
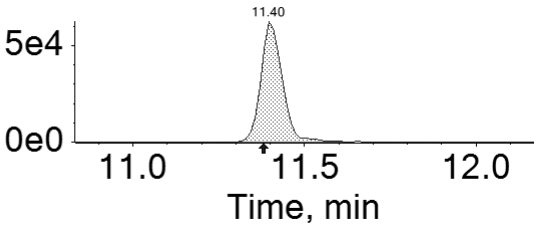
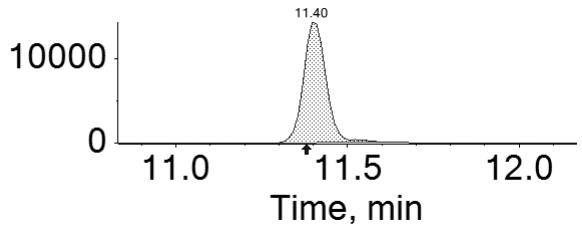
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.76 (13.73) min Calculated conc: 1.012 Area Ratio: 2.485e-2 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.50 (14.48) min Calculated conc: 1.031 Area Ratio: 1.741e-1 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.50 (14.48) min Calculated conc: 1.014 Area Ratio: 2.182e-2 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 1.804 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.79 (11.76) min Calculated conc: 1.740 Area Ratio: N/A Sample Type: (Standard)	

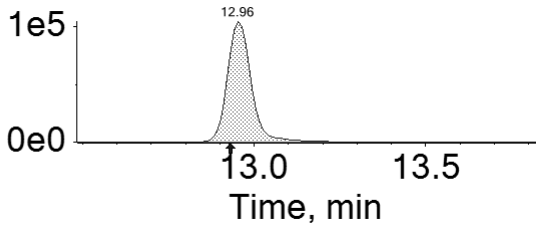
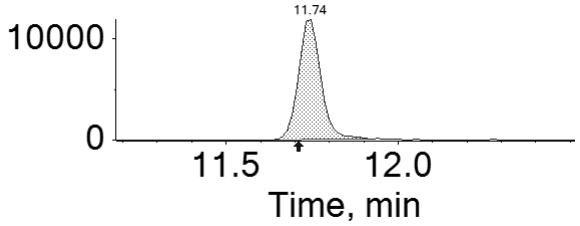
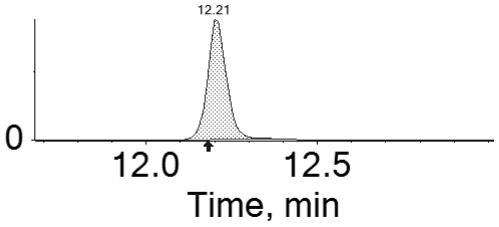
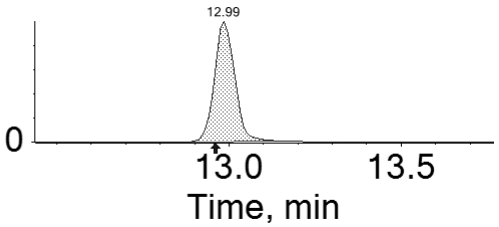
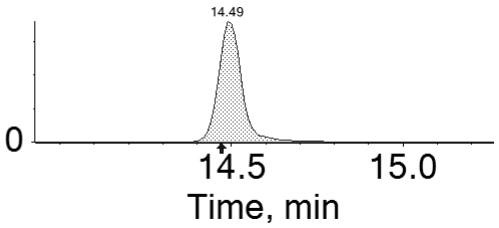
Sample Name	CAL-19206-006-03	**Injection Vial**	4
Sample ID	CAL-19206-006-03	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T12:15:20	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

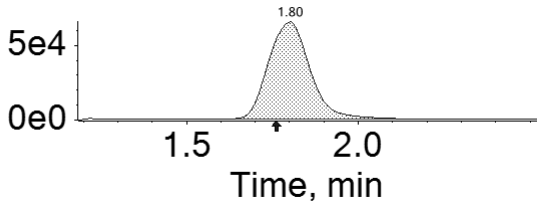
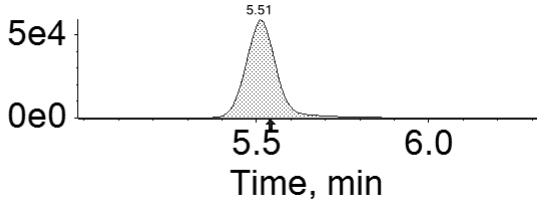
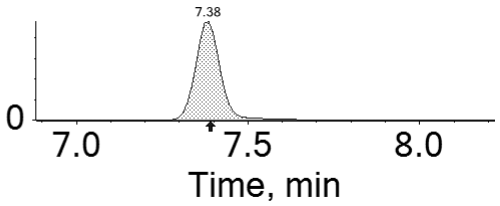
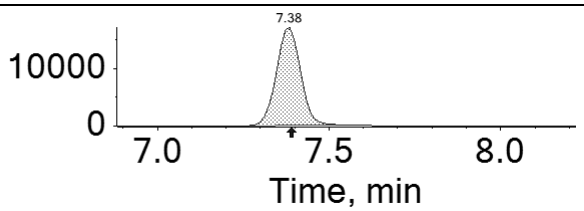
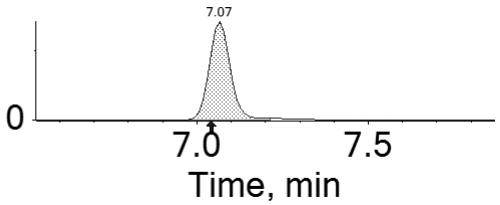
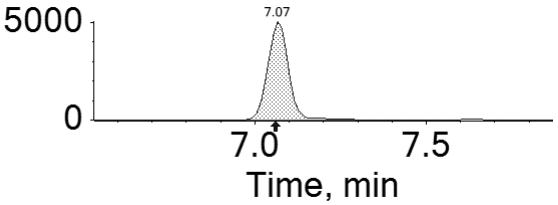
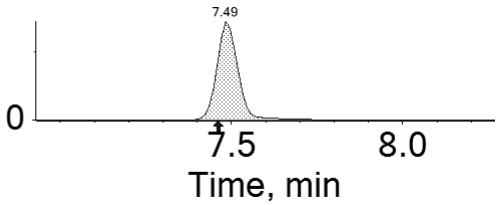
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.151e6	1.79	1.00	-
13C5_PFPeA	8.090e5	5.50	1.00	-
13C3_PFBS	5.267e5	7.37	1.00	-
13C2_4:2FTS	7.033e4	7.06	1.00	-
13C5_PFHxA	7.587e5	7.48	1.00	-
13C4_PFHpA	8.787e5	8.71	1.00	-
13C3_PFHxS	4.545e5	9.94	1.00	-
13C2_6:2FTS	5.311e4	9.32	1.00	-
13C8_PFOA	6.244e5	9.69	1.00	-
13C9_PFNA	5.159e5	10.57	1.00	-
13C8_PFOS	2.850e5	11.78	1.00	-
13C2_8:2FTS	4.384e4	11.02	1.00	-
13C6_PFDA	2.680e5	11.40	1.00	-
d3-MeFOSAA	6.574e4	11.40	1.00	-
13C8_FOSA	5.073e5	12.96	1.00	-
d5-EtFOSAA	5.376e4	11.74	1.00	-
13C7_PFUdA	3.365e5	12.21	1.00	-
13C2_PFDoA	4.093e5	12.99	1.00	-
13C2_PFTeDA	1.712e5	14.49	1.00	-

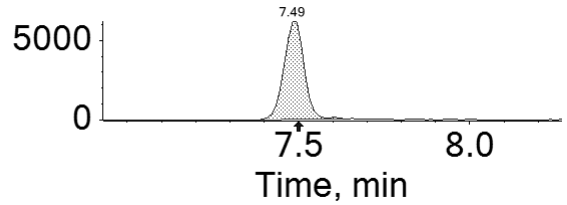
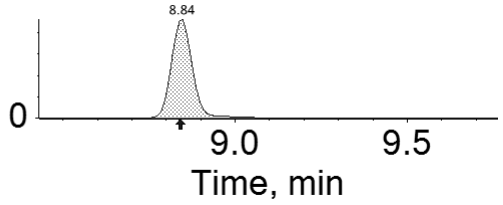
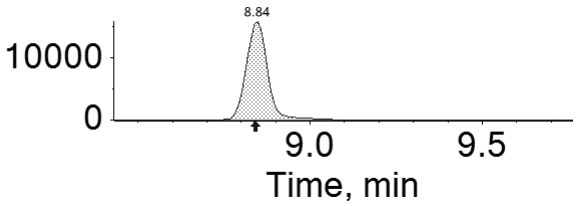
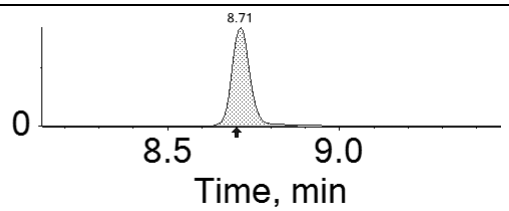
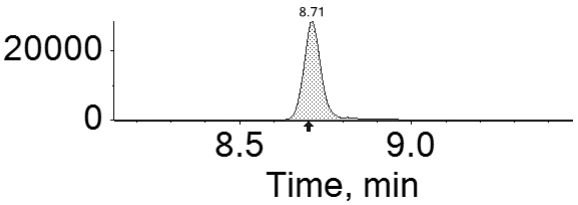
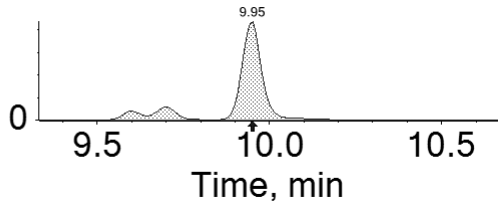
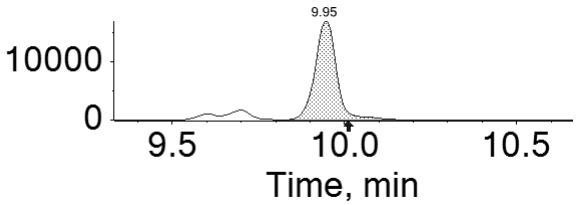
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	5.435e+05	1.80	2.00	2.118
PFPeA	3.607e+05	5.51	2.00	2.166
PFBS	2.407e+05	7.38	2.00	2.145
PFBS_2	8.308e+04	7.38	2.00	2.089
4:2FTS	3.033e+04	7.07	2.00	2.249
4:2FTS_2	2.105e+04	7.07	2.00	2.337
PFHxA	3.024e+05	7.49	2.00	2.090
PFHxA_2	2.528e+04	7.49	2.00	2.142
PFPeS	1.960e+05	8.84	2.00	2.284
PFPeS_2	6.837e+04	8.84	2.00	2.153
PFHpA	3.107e+05	8.71	2.00	2.193
PFHpA_2	1.010e+05	8.71	2.00	2.179
PFHxS	2.187e+05	9.95	2.00	2.159
PFHxS_2	7.470e+04	9.95	2.00	1.890
6:2FTS	3.314e+04	9.32	2.00	2.237
6:2FTS_2	2.567e+04	9.32	2.00	2.396
PFOA	3.660e+05	9.70	2.00	2.183
PFOA_2	1.278e+05	9.70	2.00	2.189
PFHpS	2.074e+05	10.91	2.00	2.208
PFHpS_2	5.703e+04	10.90	2.00	2.072
PFNA	1.688e+05	10.58	2.00	2.023
PFNA_2	5.946e+04	10.58	2.00	2.114
PFOS	1.431e+05	11.79	2.00	1.982
PFOS_2	3.860e+04	11.79	2.00	1.978
8:2FTS	2.020e+04	11.02	2.00	2.274
8:2FTS_2	1.637e+04	11.02	2.00	2.114
PFDA	1.297e+05	11.41	2.00	2.004
PFDA_2	3.310e+04	11.41	2.00	2.113
PFNS	1.437e+05	12.63	2.00	2.204
PFNS_2	4.584e+04	12.63	2.00	2.121
N-MeFOSAA	5.326e+04	11.42	2.00	2.353
N-MeFOSAA_2	2.539e+04	11.41	2.00	2.139
FOSA	1.453e+05	12.96	2.00	2.119
N-EtFOSAA	3.287e+04	11.76	2.00	2.077
N-EtFOSAA_2	1.699e+04	11.76	2.00	1.923
PFUdA	9.700e+04	12.21	2.00	2.075
PFUdA_2	2.089e+04	12.21	2.00	2.072
PFDS	1.017e+05	13.43	2.00	2.292
PFDS_2	3.184e+04	13.42	2.00	2.165
PFDoA	1.143e+05	12.99	2.00	2.153
PFDoA_2	1.965e+04	12.99	2.00	2.134
PFTrDA	1.073e+05	13.75	2.00	2.064
PFTrDA_2	2.088e+04	13.75	2.00	2.077
PFTeDA	6.076e+04	14.50	2.00	2.101
PFTeDA_2	8.174e+03	14.50	2.00	2.219
13C4_PFOA	7.937e+05	9.69	2.00	1.814
13C4_PFOS	3.483e+05	11.78	2.00	1.765

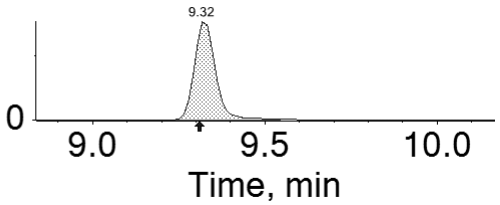
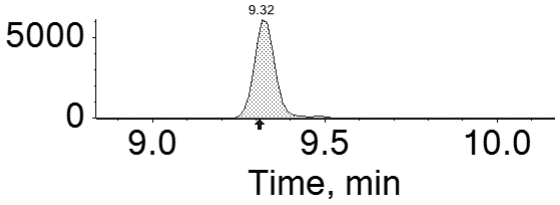
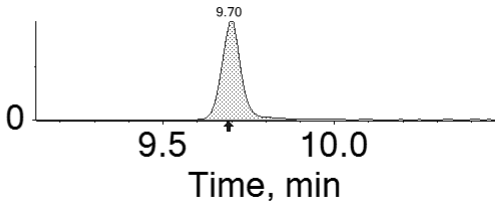
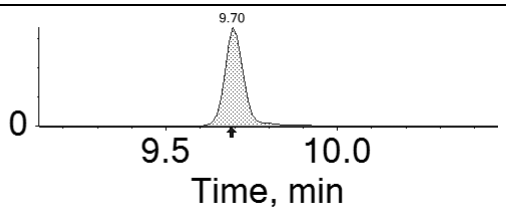
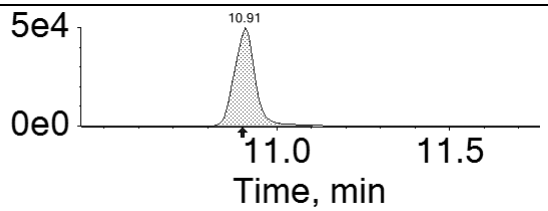
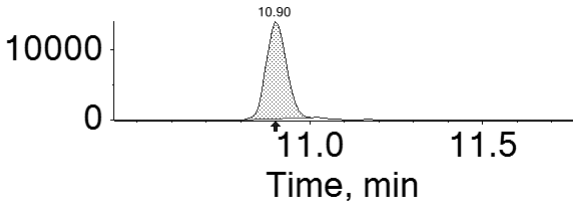
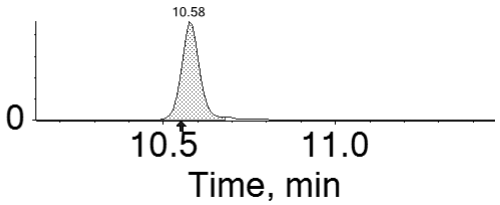
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.79(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.50(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.71(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

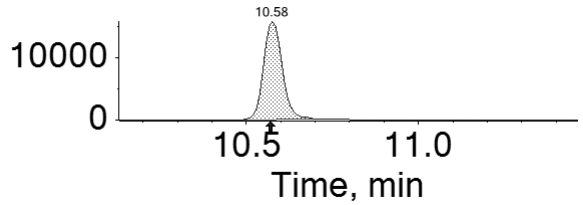
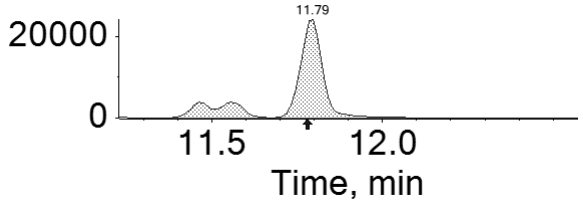
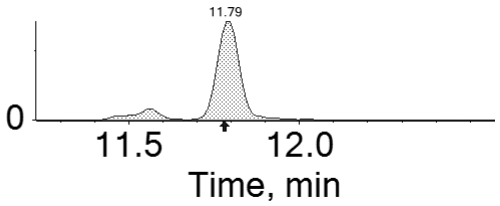
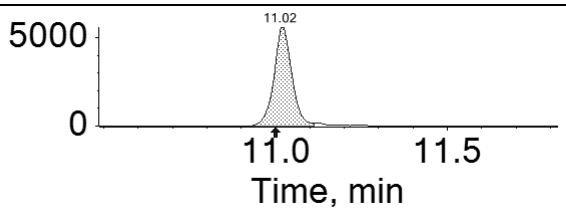
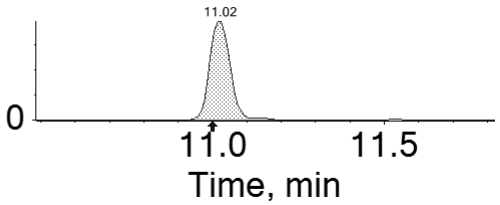
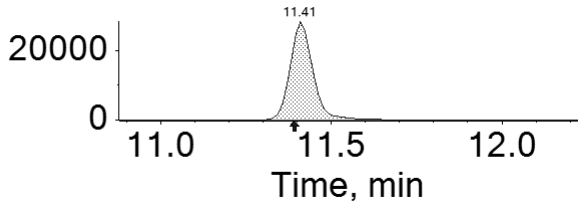
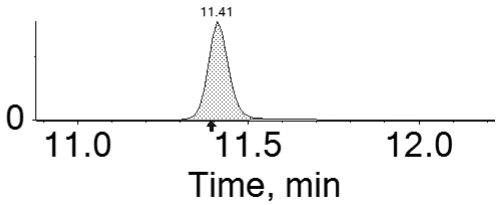
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.57(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.78(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.02(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	

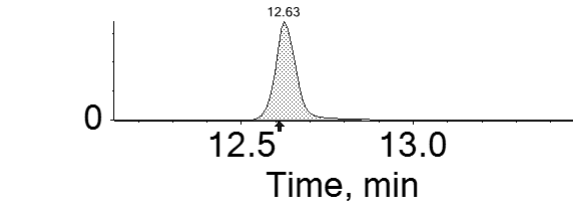
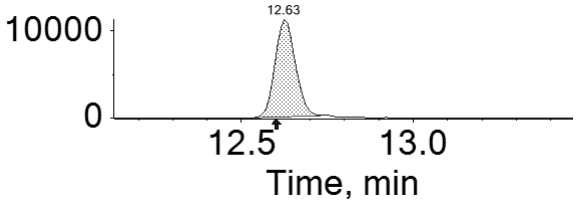
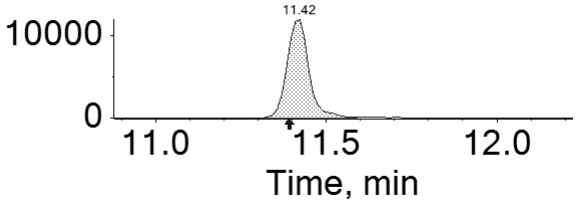
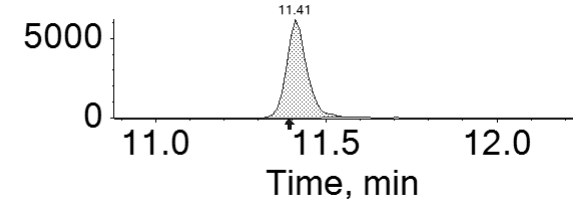
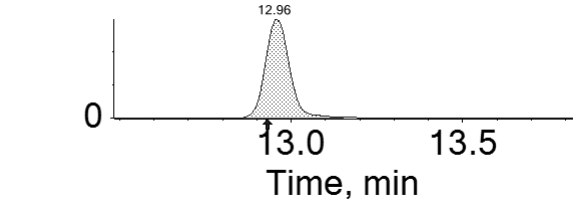
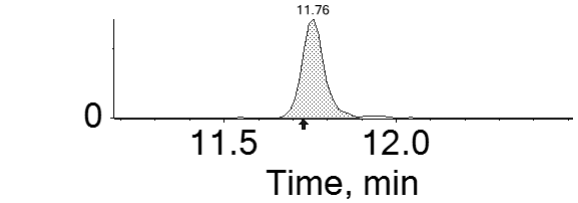
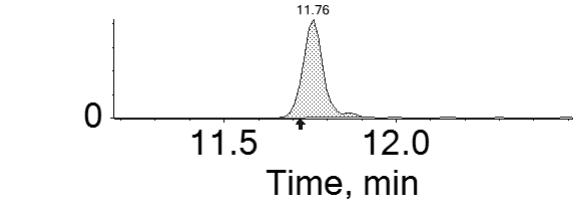
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.74(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.21(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.99(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.49(14.47) min Concentration: 1.00 Sample Type: (Standard)	

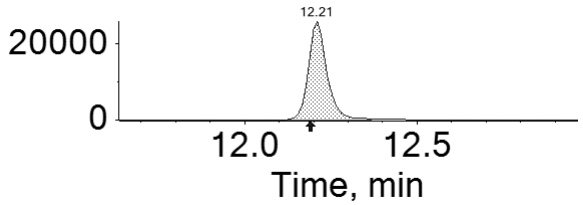
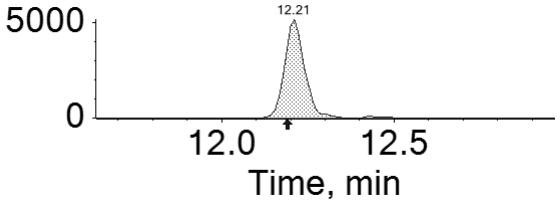
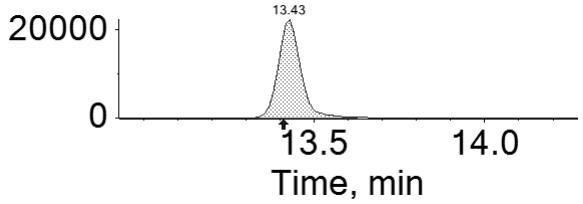
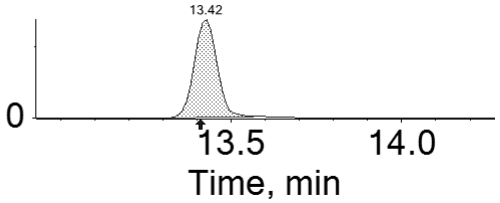
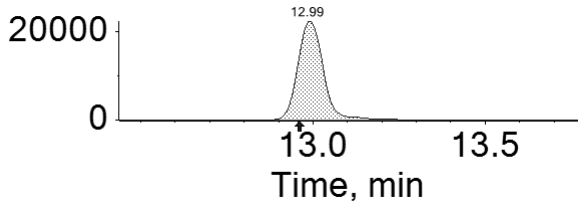
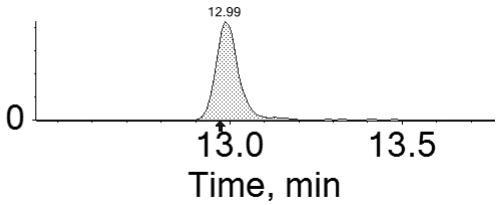
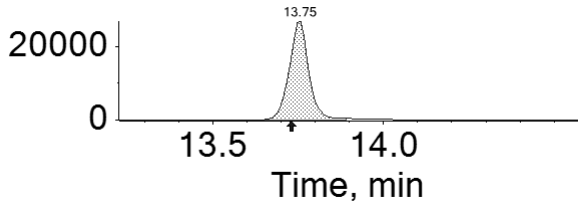
PFBA (213.0 / 169.0) RT (Exp. RT): 1.80 (1.76) min Calculated conc: 2.118 Area Ratio: 4.724e-1 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.51 (5.54) min Calculated conc: 2.166 Area Ratio: 4.458e-1 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 2.145 Area Ratio: 4.570e-1 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 2.089 Area Ratio: 1.577e-1 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.07 (7.04) min Calculated conc: 2.249 Area Ratio: 4.313e-1 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 2.337 Area Ratio: 2.992e-1 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 2.090 Area Ratio: 3.985e-1 Sample Type: (Standard)	

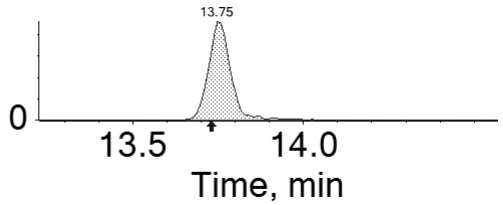
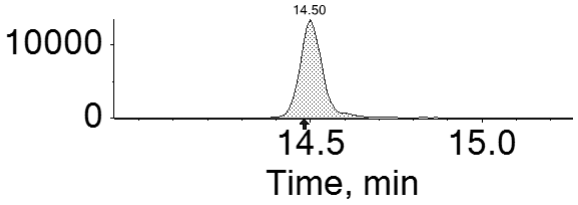
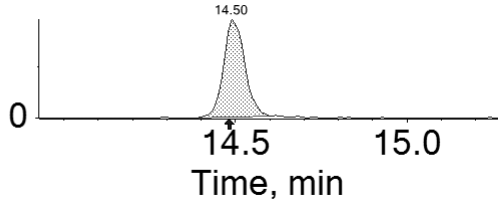
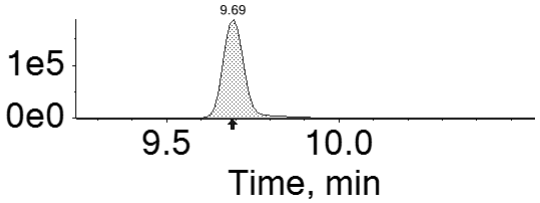
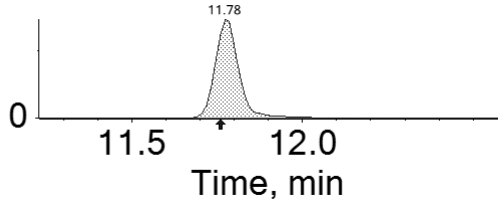
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.49 (7.50) min Calculated conc: 2.142 Area Ratio: 3.332e-2 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 2.284 Area Ratio: 2.230e-1 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 2.153 Area Ratio: 7.781e-2 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 2.193 Area Ratio: 3.536e-1 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 2.179 Area Ratio: 1.149e-1 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.95 (9.95) min Calculated conc: 2.159 Area Ratio: 4.811e-1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.95 (10.01) min Calculated conc: 1.890 Area Ratio: 1.644e-1 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 2.237 Area Ratio: 6.239e-1 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 2.396 Area Ratio: 4.834e-1 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 2.183 Area Ratio: 5.862e-1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 2.189 Area Ratio: 2.047e-1 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.91 (10.90) min Calculated conc: 2.208 Area Ratio: 4.021e-1 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 2.072 Area Ratio: 1.106e-1 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.58 (10.55) min Calculated conc: 2.023 Area Ratio: 3.273e-1 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.58 (10.57) min Calculated conc: 2.114 Area Ratio: 1.153e-1 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 1.982 Area Ratio: 5.023e-1 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 1.978 Area Ratio: 1.355e-1 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 2.274 Area Ratio: 4.608e-1 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 2.114 Area Ratio: 3.734e-1 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 2.004 Area Ratio: 4.842e-1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 2.113 Area Ratio: 1.235e-1 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.63 (12.61) min Calculated conc: 2.204 Area Ratio: 4.271e-1 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.63 (12.60) min Calculated conc: 2.121 Area Ratio: 1.362e-1 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 2.353 Area Ratio: 8.101e-1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 2.139 Area Ratio: 3.862e-1 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 2.119 Area Ratio: 2.864e-1 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.76 (11.73) min Calculated conc: 2.077 Area Ratio: 6.114e-1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.76 (11.72) min Calculated conc: 1.923 Area Ratio: 3.159e-1 Sample Type: (Standard)	

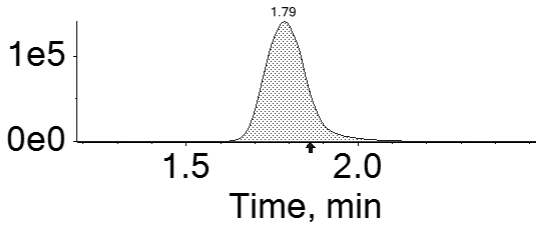
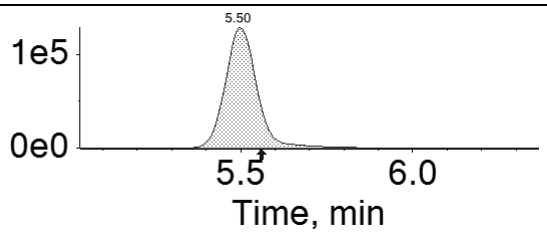
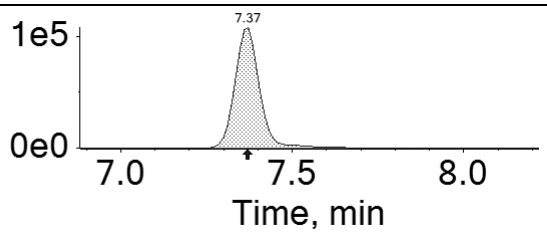
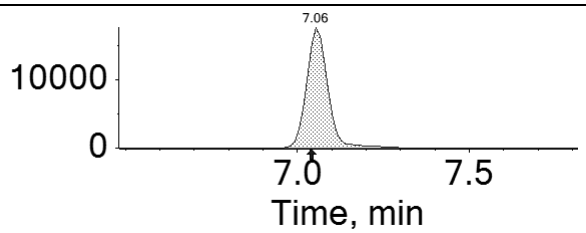
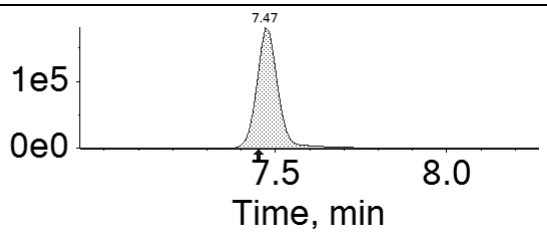
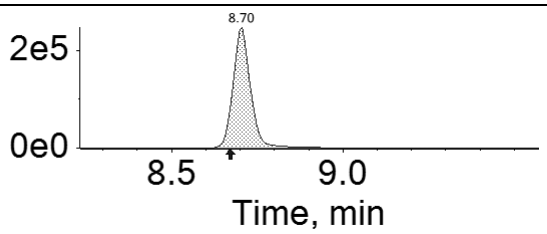
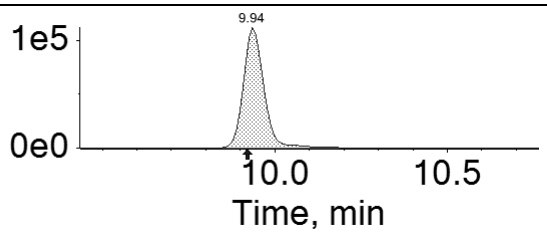
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 2.075 Area Ratio: 2.883e-1 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 2.072 Area Ratio: 6.207e-2 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.43 (13.41) min Calculated conc: 2.292 Area Ratio: 2.483e-1 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 2.165 Area Ratio: 7.779e-2 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.99 (12.96) min Calculated conc: 2.153 Area Ratio: 2.793e-1 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.99 (12.97) min Calculated conc: 2.134 Area Ratio: 4.801e-2 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 2.064 Area Ratio: 2.621e-1 Sample Type: (Standard)	

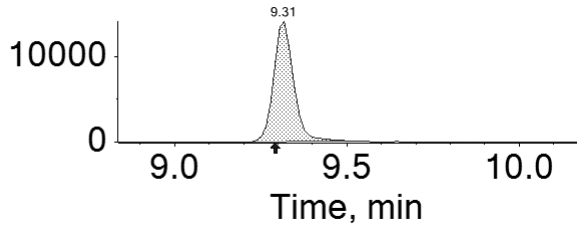
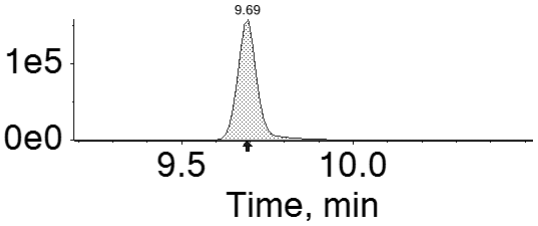
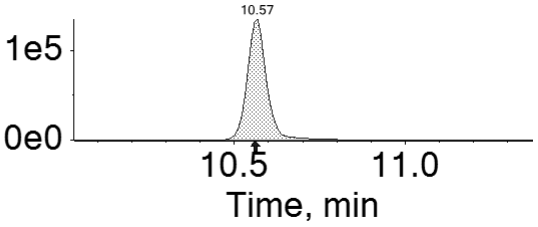
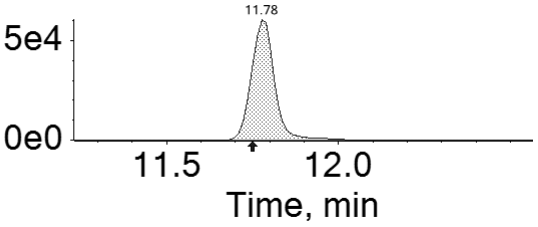
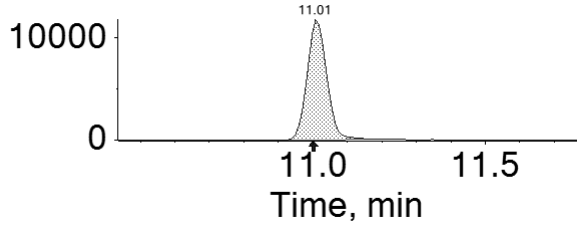
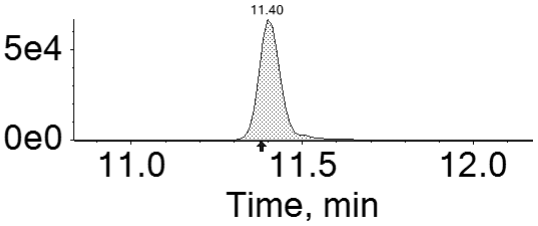
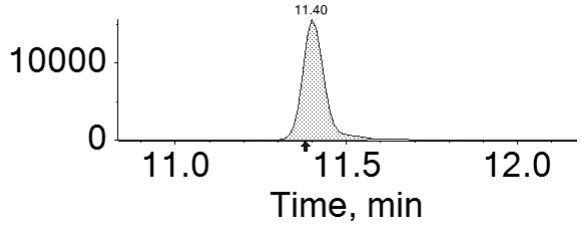
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 2.077 Area Ratio: 5.101e-2 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.50 (14.48) min Calculated conc: 2.101 Area Ratio: 3.548e-1 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.50 (14.48) min Calculated conc: 2.219 Area Ratio: 4.773e-2 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.814 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.78 (11.76) min Calculated conc: 1.765 Area Ratio: N/A Sample Type: (Standard)	

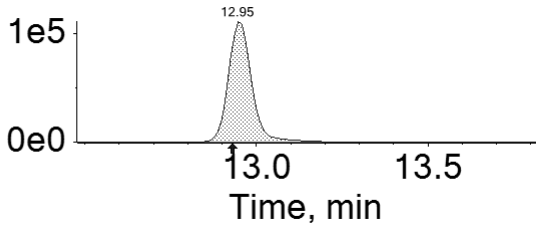
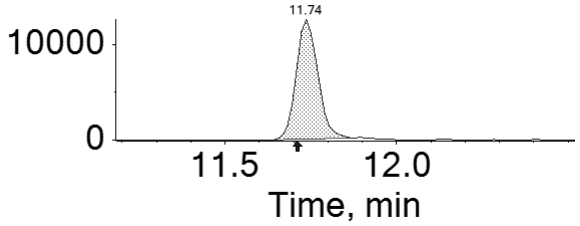
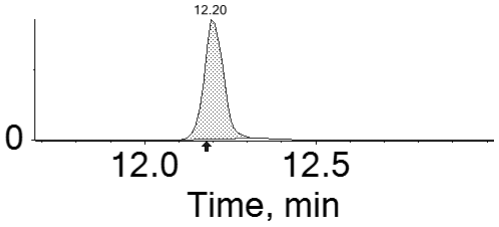
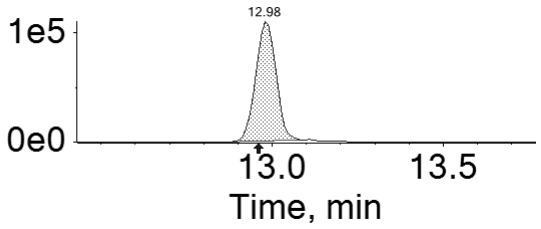
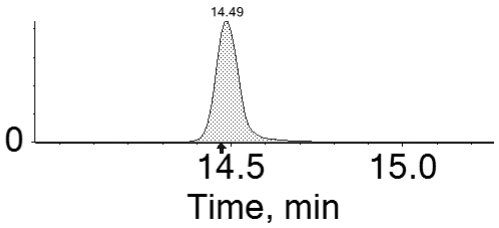
Sample Name	CAL-19206-006-04	**Injection Vial**	5
Sample ID	CAL-19206-006-04	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T12:42:00	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

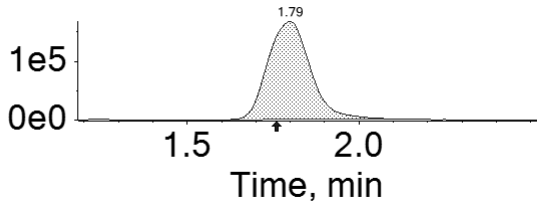
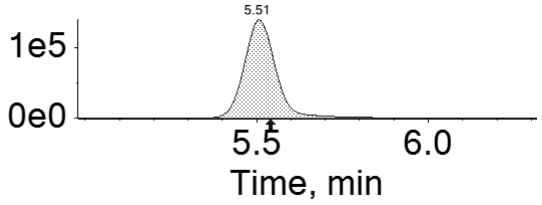
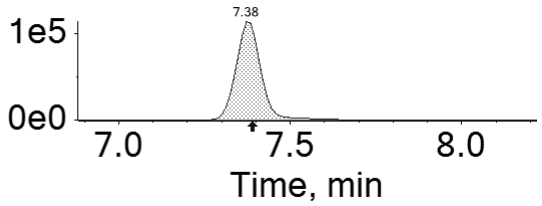
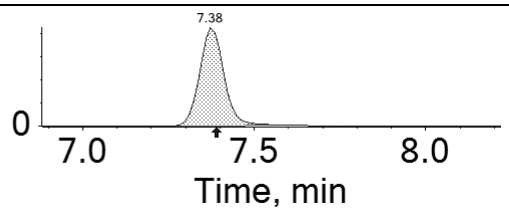
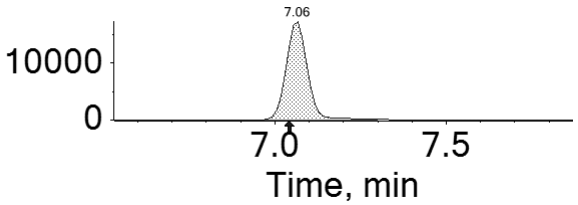
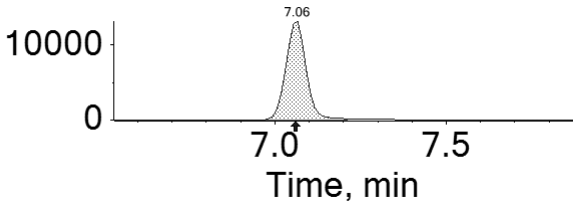
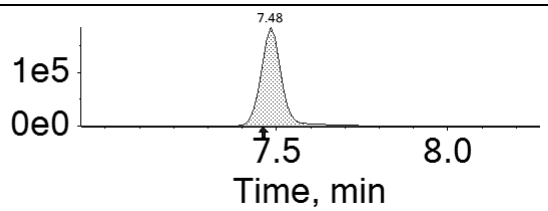
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.192e6	1.79	1.00	-
13C5_PFPeA	8.183e5	5.50	1.00	-
13C3_PFBS	5.377e5	7.37	1.00	-
13C2_4:2FTS	7.468e4	7.06	1.00	-
13C5_PFHxA	7.636e5	7.47	1.00	-
13C4_PFHpA	8.755e5	8.70	1.00	-
13C3_PFHxS	4.596e5	9.94	1.00	-
13C2_6:2FTS	5.626e4	9.31	1.00	-
13C8_PFOA	6.143e5	9.69	1.00	-
13C9_PFNA	5.344e5	10.57	1.00	-
13C8_PFOS	2.799e5	11.78	1.00	-
13C2_8:2FTS	4.641e4	11.01	1.00	-
13C6_PFDA	2.987e5	11.40	1.00	-
d3-MeFOSAA	6.859e4	11.40	1.00	-
13C8_FOSA	5.238e5	12.95	1.00	-
d5-EtFOSAA	5.480e4	11.74	1.00	-
13C7_PFUdA	3.342e5	12.20	1.00	-
13C2_PFDoA	4.518e5	12.98	1.00	-
13C2_PFTeDA	2.071e5	14.49	1.00	-

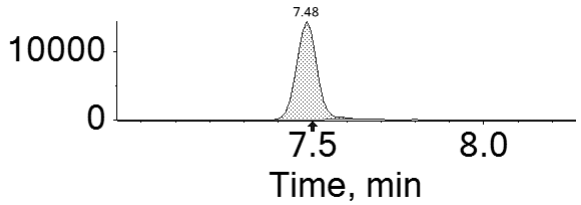
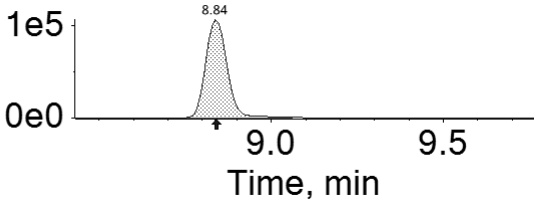
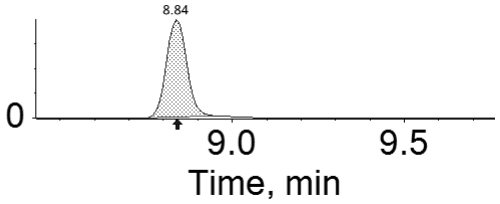
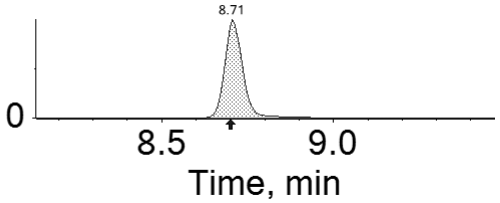
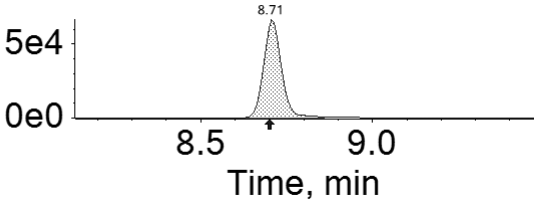
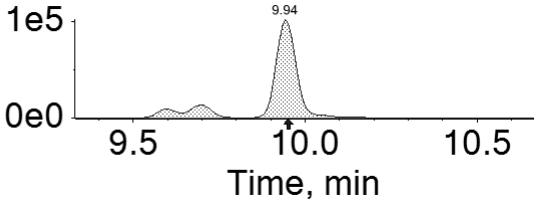
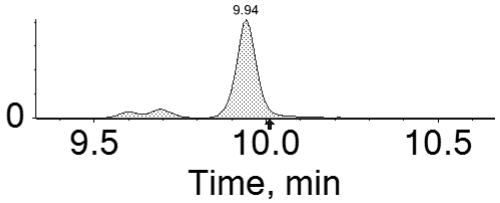
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.440e+06	1.79	5.00	5.417
PFPeA	8.790e+05	5.51	5.00	5.219
PFBS	5.739e+05	7.38	5.00	5.010
PFBS_2	2.096e+05	7.38	5.00	5.161
4:2FTS	7.478e+04	7.06	5.00	5.223
4:2FTS_2	5.392e+04	7.06	5.00	5.639
PFHxA	7.622e+05	7.48	5.00	5.234
PFHxA_2	6.003e+04	7.48	5.00	5.053
PFPeS	4.654e+05	8.84	5.00	5.443
PFPeS_2	1.602e+05	8.84	5.00	5.063
PFHpA	7.223e+05	8.71	5.00	5.116
PFHpA_2	2.381e+05	8.71	5.00	5.156
PFHxS	5.239e+05	9.94	5.00	5.115
PFHxS_2	2.046e+05	9.94	5.00	5.118
6:2FTS	8.009e+04	9.32	5.00	5.104
6:2FTS_2	6.353e+04	9.32	5.00	5.598
PFOA	8.405e+05	9.70	5.00	5.095
PFOA_2	2.970e+05	9.69	5.00	5.169
PFHpS	4.984e+05	10.90	5.00	5.121
PFHpS_2	1.417e+05	10.90	5.00	4.969
PFNA	4.314e+05	10.57	5.00	4.989
PFNA_2	1.476e+05	10.58	5.00	5.068
PFOS	3.698e+05	11.79	5.00	5.214
PFOS_2	9.256e+04	11.79	5.00	4.830
8:2FTS	4.825e+04	11.02	5.00	5.131
8:2FTS_2	4.568e+04	11.02	5.00	5.573
PFDA	3.702e+05	11.41	5.00	5.130
PFDA_2	9.010e+04	11.41	5.00	5.158
PFNS	3.510e+05	12.62	5.00	5.420
PFNS_2	1.156e+05	12.62	5.00	5.383
N-MeFOSAA	1.219e+05	11.41	5.00	5.160
N-MeFOSAA_2	6.472e+04	11.41	5.00	5.227
FOSA	3.692e+05	12.96	5.00	5.216
N-EtFOSAA	8.355e+04	11.76	5.00	5.181
N-EtFOSAA_2	4.627e+04	11.76	5.00	5.140
PFUdA	2.240e+05	12.21	5.00	4.825
PFUdA_2	4.991e+04	12.21	5.00	4.985
PFDS	2.415e+05	13.42	5.00	4.933
PFDS_2	8.343e+04	13.42	5.00	5.139
PFDoA	2.938e+05	12.99	5.00	5.013
PFDoA_2	5.194e+04	12.99	5.00	5.109
PFTrDA	2.930e+05	13.74	5.00	5.107
PFTrDA_2	5.402e+04	13.74	5.00	4.869
PFTeDA	1.751e+05	14.49	5.00	5.005
PFTeDA_2	2.300e+04	14.49	5.00	5.164
13C4_PFOA	8.049e+05	9.69	5.00	1.840
13C4_PFOS	3.462e+05	11.78	5.00	1.754

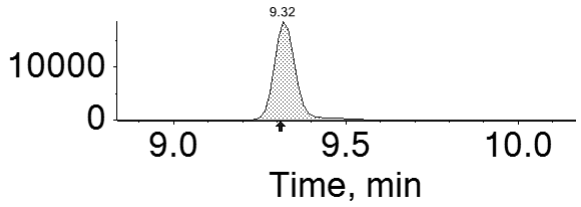
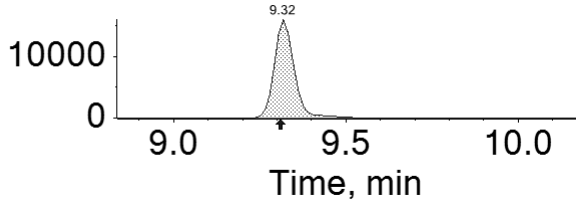
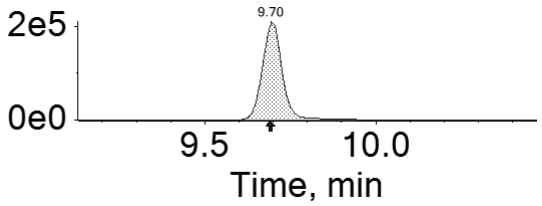
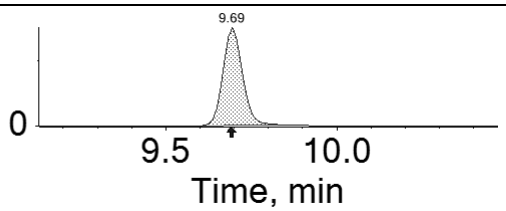
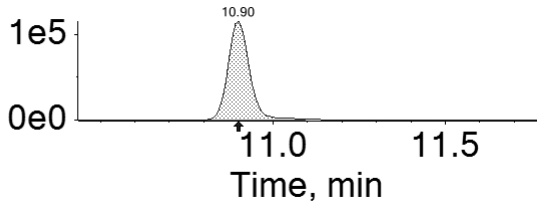
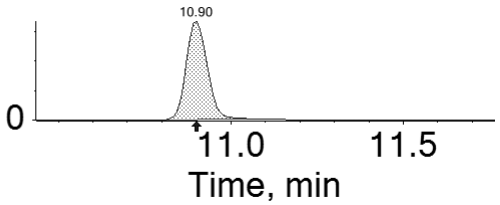
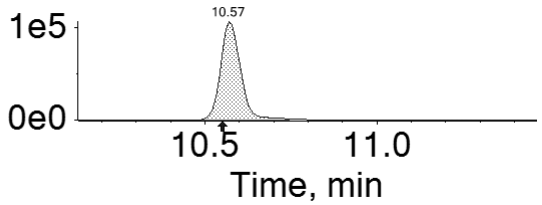
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.79(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.50(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

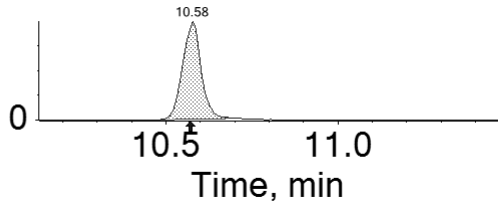
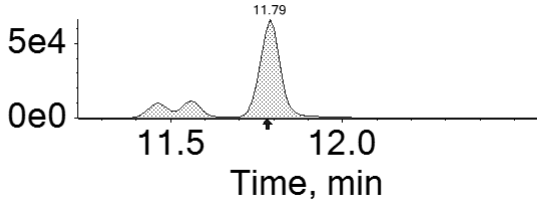
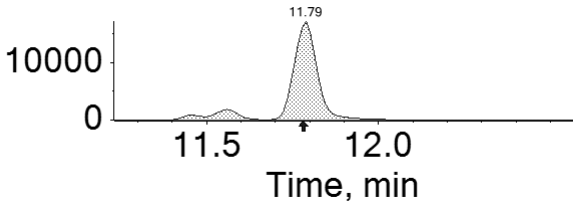
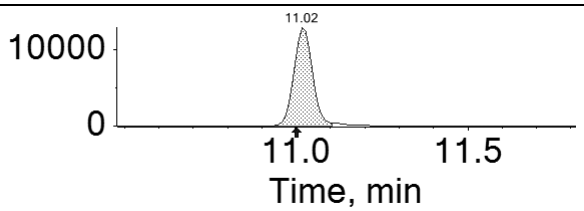
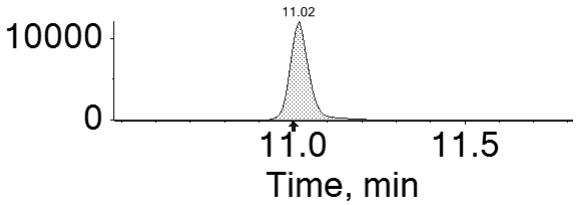
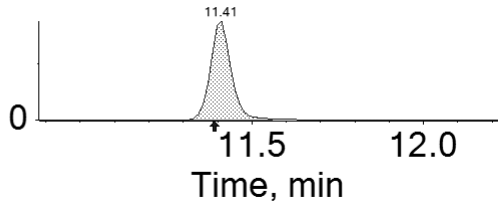
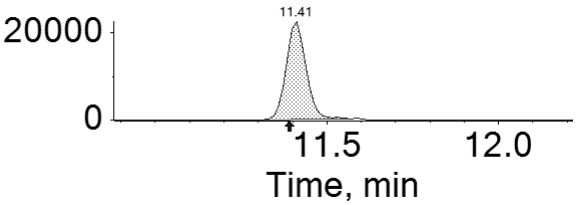
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.57(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.78(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.01(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	

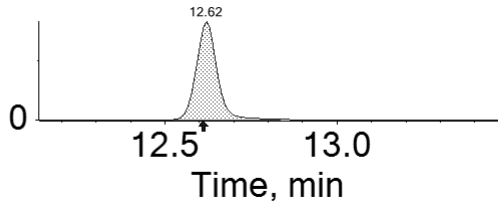
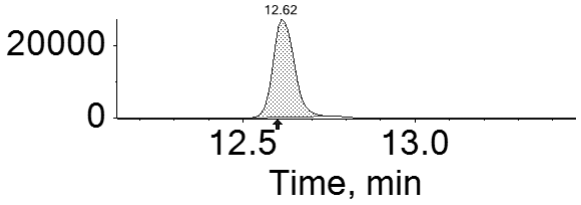
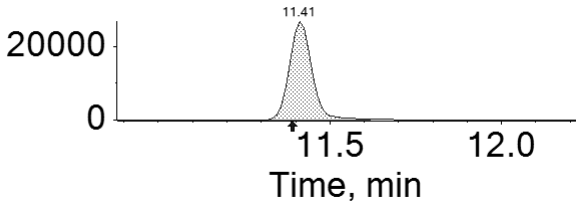
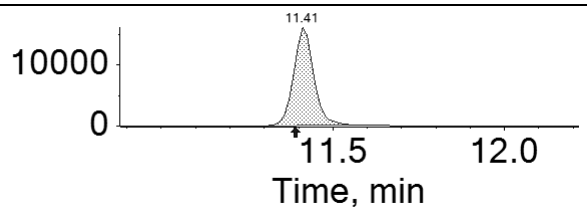
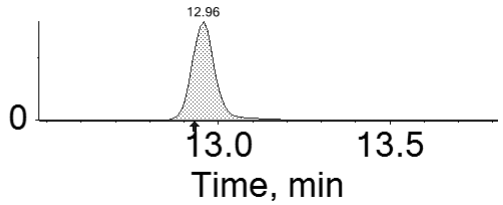
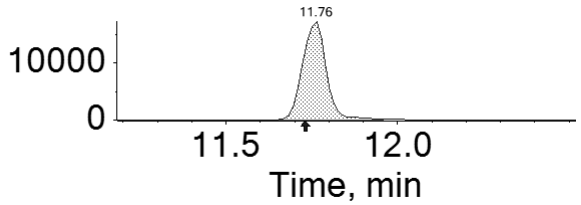
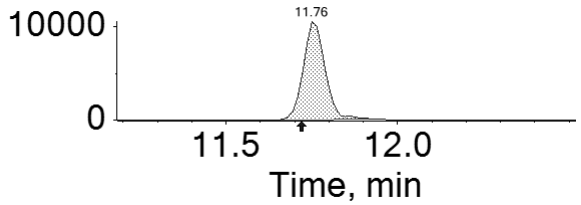
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.95(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.74(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.20(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.98(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.49(14.47) min Concentration: 1.00 Sample Type: (Standard)	

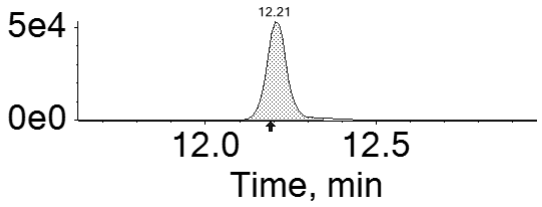
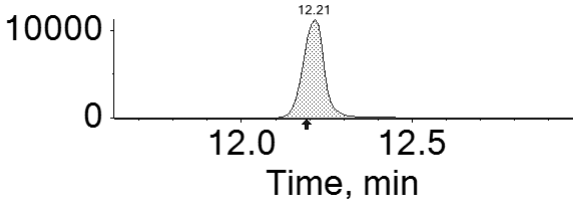
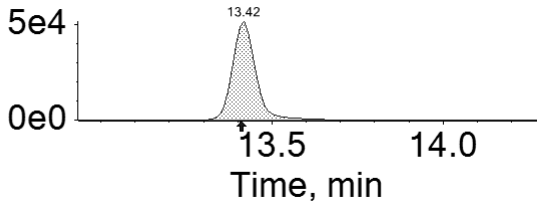
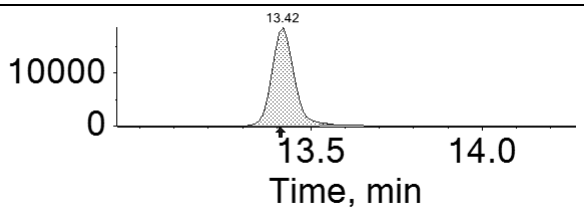
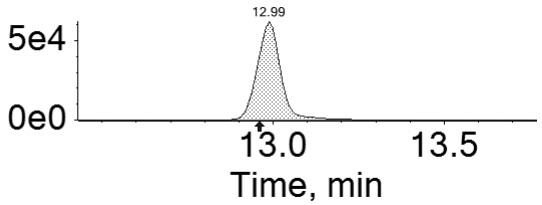
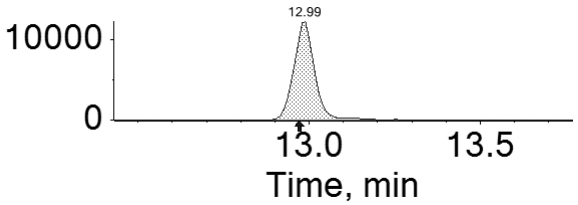
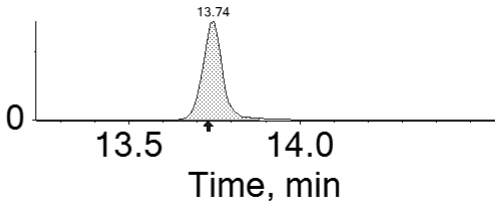
PFBA (213.0 / 169.0) RT (Exp. RT): 1.79 (1.76) min Calculated conc: 5.417 Area Ratio: 1.208e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.51 (5.54) min Calculated conc: 5.219 Area Ratio: 1.074e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 5.010 Area Ratio: 1.067e0 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 5.161 Area Ratio: 3.897e-1 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 5.223 Area Ratio: 1.001e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 5.639 Area Ratio: 7.221e-1 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 5.234 Area Ratio: 9.982e-1 Sample Type: (Standard)	

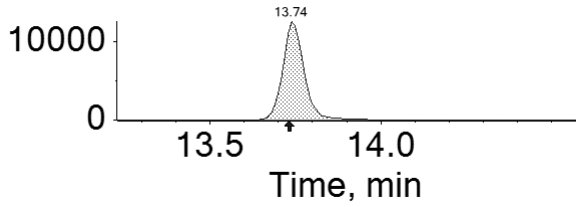
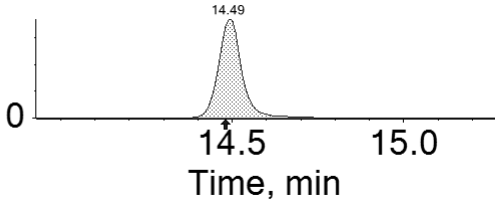
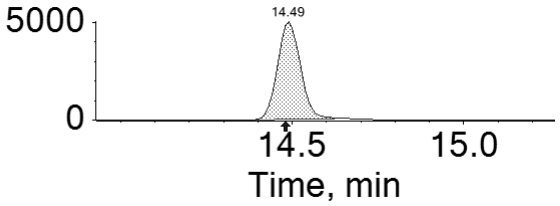
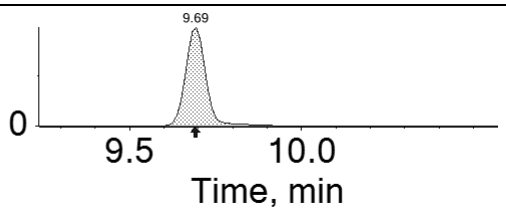
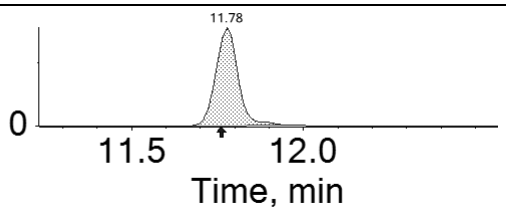
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 5.053 Area Ratio: 7.861e-2 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 5.443 Area Ratio: 5.315e-1 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 5.063 Area Ratio: 1.830e-1 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 5.116 Area Ratio: 8.250e-1 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 5.156 Area Ratio: 2.720e-1 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 5.115 Area Ratio: 1.140e0 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 5.118 Area Ratio: 4.450e-1 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 5.104 Area Ratio: 1.424e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 5.598 Area Ratio: 1.129e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 5.095 Area Ratio: 1.368e0 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 5.169 Area Ratio: 4.836e-1 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 5.121 Area Ratio: 9.328e-1 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 4.969 Area Ratio: 2.651e-1 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 4.989 Area Ratio: 8.073e-1 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.58 (10.57) min Calculated conc: 5.068 Area Ratio: 2.763e-1 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 5.214 Area Ratio: 1.321e0 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 4.830 Area Ratio: 3.307e-1 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 5.131 Area Ratio: 1.040e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 5.573 Area Ratio: 9.843e-1 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 5.130 Area Ratio: 1.239e0 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 5.158 Area Ratio: 3.016e-1 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.62 (12.61) min Calculated conc: 5.420 Area Ratio: 1.050e0 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.62 (12.60) min Calculated conc: 5.383 Area Ratio: 3.459e-1 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 5.160 Area Ratio: 1.777e0 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 5.227 Area Ratio: 9.436e-1 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 5.216 Area Ratio: 7.049e-1 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.76 (11.73) min Calculated conc: 5.181 Area Ratio: 1.525e0 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.76 (11.72) min Calculated conc: 5.140 Area Ratio: 8.444e-1 Sample Type: (Standard)	

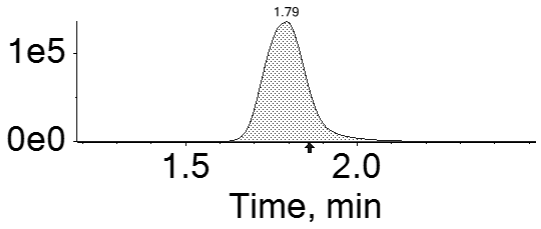
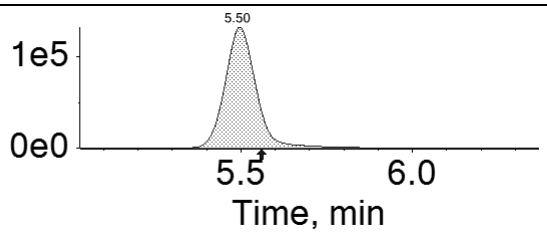
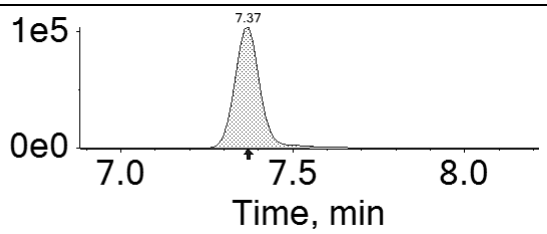
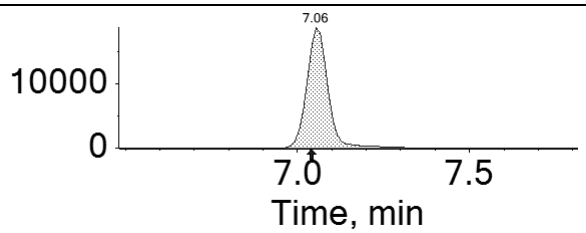
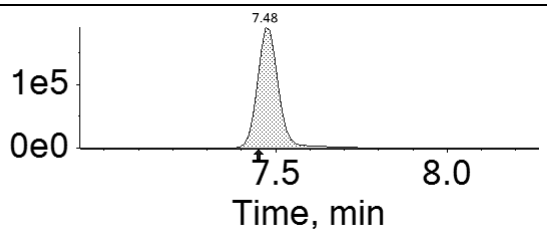
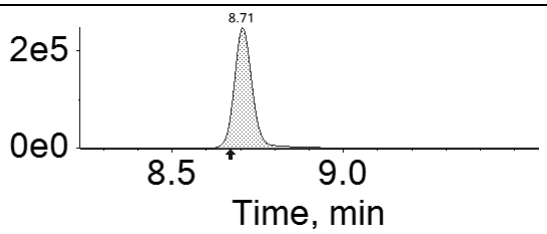
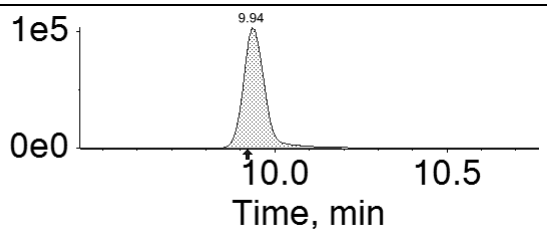
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 4.825 Area Ratio: 6.702e-1 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 4.985 Area Ratio: 1.493e-1 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 4.933 Area Ratio: 5.346e-1 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 5.139 Area Ratio: 1.846e-1 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.99 (12.96) min Calculated conc: 5.013 Area Ratio: 6.503e-1 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.99 (12.97) min Calculated conc: 5.109 Area Ratio: 1.150e-1 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 5.107 Area Ratio: 6.485e-1 Sample Type: (Standard)	

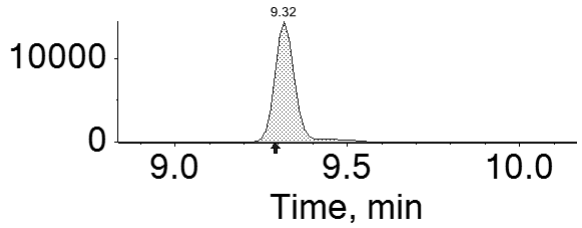
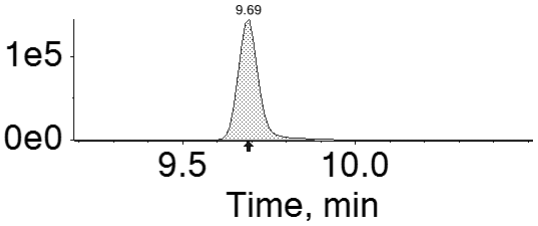
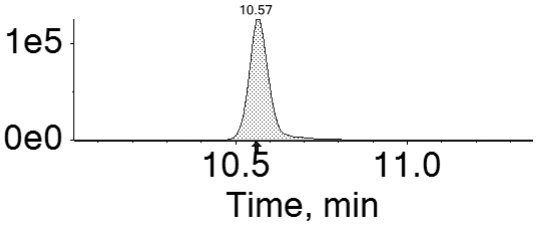
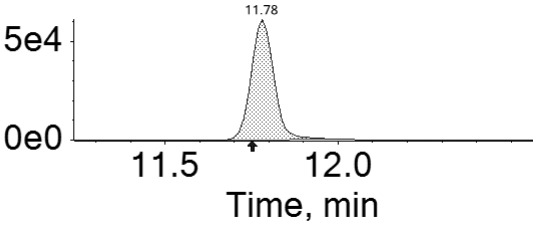
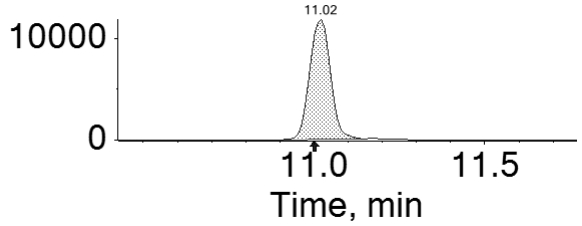
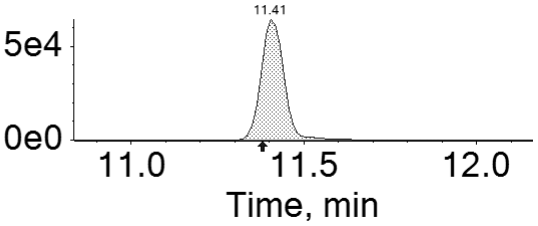
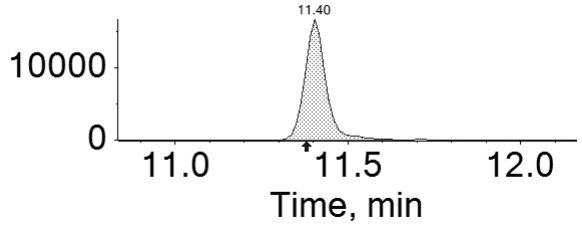
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 4.869 Area Ratio: 1.196e-1 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 5.005 Area Ratio: 8.452e-1 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 5.164 Area Ratio: 1.111e-1 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.840 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.78 (11.76) min Calculated conc: 1.754 Area Ratio: N/A Sample Type: (Standard)	

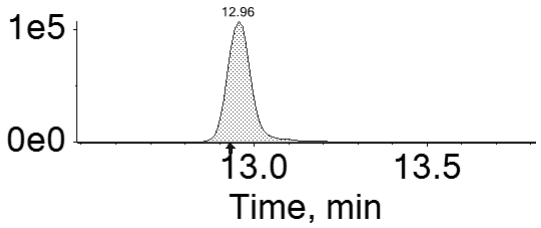
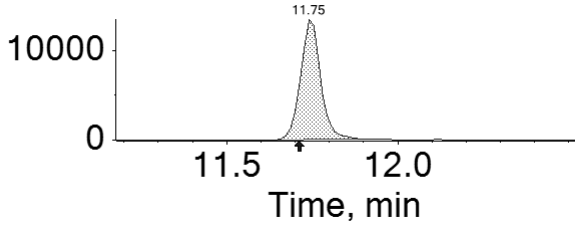
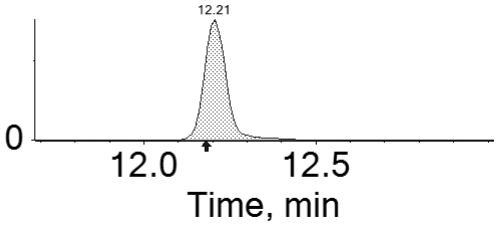
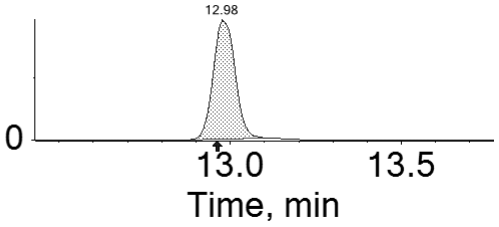
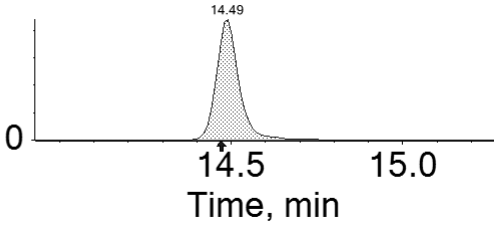
Sample Name	CAL-19206-006-05	**Injection Vial**	6
Sample ID	CAL-19206-006-05	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T13:08:41	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

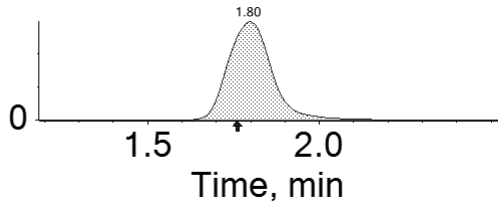
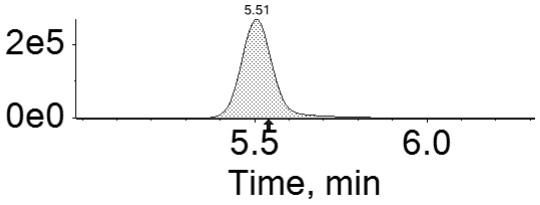
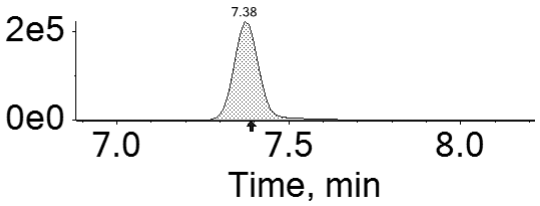
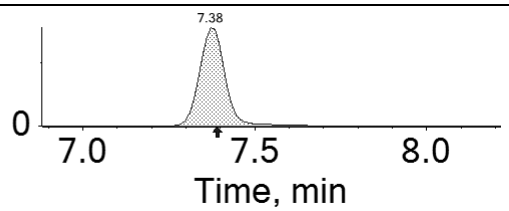
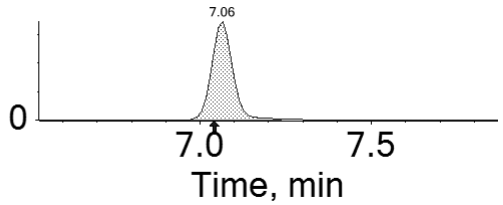
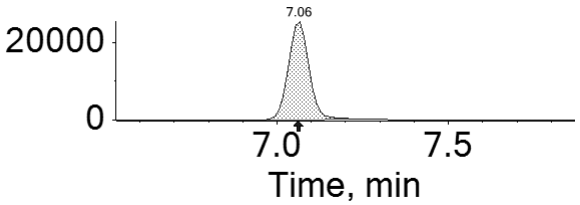
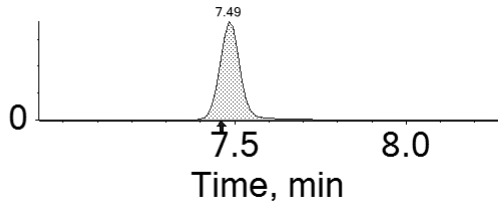
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.189e6	1.79	1.00	-
13C5_PFPeA	8.293e5	5.50	1.00	-
13C3_PFBS	5.274e5	7.37	1.00	-
13C2_4:2FTS	7.870e4	7.06	1.00	-
13C5_PFHxA	8.111e5	7.48	1.00	-
13C4_PFHpA	9.057e5	8.71	1.00	-
13C3_PFHxS	4.374e5	9.94	1.00	-
13C2_6:2FTS	5.833e4	9.32	1.00	-
13C8_PFOA	5.896e5	9.69	1.00	-
13C9_PFNA	5.102e5	10.57	1.00	-
13C8_PFOS	2.792e5	11.78	1.00	-
13C2_8:2FTS	5.016e4	11.02	1.00	-
13C6_PFDA	2.925e5	11.41	1.00	-
d3-MeFOSAA	7.020e4	11.40	1.00	-
13C8_FOSA	5.221e5	12.96	1.00	-
d5-EtFOSAA	5.455e4	11.75	1.00	-
13C7_PFUdA	3.380e5	12.21	1.00	-
13C2_PFDoA	4.221e5	12.98	1.00	-
13C2_PFTeDA	2.022e5	14.49	1.00	-

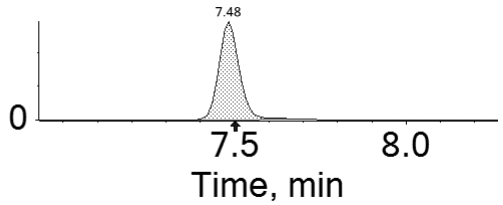
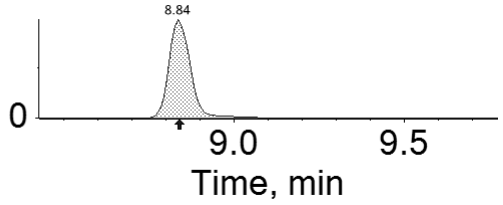
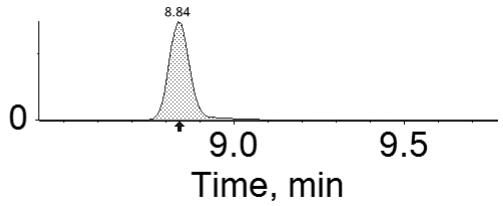
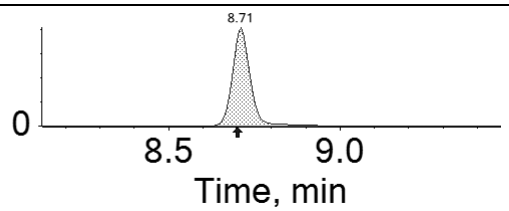
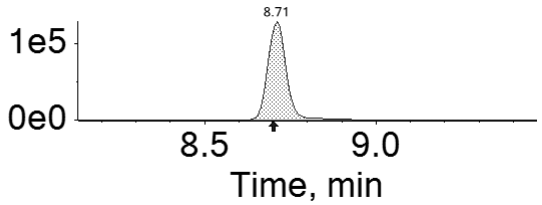
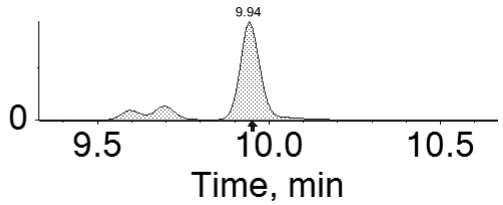
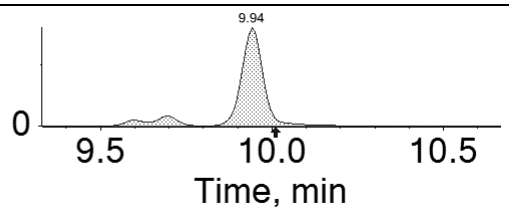
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	2.589e+06	1.80	10.00	9.766
PFPeA	1.726e+06	5.51	10.00	10.114
PFBS	1.136e+06	7.38	10.00	10.115
PFBS_2	4.020e+05	7.38	10.00	10.093
4:2FTS	1.472e+05	7.06	10.00	9.756
4:2FTS_2	1.058e+05	7.06	10.00	10.499
PFHxA	1.536e+06	7.49	10.00	9.928
PFHxA_2	1.204e+05	7.48	10.00	9.543
PFPeS	8.535e+05	8.84	10.00	9.650
PFPeS_2	3.226e+05	8.84	10.00	9.854
PFHpA	1.454e+06	8.71	10.00	9.956
PFHpA_2	4.862e+05	8.71	10.00	10.175
PFHxS	9.900e+05	9.94	10.00	10.158
PFHxS_2	4.131e+05	9.94	10.00	10.864
6:2FTS	1.668e+05	9.32	10.00	10.252
6:2FTS_2	1.182e+05	9.32	10.00	10.049
PFOA	1.739e+06	9.70	10.00	10.984
PFOA_2	5.985e+05	9.69	10.00	10.851
PFHpS	9.767e+05	10.90	10.00	10.511
PFHpS_2	2.840e+05	10.90	10.00	10.436
PFNA	8.358e+05	10.57	10.00	10.125
PFNA_2	2.855e+05	10.57	10.00	10.266
PFOS	7.170e+05	11.79	10.00	10.134
PFOS_2	1.907e+05	11.79	10.00	9.974
8:2FTS	1.009e+05	11.02	10.00	9.928
8:2FTS_2	8.648e+04	11.02	10.00	9.762
PFDA	7.684e+05	11.41	10.00	10.875
PFDA_2	1.681e+05	11.41	10.00	9.829
PFNS	6.730e+05	12.62	10.00	10.275
PFNS_2	2.137e+05	12.62	10.00	9.841
N-MeFOSAA	2.322e+05	11.42	10.00	9.608
N-MeFOSAA_2	1.279e+05	11.42	10.00	10.093
FOSA	7.246e+05	12.96	10.00	10.270
N-EtFOSAA	1.551e+05	11.76	10.00	9.660
N-EtFOSAA_2	9.193e+04	11.76	10.00	10.259
PFUdA	4.885e+05	12.21	10.00	10.405
PFUdA_2	1.118e+05	12.21	10.00	11.043
PFDS	4.774e+05	13.42	10.00	10.437
PFDS_2	1.619e+05	13.42	10.00	10.676
PFDoA	5.849e+05	12.99	10.00	10.683
PFDoA_2	1.020e+05	12.99	10.00	10.737
PFTrDA	5.545e+05	13.75	10.00	10.346
PFTrDA_2	1.022e+05	13.75	10.00	9.858
PFTeDA	3.449e+05	14.50	10.00	10.102
PFTeDA_2	4.342e+04	14.49	10.00	9.982
13C4_PFOA	7.711e+05	9.69	10.00	1.763
13C4_PFOS	3.321e+05	11.78	10.00	1.683

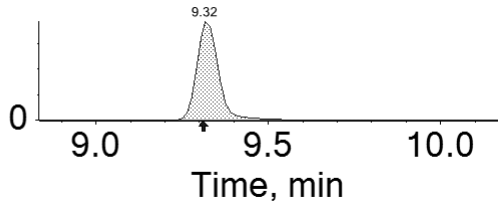
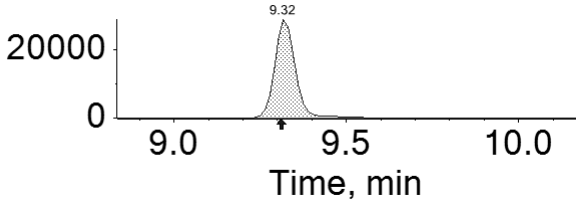
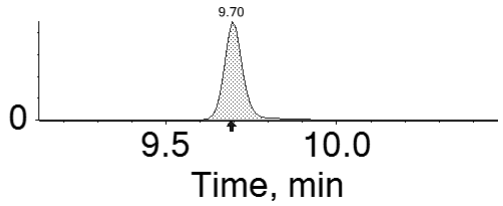
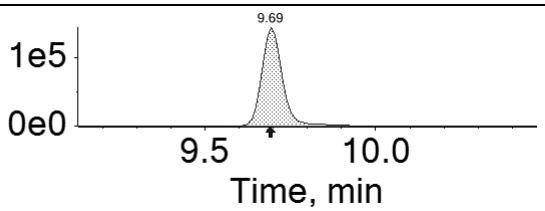
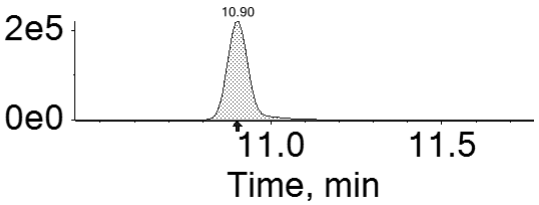
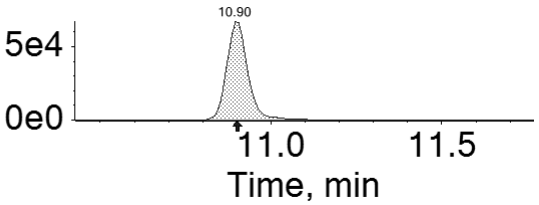
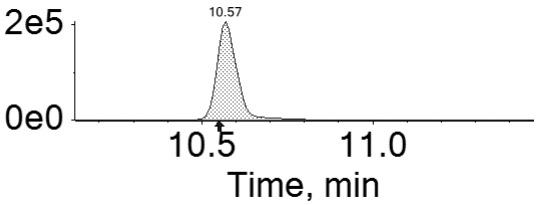
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.79(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.50(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.48(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.71(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.94(9.92) min Concentration: 1.00 Sample Type: (Standard)	

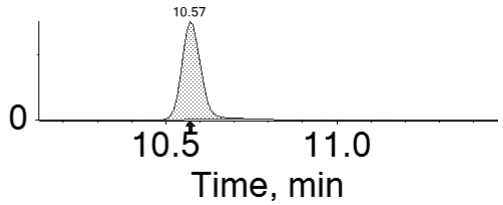
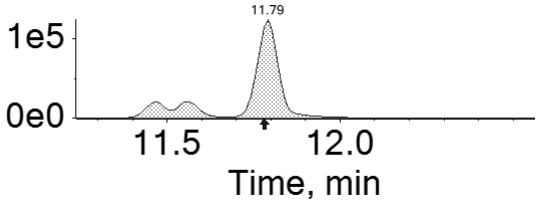
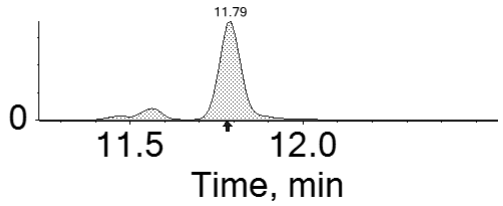
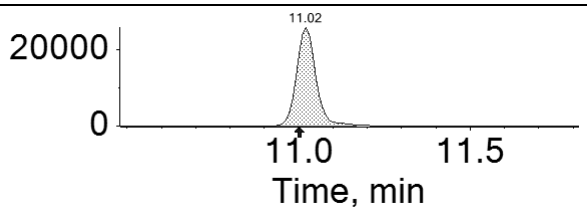
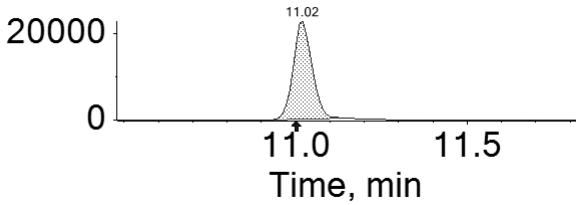
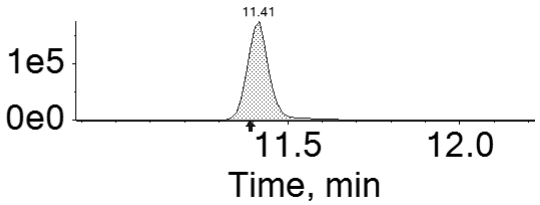
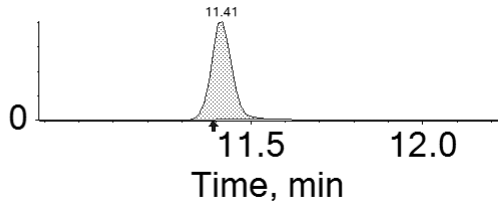
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.69(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.57(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.78(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.02(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.41(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	

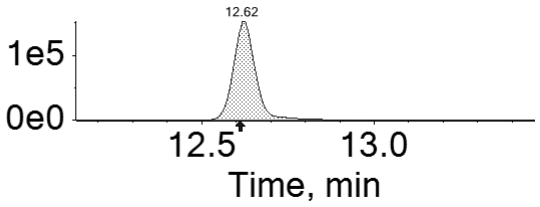
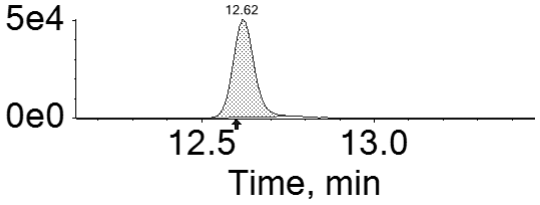
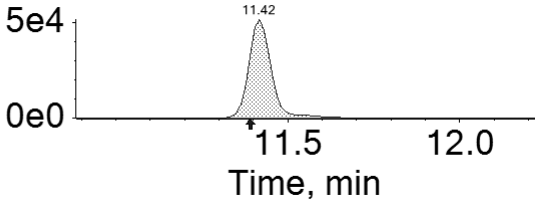
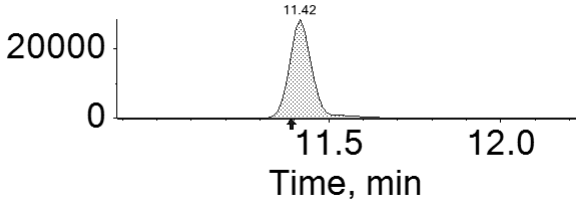
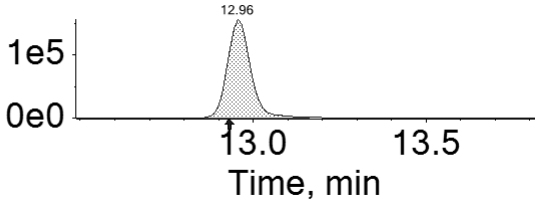
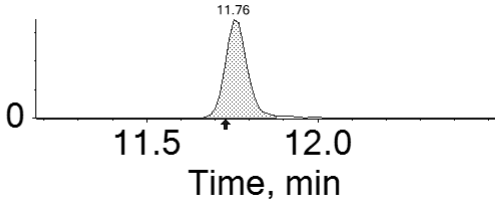
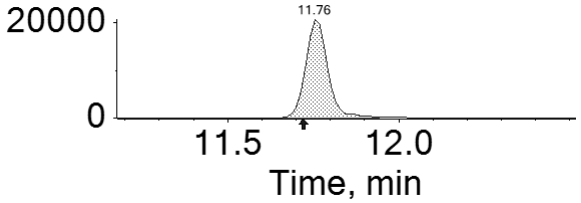
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.75(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.21(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.98(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.49(14.47) min Concentration: 1.00 Sample Type: (Standard)	

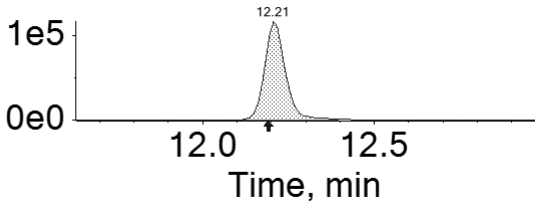
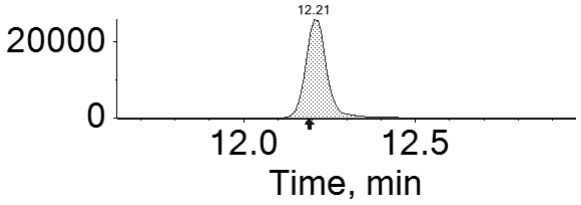
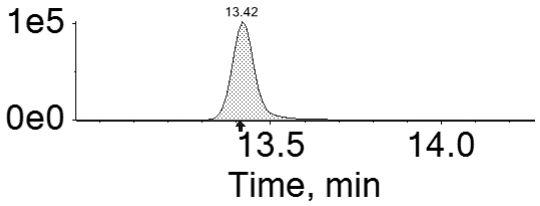
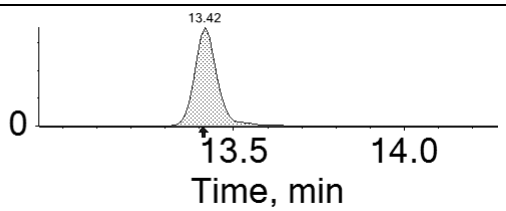
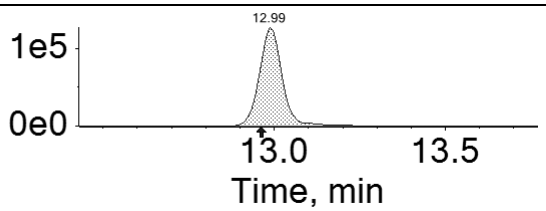
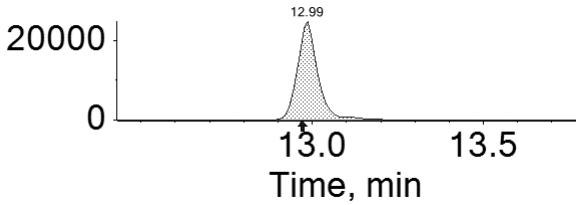
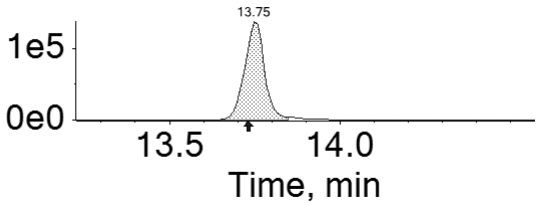
PFBA (213.0 / 169.0) RT (Exp. RT): 1.80 (1.76) min Calculated conc: 9.766 Area Ratio: 2.178e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.51 (5.54) min Calculated conc: 10.114 Area Ratio: 2.082e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 10.115 Area Ratio: 2.154e0 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 10.093 Area Ratio: 7.622e-1 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 9.756 Area Ratio: 1.871e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 10.499 Area Ratio: 1.344e0 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.49 (7.46) min Calculated conc: 9.928 Area Ratio: 1.894e0 Sample Type: (Standard)	

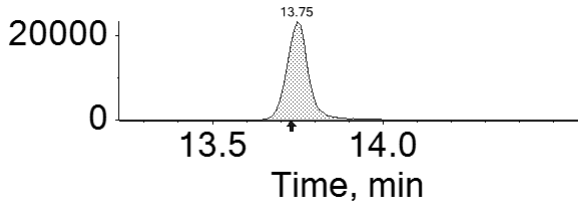
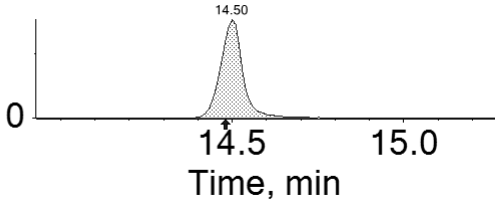
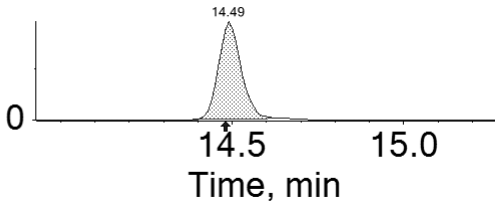
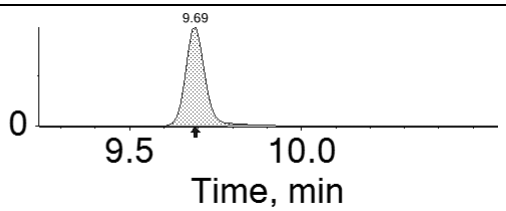
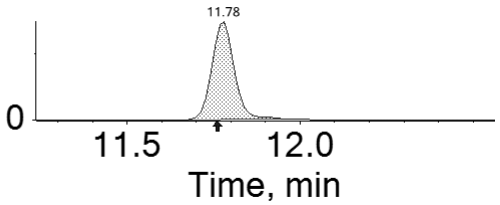
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 9.543 Area Ratio: 1.485e-1 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 9.650 Area Ratio: 9.423e-1 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.84 (8.84) min Calculated conc: 9.854 Area Ratio: 3.562e-1 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 9.956 Area Ratio: 1.605e0 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 10.175 Area Ratio: 5.368e-1 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 10.158 Area Ratio: 2.264e0 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 10.864 Area Ratio: 9.446e-1 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 10.252 Area Ratio: 2.859e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 10.049 Area Ratio: 2.027e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 10.984 Area Ratio: 2.950e0 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 10.851 Area Ratio: 1.015e0 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 10.511 Area Ratio: 1.914e0 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.90 (10.90) min Calculated conc: 10.436 Area Ratio: 5.567e-1 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 10.125 Area Ratio: 1.638e0 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 10.266 Area Ratio: 5.596e-1 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 10.134 Area Ratio: 2.568e0 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 9.974 Area Ratio: 6.830e-1 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 9.928 Area Ratio: 2.012e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 9.762 Area Ratio: 1.724e0 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 10.875 Area Ratio: 2.627e0 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 9.829 Area Ratio: 5.747e-1 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.62 (12.61) min Calculated conc: 10.275 Area Ratio: 1.991e0 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.62 (12.60) min Calculated conc: 9.841 Area Ratio: 6.323e-1 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 9.608 Area Ratio: 3.308e0 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 10.093 Area Ratio: 1.822e0 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 10.270 Area Ratio: 1.388e0 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.76 (11.73) min Calculated conc: 9.660 Area Ratio: 2.843e0 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.76 (11.72) min Calculated conc: 10.259 Area Ratio: 1.685e0 Sample Type: (Standard)	

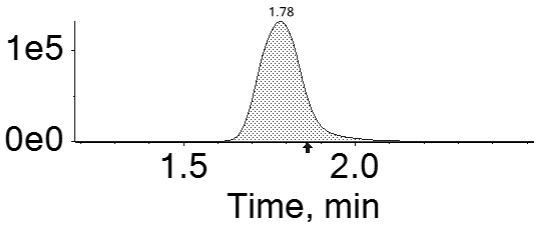
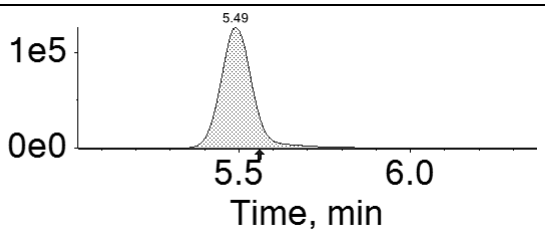
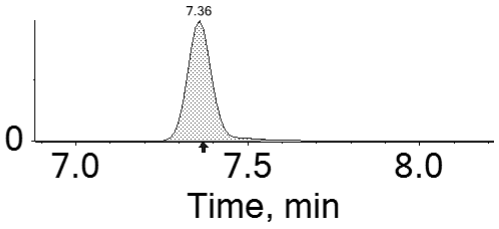
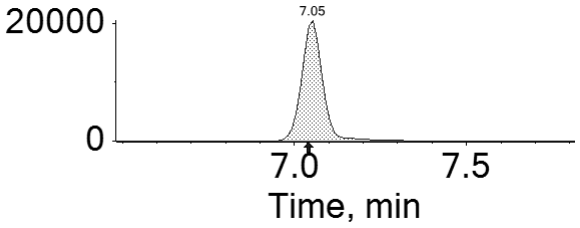
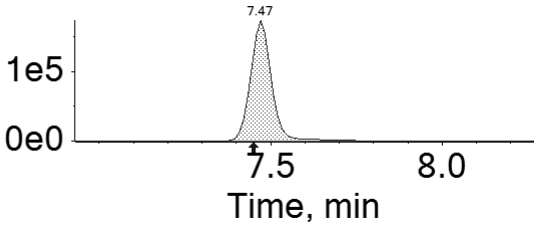
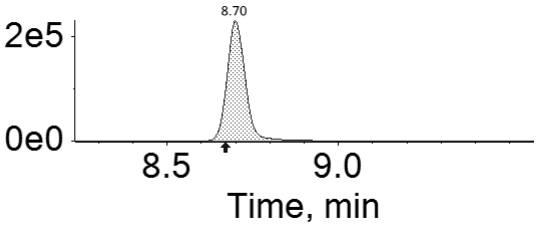
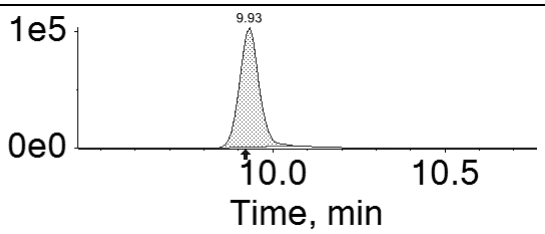
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 10.405 Area Ratio: 1.445e0 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 11.043 Area Ratio: 3.308e-1 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 10.437 Area Ratio: 1.131e0 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.42 (13.41) min Calculated conc: 10.676 Area Ratio: 3.836e-1 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.99 (12.96) min Calculated conc: 10.683 Area Ratio: 1.386e0 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.99 (12.97) min Calculated conc: 10.737 Area Ratio: 2.416e-1 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 10.346 Area Ratio: 1.314e0 Sample Type: (Standard)	

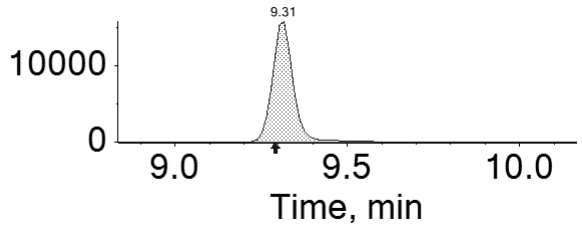
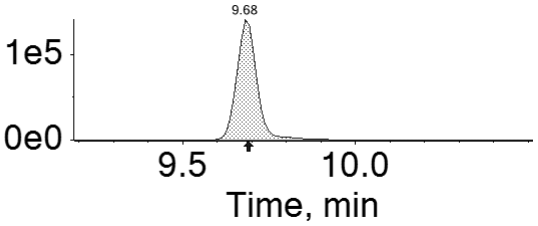
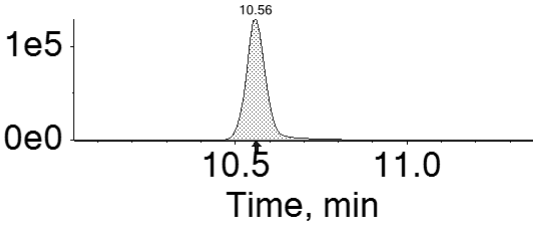
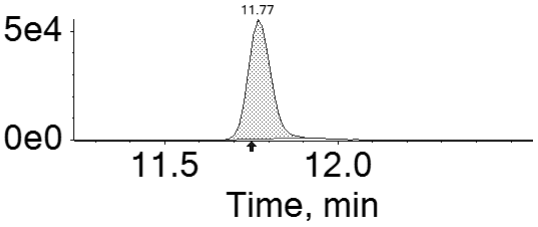
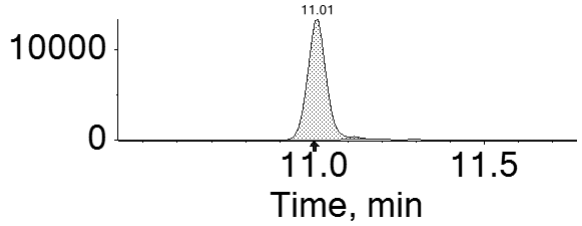
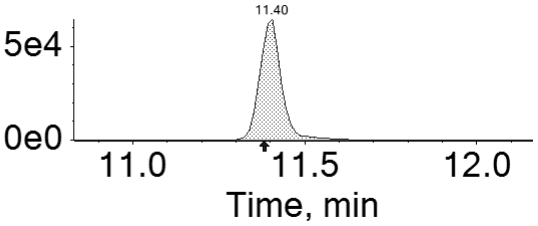
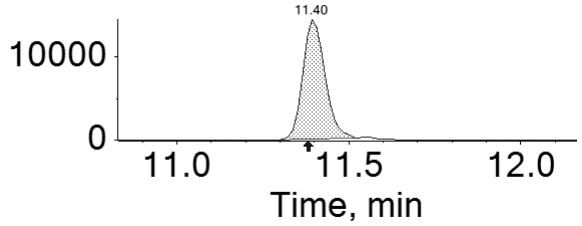
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 9.858 Area Ratio: 2.421e-1 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.50 (14.48) min Calculated conc: 10.102 Area Ratio: 1.706e0 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 9.982 Area Ratio: 2.147e-1 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 1.763 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.78 (11.76) min Calculated conc: 1.683 Area Ratio: N/A Sample Type: (Standard)	

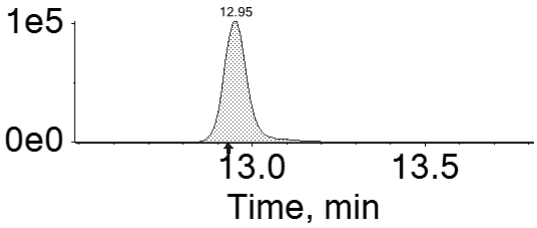
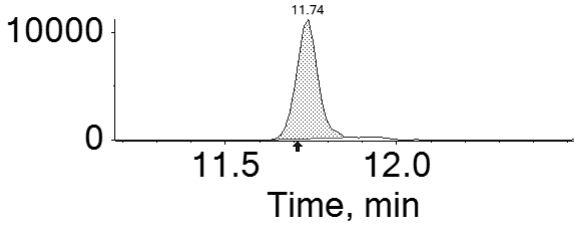
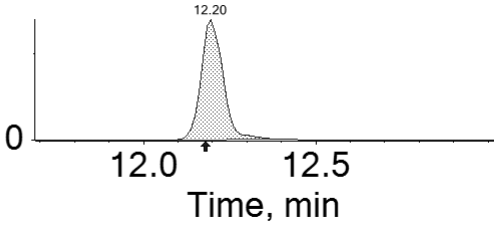
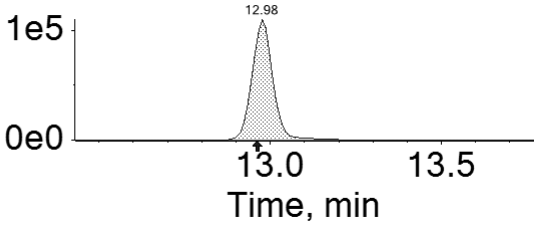
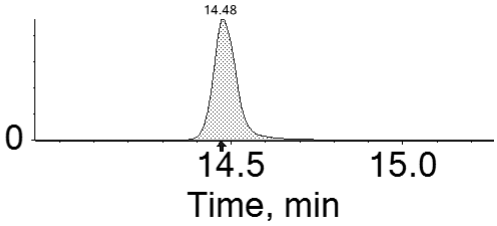
Sample Name	CAL-19206-006-06	**Injection Vial**	7
Sample ID	CAL-19206-006-06	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T13:35:20	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

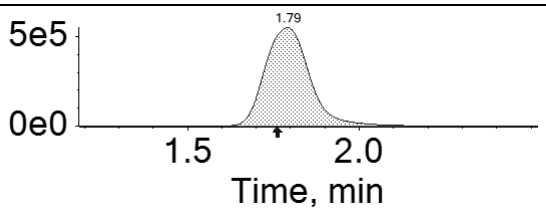
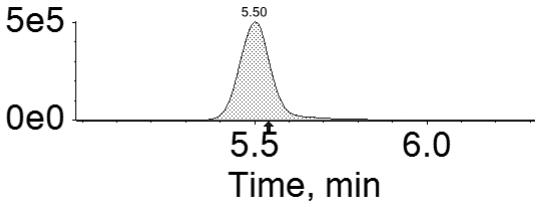
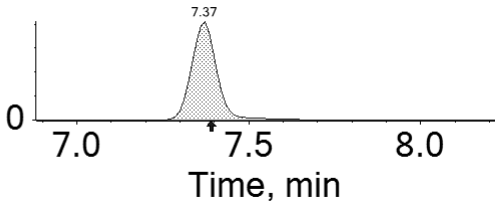
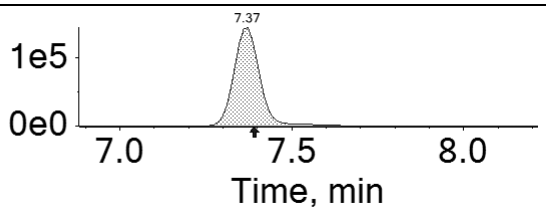
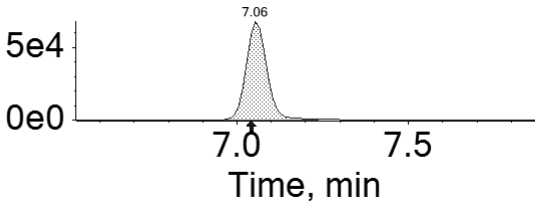
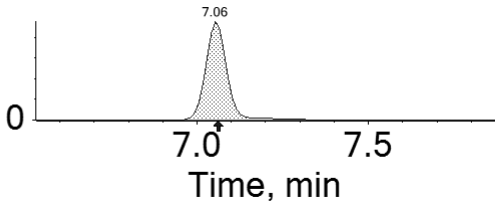
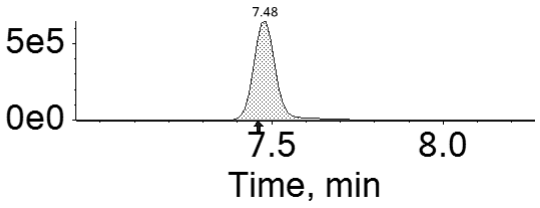
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.166e6	1.78	1.00	-
13C5_PFPeA	8.149e5	5.49	1.00	-
13C3_PFBS	4.885e5	7.36	1.00	-
13C2_4:2FTS	8.642e4	7.05	1.00	-
13C5_PFHxA	7.294e5	7.47	1.00	-
13C4_PFHpA	8.563e5	8.70	1.00	-
13C3_PFHxS	4.022e5	9.93	1.00	-
13C2_6:2FTS	6.606e4	9.31	1.00	-
13C8_PFOA	5.684e5	9.68	1.00	-
13C9_PFNA	5.253e5	10.56	1.00	-
13C8_PFOS	2.490e5	11.77	1.00	-
13C2_8:2FTS	5.161e4	11.01	1.00	-
13C6_PFDA	2.812e5	11.40	1.00	-
d3-MeFOSAA	6.443e4	11.40	1.00	-
13C8_FOSA	4.980e5	12.95	1.00	-
d5-EtFOSAA	4.848e4	11.74	1.00	-
13C7_PFUdA	3.055e5	12.20	1.00	-
13C2_PFDoA	4.606e5	12.98	1.00	-
13C2_PFTeDA	2.216e5	14.48	1.00	-

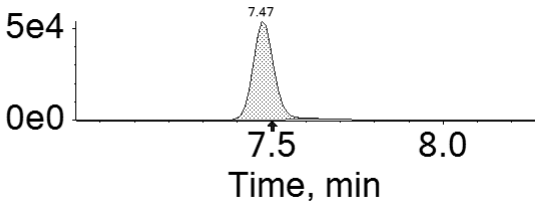
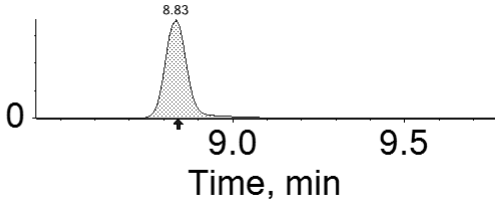
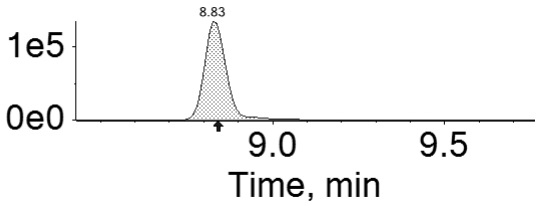
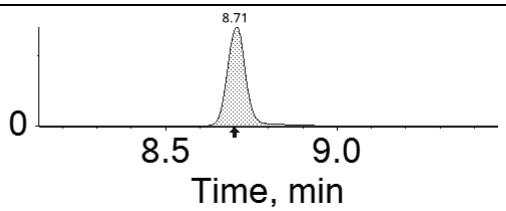
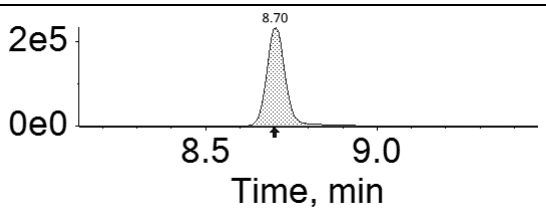
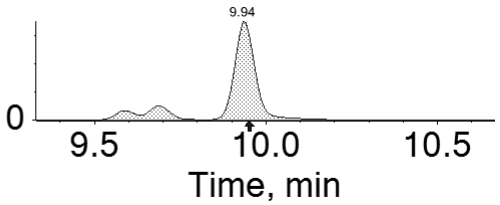
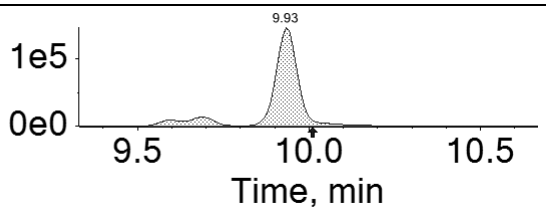
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	4.921e+06	1.79	20.00	18.923
PFPeA	3.263e+06	5.50	20.00	19.454
PFBS	2.094e+06	7.37	20.00	20.131
PFBS_2	7.511e+05	7.37	20.00	20.362
4:2FTS	2.854e+05	7.06	20.00	17.226
4:2FTS_2	2.027e+05	7.06	20.00	18.317
PFHxA	2.876e+06	7.48	20.00	20.674
PFHxA_2	2.293e+05	7.47	20.00	20.209
PFPeS	1.592e+06	8.83	20.00	19.046
PFPeS_2	5.964e+05	8.83	20.00	19.270
PFHpA	2.697e+06	8.71	20.00	19.533
PFHpA_2	8.784e+05	8.70	20.00	19.446
PFHxS	1.847e+06	9.94	20.00	20.606
PFHxS_2	7.631e+05	9.93	20.00	21.818
6:2FTS	3.347e+05	9.31	20.00	18.167
6:2FTS_2	2.391e+05	9.31	20.00	17.942
PFOA	3.121e+06	9.69	20.00	20.448
PFOA_2	1.136e+06	9.69	20.00	21.374
PFHpS	1.736e+06	10.89	20.00	18.144
PFHpS_2	5.131e+05	10.89	20.00	18.308
PFNA	1.614e+06	10.57	20.00	18.985
PFNA_2	5.419e+05	10.56	20.00	18.922
PFOS	1.323e+06	11.78	20.00	20.968
PFOS_2	3.436e+05	11.79	20.00	20.154
8:2FTS	1.931e+05	11.01	20.00	18.463
8:2FTS_2	1.724e+05	11.01	20.00	18.908
PFDA	1.246e+06	11.41	20.00	18.342
PFDA_2	3.210e+05	11.40	20.00	19.527
PFNS	1.212e+06	12.61	20.00	20.467
PFNS_2	4.153e+05	12.61	20.00	21.160
N-MeFOSAA	4.771e+05	11.41	20.00	21.506
N-MeFOSAA_2	2.294e+05	11.41	20.00	19.727
FOSA	1.397e+06	12.95	20.00	20.760
N-EtFOSAA	3.059e+05	11.75	20.00	21.441
N-EtFOSAA_2	1.709e+05	11.75	20.00	21.467
PFUdA	9.237e+05	12.20	20.00	21.765
PFUdA_2	1.996e+05	12.21	20.00	21.806
PFDS	8.820e+05	13.41	20.00	17.669
PFDS_2	2.934e+05	13.41	20.00	17.729
PFDoA	1.131e+06	12.98	20.00	18.930
PFDoA_2	1.987e+05	12.98	20.00	19.171
PFTrDA	1.185e+06	13.74	20.00	20.262
PFTrDA_2	2.134e+05	13.74	20.00	18.871
PFTeDA	7.356e+05	14.49	20.00	19.655
PFTeDA_2	9.351e+04	14.48	20.00	19.613
13C4_PFOA	7.593e+05	9.68	20.00	1.736
13C4_PFOS	3.167e+05	11.77	20.00	1.605

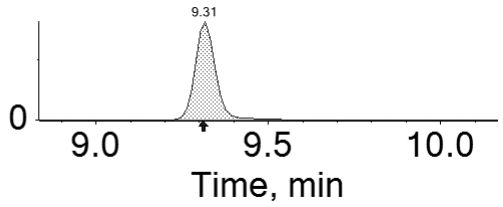
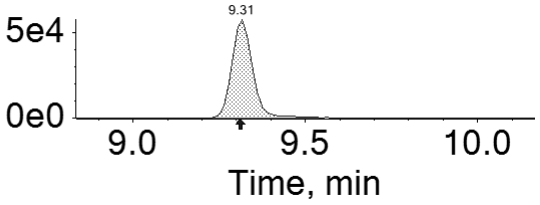
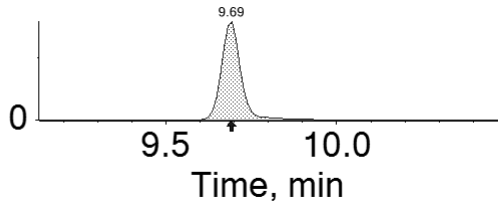
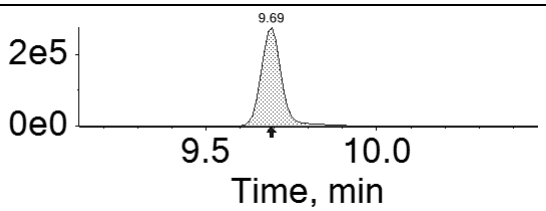
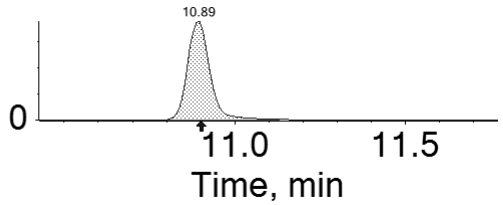
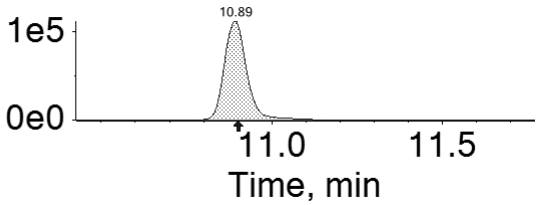
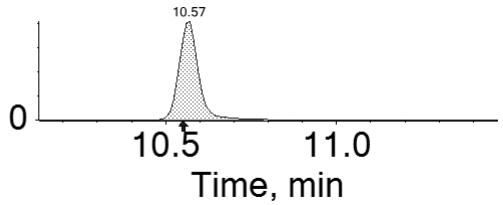
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.78(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.49(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Standard)	

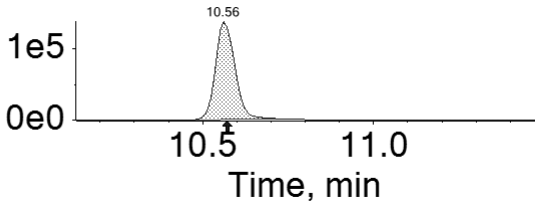
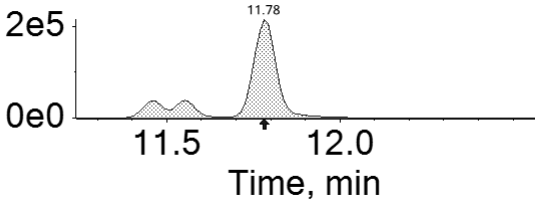
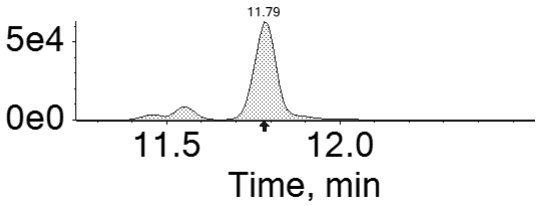
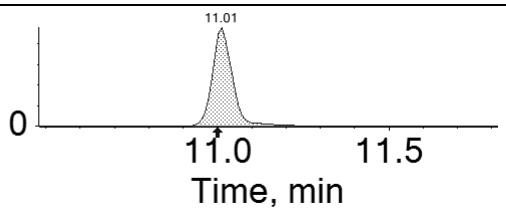
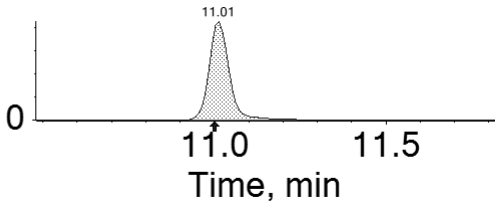
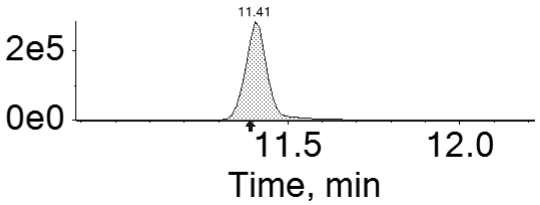
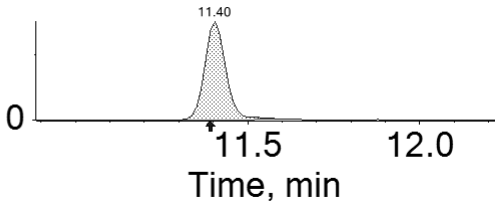
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.01(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	

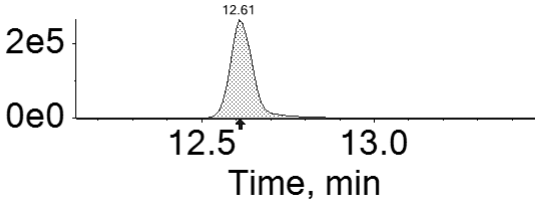
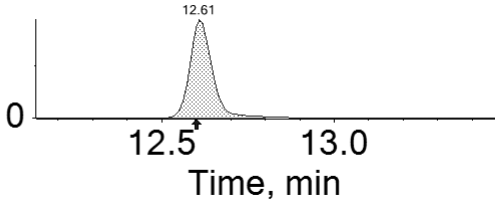
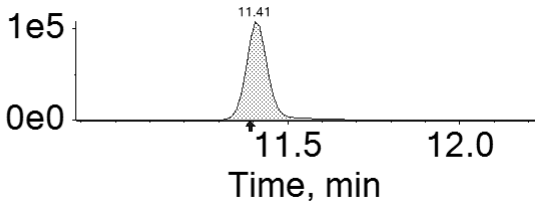
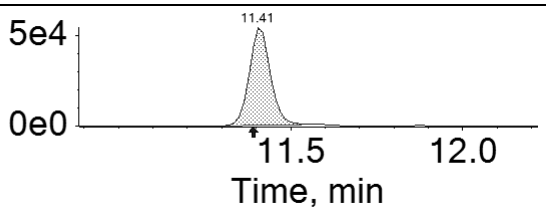
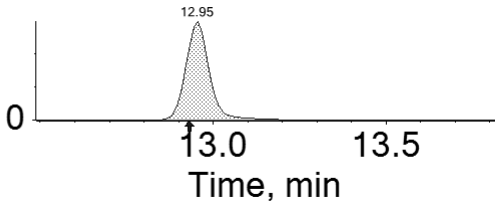
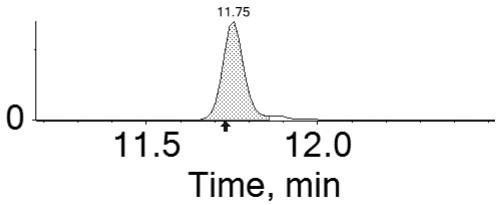
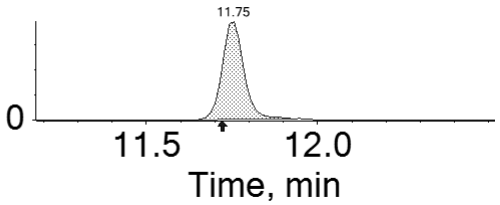
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.95(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.74(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.20(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.98(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.48(14.47) min Concentration: 1.00 Sample Type: (Standard)	

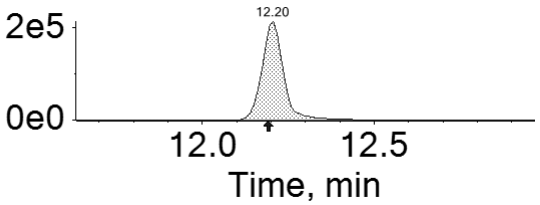
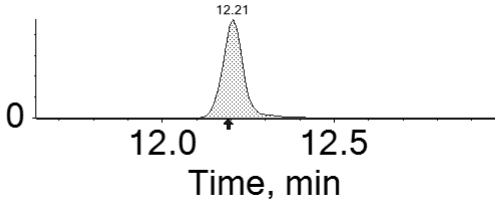
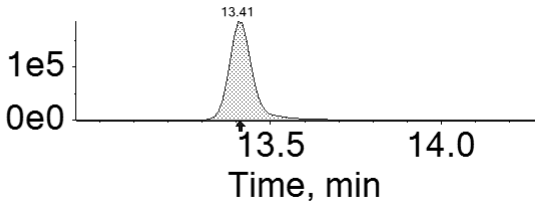
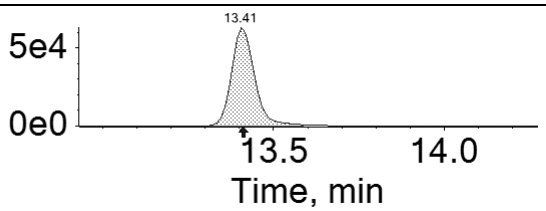
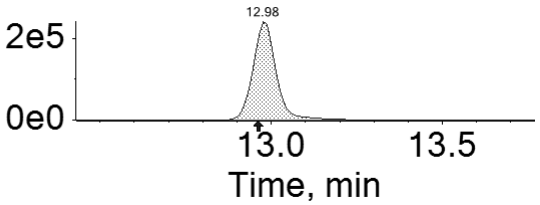
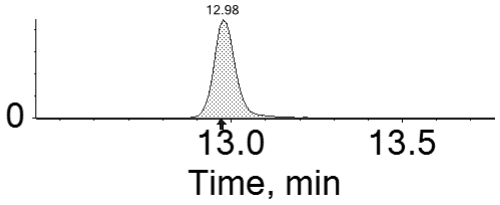
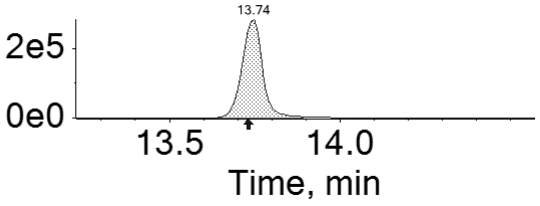
PFBA (213.0 / 169.0) RT (Exp. RT): 1.79 (1.76) min Calculated conc: 18.923 Area Ratio: 4.220e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.50 (5.54) min Calculated conc: 19.454 Area Ratio: 4.004e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 20.131 Area Ratio: 4.288e0 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 20.362 Area Ratio: 1.538e0 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 17.226 Area Ratio: 3.303e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 18.317 Area Ratio: 2.346e0 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 20.674 Area Ratio: 3.943e0 Sample Type: (Standard)	

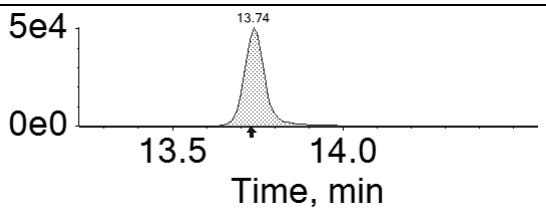
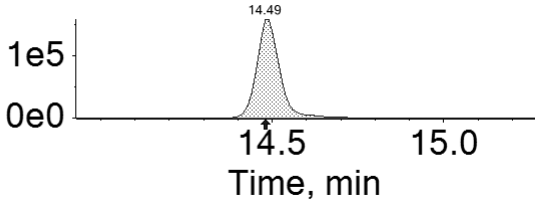
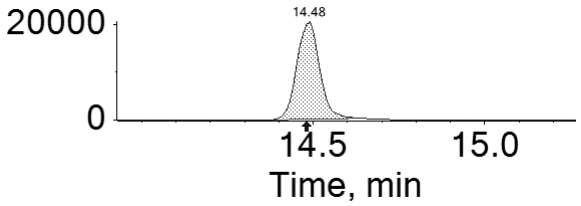
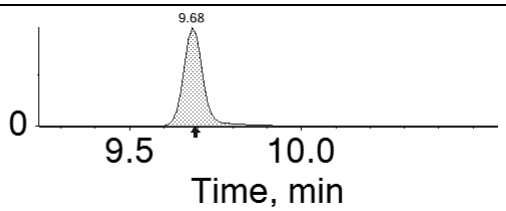
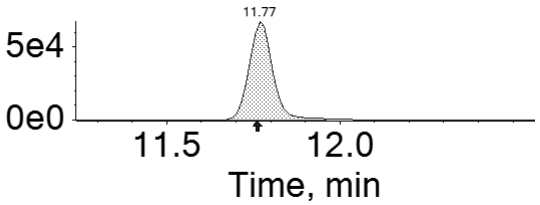
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 20.209 Area Ratio: 3.144e-1 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 19.046 Area Ratio: 1.860e0 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 19.270 Area Ratio: 6.965e-1 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 19.533 Area Ratio: 3.150e0 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 19.446 Area Ratio: 1.026e0 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 20.606 Area Ratio: 4.592e0 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 21.818 Area Ratio: 1.897e0 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 18.167 Area Ratio: 5.067e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 17.942 Area Ratio: 3.619e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 20.448 Area Ratio: 5.491e0 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 21.374 Area Ratio: 1.999e0 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 18.144 Area Ratio: 3.305e0 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 18.308 Area Ratio: 9.767e-1 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 18.985 Area Ratio: 3.072e0 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 18.922 Area Ratio: 1.031e0 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 20.968 Area Ratio: 5.314e0 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.79 (11.78) min Calculated conc: 20.154 Area Ratio: 1.380e0 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 18.463 Area Ratio: 3.741e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 18.908 Area Ratio: 3.340e0 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 18.342 Area Ratio: 4.431e0 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 19.527 Area Ratio: 1.142e0 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.61 (12.61) min Calculated conc: 20.467 Area Ratio: 3.966e0 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.61 (12.60) min Calculated conc: 21.160 Area Ratio: 1.359e0 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 21.506 Area Ratio: 7.404e0 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 19.727 Area Ratio: 3.561e0 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.95 (12.93) min Calculated conc: 20.760 Area Ratio: 2.805e0 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.75 (11.73) min Calculated conc: 21.441 Area Ratio: 6.310e0 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.75 (11.72) min Calculated conc: 21.467 Area Ratio: 3.526e0 Sample Type: (Standard)	

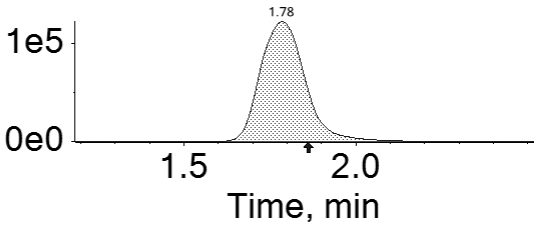
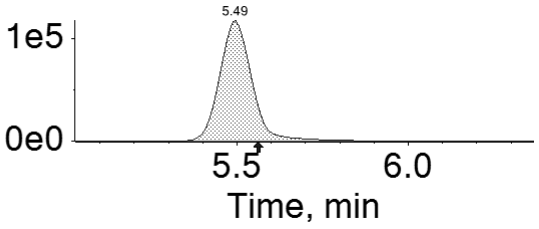
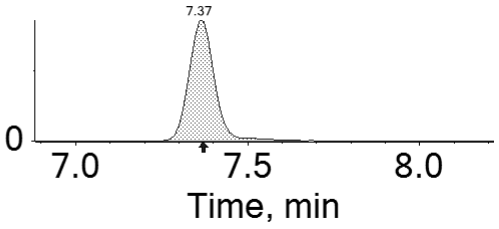
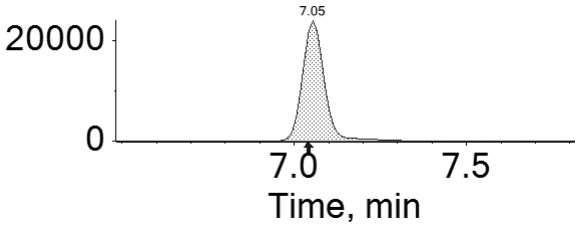
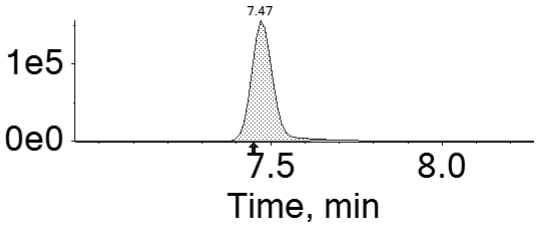
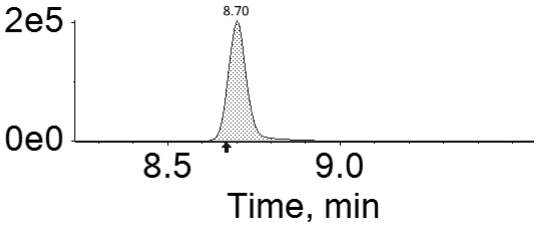
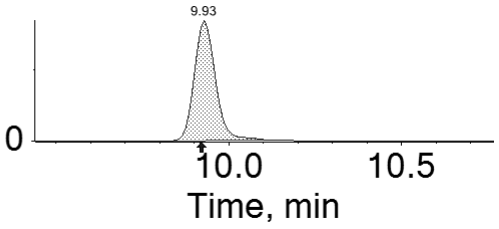
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.20 (12.19) min Calculated conc: 21.765 Area Ratio: 3.023e0 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 21.806 Area Ratio: 6.533e-1 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 17.669 Area Ratio: 1.915e0 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 17.729 Area Ratio: 6.370e-1 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.98 (12.96) min Calculated conc: 18.930 Area Ratio: 2.455e0 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.98 (12.97) min Calculated conc: 19.171 Area Ratio: 4.314e-1 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 20.262 Area Ratio: 2.573e0 Sample Type: (Standard)	

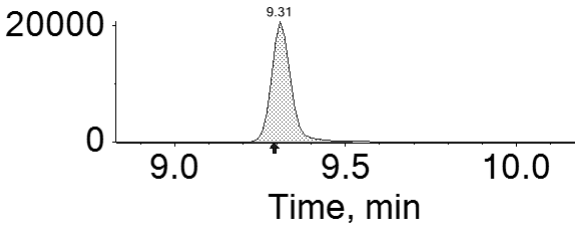
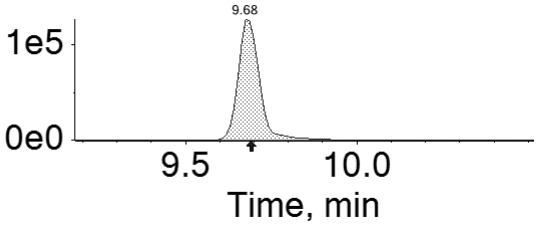
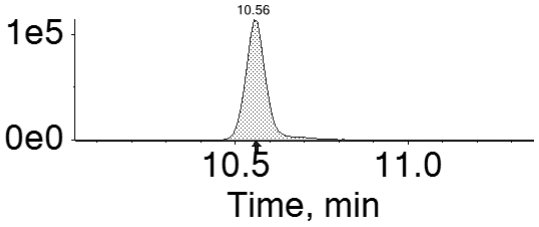
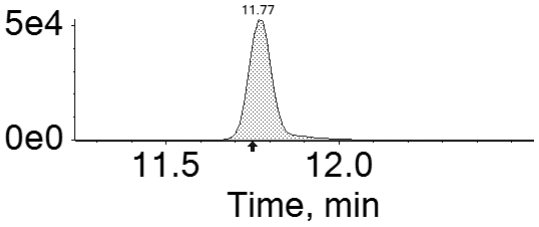
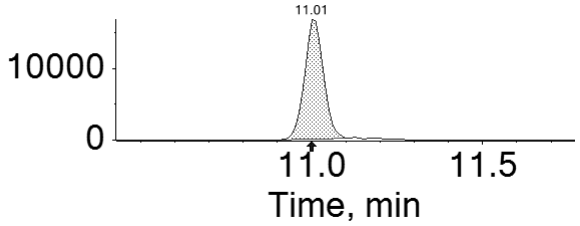
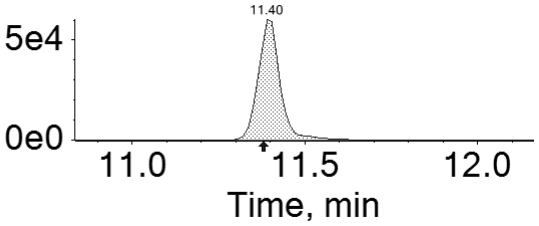
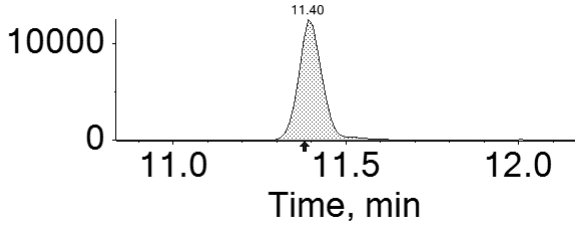
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 18.871 Area Ratio: 4.634e-1 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 19.655 Area Ratio: 3.319e0 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 19.613 Area Ratio: 4.219e-1 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 1.736 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.77 (11.76) min Calculated conc: 1.605 Area Ratio: N/A Sample Type: (Standard)	

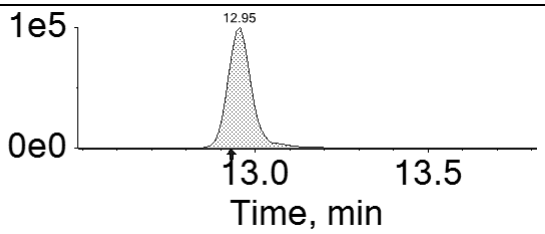
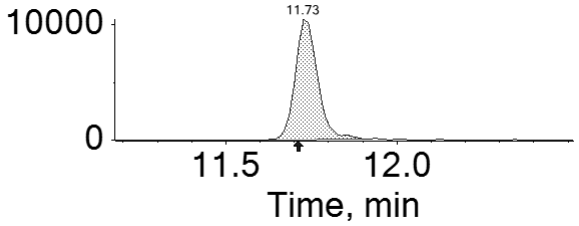
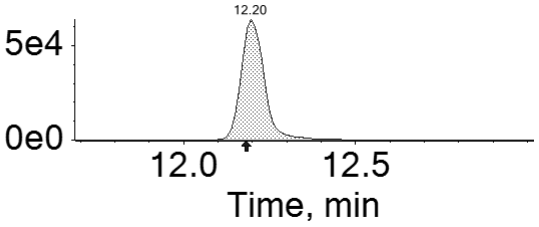
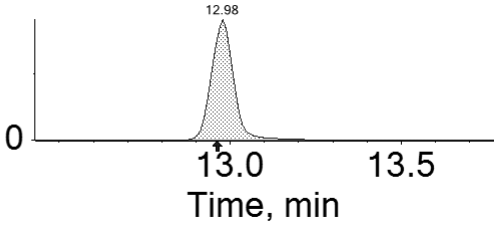
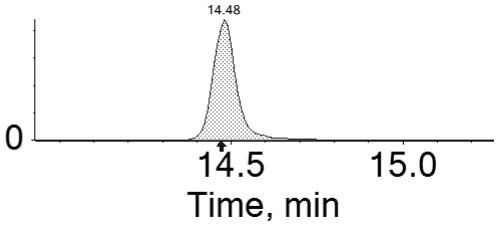
Sample Name	CAL-19206-006-07	**Injection Vial**	8
Sample ID	CAL-19206-006-07	**Injection Volume**	10.00
Sample Type	Standard	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T14:02:01	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

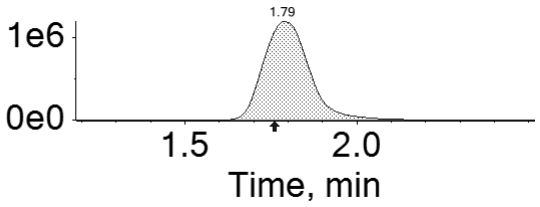
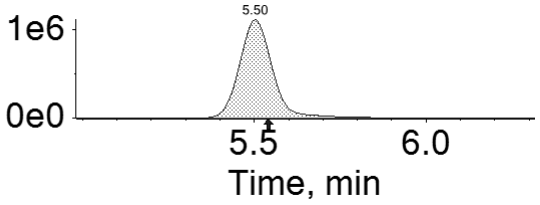
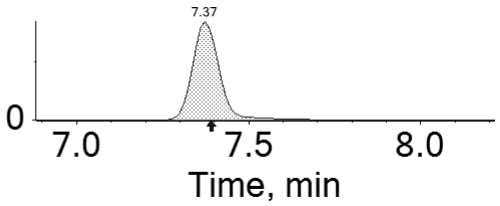
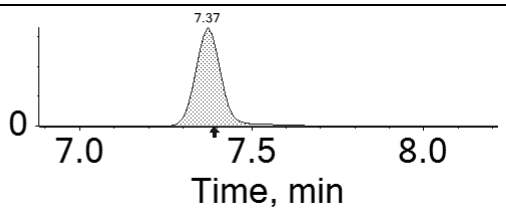
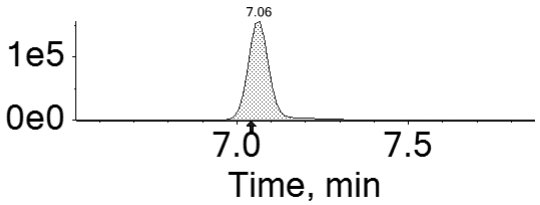
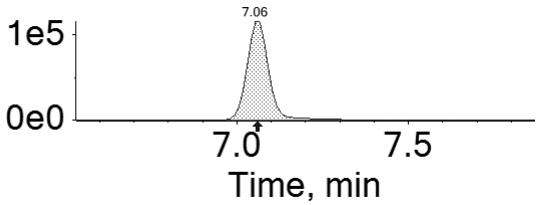
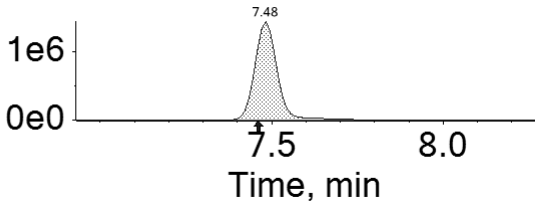
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.104e6	1.78	1.00	-
13C5_PFPeA	7.619e5	5.49	1.00	-
13C3_PFBS	4.445e5	7.37	1.00	-
13C2_4:2FTS	1.048e5	7.05	1.00	-
13C5_PFHxA	6.742e5	7.47	1.00	-
13C4_PFHpA	7.620e5	8.70	1.00	-
13C3_PFHxS	3.548e5	9.93	1.00	-
13C2_6:2FTS	8.081e4	9.31	1.00	-
13C8_PFOA	5.424e5	9.68	1.00	-
13C9_PFNA	4.737e5	10.56	1.00	-
13C8_PFOS	2.564e5	11.77	1.00	-
13C2_8:2FTS	6.443e4	11.01	1.00	-
13C6_PFDA	2.637e5	11.40	1.00	-
d3-MeFOSAA	5.917e4	11.40	1.00	-
13C8_FOSA	4.838e5	12.95	1.00	-
d5-EtFOSAA	4.766e4	11.73	1.00	-
13C7_PFUdA	2.967e5	12.20	1.00	-
13C2_PFDoA	4.052e5	12.98	1.00	-
13C2_PFTeDA	2.095e5	14.48	1.00	-

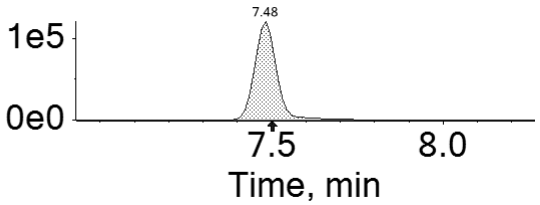
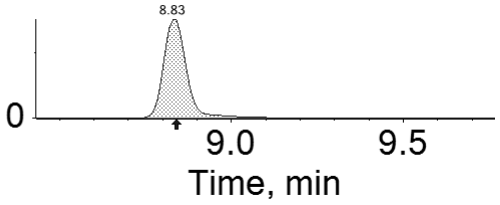
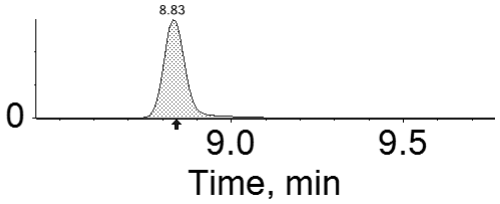
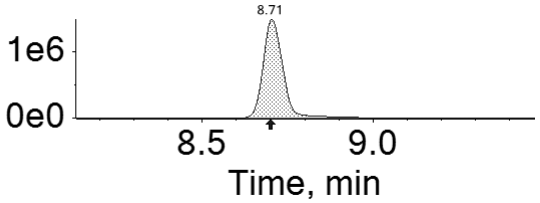
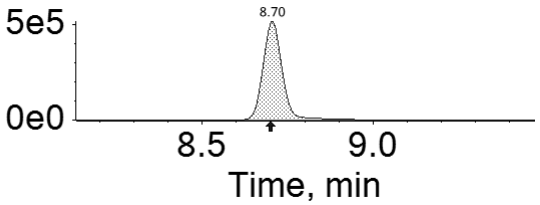
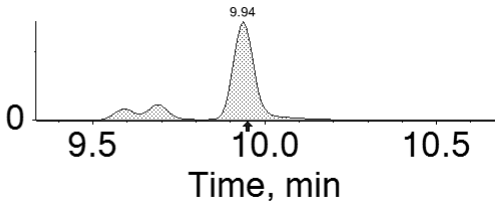
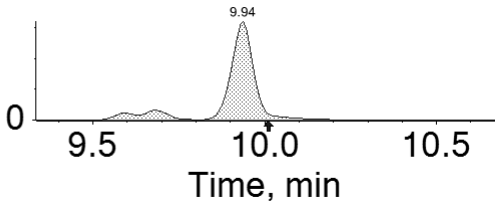
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.101e+07	1.79	50.00	44.712
PFPeA	7.427e+06	5.50	50.00	47.359
PFBS	4.584e+06	7.37	50.00	48.420
PFBS_2	1.705e+06	7.37	50.00	50.783
4:2FTS	6.814e+05	7.06	50.00	33.916
4:2FTS_2	5.075e+05	7.06	50.00	37.820
PFHxA	6.434e+06	7.48	50.00	50.036
PFHxA_2	5.303e+05	7.48	50.00	50.553
PFPeS	3.477e+06	8.83	50.00	46.731
PFPeS_2	1.311e+06	8.83	50.00	47.591
PFHpA	5.914e+06	8.71	50.00	48.130
PFHpA_2	2.011e+06	8.70	50.00	50.015
PFHxS	4.019e+06	9.94	50.00	50.828
PFHxS_2	1.725e+06	9.94	50.00	55.924
6:2FTS	7.968e+05	9.32	50.00	35.356
6:2FTS_2	5.558e+05	9.31	50.00	34.094
PFOA	6.618e+06	9.69	50.00	45.436
PFOA_2	2.499e+06	9.69	50.00	49.255
PFHpS	3.836e+06	10.89	50.00	44.466
PFHpS_2	1.103e+06	10.89	50.00	43.657
PFNA	3.575e+06	10.57	50.00	46.636
PFNA_2	1.285e+06	10.57	50.00	49.748
PFOS	2.989e+06	11.78	50.00	45.997
PFOS_2	7.865e+05	11.78	50.00	44.796
8:2FTS	4.775e+05	11.01	50.00	36.582
8:2FTS_2	4.204e+05	11.01	50.00	36.944
PFDA	3.047e+06	11.40	50.00	47.833
PFDA_2	7.530e+05	11.40	50.00	48.833
PFNS	2.725e+06	12.62	50.00	47.400
PFNS_2	9.126e+05	12.61	50.00	47.877
N-MeFOSAA	9.996e+05	11.41	50.00	49.069
N-MeFOSAA_2	5.417e+05	11.41	50.00	50.723
FOSA	3.258e+06	12.96	50.00	49.842
N-EtFOSAA	7.103e+05	11.75	50.00	50.650
N-EtFOSAA_2	4.136e+05	11.75	50.00	52.826
PFUdA	2.071e+06	12.21	50.00	50.257
PFUdA_2	4.144e+05	12.20	50.00	46.619
PFDS	1.884e+06	13.41	50.00	42.895
PFDS_2	6.170e+05	13.41	50.00	42.376
PFDoA	2.477e+06	12.98	50.00	47.120
PFDoA_2	4.124e+05	12.98	50.00	45.226
PFTrDA	2.509e+06	13.74	50.00	48.753
PFTrDA_2	4.676e+05	13.74	50.00	46.993
PFTeDA	1.619e+06	14.48	50.00	45.743
PFTeDA_2	2.200e+05	14.48	50.00	48.797
13C4_PFOA	6.795e+05	9.68	50.00	1.553
13C4_PFOS	3.197e+05	11.77	50.00	1.620

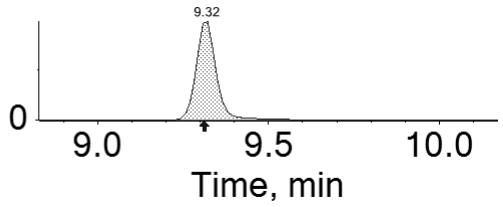
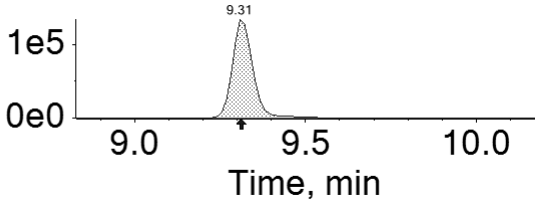
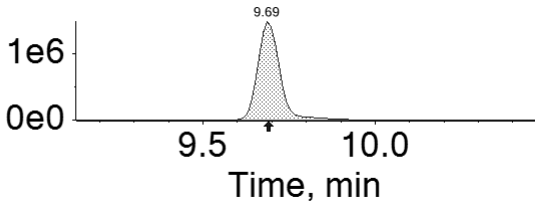
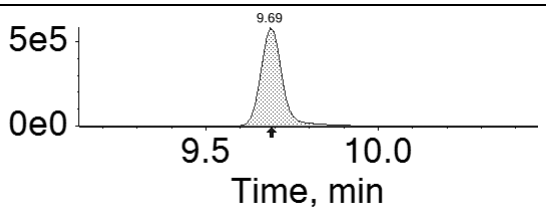
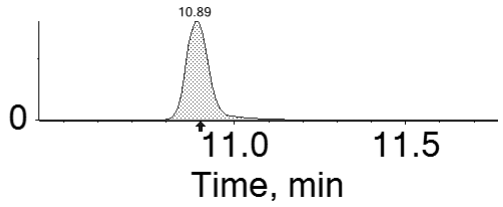
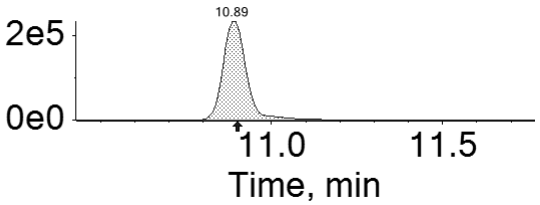
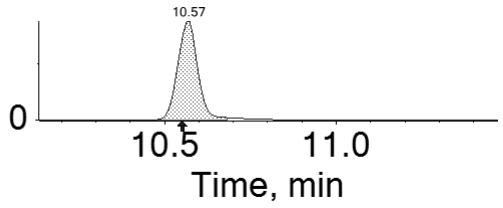
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.78(1.86) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.49(5.56) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Standard)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Standard)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Standard)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Standard)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Standard)	

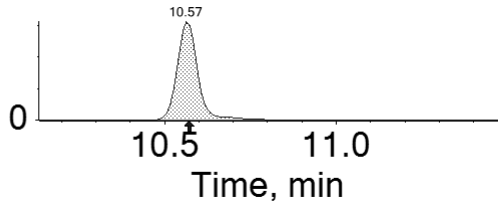
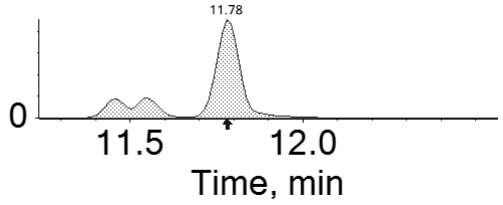
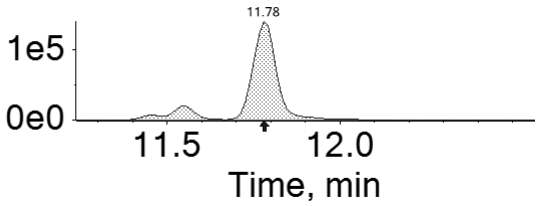
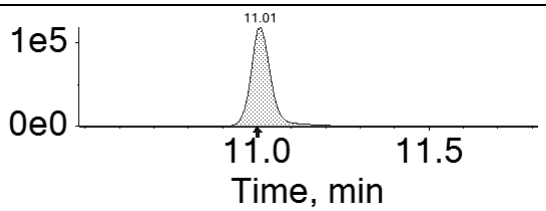
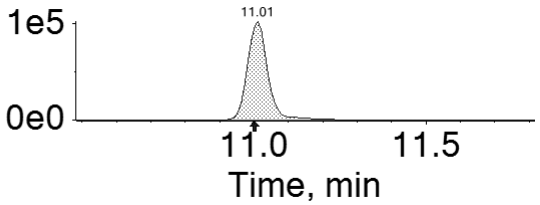
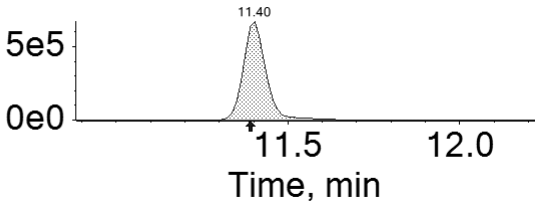
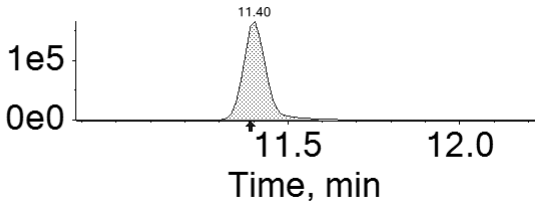
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Standard)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Standard)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Standard)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.01(11.00) min Concentration: 1.00 Sample Type: (Standard)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Standard)	

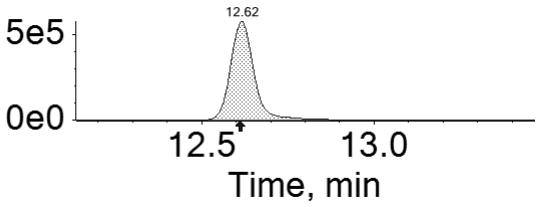
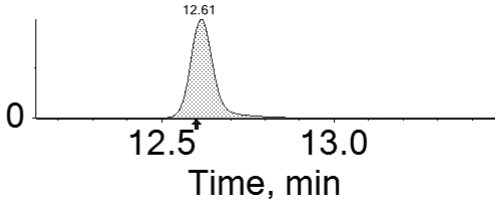
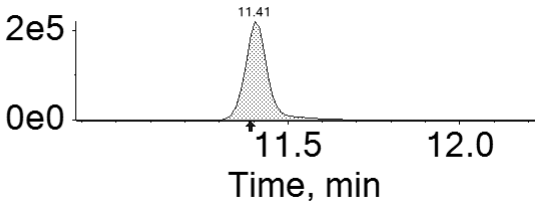
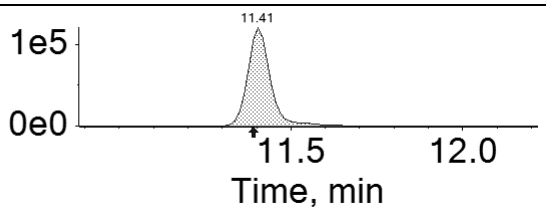
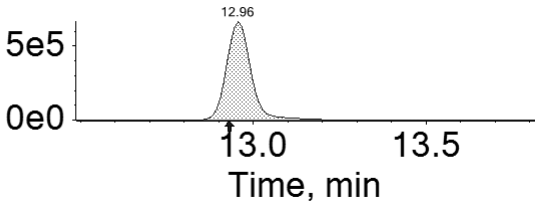
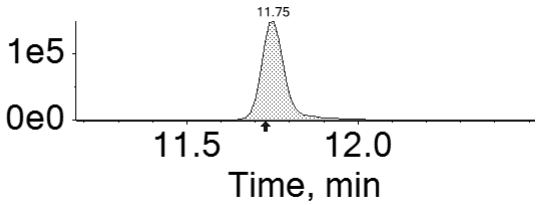
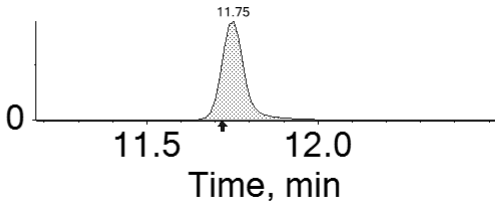
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.95(12.93) min Concentration: 1.00 Sample Type: (Standard)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.73(11.71) min Concentration: 1.00 Sample Type: (Standard)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.20(12.18) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.98(12.96) min Concentration: 1.00 Sample Type: (Standard)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.48(14.47) min Concentration: 1.00 Sample Type: (Standard)	

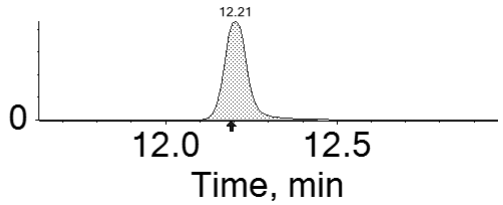
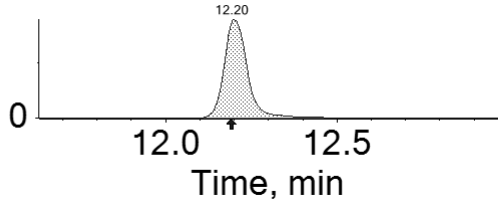
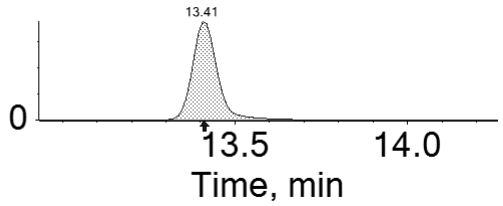
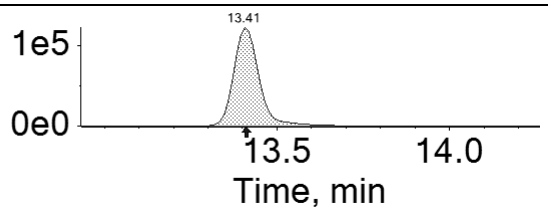
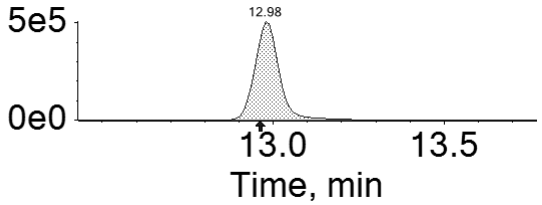
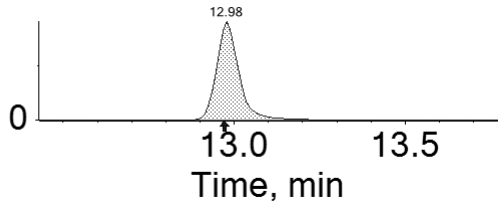
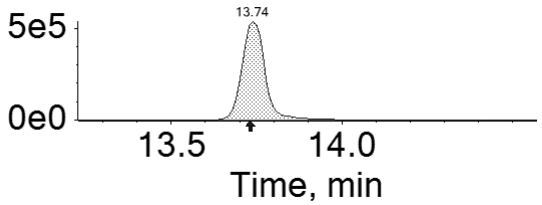
PFBA (213.0 / 169.0) RT (Exp. RT): 1.79 (1.76) min Calculated conc: 44.712 Area Ratio: 9.971e0 Sample Type: (Standard)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.50 (5.54) min Calculated conc: 47.359 Area Ratio: 9.748e0 Sample Type: (Standard)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 48.420 Area Ratio: 1.031e1 Sample Type: (Standard)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 50.783 Area Ratio: 3.835e0 Sample Type: (Standard)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 33.916 Area Ratio: 6.503e0 Sample Type: (Standard)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 37.820 Area Ratio: 4.843e0 Sample Type: (Standard)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 50.036 Area Ratio: 9.543e0 Sample Type: (Standard)	

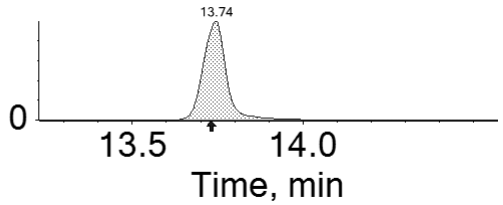
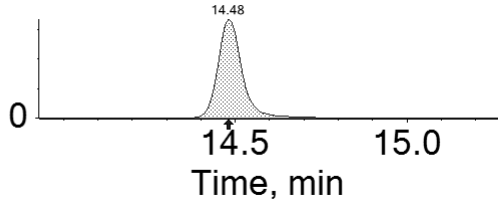
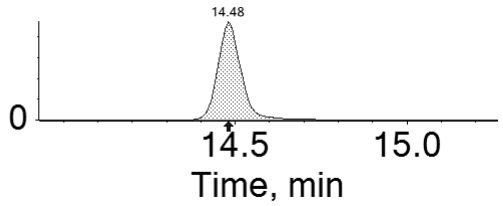
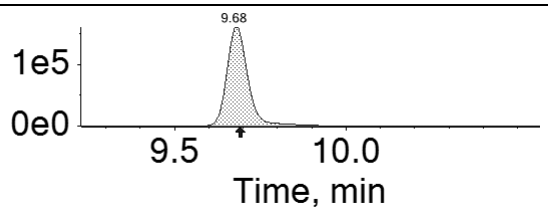
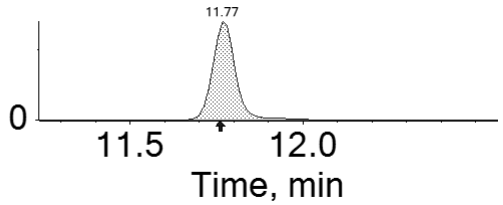
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 50.553 Area Ratio: 7.865e-1 Sample Type: (Standard)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 46.731 Area Ratio: 4.563e0 Sample Type: (Standard)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 47.591 Area Ratio: 1.720e0 Sample Type: (Standard)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 48.130 Area Ratio: 7.761e0 Sample Type: (Standard)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.70 (8.70) min Calculated conc: 50.015 Area Ratio: 2.638e0 Sample Type: (Standard)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 50.828 Area Ratio: 1.133e1 Sample Type: (Standard)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 55.924 Area Ratio: 4.863e0 Sample Type: (Standard)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 35.356 Area Ratio: 9.861e0 Sample Type: (Standard)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 34.094 Area Ratio: 6.878e0 Sample Type: (Standard)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 45.436 Area Ratio: 1.220e1 Sample Type: (Standard)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 49.255 Area Ratio: 4.607e0 Sample Type: (Standard)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 44.466 Area Ratio: 8.099e0 Sample Type: (Standard)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 43.657 Area Ratio: 2.329e0 Sample Type: (Standard)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 46.636 Area Ratio: 7.546e0 Sample Type: (Standard)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 49.748 Area Ratio: 2.712e0 Sample Type: (Standard)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 45.997 Area Ratio: 1.166e1 Sample Type: (Standard)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 44.796 Area Ratio: 3.068e0 Sample Type: (Standard)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 36.582 Area Ratio: 7.412e0 Sample Type: (Standard)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 36.944 Area Ratio: 6.525e0 Sample Type: (Standard)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 47.833 Area Ratio: 1.155e1 Sample Type: (Standard)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 48.833 Area Ratio: 2.855e0 Sample Type: (Standard)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.62 (12.61) min Calculated conc: 47.400 Area Ratio: 9.186e0 Sample Type: (Standard)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.61 (12.60) min Calculated conc: 47.877 Area Ratio: 3.076e0 Sample Type: (Standard)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 49.069 Area Ratio: 1.689e1 Sample Type: (Standard)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 50.723 Area Ratio: 9.156e0 Sample Type: (Standard)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 49.842 Area Ratio: 6.735e0 Sample Type: (Standard)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.75 (11.73) min Calculated conc: 50.650 Area Ratio: 1.491e1 Sample Type: (Standard)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.75 (11.72) min Calculated conc: 52.826 Area Ratio: 8.678e0 Sample Type: (Standard)	

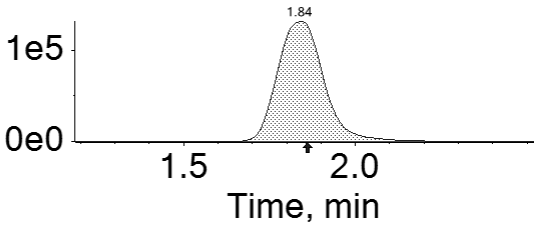
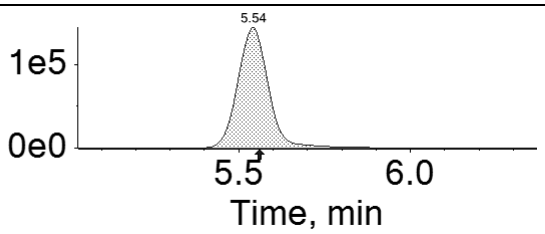
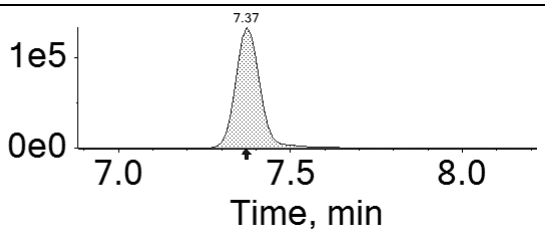
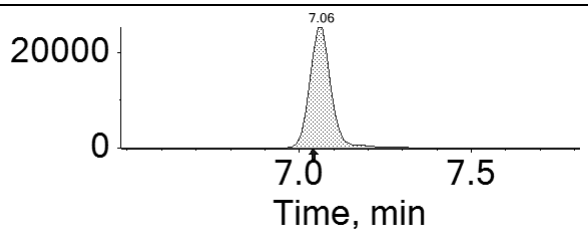
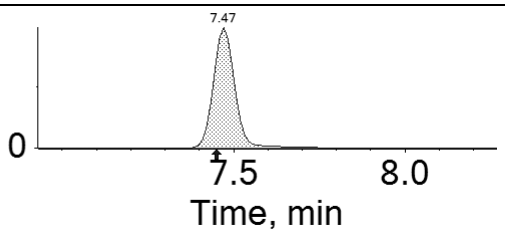
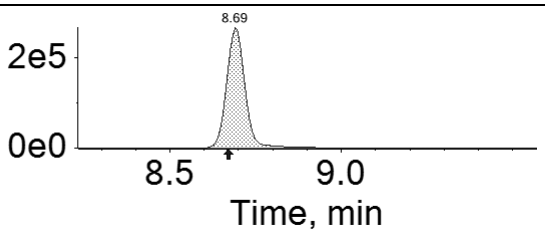
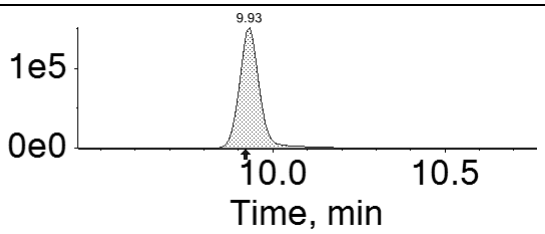
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 50.257 Area Ratio: 6.981e0 Sample Type: (Standard)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.20 (12.19) min Calculated conc: 46.619 Area Ratio: 1.397e0 Sample Type: (Standard)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 42.895 Area Ratio: 4.649e0 Sample Type: (Standard)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 42.376 Area Ratio: 1.523e0 Sample Type: (Standard)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.98 (12.96) min Calculated conc: 47.120 Area Ratio: 6.112e0 Sample Type: (Standard)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.98 (12.97) min Calculated conc: 45.226 Area Ratio: 1.018e0 Sample Type: (Standard)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 48.753 Area Ratio: 6.191e0 Sample Type: (Standard)	

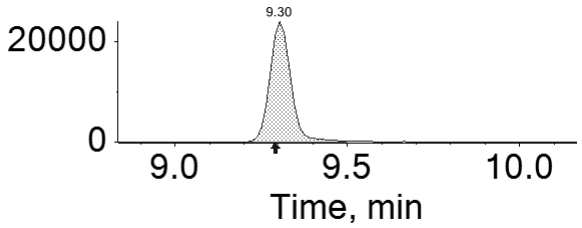
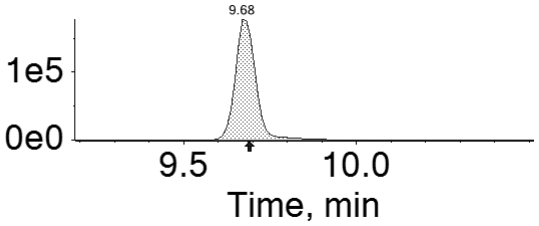
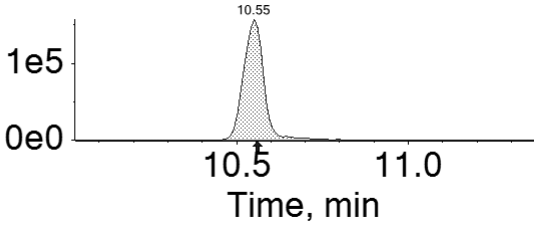
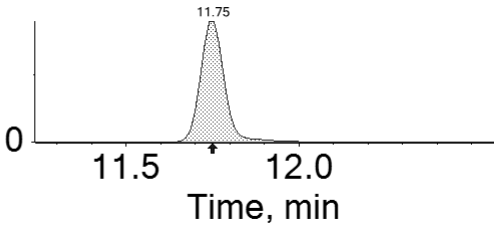
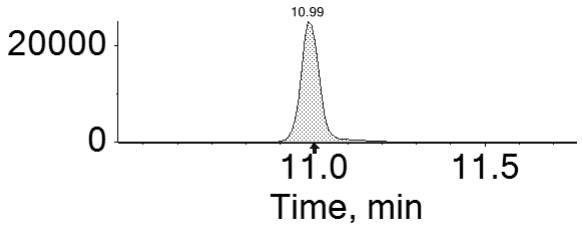
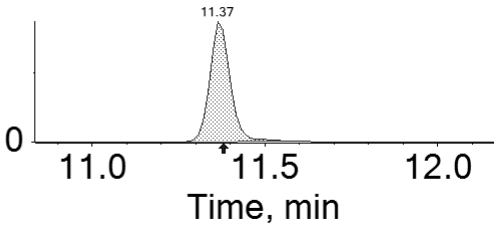
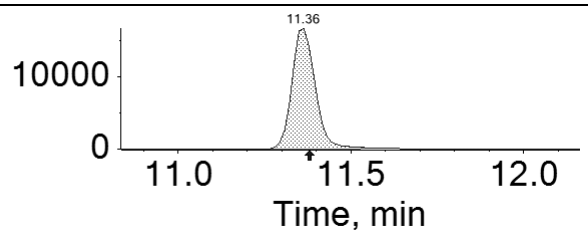
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 46.993 Area Ratio: 1.154e0 Sample Type: (Standard)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 45.743 Area Ratio: 7.724e0 Sample Type: (Standard)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 48.797 Area Ratio: 1.050e0 Sample Type: (Standard)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 1.553 Area Ratio: N/A Sample Type: (Standard)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.77 (11.76) min Calculated conc: 1.620 Area Ratio: N/A Sample Type: (Standard)	

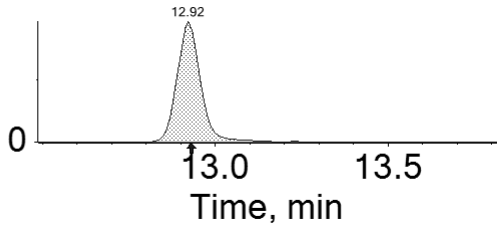
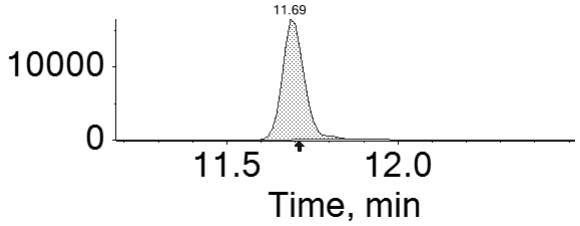
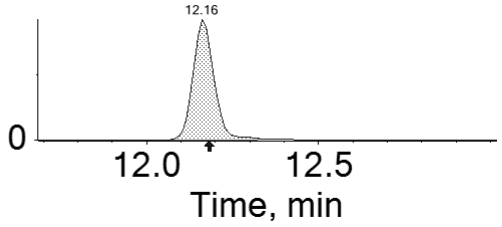
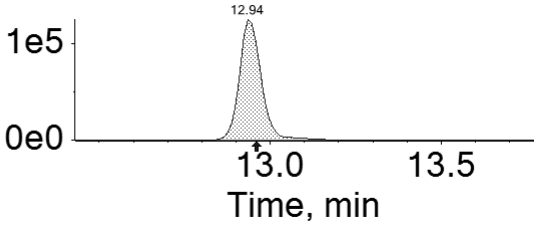
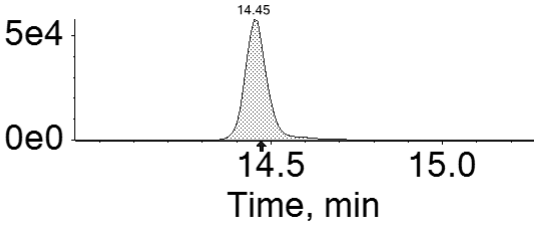
Sample Name	ICV-19206-007	**Injection Vial**	9
Sample ID	ICV-19206-007	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-20T19:58:10	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190620A.wiff		
Result Table	190626AM		
Sample Comment			

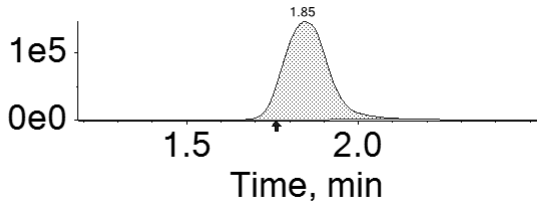
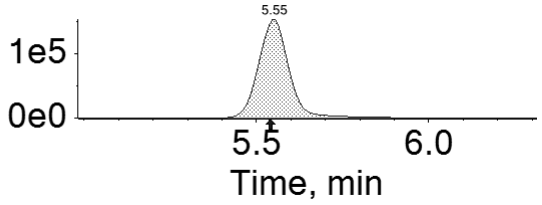
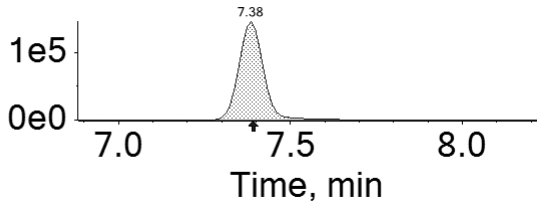
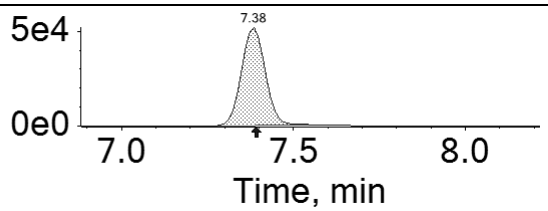
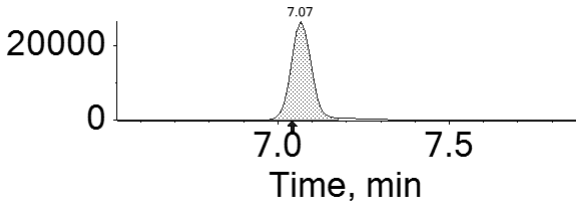
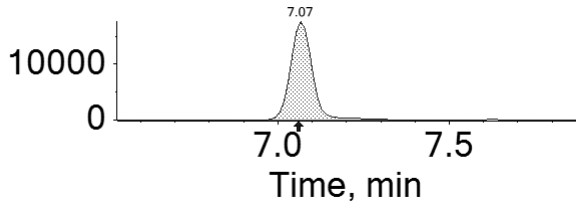
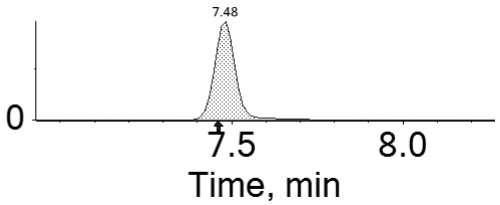
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.228e6	1.84	1.00	-
13C5_PFPeA	8.861e5	5.54	1.00	-
13C3_PFBS	6.569e5	7.37	1.00	-
13C2_4:2FTS	1.084e5	7.06	1.00	-
13C5_PFHxA	8.596e5	7.47	1.00	-
13C4_PFHpA	9.979e5	8.69	1.00	-
13C3_PFHxS	6.053e5	9.93	1.00	-
13C2_6:2FTS	1.003e5	9.30	1.00	-
13C8_PFOA	7.279e5	9.68	1.00	-
13C9_PFNA	6.482e5	10.55	1.00	-
13C8_PFOS	4.305e5	11.75	1.00	-
13C2_8:2FTS	9.604e4	10.99	1.00	-
13C6_PFDA	3.586e5	11.37	1.00	-
d3-MeFOSAA	7.820e4	11.36	1.00	-
13C8_FOSA	9.171e5	12.92	1.00	-
d5-EtFOSAA	7.239e4	11.69	1.00	-
13C7_PFUdA	3.939e5	12.16	1.00	-
13C2_PFDoA	5.511e5	12.94	1.00	-
13C2_PFTeDA	2.620e5	14.45	1.00	-

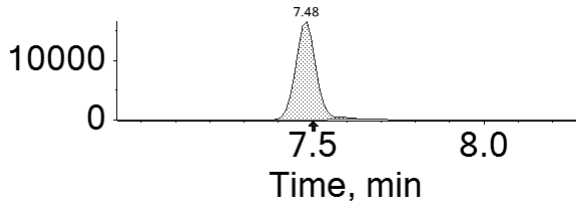
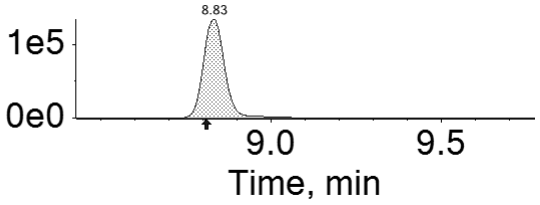
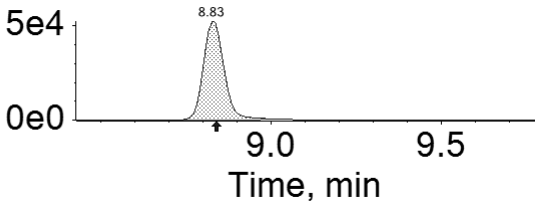
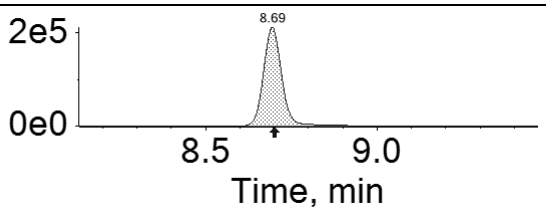
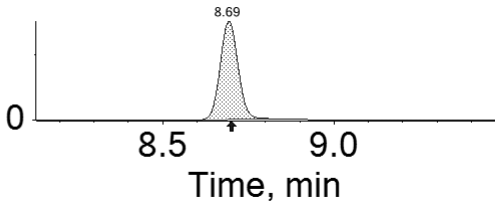
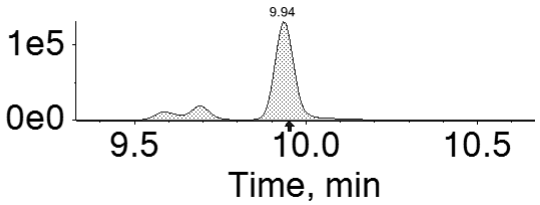
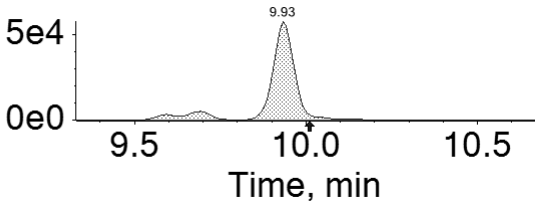
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.334e+06	1.85	5.00	5.069
PFPeA	9.290e+05	5.55	5.00	5.074
PFBS	7.221e+05	7.38	5.00	5.128
PFBS_2	2.507e+05	7.38	5.00	5.015
4:2FTS	1.091e+05	7.07	5.00	5.196
4:2FTS_2	7.701e+04	7.07	5.00	5.318
PFHxA	8.201e+05	7.48	5.00	5.202
PFHxA_2	6.844e+04	7.48	5.00	5.218
PFPeS	5.824e+05	8.83	5.00	5.143
PFPeS_2	2.196e+05	8.83	5.00	5.099
PFHpA	7.899e+05	8.69	5.00	5.004
PFHpA_2	2.713e+05	8.69	5.00	5.096
PFHxS	6.670e+05	9.94	5.00	4.941
PFHxS_2	2.869e+05	9.93	5.00	5.304
6:2FTS	1.583e+05	9.31	5.00	6.038
6:2FTS_2	1.060e+05	9.31	5.00	5.316
PFOA	9.493e+05	9.68	5.00	5.117
PFOA_2	3.372e+05	9.68	5.00	4.821
PFHpS	6.713e+05	10.88	5.00	4.999
PFHpS_2	1.879e+05	10.88	5.00	4.830
PFNA	4.771e+05	10.55	5.00	4.713
PFNA_2	1.758e+05	10.55	5.00	5.026
PFOS	4.842e+05	11.76	5.00	5.089
PFOS_2	1.354e+05	11.76	5.00	4.964
8:2FTS	1.107e+05	10.99	5.00	5.737
8:2FTS_2	8.320e+04	10.99	5.00	4.823
PFDA	4.197e+05	11.38	5.00	5.168
PFDA_2	1.060e+05	11.38	5.00	5.081
PFNS	4.938e+05	12.59	5.00	5.173
PFNS_2	1.631e+05	12.59	5.00	5.199
N-MeFOSAA	1.374e+05	11.37	5.00	5.472
N-MeFOSAA_2	6.750e+04	11.37	5.00	5.136
FOSA	6.603e+05	12.92	5.00	5.250
N-EtFOSAA	1.053e+05	11.71	5.00	5.212
N-EtFOSAA_2	5.815e+04	11.71	5.00	5.421
PFUdA	3.197e+05	12.17	5.00	5.492
PFUdA_2	7.228e+04	12.17	5.00	5.603
PFDS	3.771e+05	13.39	5.00	5.224
PFDS_2	1.301e+05	13.39	5.00	5.287
PFDoA	3.781e+05	12.94	5.00	5.201
PFDoA_2	6.246e+04	12.95	5.00	5.019
PFTrDA	3.956e+05	13.71	5.00	4.985
PFTrDA_2	7.422e+04	13.71	5.00	5.049
PFTeDA	2.321e+05	14.46	5.00	5.380
PFTeDA_2	2.966e+04	14.46	5.00	5.017
13C4_PFOA	9.376e+05	9.68	1.00	1.026
13C4_PFOS	4.913e+05	11.75	1.00	0.998

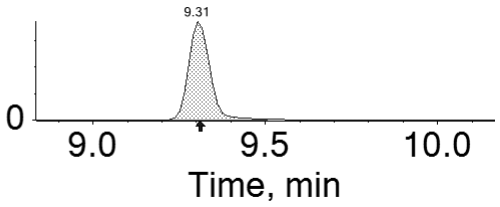
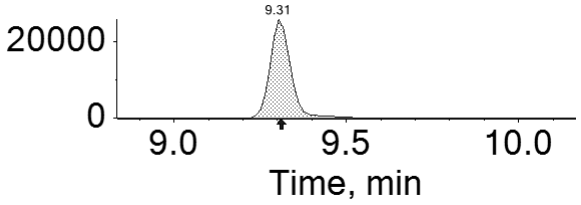
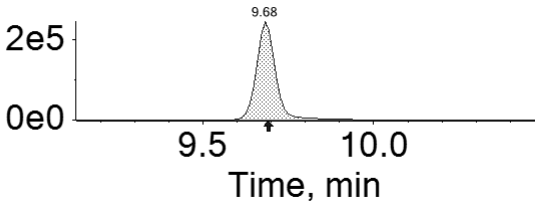
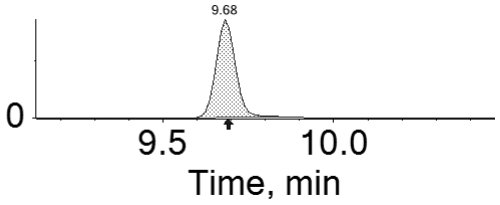
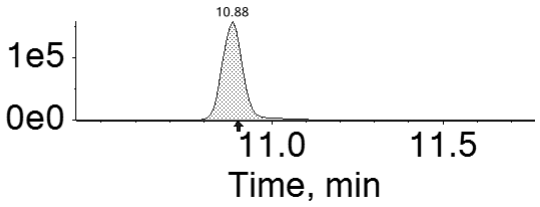
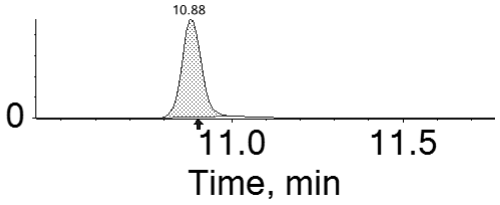
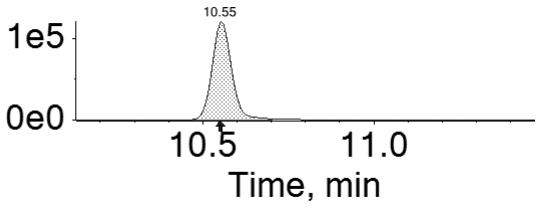
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.84(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.54(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.69(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

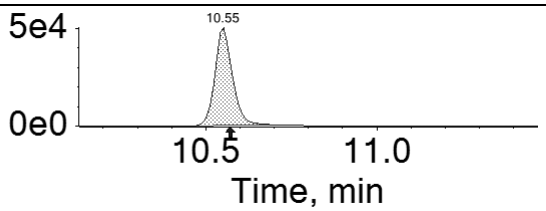
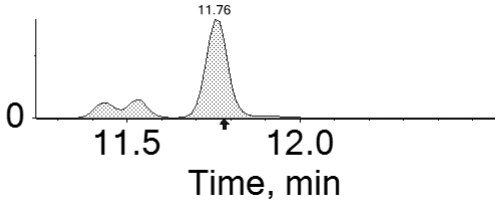
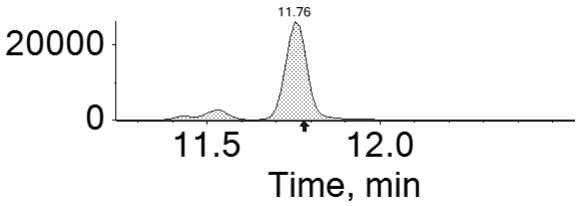
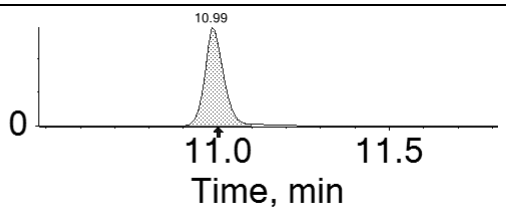
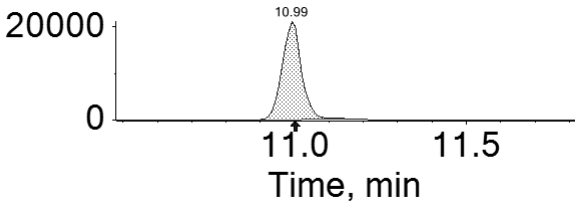
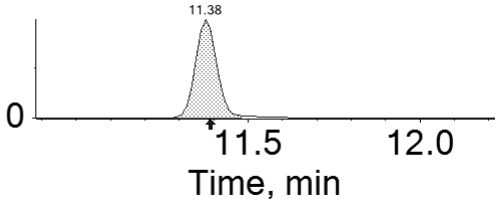
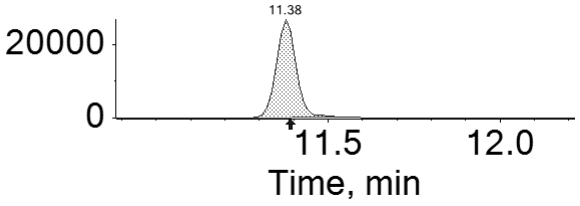
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.36(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

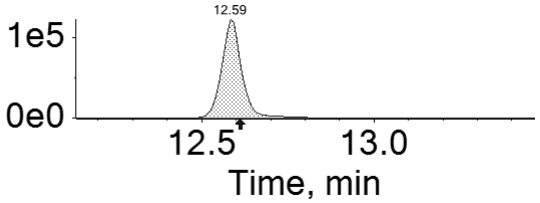
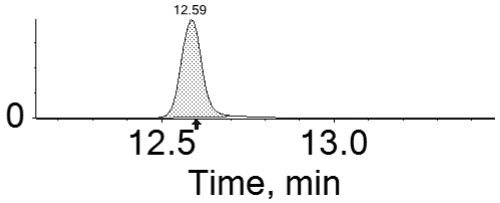
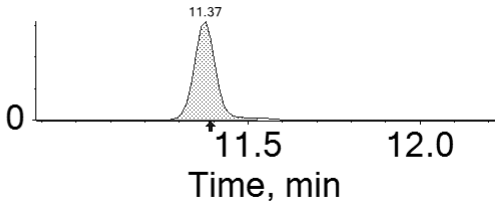
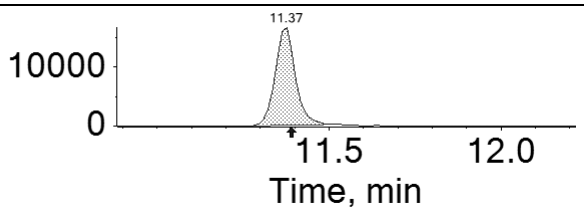
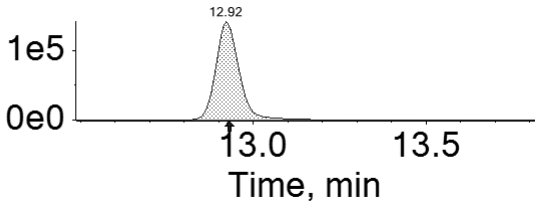
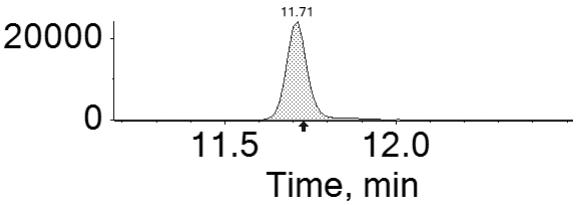
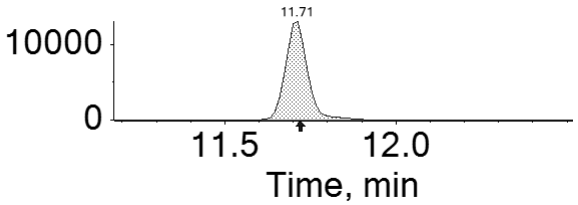
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.92(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.69(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.16(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

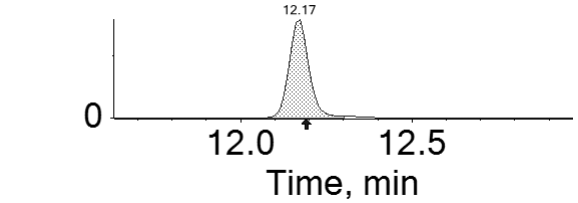
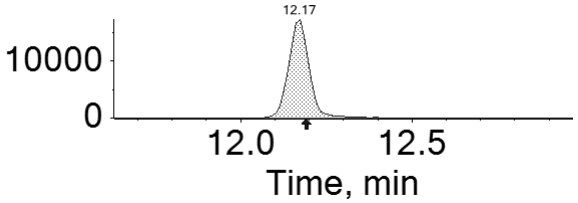
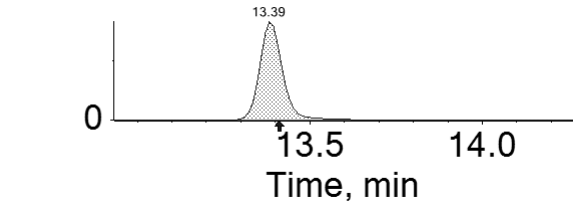
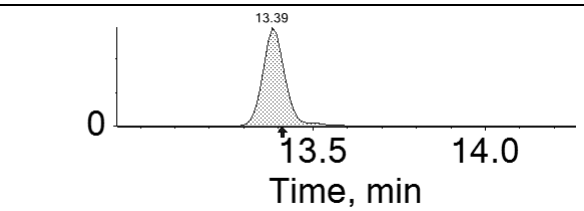
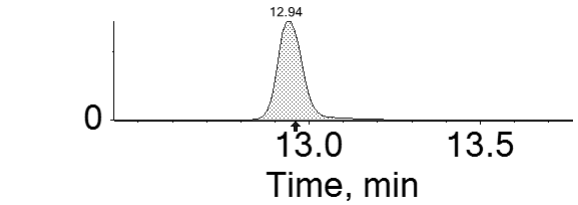
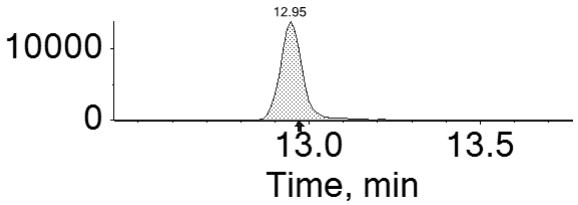
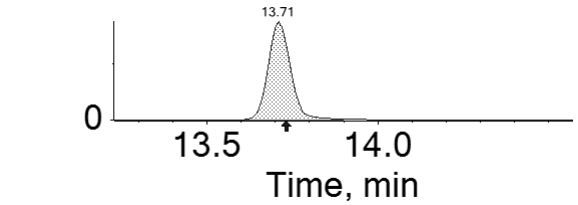
PFBA (213.0 / 169.0) RT (Exp. RT): 1.85 (1.76) min Calculated conc: 5.069 Area Ratio: 1.086e0 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.55 (5.54) min Calculated conc: 5.074 Area Ratio: 1.048e0 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 5.128 Area Ratio: 1.099e0 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 5.015 Area Ratio: 3.817e-1 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.07 (7.04) min Calculated conc: 5.196 Area Ratio: 1.006e0 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 5.318 Area Ratio: 7.105e-1 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 5.202 Area Ratio: 9.541e-1 Sample Type: (Quality Control)	

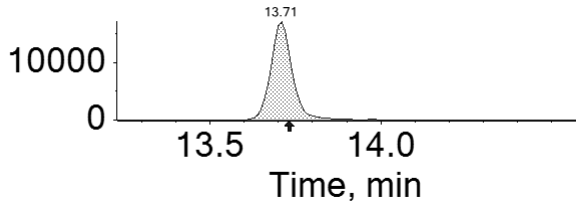
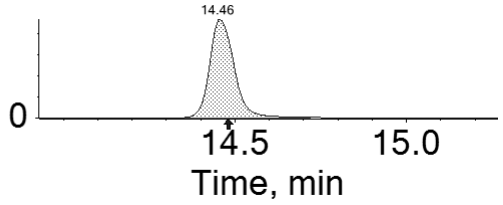
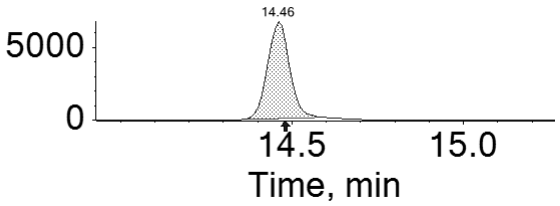
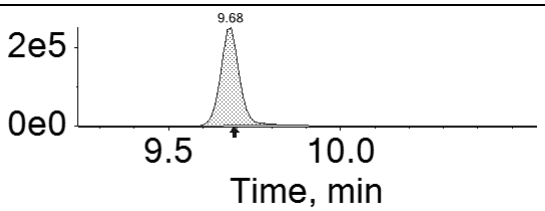
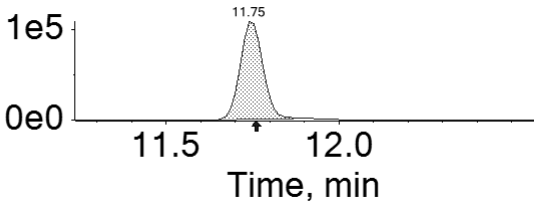
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 5.218 Area Ratio: 7.962e-2 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.83 (8.81) min Calculated conc: 5.143 Area Ratio: 5.836e-1 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 5.099 Area Ratio: 2.201e-1 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 5.004 Area Ratio: 7.915e-1 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 5.096 Area Ratio: 2.718e-1 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 4.941 Area Ratio: 1.102e0 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 5.304 Area Ratio: 4.740e-1 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 6.038 Area Ratio: 1.578e0 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 5.316 Area Ratio: 1.056e0 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 5.117 Area Ratio: 1.304e0 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 4.821 Area Ratio: 4.632e-1 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 4.999 Area Ratio: 1.036e0 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 4.830 Area Ratio: 2.899e-1 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.55 (10.55) min Calculated conc: 4.713 Area Ratio: 7.361e-1 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.55 (10.57) min Calculated conc: 5.026 Area Ratio: 2.712e-1 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 5.089 Area Ratio: 1.125e0 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 4.964 Area Ratio: 3.145e-1 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 5.737 Area Ratio: 1.153e0 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 4.823 Area Ratio: 8.663e-1 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 5.168 Area Ratio: 1.170e0 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 5.081 Area Ratio: 2.957e-1 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: 5.173 Area Ratio: 1.253e0 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: 5.199 Area Ratio: 4.141e-1 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 5.472 Area Ratio: 1.757e0 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 5.136 Area Ratio: 8.631e-1 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.92 (12.93) min Calculated conc: 5.250 Area Ratio: 7.200e-1 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.71 (11.73) min Calculated conc: 5.212 Area Ratio: 1.455e0 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.71 (11.72) min Calculated conc: 5.421 Area Ratio: 8.032e-1 Sample Type: (Quality Control)	

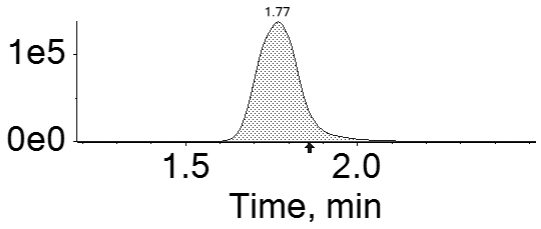
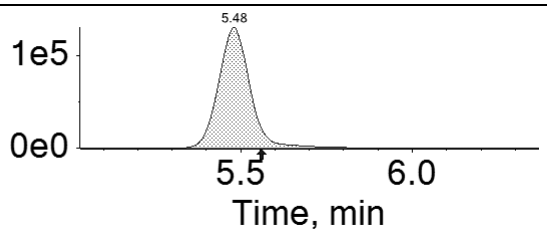
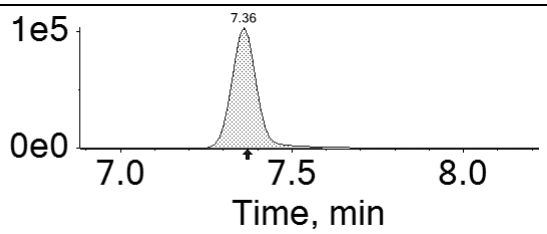
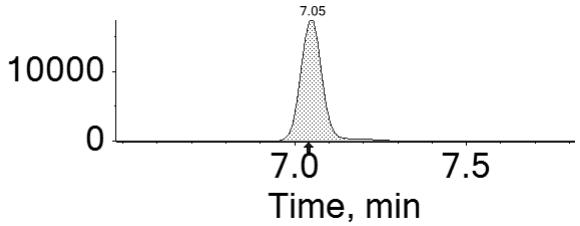
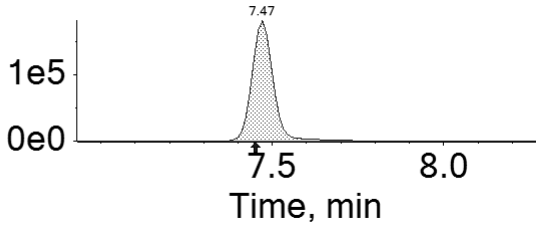
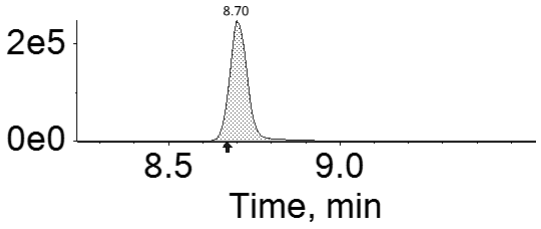
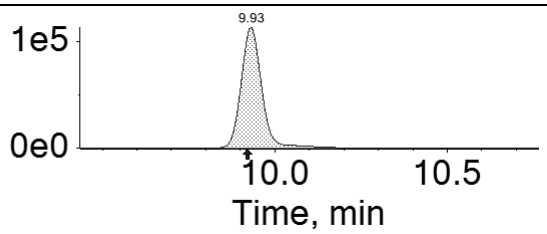
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 5.492 Area Ratio: 8.116e-1 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 5.603 Area Ratio: 1.835e-1 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 5.224 Area Ratio: 6.842e-1 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 5.287 Area Ratio: 2.361e-1 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.94 (12.96) min Calculated conc: 5.201 Area Ratio: 6.862e-1 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: 5.019 Area Ratio: 1.134e-1 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 4.985 Area Ratio: 7.179e-1 Sample Type: (Quality Control)	

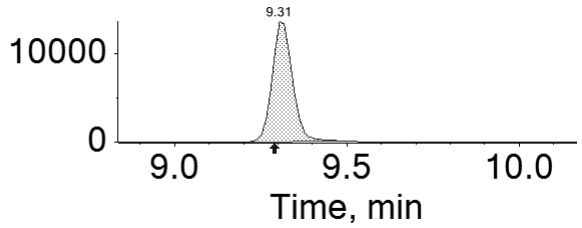
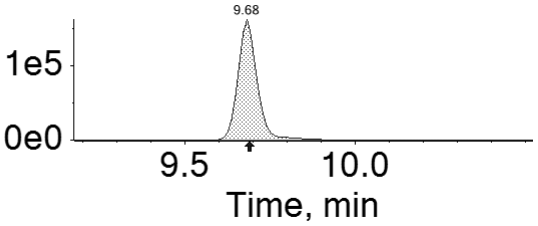
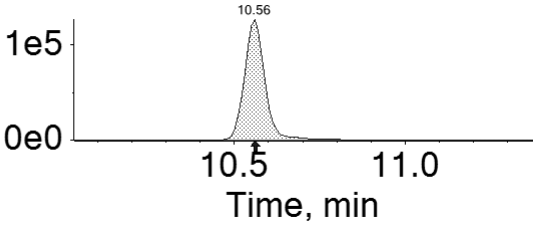
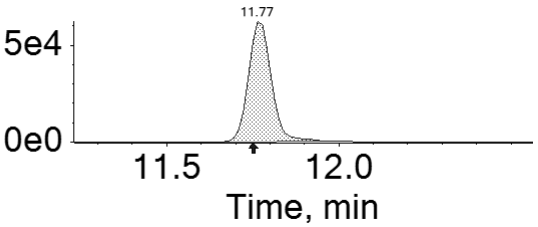
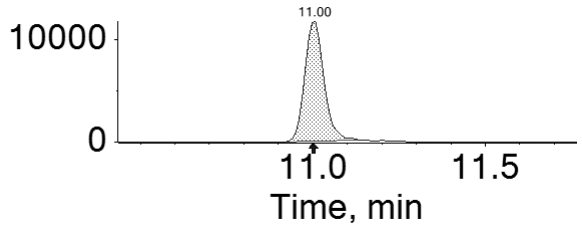
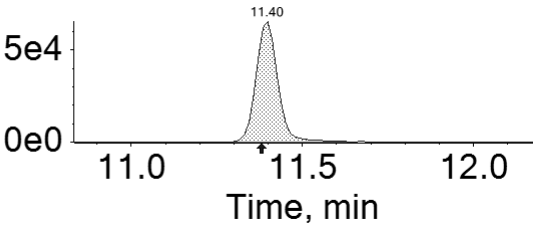
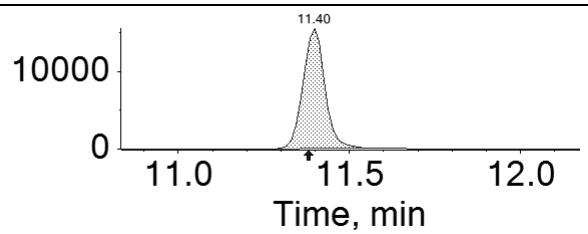
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 5.049 Area Ratio: 1.347e-1 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 5.380 Area Ratio: 8.857e-1 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 5.017 Area Ratio: 1.132e-1 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 1.026 Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 0.998 Area Ratio: N/A Sample Type: (Quality Control)	

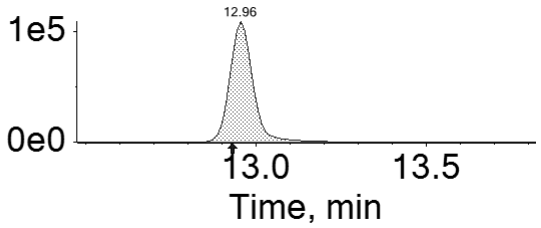
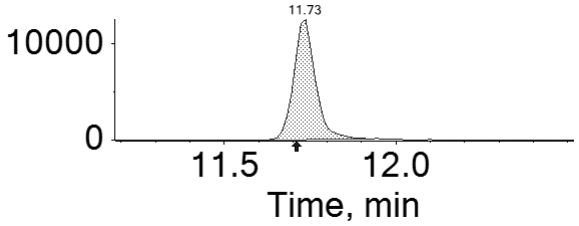
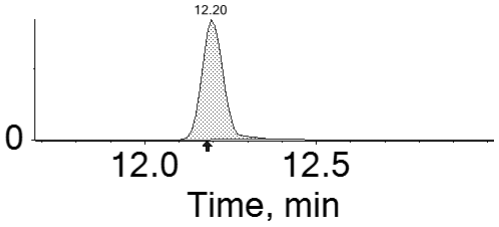
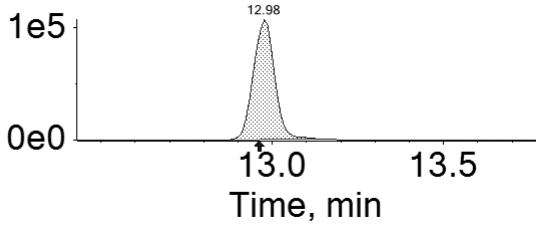
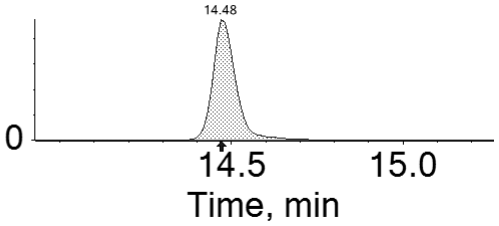
Sample Name	ICV-19206-007	**Injection Vial**	9
Sample ID	ICV-19206-007	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-28T14:55:22	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190628A.wiff		
Result Table	190628AM		
Sample Comment			

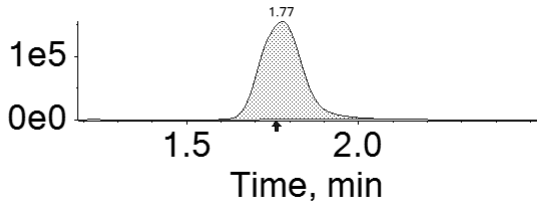
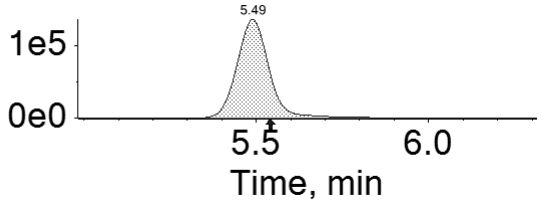
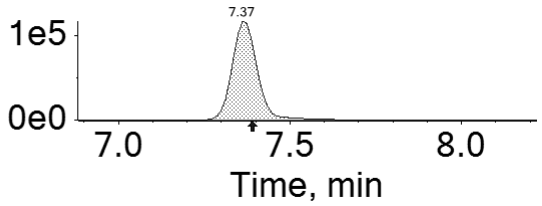
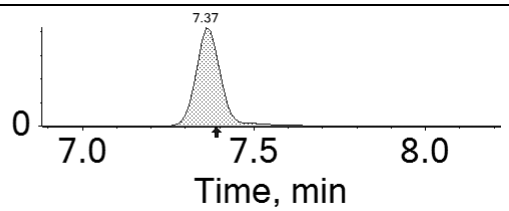
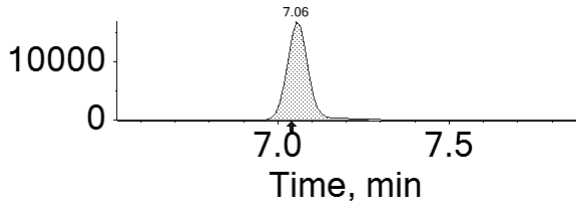
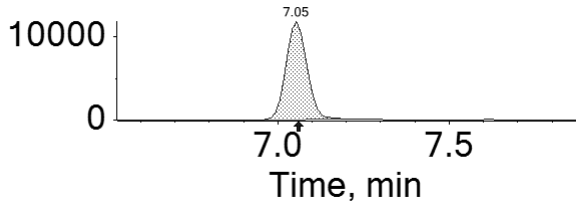
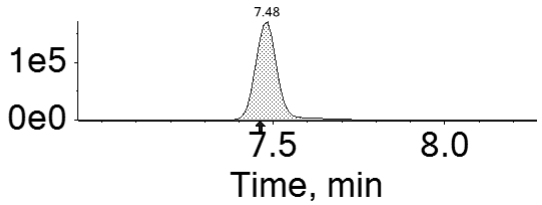
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.201e6	1.77	1.00	-
13C5_PFPeA	8.236e5	5.48	1.00	-
13C3_PFBS	5.184e5	7.36	1.00	-
13C2_4:2FTS	7.612e4	7.05	1.00	-
13C5_PFHxA	7.746e5	7.47	1.00	-
13C4_PFHpA	9.061e5	8.70	1.00	-
13C3_PFHxS	4.685e5	9.93	1.00	-
13C2_6:2FTS	5.573e4	9.31	1.00	-
13C8_PFOA	6.271e5	9.68	1.00	-
13C9_PFNA	5.269e5	10.56	1.00	-
13C8_PFOS	2.876e5	11.77	1.00	-
13C2_8:2FTS	4.532e4	11.00	1.00	-
13C6_PFDA	2.860e5	11.40	1.00	-
d3-MeFOSAA	6.816e4	11.40	1.00	-
13C8_FOSA	5.133e5	12.96	1.00	-
d5-EtFOSAA	5.480e4	11.73	1.00	-
13C7_PFUdA	3.624e5	12.20	1.00	-
13C2_PFDoA	4.599e5	12.98	1.00	-
13C2_PFTeDA	2.199e5	14.48	1.00	-

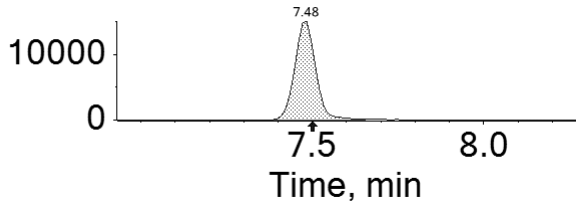
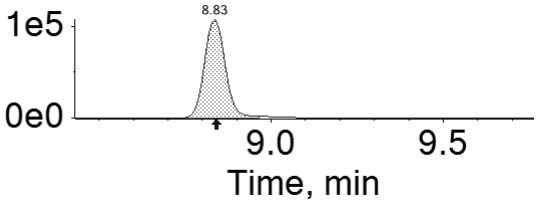
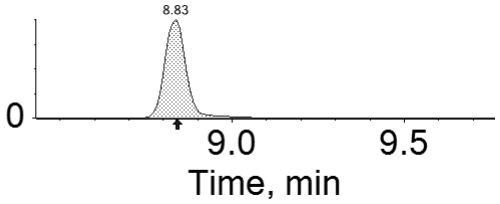
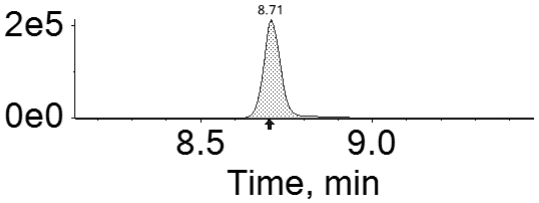
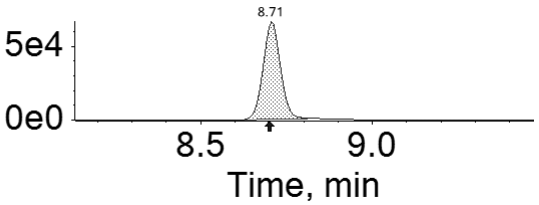
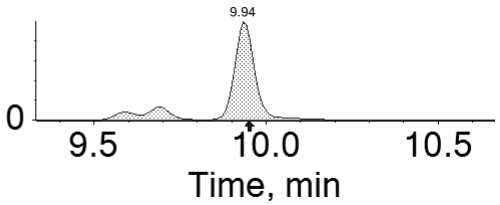
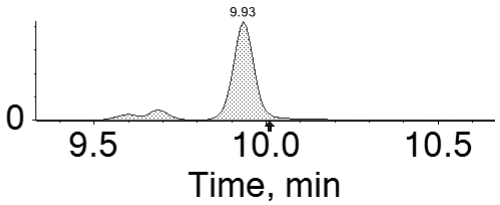
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.337e+06	1.77	5.00	4.989
PFPeA	8.750e+05	5.49	5.00	5.162
PFBS	5.984e+05	7.37	5.00	5.419
PFBS_2	2.094e+05	7.37	5.00	5.348
4:2FTS	7.281e+04	7.06	5.00	4.989
4:2FTS_2	5.037e+04	7.05	5.00	5.168
PFHxA	7.512e+05	7.48	5.00	5.085
PFHxA_2	6.362e+04	7.48	5.00	5.279
PFPeS	4.516e+05	8.83	5.00	5.104
PFPeS_2	1.725e+05	8.83	5.00	5.267
PFHpA	7.493e+05	8.71	5.00	5.128
PFHpA_2	2.307e+05	8.71	5.00	4.826
PFHxS	5.032e+05	9.94	5.00	4.820
PFHxS_2	2.148e+05	9.93	5.00	5.273
6:2FTS	8.678e+04	9.32	5.00	5.584
6:2FTS_2	6.137e+04	9.32	5.00	5.459
PFOA	8.061e+05	9.69	5.00	4.787
PFOA_2	3.081e+05	9.69	5.00	5.253
PFHpS	5.213e+05	10.89	5.00	5.432
PFHpS_2	1.424e+05	10.89	5.00	5.065
PFNA	4.380e+05	10.57	5.00	5.138
PFNA_2	1.414e+05	10.57	5.00	4.922
PFOS	3.461e+05	11.78	5.00	4.749
PFOS_2	9.963e+04	11.78	5.00	5.059
8:2FTS	4.715e+04	11.01	5.00	5.135
8:2FTS_2	4.388e+04	11.01	5.00	5.482
PFDA	3.974e+05	11.40	5.00	5.752
PFDA_2	8.859e+04	11.40	5.00	5.297
PFNS	3.560e+05	12.61	5.00	5.069
PFNS_2	1.209e+05	12.61	5.00	5.194
N-MeFOSAA	1.218e+05	11.41	5.00	5.190
N-MeFOSAA_2	6.847e+04	11.41	5.00	5.565
FOSA	3.622e+05	12.96	5.00	5.222
N-EtFOSAA	8.665e+04	11.75	5.00	5.373
N-EtFOSAA_2	4.547e+04	11.75	5.00	5.051
PFUdA	2.461e+05	12.20	5.00	4.889
PFUdA_2	4.960e+04	12.20	5.00	4.568
PFDS	2.514e+05	13.41	5.00	5.044
PFDS_2	8.132e+04	13.41	5.00	4.921
PFDoA	2.995e+05	12.98	5.00	5.021
PFDoA_2	5.546e+04	12.98	5.00	5.359
PFTrDA	2.973e+05	13.74	5.00	5.090
PFTrDA_2	5.513e+04	13.74	5.00	4.882
PFTeDA	1.918e+05	14.49	5.00	5.167
PFTeDA_2	2.369e+04	14.48	5.00	5.009
13C4_PFOA	8.072e+05	9.68	5.00	1.845
13C4_PFOS	3.541e+05	11.77	5.00	1.794

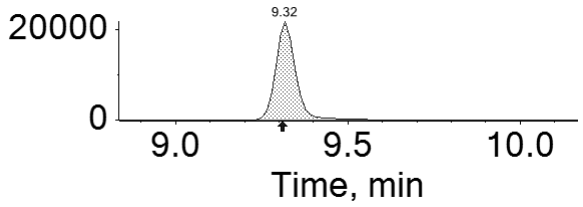
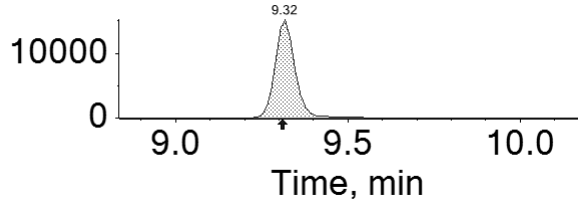
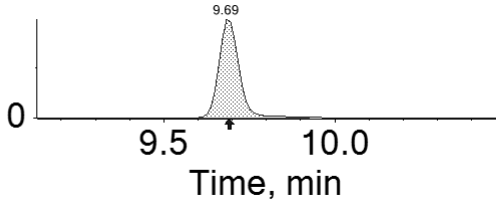
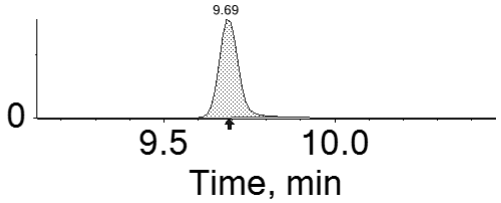
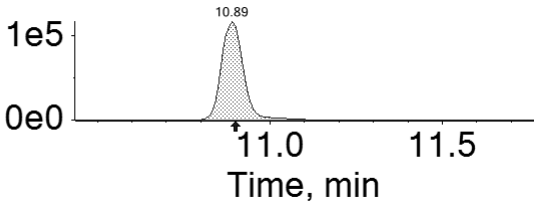
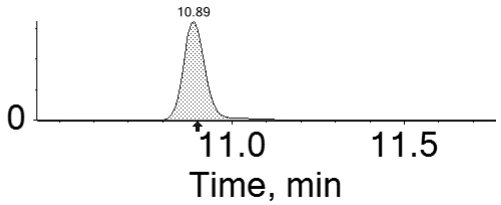
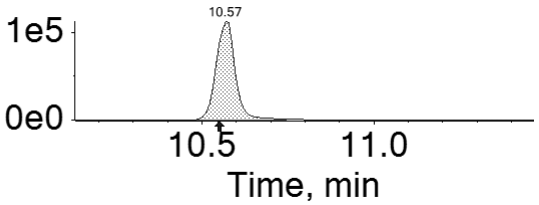
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.77(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.48(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.70(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

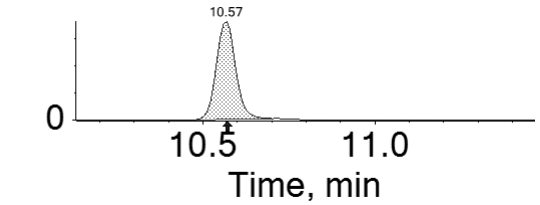
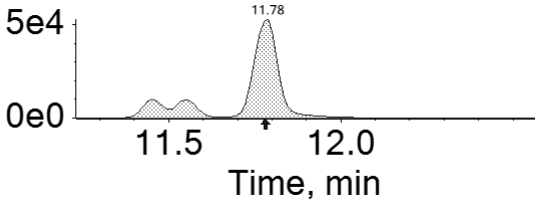
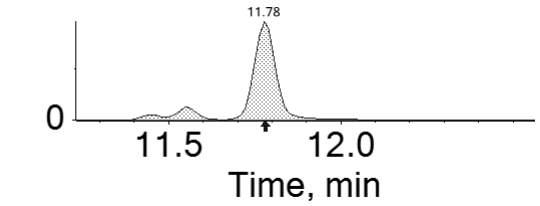
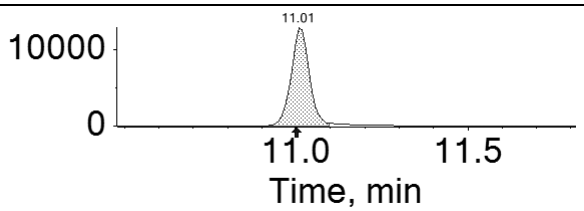
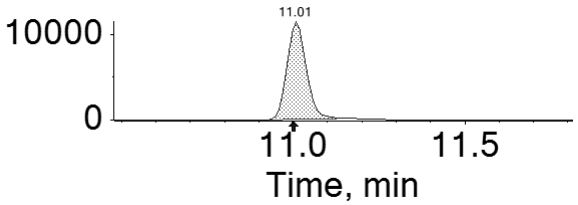
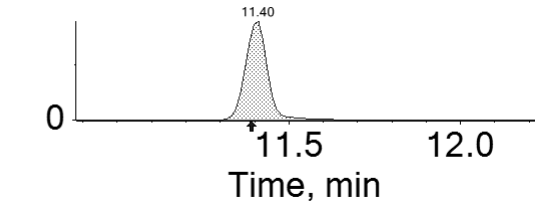
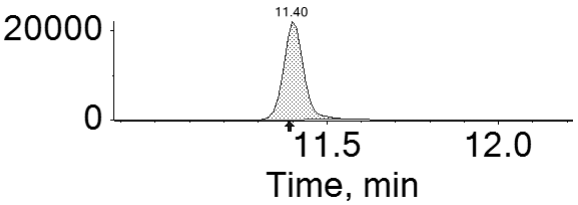
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.31(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.77(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.40(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

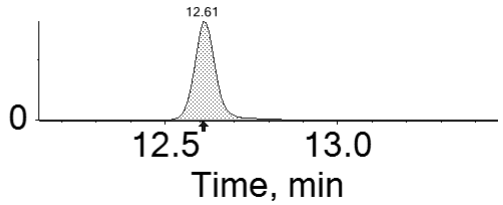
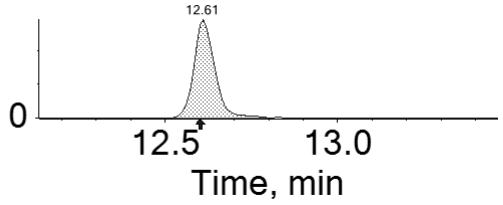
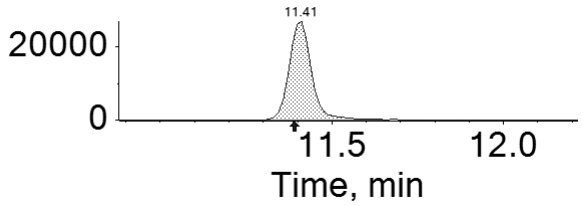
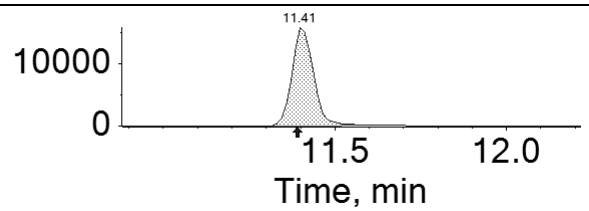
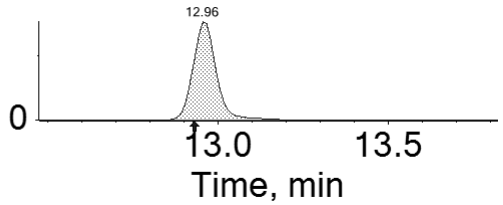
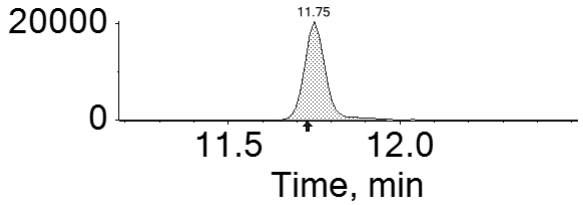
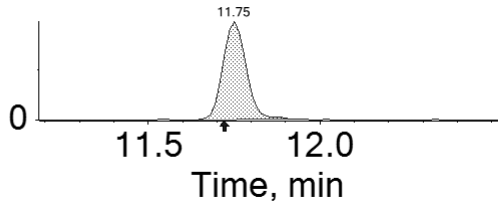
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.73(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.20(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.98(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.48(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

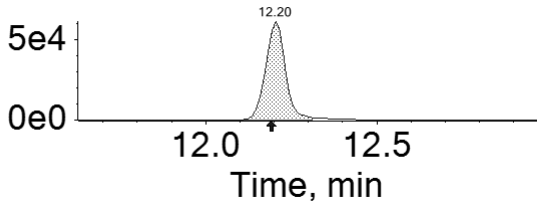
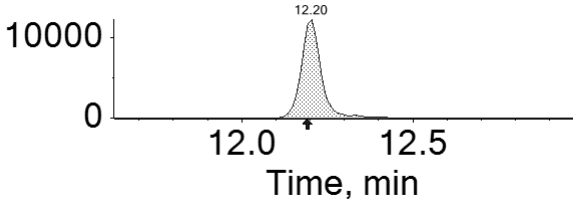
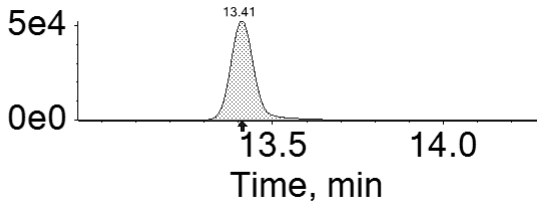
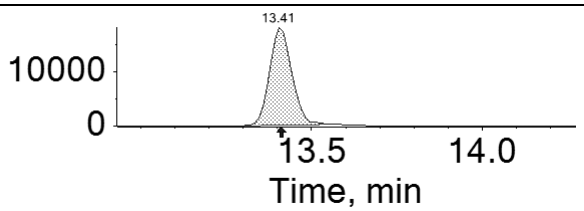
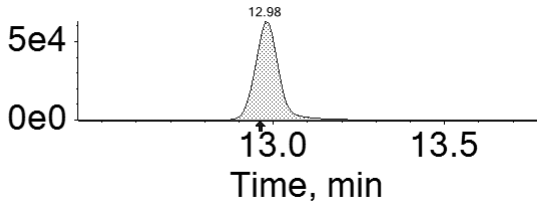
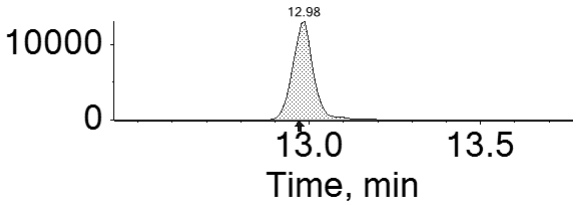
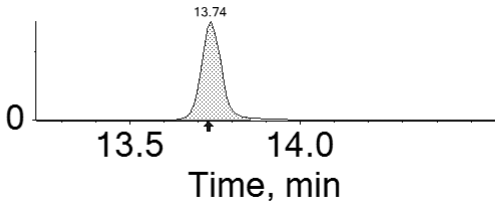
PFBA (213.0 / 169.0) RT (Exp. RT): 1.77 (1.76) min Calculated conc: 4.989 Area Ratio: 1.113e0 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.49 (5.54) min Calculated conc: 5.162 Area Ratio: 1.062e0 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 5.419 Area Ratio: 1.154e0 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 5.348 Area Ratio: 4.039e-1 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 4.989 Area Ratio: 9.565e-1 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.05 (7.06) min Calculated conc: 5.168 Area Ratio: 6.617e-1 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.48 (7.46) min Calculated conc: 5.085 Area Ratio: 9.698e-1 Sample Type: (Quality Control)	

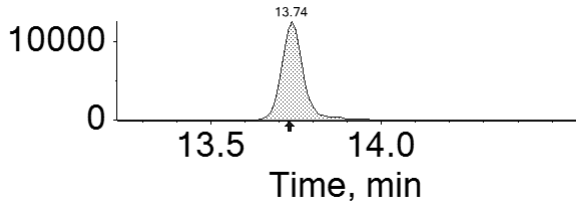
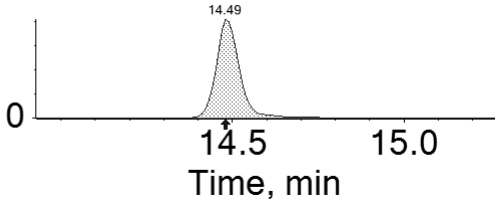
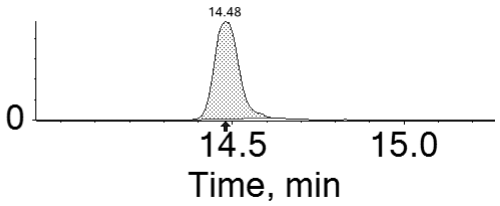
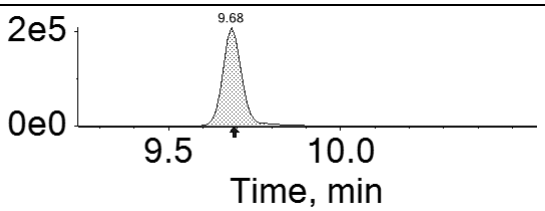
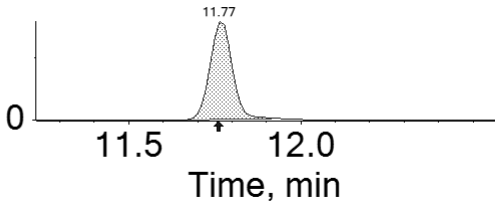
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.48 (7.50) min Calculated conc: 5.279 Area Ratio: 8.213e-2 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 5.104 Area Ratio: 4.984e-1 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 5.267 Area Ratio: 1.904e-1 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 5.128 Area Ratio: 8.269e-1 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.71 (8.70) min Calculated conc: 4.826 Area Ratio: 2.546e-1 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 4.820 Area Ratio: 1.074e0 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 5.273 Area Ratio: 4.585e-1 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 5.584 Area Ratio: 1.557e0 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.32 (9.31) min Calculated conc: 5.459 Area Ratio: 1.101e0 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 4.787 Area Ratio: 1.286e0 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.69 (9.69) min Calculated conc: 5.253 Area Ratio: 4.914e-1 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 5.432 Area Ratio: 9.894e-1 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 5.065 Area Ratio: 2.702e-1 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.57 (10.55) min Calculated conc: 5.138 Area Ratio: 8.313e-1 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 4.922 Area Ratio: 2.683e-1 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 4.749 Area Ratio: 1.204e0 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.78 (11.78) min Calculated conc: 5.059 Area Ratio: 3.465e-1 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 5.135 Area Ratio: 1.040e0 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.01 (11.00) min Calculated conc: 5.482 Area Ratio: 9.682e-1 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 5.752 Area Ratio: 1.389e0 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.40 (11.39) min Calculated conc: 5.297 Area Ratio: 3.097e-1 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.61 (12.61) min Calculated conc: 5.069 Area Ratio: 9.823e-1 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.61 (12.60) min Calculated conc: 5.194 Area Ratio: 3.337e-1 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 5.190 Area Ratio: 1.787e0 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.41 (11.39) min Calculated conc: 5.565 Area Ratio: 1.004e0 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 5.222 Area Ratio: 7.056e-1 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.75 (11.73) min Calculated conc: 5.373 Area Ratio: 1.581e0 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.75 (11.72) min Calculated conc: 5.051 Area Ratio: 8.297e-1 Sample Type: (Quality Control)	

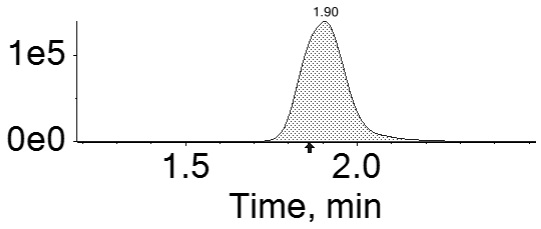
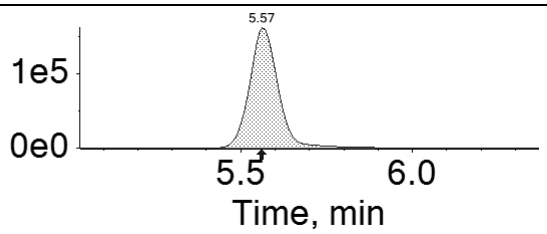
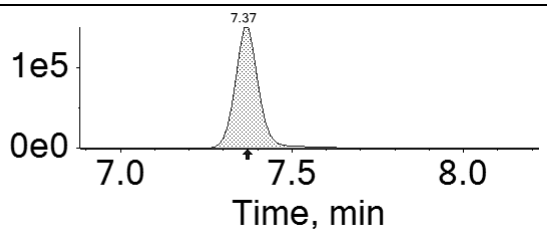
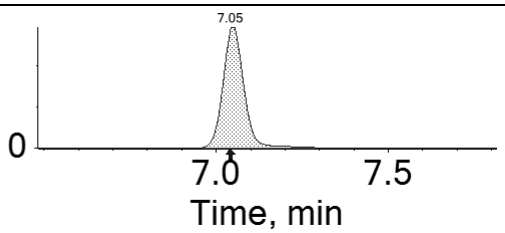
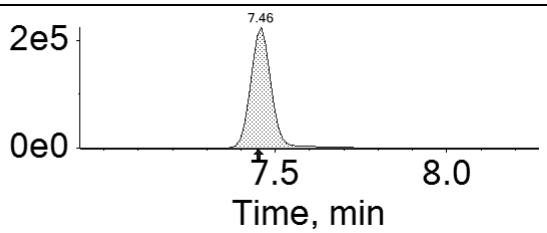
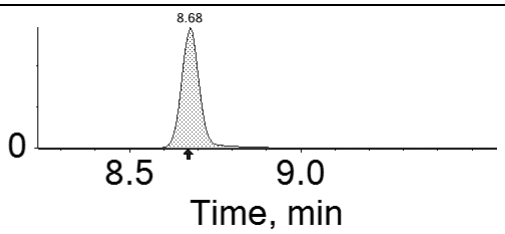
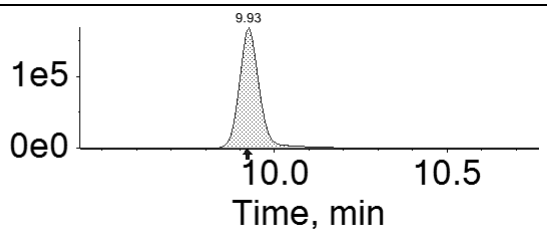
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.20 (12.19) min Calculated conc: 4.889 Area Ratio: 6.792e-1 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.20 (12.19) min Calculated conc: 4.568 Area Ratio: 1.369e-1 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 5.044 Area Ratio: 5.467e-1 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.41 (13.41) min Calculated conc: 4.921 Area Ratio: 1.768e-1 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.98 (12.96) min Calculated conc: 5.021 Area Ratio: 6.513e-1 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.98 (12.97) min Calculated conc: 5.359 Area Ratio: 1.206e-1 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 5.090 Area Ratio: 6.463e-1 Sample Type: (Quality Control)	

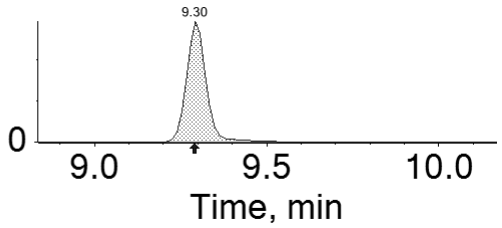
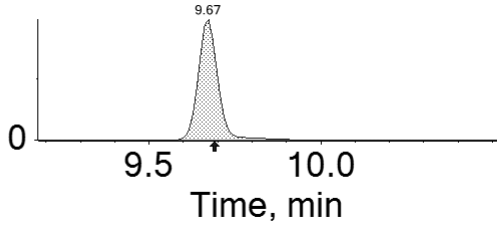
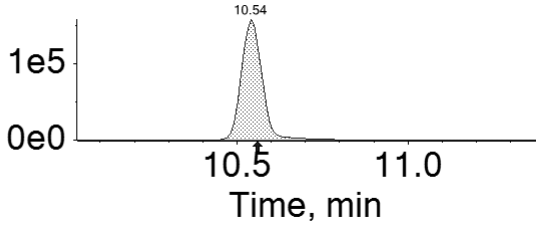
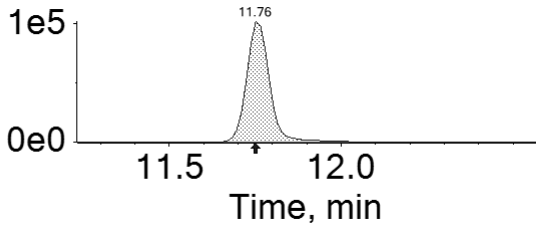
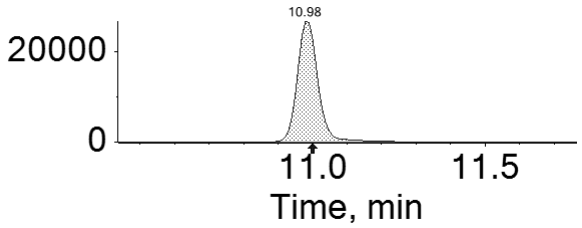
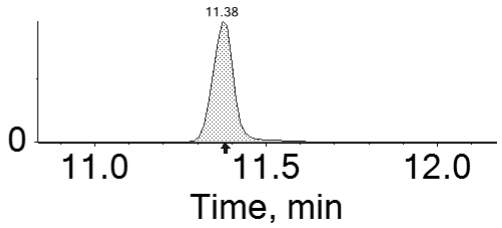
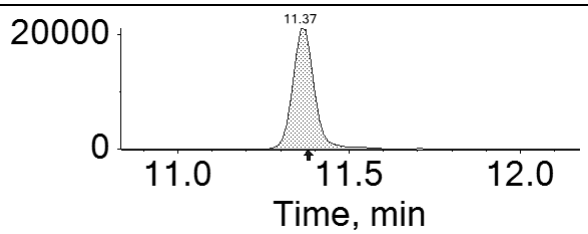
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.74 (13.73) min Calculated conc: 4.882 Area Ratio: 1.199e-1 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 5.167 Area Ratio: 8.725e-1 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 5.009 Area Ratio: 1.077e-1 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 1.845 Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.77 (11.76) min Calculated conc: 1.794 Area Ratio: N/A Sample Type: (Quality Control)	

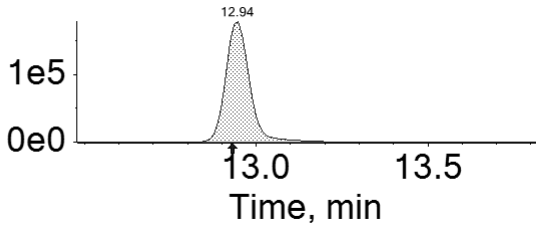
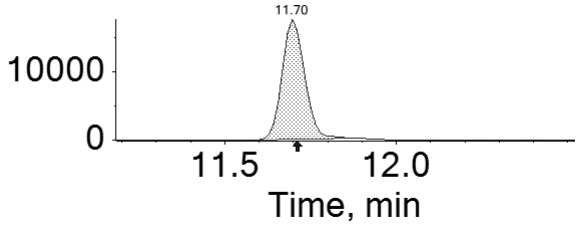
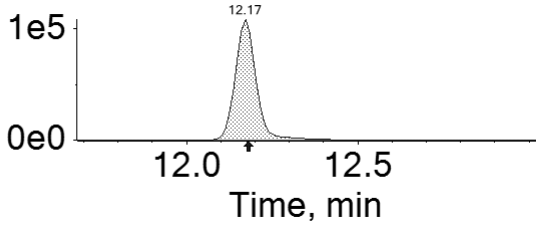
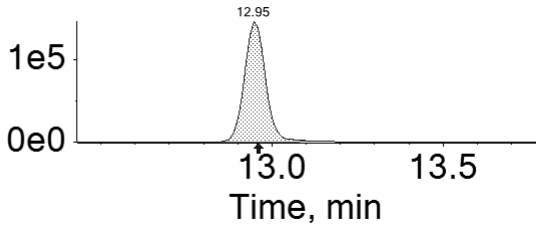
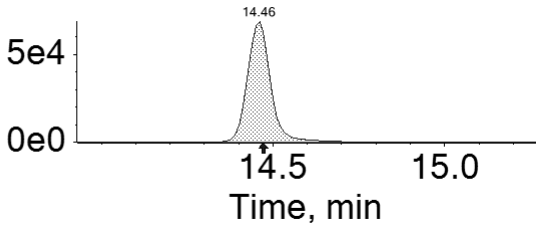
Sample Name	CCV-Low	**Injection Vial**	2
Sample ID	CAL-19206-006-01	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T03:12:21	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

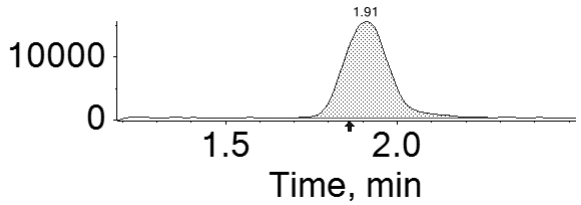
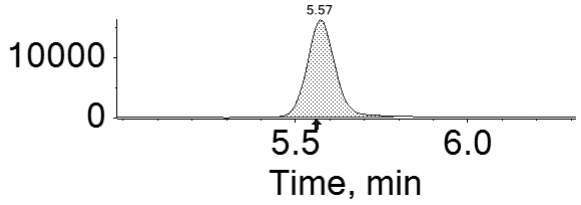
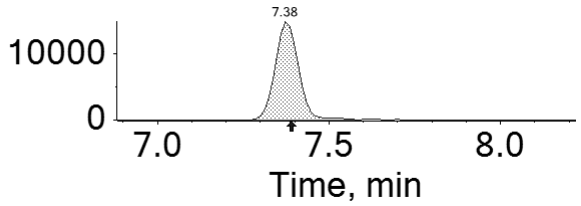
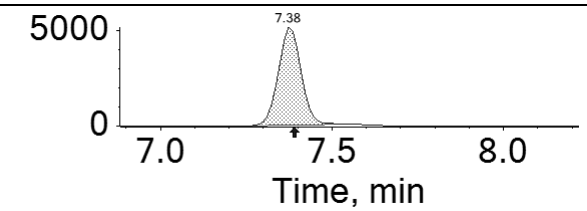
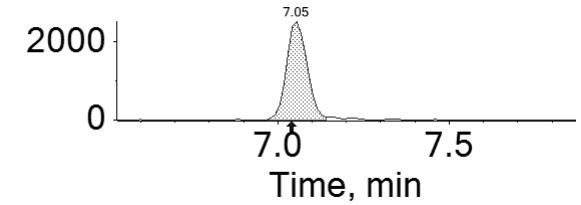
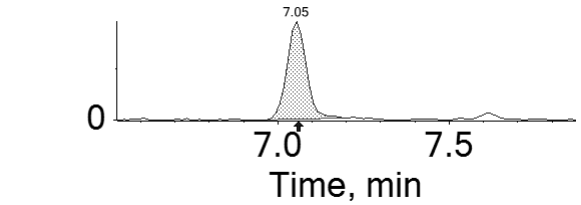
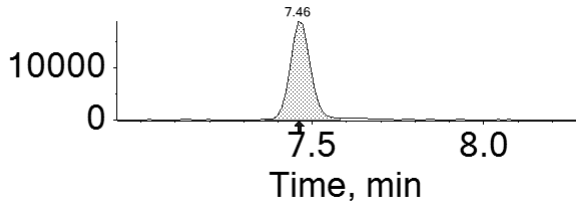
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.279e6	1.90	1.00	-
13C5_PFPeA	9.380e5	5.57	1.00	-
13C3_PFBS	7.137e5	7.37	1.00	-
13C2_4:2FTS	1.226e5	7.05	1.00	-
13C5_PFHxA	9.355e5	7.46	1.00	-
13C4_PFHpA	1.071e6	8.68	1.00	-
13C3_PFHxS	6.685e5	9.93	1.00	-
13C2_6:2FTS	1.143e5	9.30	1.00	-
13C8_PFOA	7.827e5	9.67	1.00	-
13C9_PFNA	6.679e5	10.54	1.00	-
13C8_PFOS	4.670e5	11.76	1.00	-
13C2_8:2FTS	1.117e5	10.98	1.00	-
13C6_PFDA	4.125e5	11.38	1.00	-
d3-MeFOSAA	9.313e4	11.37	1.00	-
13C8_FOSA	8.675e5	12.94	1.00	-
d5-EtFOSAA	7.966e4	11.70	1.00	-
13C7_PFUdA	4.576e5	12.17	1.00	-
13C2_PFDoA	6.195e5	12.95	1.00	-
13C2_PFTeDA	3.210e5	14.46	1.00	-

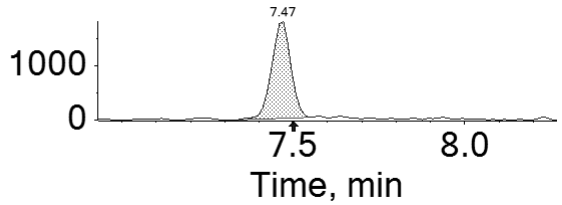
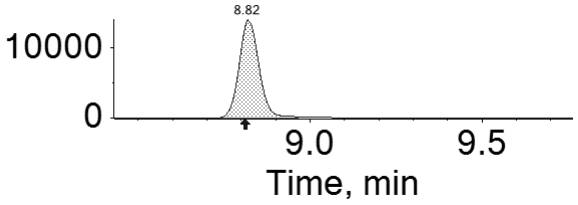
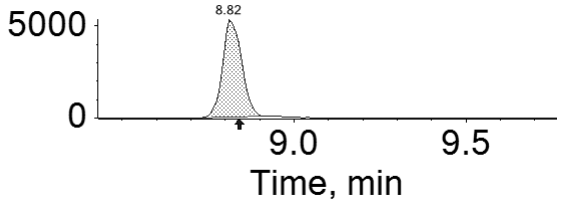
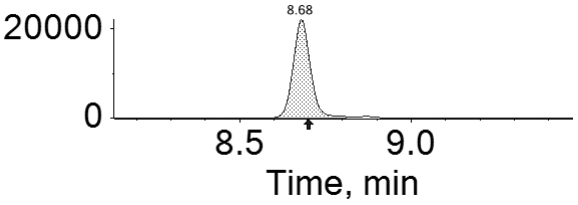
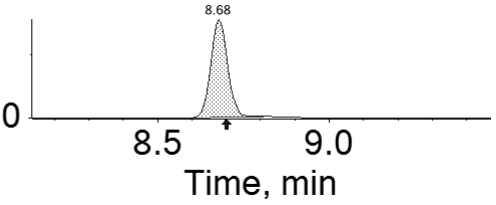
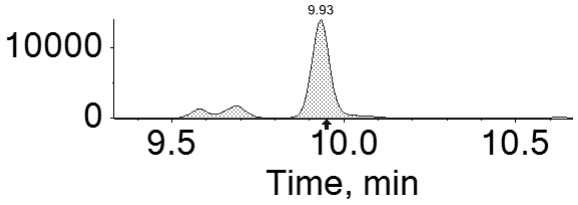
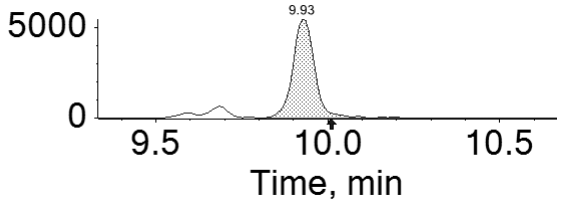
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.413e+05	1.91	0.50	0.515
PFPeA	9.232e+04	5.57	0.50	0.476
PFBS	7.102e+04	7.38	0.50	0.464
PFBS_2	2.360e+04	7.38	0.50	0.435
4:2FTS	1.052e+04	7.05	0.50	0.443
4:2FTS_2	7.564e+03	7.05	0.50	0.462
PFHxA	7.851e+04	7.46	0.50	0.458
PFHxA_2	6.967e+03	7.47	0.50	0.488
PFPeS	5.636e+04	8.82	0.50	0.464
PFPeS_2	2.037e+04	8.82	0.50	0.441
PFHpA	7.762e+04	8.68	0.50	0.458
PFHpA_2	2.639e+04	8.68	0.50	0.462
PFHxS	6.718e+04	9.93	0.50	0.451
PFHxS_2	2.404e+04	9.93	0.50	0.402
6:2FTS	1.531e+04	9.30	0.50	0.512
6:2FTS_2	1.192e+04	9.30	0.50	0.525
PFOA	9.303e+04	9.68	0.50	0.478
PFOA_2	3.370e+04	9.68	0.50	0.448
PFHpS	6.560e+04	10.88	0.50	0.474
PFHpS_2	1.891e+04	10.88	0.50	0.472
PFNA	4.738e+04	10.55	0.50	0.454
PFNA_2	1.612e+04	10.55	0.50	0.447
PFOS	4.606e+04	11.77	0.50	0.443
PFOS_2	1.425e+04	11.77	0.50	0.482
8:2FTS	1.161e+04	10.99	0.50	0.517
8:2FTS_2	9.471e+03	10.99	0.50	0.472
PFDA	3.846e+04	11.38	0.50	0.412
PFDA_2	1.107e+04	11.38	0.50	0.461
PFNS	4.838e+04	12.60	0.50	0.461
PFNS_2	1.534e+04	12.60	0.50	0.421
N-MeFOSAA	1.407e+04	11.37	0.50	0.470
N-MeFOSAA_2	7.503e+03	11.38	0.50	0.479
FOSA	5.696e+04	12.95	0.50	0.479
N-EtFOSAA	9.492e+03	11.72	0.50	0.427
N-EtFOSAA_2	5.950e+03	11.71	0.50	0.504
PFUdA	3.016e+04	12.17	0.50	0.446
PFUdA_2	7.377e+03	12.17	0.50	0.511
PFDS	3.564e+04	13.39	0.50	0.439
PFDS_2	1.264e+04	13.39	0.50	0.457
PFDoA	4.155e+04	12.95	0.50	0.508
PFDoA_2	6.183e+03	12.95	0.50	0.442
PFTrDA	3.981e+04	13.71	0.50	0.446
PFTrDA_2	7.263e+03	13.72	0.50	0.440
PFTeDA	2.533e+04	14.46	0.50	0.479
PFTeDA_2	3.669e+03	14.46	0.50	0.507
13C4_PFOA	1.027e+06	9.67	0.50	1.924
13C4_PFOS	5.349e+05	11.75	0.50	1.895

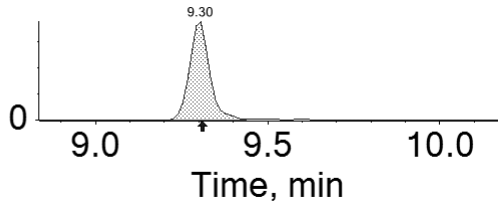
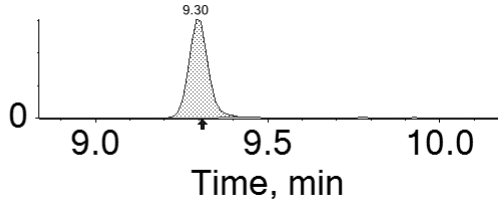
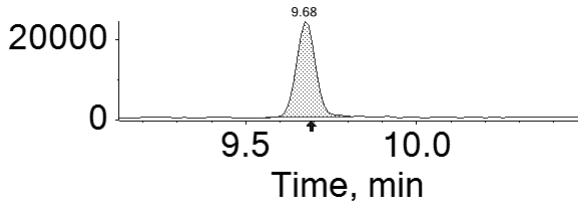
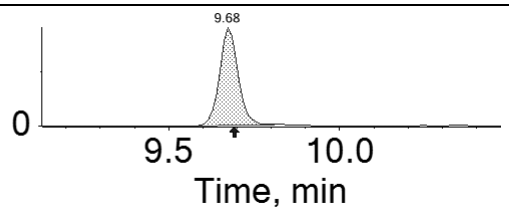
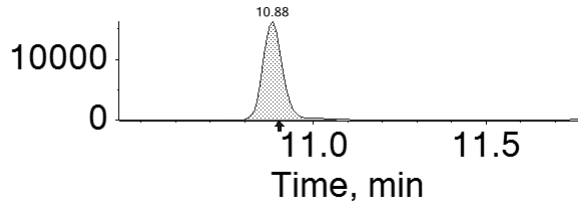
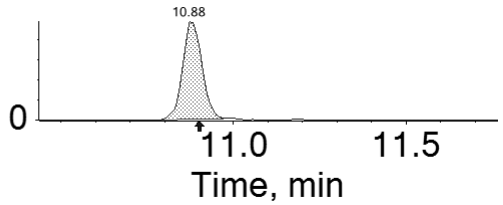
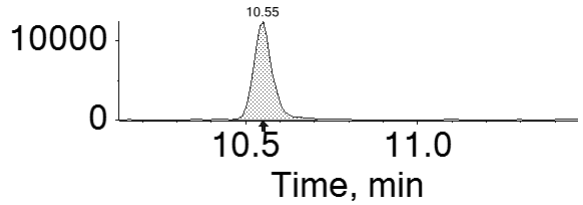
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.90(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.57(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.46(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

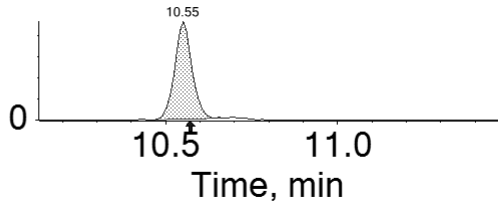
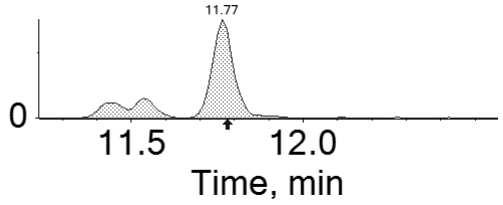
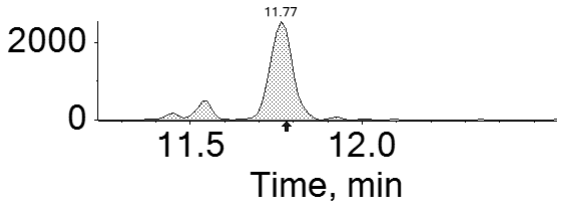
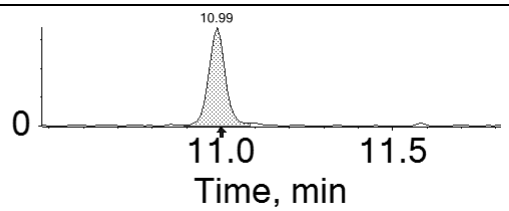
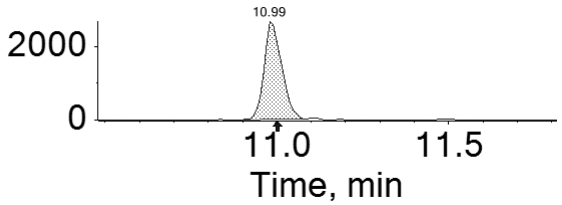
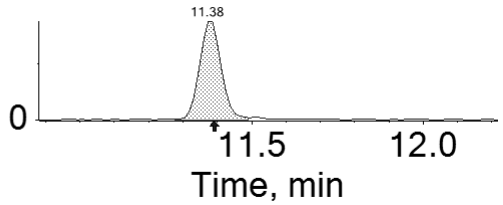
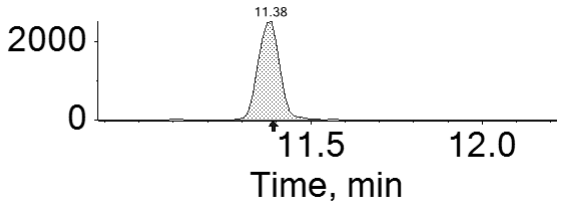
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.54(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.98(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

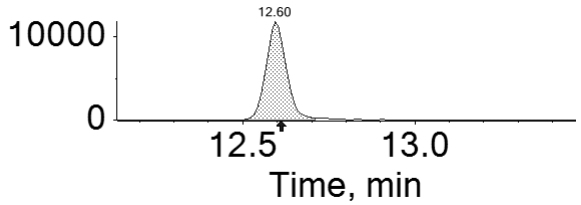
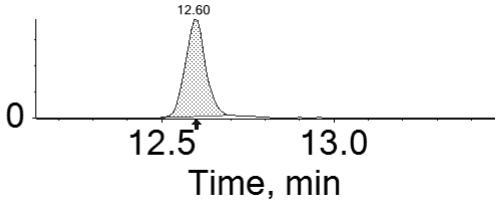
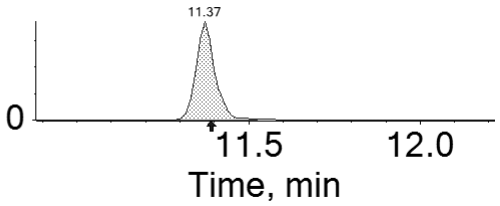
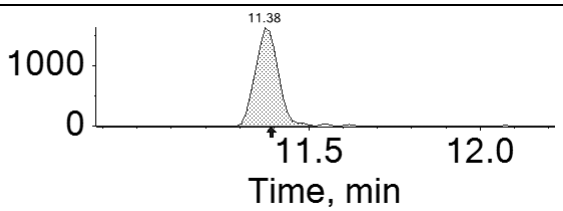
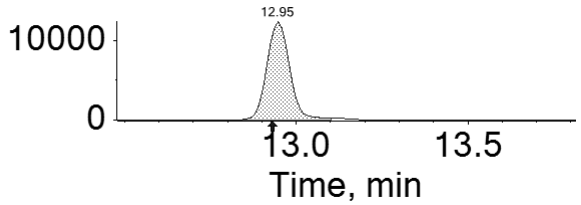
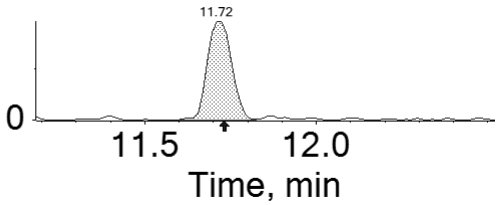
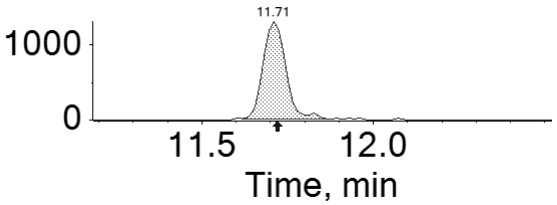
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.95(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.46(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

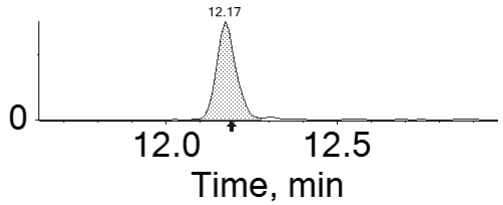
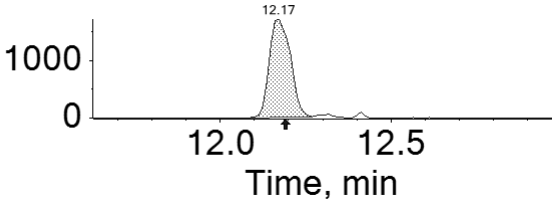
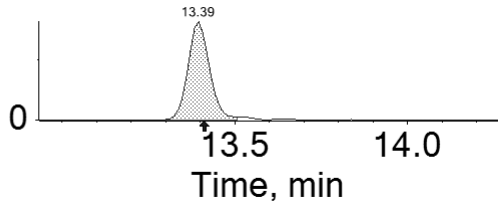
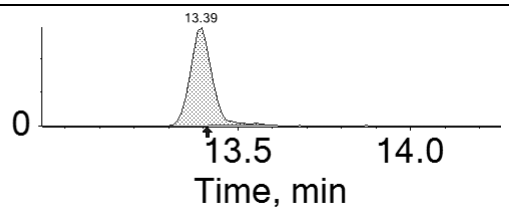
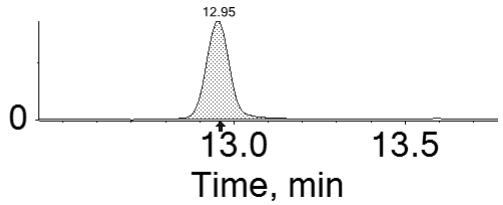
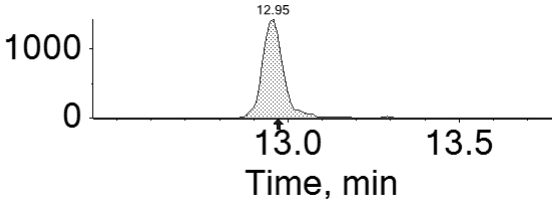
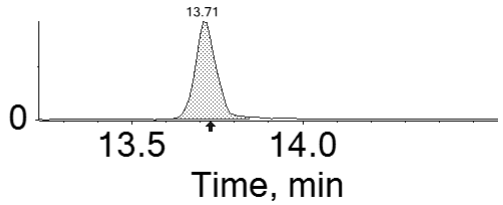
PFBA (213.0 / 169.0) RT (Exp. RT): 1.91 (1.86) min Calculated conc: 0.515 Area Ratio: 1.104e-1 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.57 (5.56) min Calculated conc: 0.476 Area Ratio: 9.843e-2 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.464 Area Ratio: 9.951e-2 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.435 Area Ratio: 3.307e-2 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.05 (7.04) min Calculated conc: 0.443 Area Ratio: 8.581e-2 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.05 (7.06) min Calculated conc: 0.462 Area Ratio: 6.168e-2 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.46 (7.46) min Calculated conc: 0.458 Area Ratio: 8.392e-2 Sample Type: (Quality Control)	

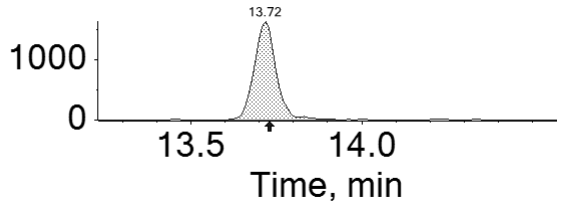
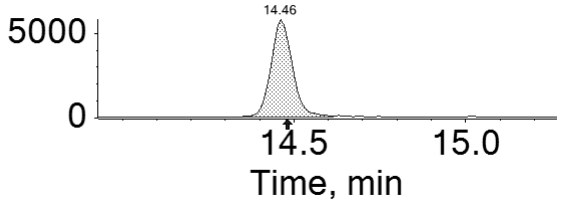
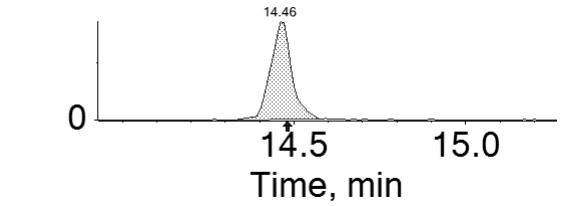
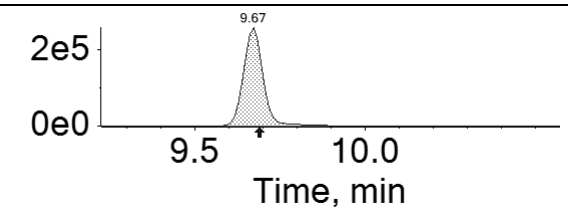
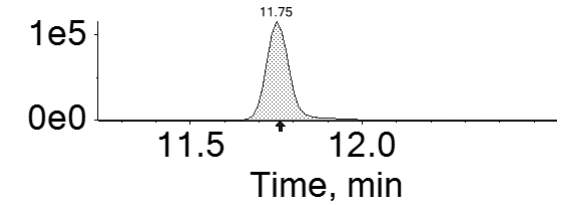
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 0.488 Area Ratio: 7.447e-3 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: 0.464 Area Ratio: 5.264e-2 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.82 (8.84) min Calculated conc: 0.441 Area Ratio: 1.902e-2 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.458 Area Ratio: 7.250e-2 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.462 Area Ratio: 2.465e-2 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: 0.451 Area Ratio: 1.005e-1 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 0.402 Area Ratio: 3.596e-2 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.512 Area Ratio: 1.339e-1 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.525 Area Ratio: 1.042e-1 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.478 Area Ratio: 1.189e-1 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.448 Area Ratio: 4.306e-2 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 0.474 Area Ratio: 9.821e-2 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 0.472 Area Ratio: 2.831e-2 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.55 (10.55) min Calculated conc: 0.454 Area Ratio: 7.094e-2 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.55 (10.57) min Calculated conc: 0.447 Area Ratio: 2.413e-2 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 0.443 Area Ratio: 9.861e-2 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 0.482 Area Ratio: 3.052e-2 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 0.517 Area Ratio: 1.040e-1 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 0.472 Area Ratio: 8.481e-2 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.412 Area Ratio: 9.324e-2 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.461 Area Ratio: 2.683e-2 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.60 (12.61) min Calculated conc: 0.461 Area Ratio: 7.244e-2 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.60 (12.60) min Calculated conc: 0.421 Area Ratio: 3.353e-2 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 0.470 Area Ratio: 1.511e-1 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.479 Area Ratio: 8.056e-2 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.95 (12.93) min Calculated conc: 0.479 Area Ratio: 6.566e-2 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: 0.427 Area Ratio: 1.192e-1 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.71 (11.72) min Calculated conc: 0.504 Area Ratio: 7.469e-2 Sample Type: (Quality Control)	

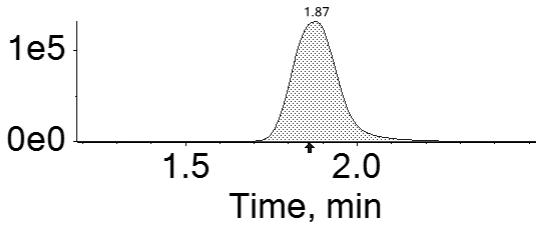
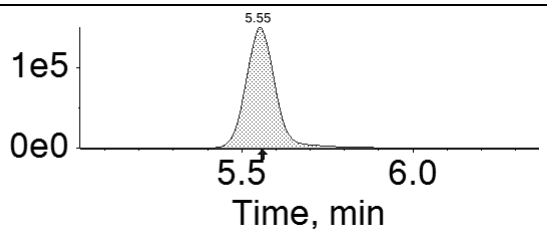
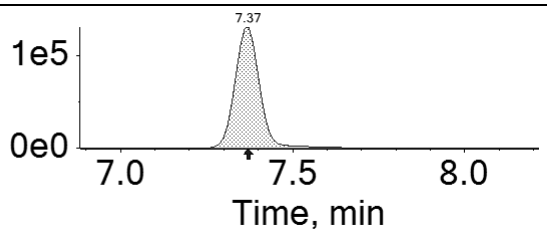
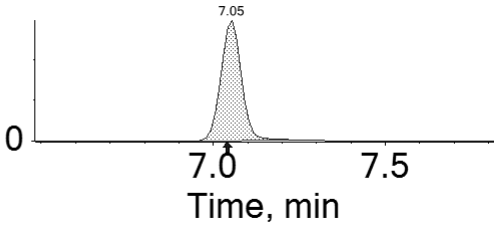
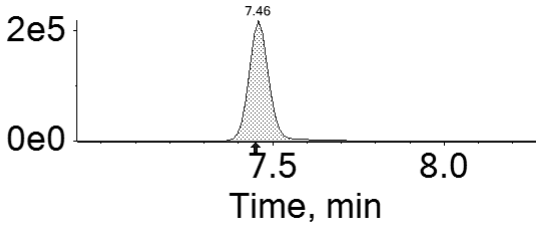
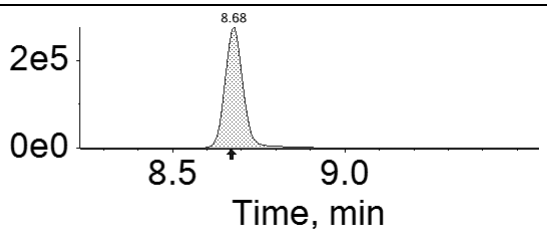
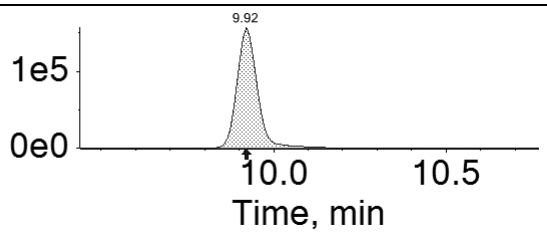
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 0.446 Area Ratio: 6.591e-2 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 0.511 Area Ratio: 1.612e-2 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 0.439 Area Ratio: 5.753e-2 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 0.457 Area Ratio: 2.040e-2 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.95 (12.96) min Calculated conc: 0.508 Area Ratio: 6.707e-2 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: 0.442 Area Ratio: 9.981e-3 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 0.446 Area Ratio: 6.426e-2 Sample Type: (Quality Control)	

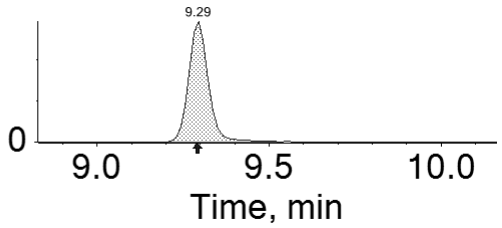
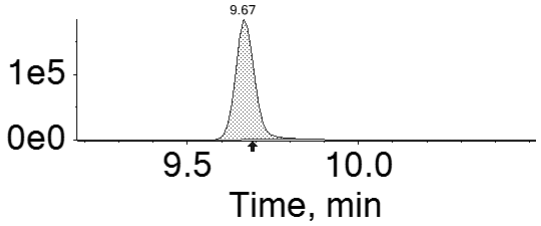
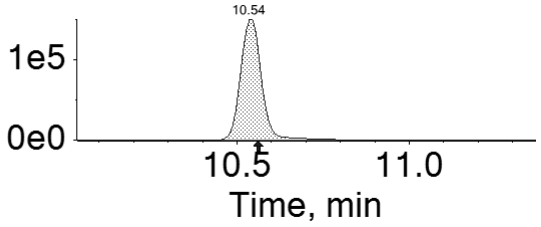
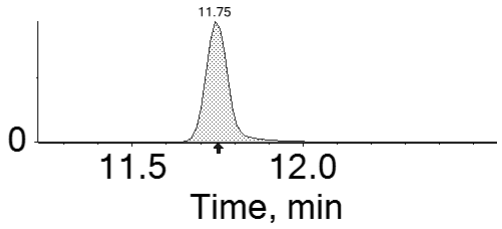
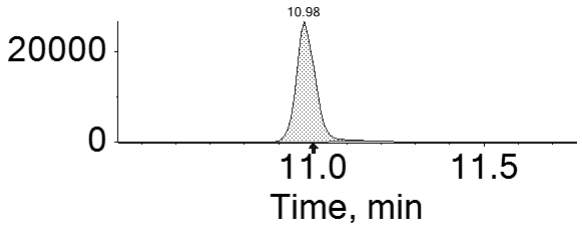
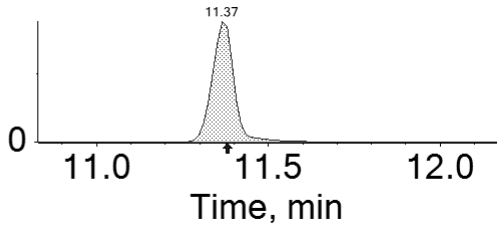
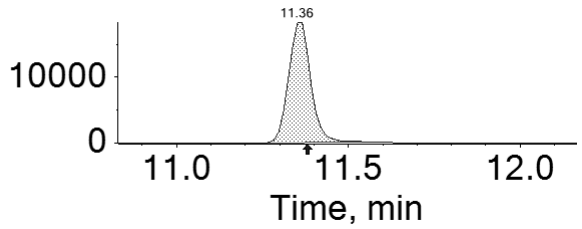
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: 0.440 Area Ratio: 1.173e-2 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 0.479 Area Ratio: 7.891e-2 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 0.507 Area Ratio: 1.143e-2 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.924 Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 1.895 Area Ratio: N/A Sample Type: (Quality Control)	

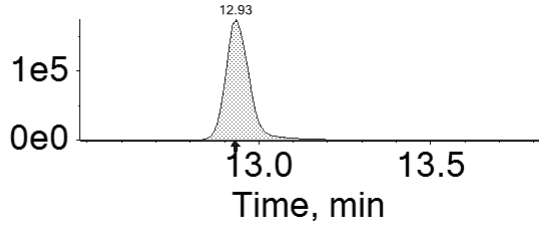
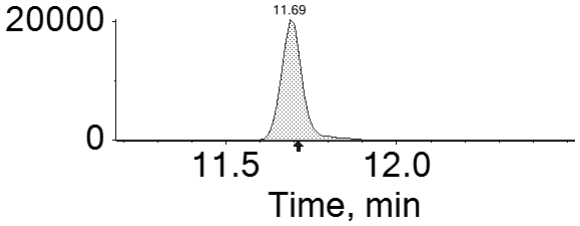
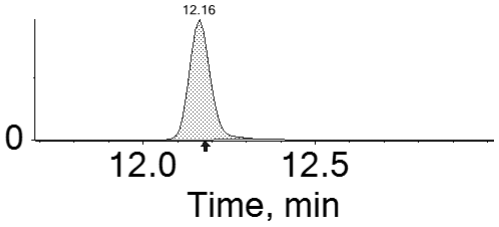
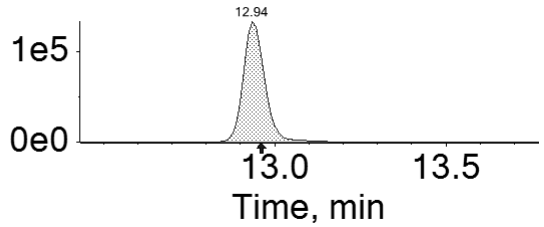
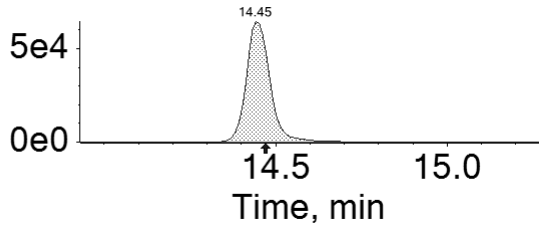
Sample Name	CCV-Med	**Injection Vial**	31
Sample ID	CAL-19206-006-04	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T08:59:16	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

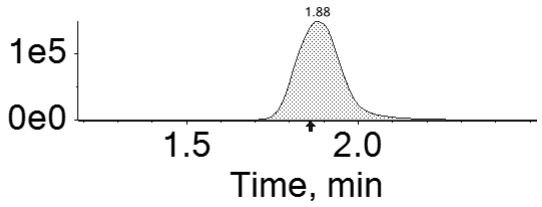
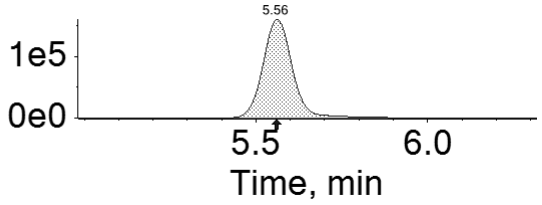
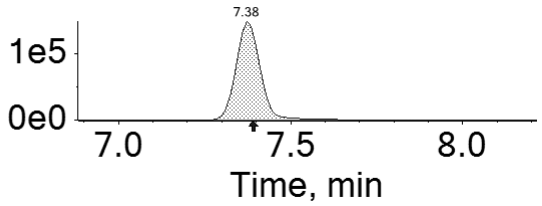
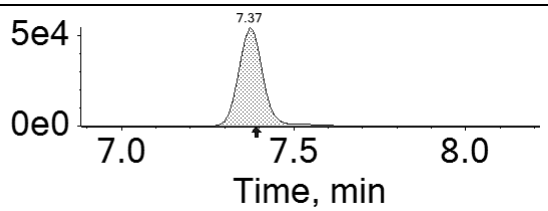
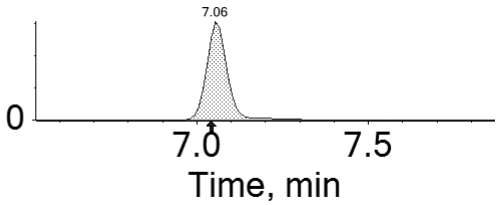
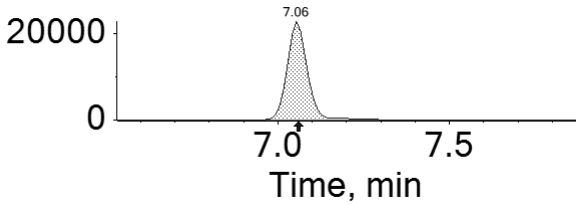
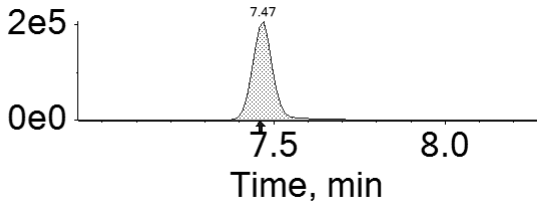
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.227e6	1.87	1.00	-
13C5_PFPeA	8.893e5	5.55	1.00	-
13C3_PFBS	6.477e5	7.37	1.00	-
13C2_4:2FTS	1.222e5	7.05	1.00	-
13C5_PFHxA	8.923e5	7.46	1.00	-
13C4_PFHpA	1.014e6	8.68	1.00	-
13C3_PFHxS	6.325e5	9.92	1.00	-
13C2_6:2FTS	1.154e5	9.29	1.00	-
13C8_PFOA	7.092e5	9.67	1.00	-
13C9_PFNA	6.381e5	10.54	1.00	-
13C8_PFOS	4.343e5	11.75	1.00	-
13C2_8:2FTS	1.030e5	10.98	1.00	-
13C6_PFDA	3.912e5	11.37	1.00	-
d3-MeFOSAA	8.178e4	11.36	1.00	-
13C8_FOSA	8.452e5	12.93	1.00	-
d5-EtFOSAA	8.699e4	11.69	1.00	-
13C7_PFUdA	4.145e5	12.16	1.00	-
13C2_PFDoA	5.818e5	12.94	1.00	-
13C2_PFTeDA	3.108e5	14.45	1.00	-

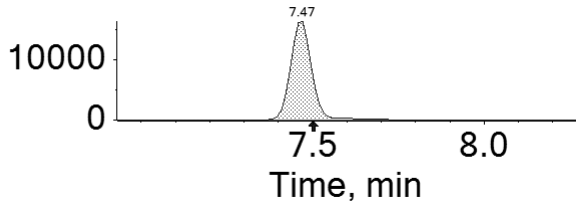
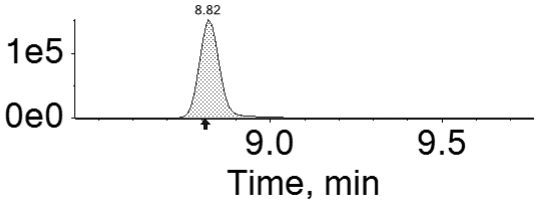
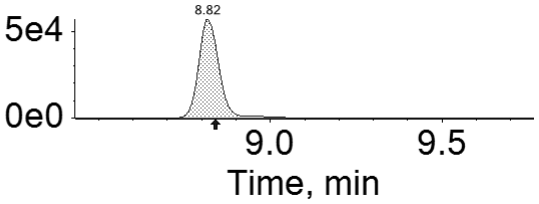
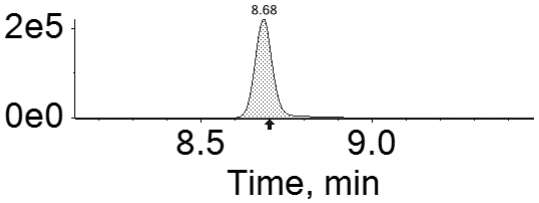
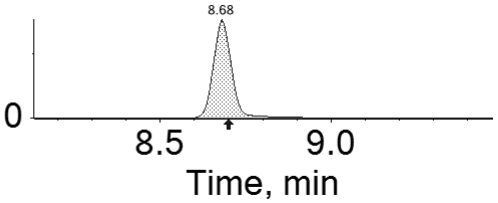
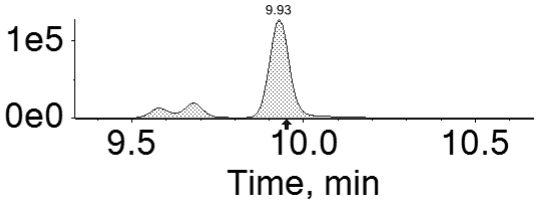
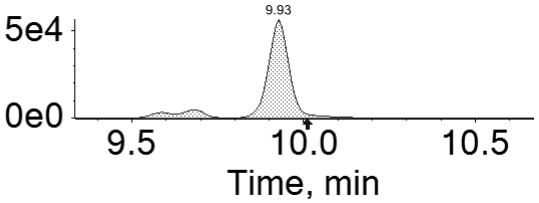
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.351e+06	1.88	5.00	5.140
PFPeA	9.549e+05	5.56	5.00	5.198
PFBS	7.238e+05	7.38	5.00	5.212
PFBS_2	2.656e+05	7.37	5.00	5.387
4:2FTS	1.273e+05	7.06	5.00	5.380
4:2FTS_2	9.290e+04	7.06	5.00	5.689
PFHxA	8.575e+05	7.47	5.00	5.240
PFHxA_2	6.990e+04	7.47	5.00	5.134
PFPeS	6.306e+05	8.82	5.00	5.480
PFPeS_2	2.326e+05	8.82	5.00	5.313
PFHpA	8.179e+05	8.68	5.00	5.099
PFHpA_2	2.809e+05	8.68	5.00	5.191
PFHxS	6.771e+05	9.93	5.00	4.800
PFHxS_2	2.771e+05	9.93	5.00	4.902
6:2FTS	1.650e+05	9.30	5.00	5.470
6:2FTS_2	1.235e+05	9.30	5.00	5.385
PFOA	9.332e+05	9.67	5.00	5.292
PFOA_2	3.673e+05	9.67	5.00	5.391
PFHpS	7.148e+05	10.87	5.00	5.407
PFHpS_2	2.066e+05	10.88	5.00	5.395
PFNA	5.093e+05	10.55	5.00	5.110
PFNA_2	1.884e+05	10.55	5.00	5.470
PFOS	5.017e+05	11.76	5.00	5.187
PFOS_2	1.407e+05	11.76	5.00	5.112
8:2FTS	1.156e+05	10.99	5.00	5.587
8:2FTS_2	9.699e+04	10.98	5.00	5.244
PFDA	4.136e+05	11.37	5.00	4.669
PFDA_2	1.197e+05	11.37	5.00	5.258
PFNS	5.026e+05	12.59	5.00	5.015
PFNS_2	1.743e+05	12.59	5.00	5.280
N-MeFOSAA	1.495e+05	11.37	5.00	5.694
N-MeFOSAA_2	7.858e+04	11.37	5.00	5.718
FOSA	5.881e+05	12.94	5.00	5.074
N-EtFOSAA	1.132e+05	11.71	5.00	4.662
N-EtFOSAA_2	6.904e+04	11.71	5.00	5.356
PFUdA	3.083e+05	12.17	5.00	5.033
PFUdA_2	6.887e+04	12.17	5.00	5.268
PFDS	4.029e+05	13.38	5.00	5.288
PFDS_2	1.383e+05	13.38	5.00	5.322
PFDoA	4.466e+05	12.94	5.00	5.818
PFDoA_2	6.841e+04	12.94	5.00	5.207
PFTrDA	4.434e+05	13.71	5.00	5.293
PFTrDA_2	7.585e+04	13.70	5.00	4.887
PFTeDA	2.599e+05	14.45	5.00	5.081
PFTeDA_2	3.577e+04	14.45	5.00	5.102
13C4_PFOA	9.241e+05	9.67	5.00	1.731
13C4_PFOS	5.128e+05	11.74	5.00	1.817

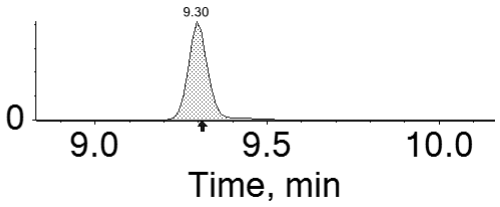
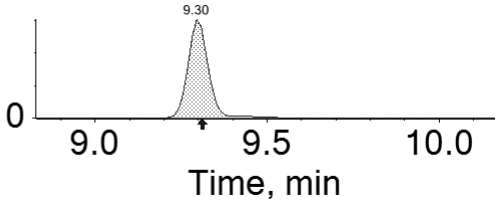
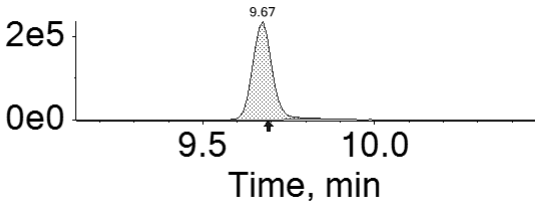
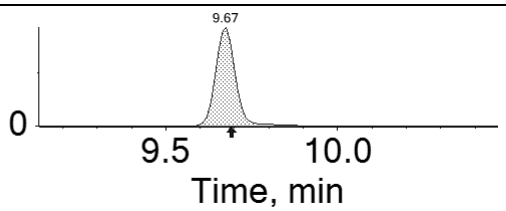
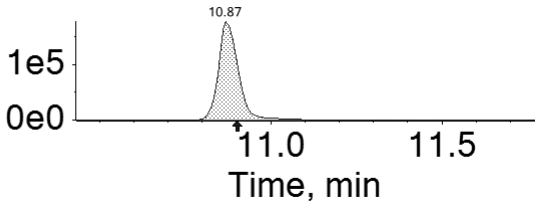
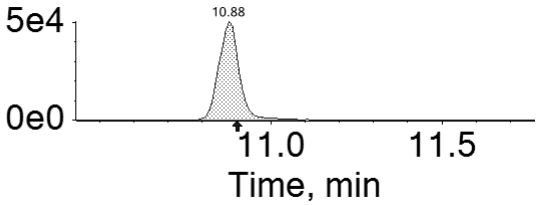
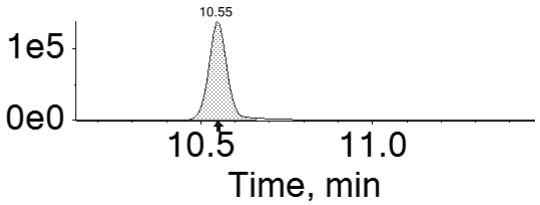
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.87(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.46(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.92(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

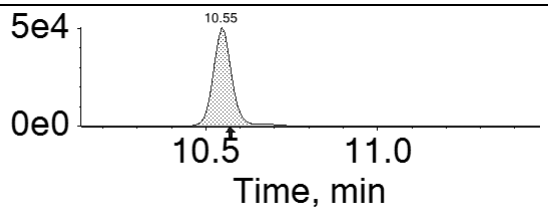
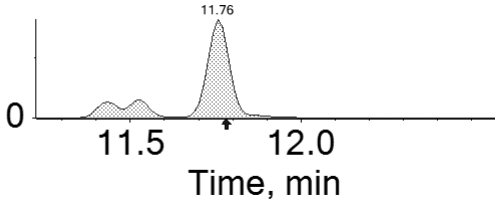
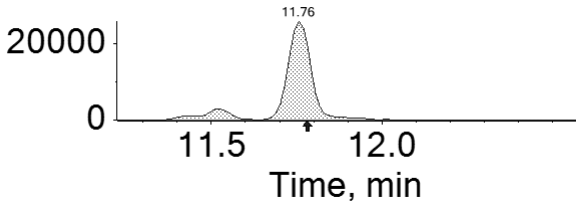
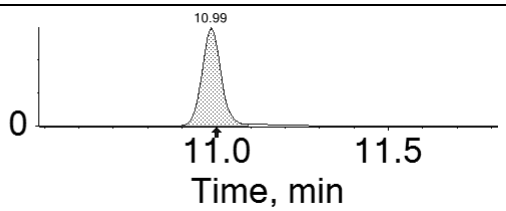
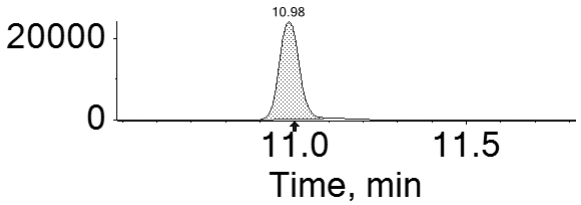
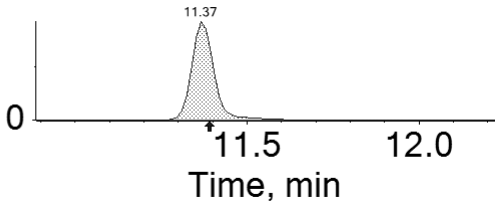
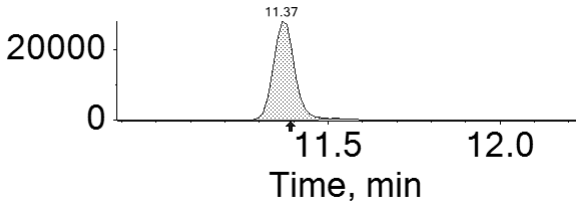
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.29(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.54(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.98(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.36(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

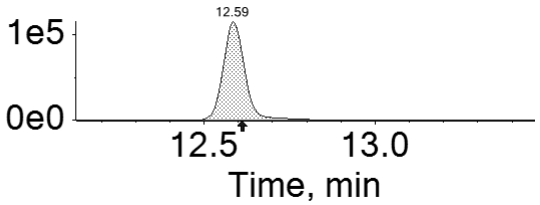
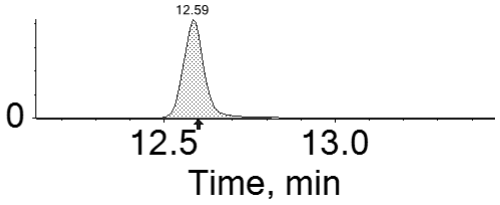
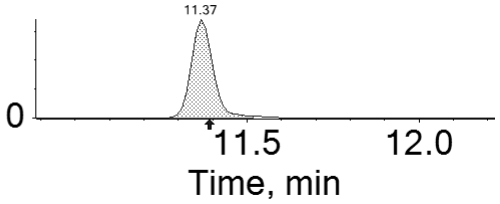
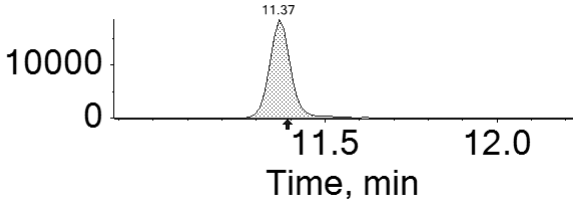
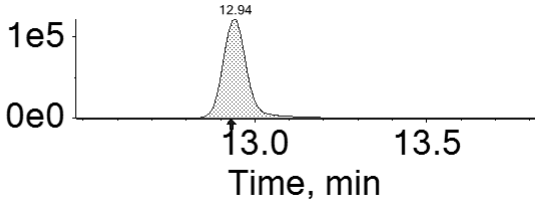
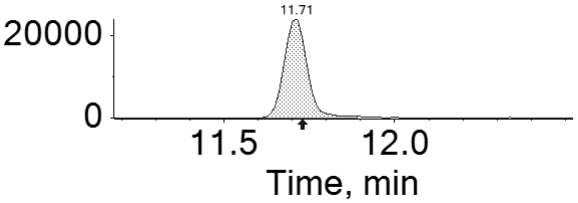
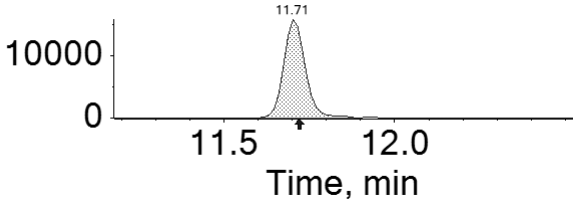
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.93(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.69(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.16(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

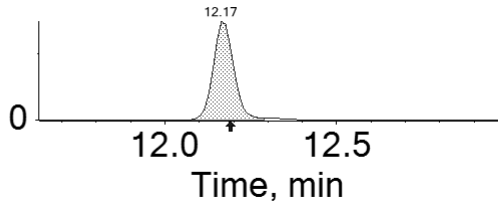
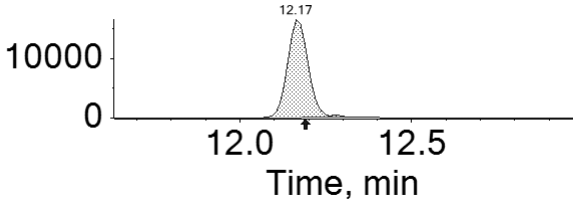
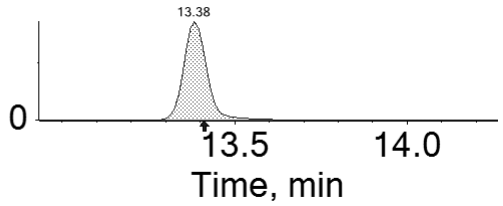
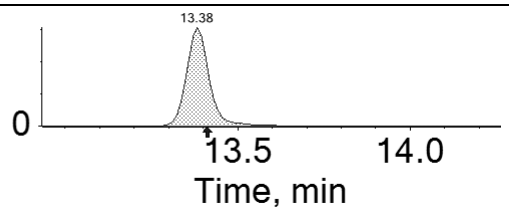
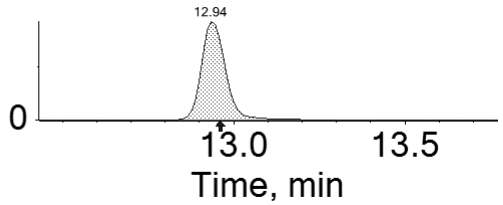
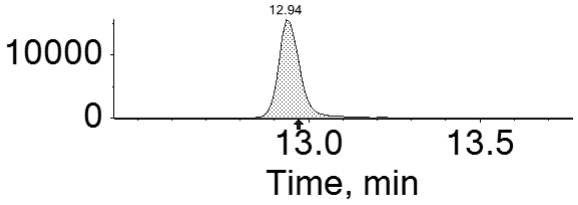
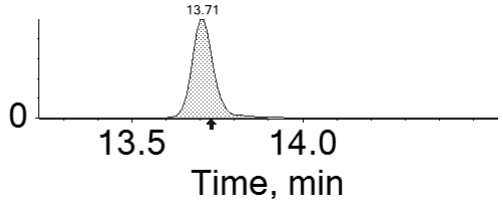
PFBA (213.0 / 169.0) RT (Exp. RT): 1.88 (1.86) min Calculated conc: 5.140 Area Ratio: 1.101e0 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.56) min Calculated conc: 5.198 Area Ratio: 1.074e0 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 5.212 Area Ratio: 1.118e0 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: 5.387 Area Ratio: 4.100e-1 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 5.380 Area Ratio: 1.042e0 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 5.689 Area Ratio: 7.600e-1 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 5.240 Area Ratio: 9.610e-1 Sample Type: (Quality Control)	

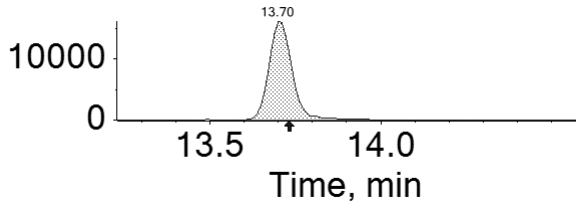
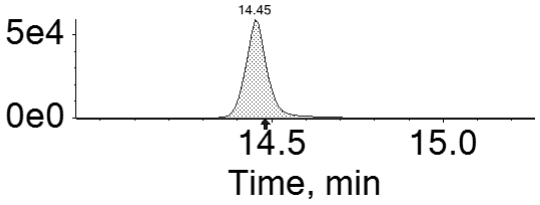
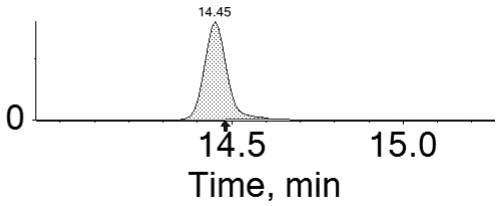
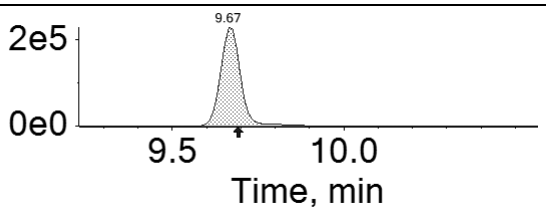
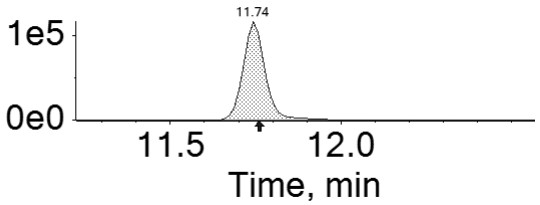
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 5.134 Area Ratio: 7.834e-2 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: 5.480 Area Ratio: 6.218e-1 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.82 (8.84) min Calculated conc: 5.313 Area Ratio: 2.293e-1 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 5.099 Area Ratio: 8.065e-1 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 5.191 Area Ratio: 2.769e-1 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: 4.800 Area Ratio: 1.071e0 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 4.902 Area Ratio: 4.381e-1 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 5.470 Area Ratio: 1.430e0 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 5.385 Area Ratio: 1.070e0 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 5.292 Area Ratio: 1.316e0 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 5.391 Area Ratio: 5.180e-1 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: 5.407 Area Ratio: 1.120e0 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 5.395 Area Ratio: 3.238e-1 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.55 (10.55) min Calculated conc: 5.110 Area Ratio: 7.982e-1 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.55 (10.57) min Calculated conc: 5.470 Area Ratio: 2.952e-1 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 5.187 Area Ratio: 1.155e0 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 5.112 Area Ratio: 3.239e-1 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 5.587 Area Ratio: 1.123e0 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.98 (11.00) min Calculated conc: 5.244 Area Ratio: 9.419e-1 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 4.669 Area Ratio: 1.057e0 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 5.258 Area Ratio: 3.060e-1 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: 5.015 Area Ratio: 7.877e-1 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: 5.280 Area Ratio: 4.206e-1 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 5.694 Area Ratio: 1.829e0 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.37 (11.39) min Calculated conc: 5.718 Area Ratio: 9.610e-1 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.94 (12.93) min Calculated conc: 5.074 Area Ratio: 6.958e-1 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.71 (11.73) min Calculated conc: 4.662 Area Ratio: 1.301e0 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.71 (11.72) min Calculated conc: 5.356 Area Ratio: 7.937e-1 Sample Type: (Quality Control)	

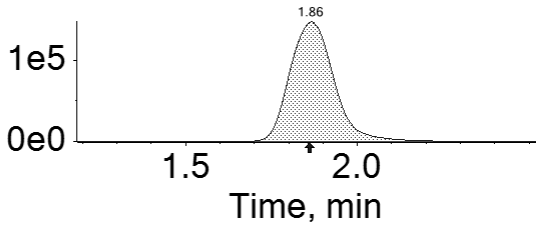
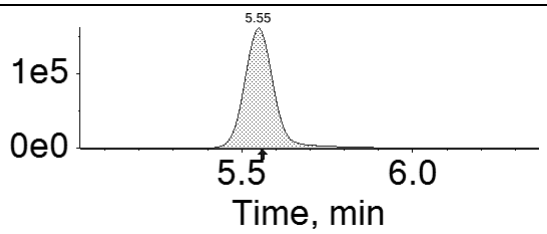
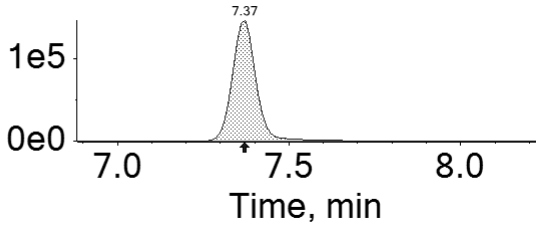
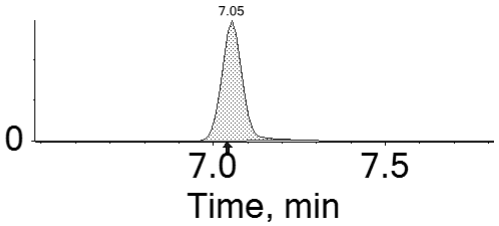
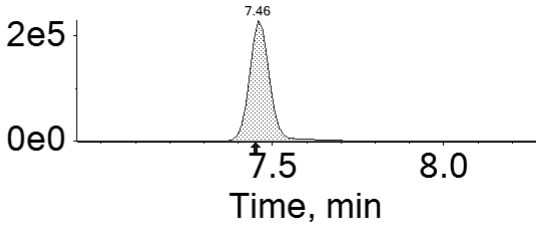
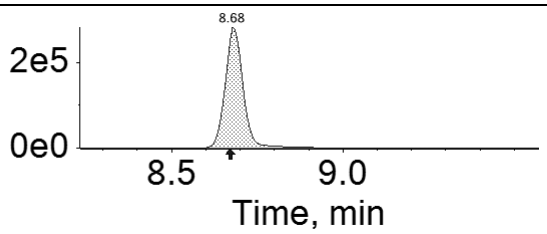
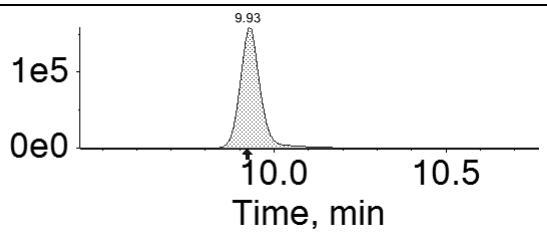
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 5.033 Area Ratio: 7.438e-1 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 5.268 Area Ratio: 1.661e-1 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.38 (13.41) min Calculated conc: 5.288 Area Ratio: 6.926e-1 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.38 (13.41) min Calculated conc: 5.322 Area Ratio: 2.376e-1 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.94 (12.96) min Calculated conc: 5.818 Area Ratio: 7.676e-1 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.94 (12.97) min Calculated conc: 5.207 Area Ratio: 1.176e-1 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 5.293 Area Ratio: 7.622e-1 Sample Type: (Quality Control)	

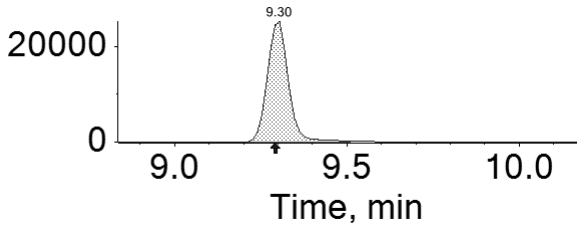
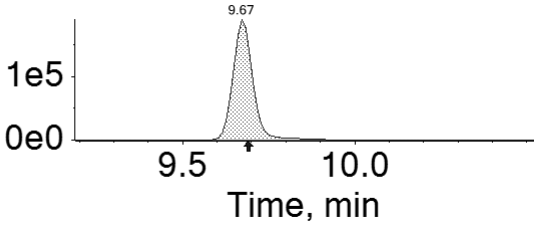
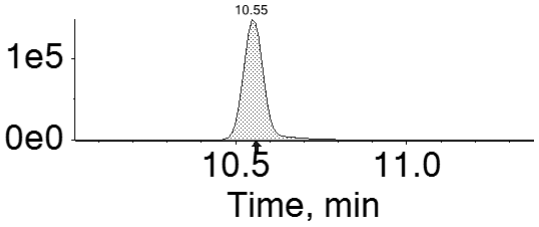
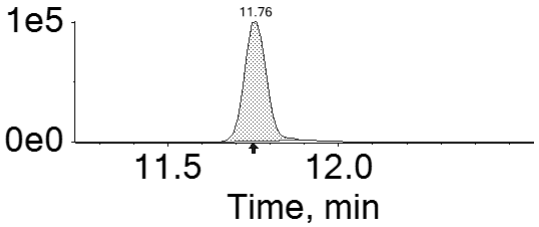
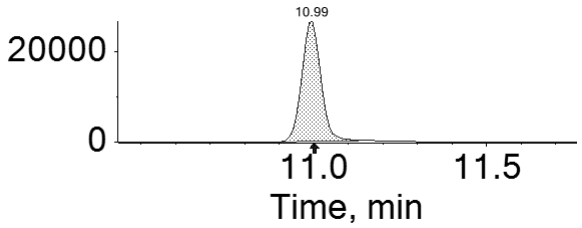
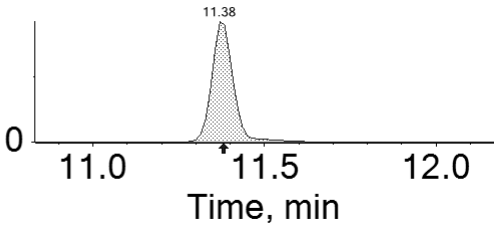
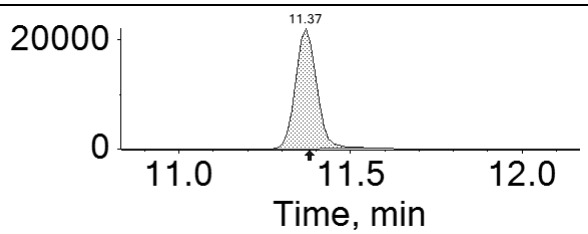
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: 4.887 Area Ratio: 1.304e-1 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 5.081 Area Ratio: 8.365e-1 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 5.102 Area Ratio: 1.151e-1 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.731 Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.74 (11.76) min Calculated conc: 1.817 Area Ratio: N/A Sample Type: (Quality Control)	

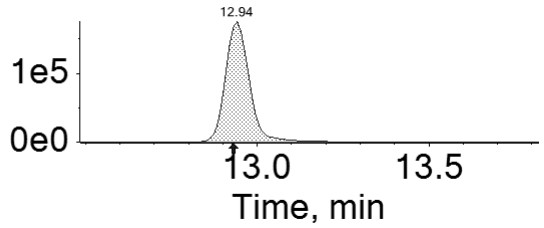
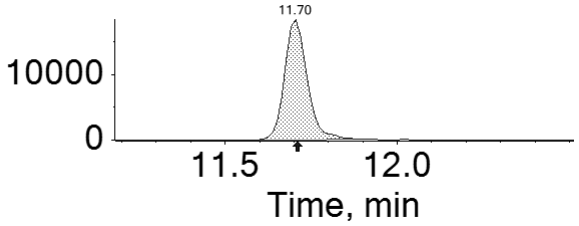
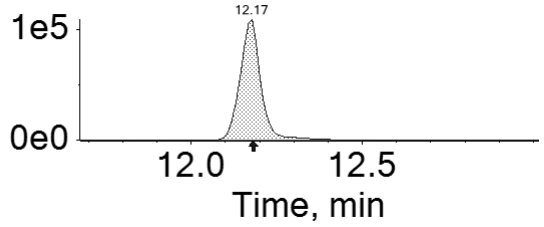
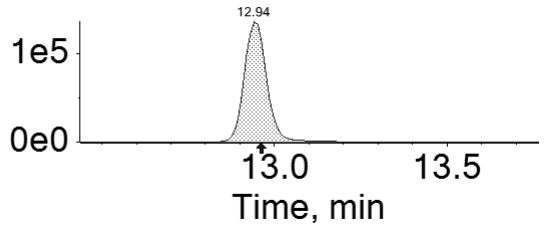
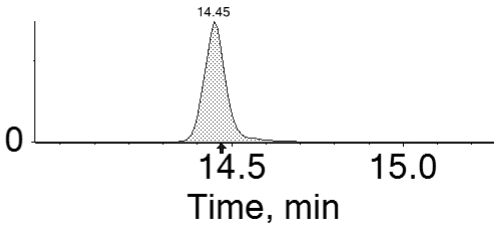
Sample Name	CCV-Low	**Injection Vial**	2
Sample ID	CAL-19206-006-01	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T11:12:44	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

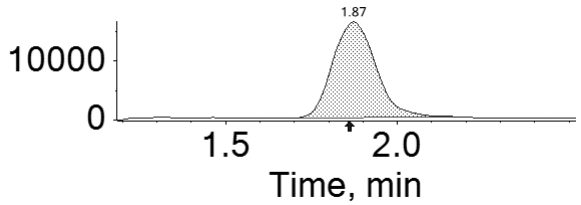
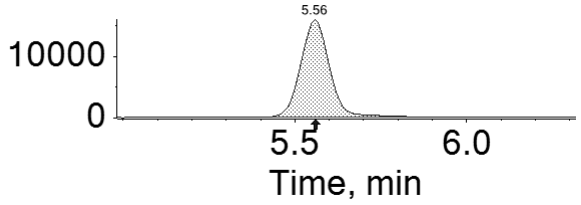
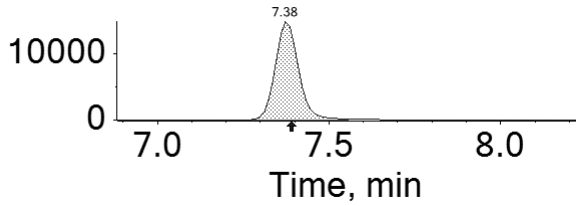
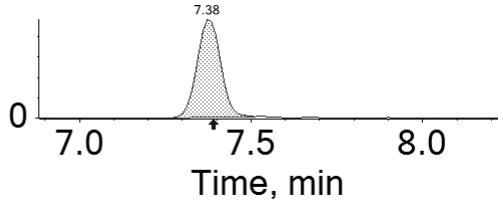
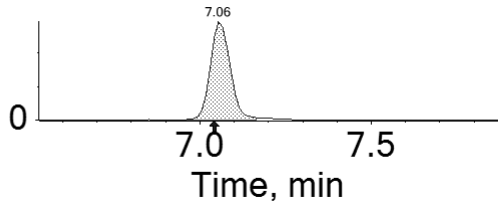
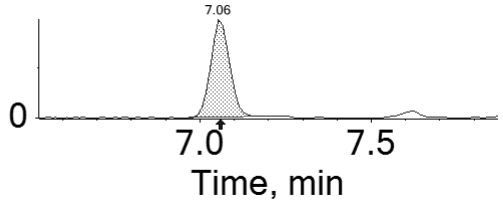
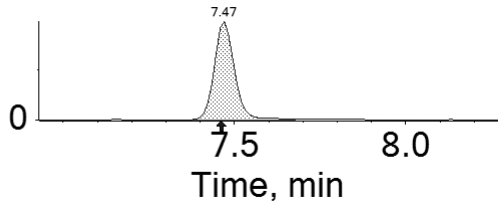
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.302e6	1.86	1.00	-
13C5_PFPeA	9.509e5	5.55	1.00	-
13C3_PFBS	6.996e5	7.37	1.00	-
13C2_4:2FTS	1.213e5	7.05	1.00	-
13C5_PFHxA	9.348e5	7.46	1.00	-
13C4_PFHpA	1.029e6	8.68	1.00	-
13C3_PFHxS	6.422e5	9.93	1.00	-
13C2_6:2FTS	1.062e5	9.30	1.00	-
13C8_PFOA	7.597e5	9.67	1.00	-
13C9_PFNA	6.245e5	10.55	1.00	-
13C8_PFOS	4.493e5	11.76	1.00	-
13C2_8:2FTS	1.015e5	10.99	1.00	-
13C6_PFDA	3.995e5	11.38	1.00	-
d3-MeFOSAA	9.469e4	11.37	1.00	-
13C8_FOSA	8.509e5	12.94	1.00	-
d5-EtFOSAA	8.426e4	11.70	1.00	-
13C7_PFUdA	4.565e5	12.17	1.00	-
13C2_PFDoA	6.145e5	12.94	1.00	-
13C2_PFTeDA	3.293e5	14.45	1.00	-

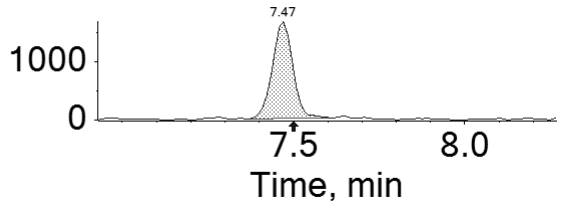
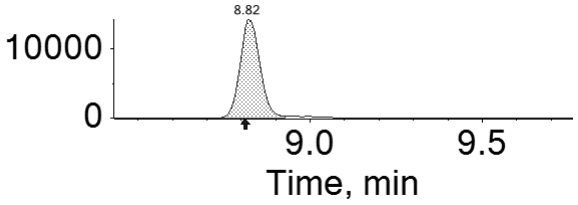
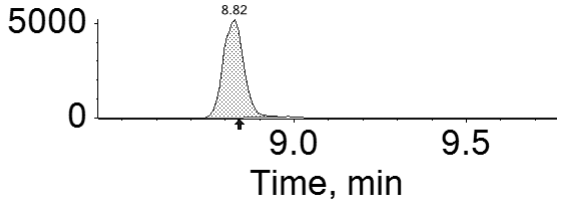
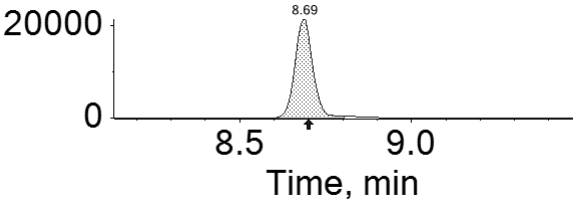
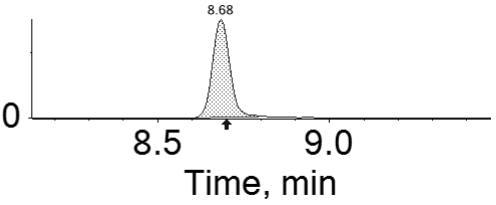
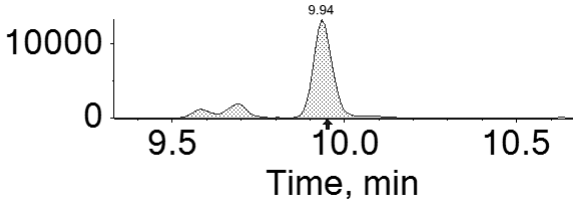
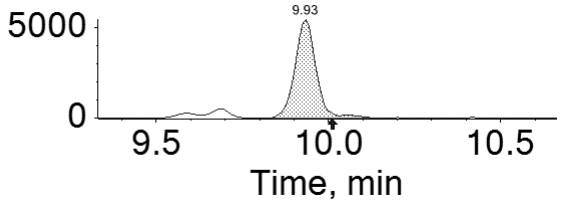
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.425e+05	1.87	0.50	0.511
PFPeA	9.336e+04	5.56	0.50	0.475
PFBS	6.998e+04	7.38	0.50	0.467
PFBS_2	2.295e+04	7.38	0.50	0.431
4:2FTS	1.183e+04	7.06	0.50	0.504
4:2FTS_2	7.415e+03	7.06	0.50	0.458
PFHxA	7.966e+04	7.47	0.50	0.465
PFHxA_2	6.913e+03	7.47	0.50	0.485
PFPeS	5.774e+04	8.82	0.50	0.495
PFPeS_2	2.173e+04	8.82	0.50	0.489
PFHpA	7.725e+04	8.69	0.50	0.475
PFHpA_2	2.606e+04	8.68	0.50	0.475
PFHxS	6.599e+04	9.94	0.50	0.461
PFHxS_2	2.325e+04	9.93	0.50	0.405
6:2FTS	1.587e+04	9.30	0.50	0.572
6:2FTS_2	1.164e+04	9.30	0.50	0.552
PFOA	8.807e+04	9.68	0.50	0.466
PFOA_2	3.273e+04	9.68	0.50	0.448
PFHpS	6.497e+04	10.89	0.50	0.502
PFHpS_2	1.759e+04	10.88	0.50	0.469
PFNA	4.618e+04	10.56	0.50	0.473
PFNA_2	1.685e+04	10.56	0.50	0.500
PFOS	4.891e+04	11.77	0.50	0.489
PFOS_2	1.412e+04	11.77	0.50	0.496
8:2FTS	1.147e+04	10.99	0.50	0.563
8:2FTS_2	9.440e+03	10.99	0.50	0.518
PFDA	3.945e+04	11.38	0.50	0.436
PFDA_2	1.075e+04	11.39	0.50	0.462
PFNS	4.911e+04	12.59	0.50	0.501
PFNS_2	1.770e+04	12.59	0.50	0.487
N-MeFOSAA	1.257e+04	11.38	0.50	0.413
N-MeFOSAA_2	7.065e+03	11.38	0.50	0.444
FOSA	5.718e+04	12.94	0.50	0.490
N-EtFOSAA	1.109e+04	11.72	0.50	0.472
N-EtFOSAA_2	5.886e+03	11.73	0.50	0.471
PFUdA	2.841e+04	12.18	0.50	0.421
PFUdA_2	6.463e+03	12.18	0.50	0.449
PFDS	3.691e+04	13.39	0.50	0.459
PFDS_2	1.245e+04	13.39	0.50	0.454
PFDoA	3.626e+04	12.95	0.50	0.447
PFDoA_2	6.518e+03	12.94	0.50	0.470
PFTrDA	4.339e+04	13.71	0.50	0.490
PFTrDA_2	7.625e+03	13.71	0.50	0.465
PFTeDA	2.533e+04	14.46	0.50	0.467
PFTeDA_2	3.013e+03	14.45	0.50	0.406
13C4_PFOA	9.631e+05	9.67	0.50	1.804
13C4_PFOS	5.331e+05	11.76	0.50	1.888

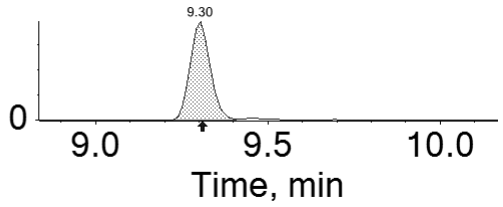
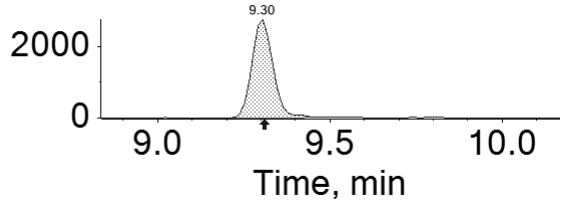
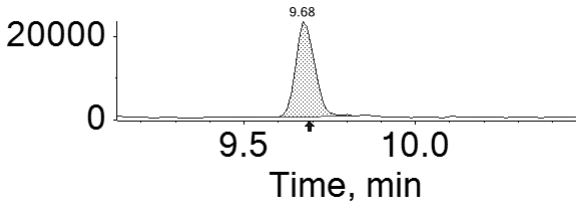
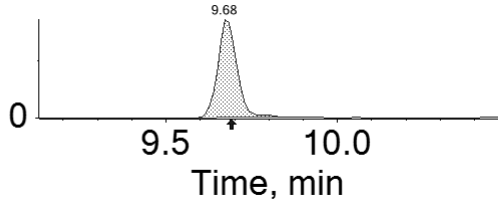
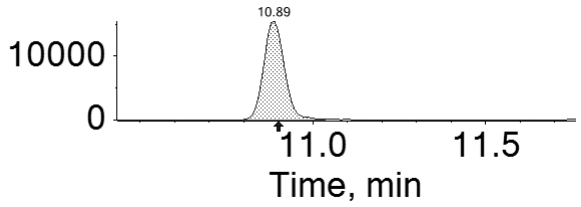
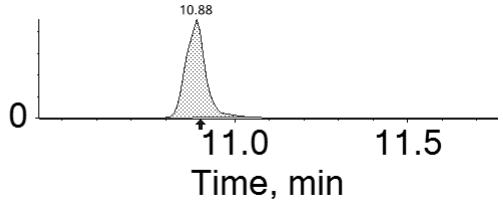
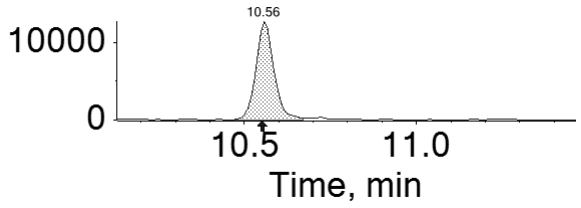
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.46(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

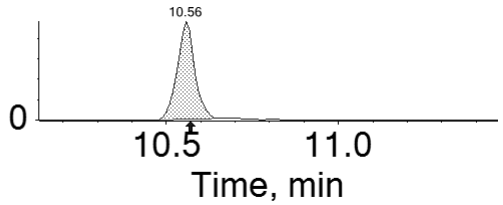
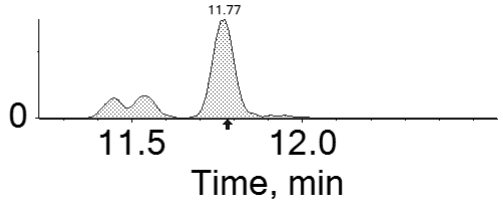
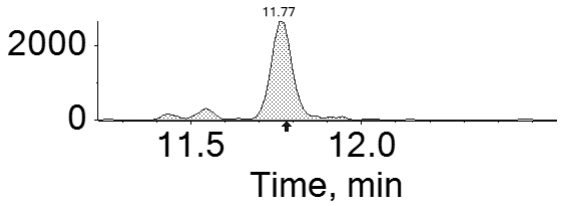
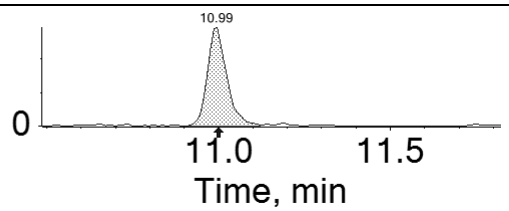
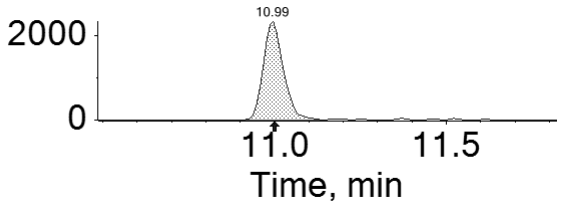
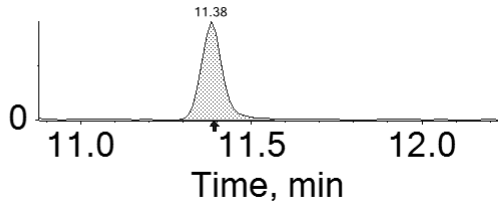
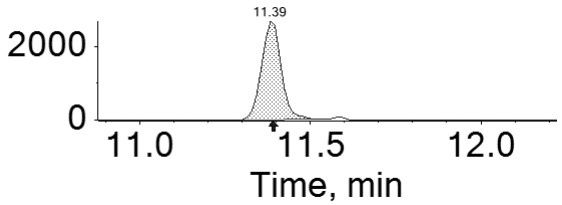
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

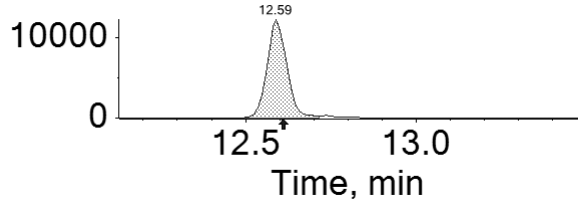
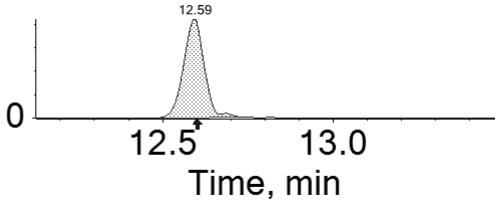
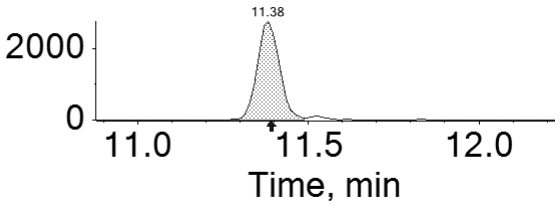
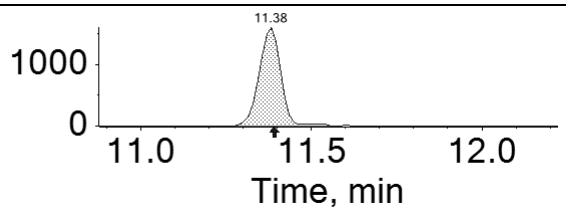
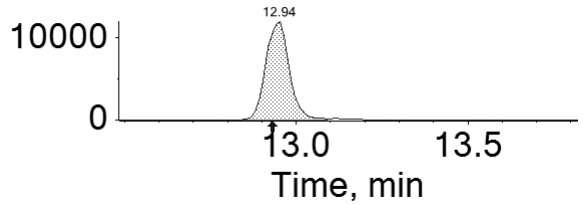
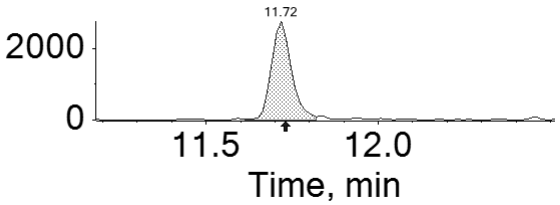
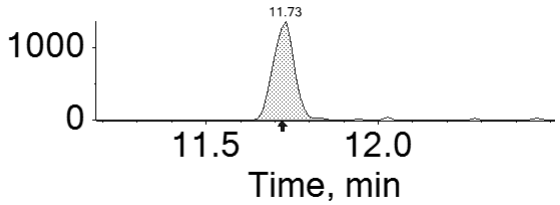
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

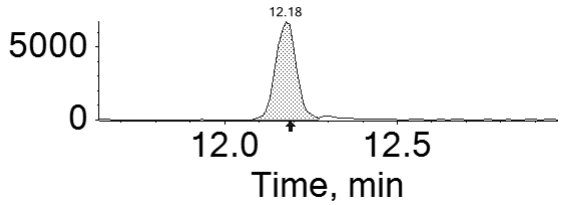
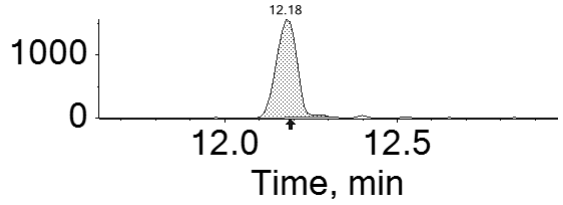
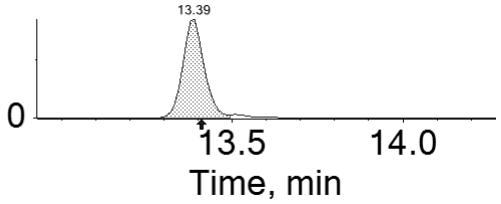
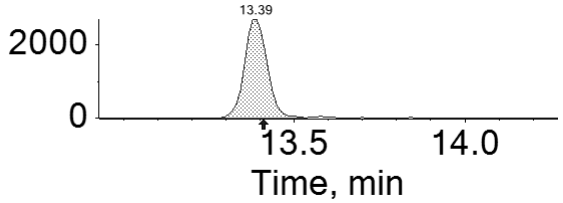
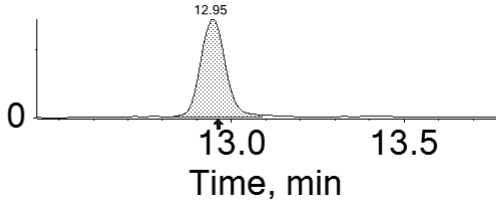
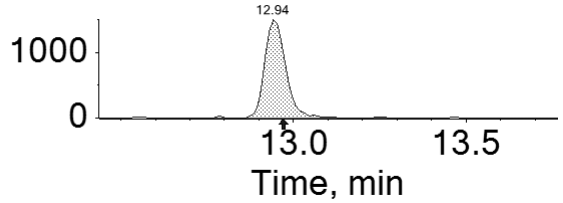
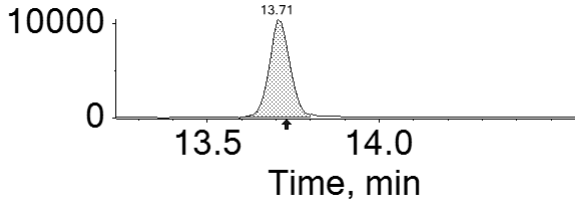
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.86) min Calculated conc: 0.511 Area Ratio: 1.094e-1 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.56) min Calculated conc: 0.475 Area Ratio: 9.818e-2 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.467 Area Ratio: 1.000e-1 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 0.431 Area Ratio: 3.280e-2 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 0.504 Area Ratio: 9.755e-2 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 0.458 Area Ratio: 6.112e-2 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 0.465 Area Ratio: 8.522e-2 Sample Type: (Quality Control)	

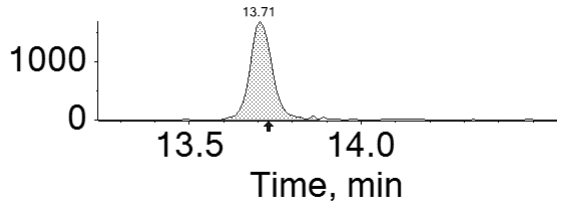
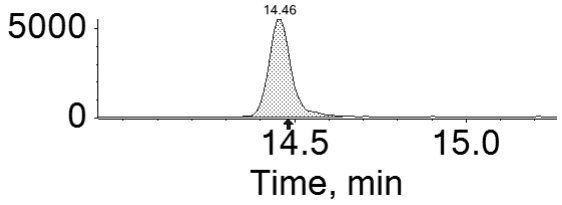
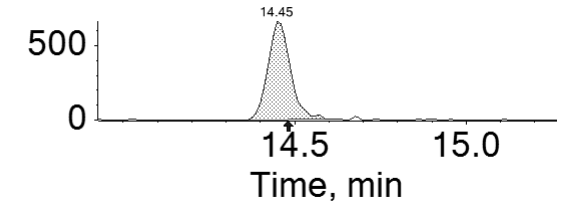
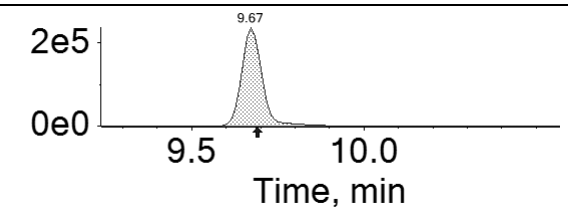
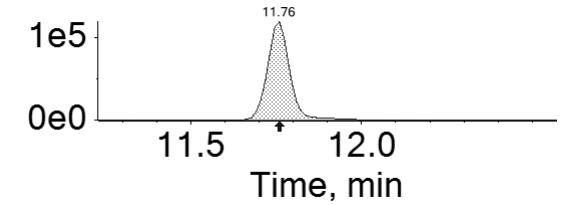
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 0.485 Area Ratio: 7.396e-3 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: 0.495 Area Ratio: 5.612e-2 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.82 (8.84) min Calculated conc: 0.489 Area Ratio: 2.112e-2 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 0.475 Area Ratio: 7.508e-2 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.475 Area Ratio: 2.533e-2 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 0.461 Area Ratio: 1.027e-1 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 0.405 Area Ratio: 3.620e-2 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.572 Area Ratio: 1.495e-1 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.552 Area Ratio: 1.097e-1 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.466 Area Ratio: 1.159e-1 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.448 Area Ratio: 4.308e-2 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 0.502 Area Ratio: 1.040e-1 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 0.469 Area Ratio: 2.816e-2 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 0.473 Area Ratio: 7.395e-2 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 0.500 Area Ratio: 2.698e-2 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 0.489 Area Ratio: 1.089e-1 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 0.496 Area Ratio: 3.142e-2 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 0.563 Area Ratio: 1.131e-1 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 0.518 Area Ratio: 9.305e-2 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.436 Area Ratio: 9.876e-2 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.462 Area Ratio: 2.690e-2 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: 0.501 Area Ratio: 7.863e-2 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: 0.487 Area Ratio: 3.878e-2 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.413 Area Ratio: 1.327e-1 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 0.444 Area Ratio: 7.462e-2 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.94 (12.93) min Calculated conc: 0.490 Area Ratio: 6.720e-2 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: 0.472 Area Ratio: 1.316e-1 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.73 (11.72) min Calculated conc: 0.471 Area Ratio: 6.985e-2 Sample Type: (Quality Control)	

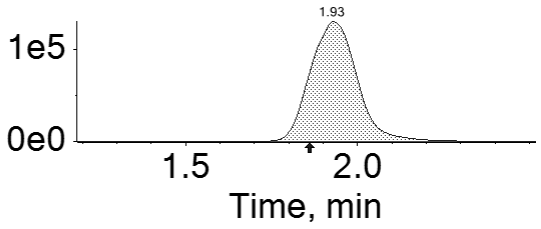
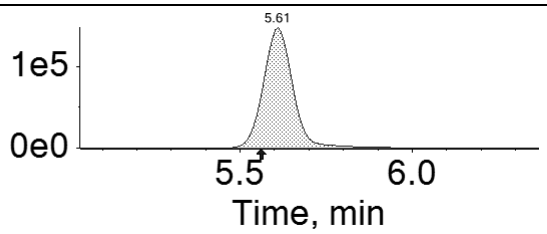
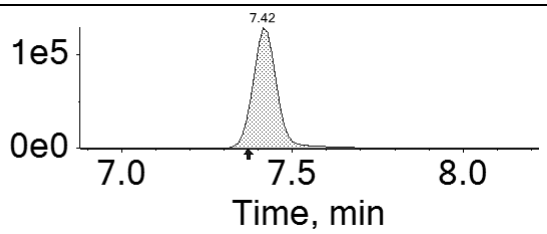
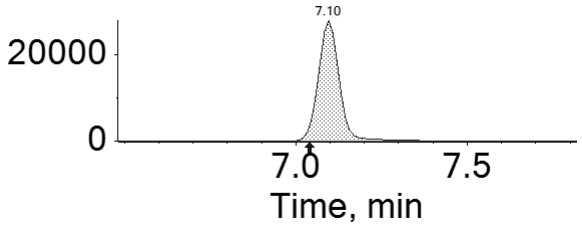
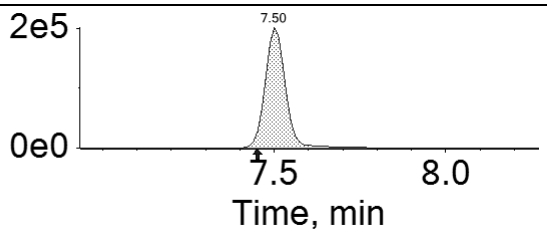
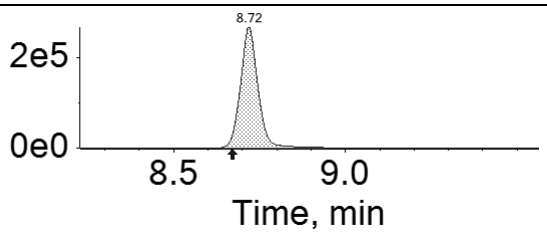
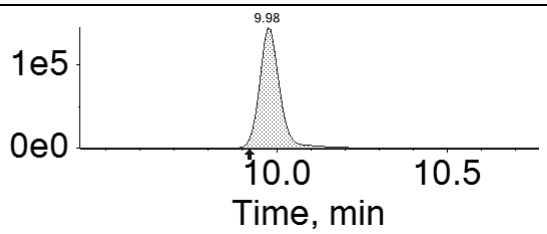
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 0.421 Area Ratio: 6.224e-2 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 0.449 Area Ratio: 1.416e-2 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 0.459 Area Ratio: 6.007e-2 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: 0.454 Area Ratio: 2.027e-2 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.95 (12.96) min Calculated conc: 0.447 Area Ratio: 5.901e-2 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.94 (12.97) min Calculated conc: 0.470 Area Ratio: 1.061e-2 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 0.490 Area Ratio: 7.061e-2 Sample Type: (Quality Control)	

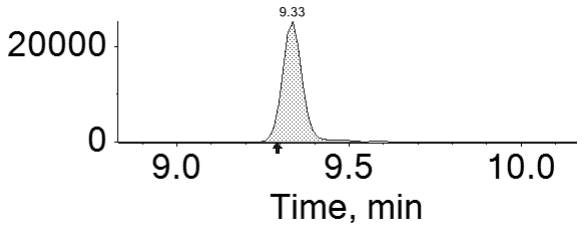
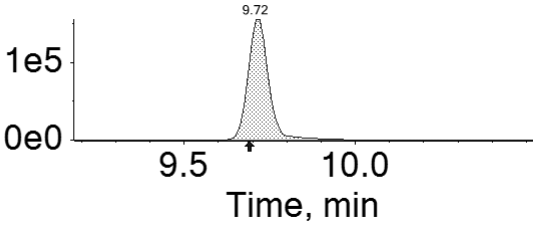
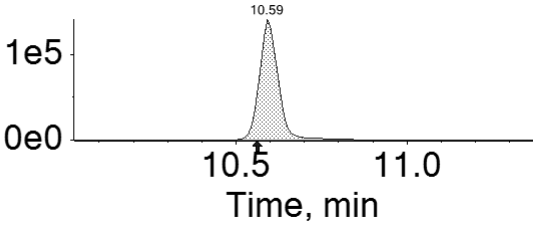
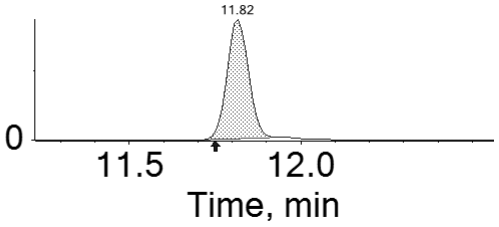
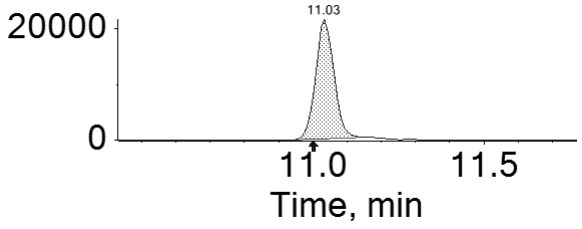
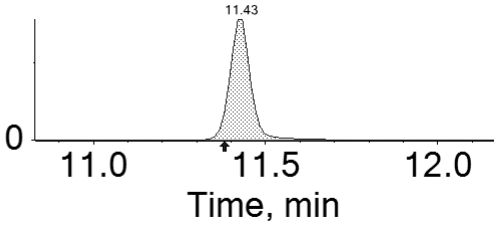
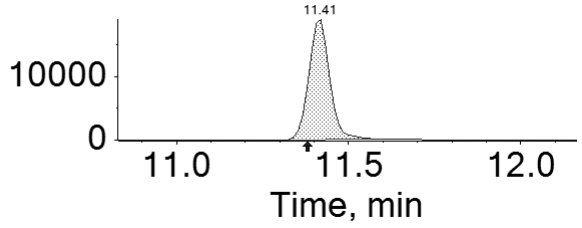
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: 0.465 Area Ratio: 1.241e-2 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 0.467 Area Ratio: 7.694e-2 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 0.406 Area Ratio: 9.152e-3 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.804 Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.76 (11.76) min Calculated conc: 1.888 Area Ratio: N/A Sample Type: (Quality Control)	

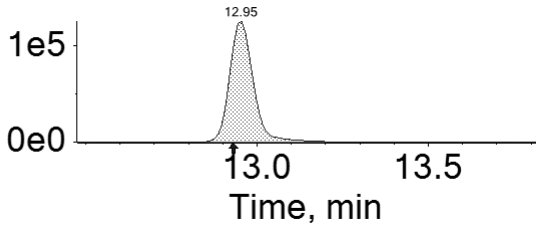
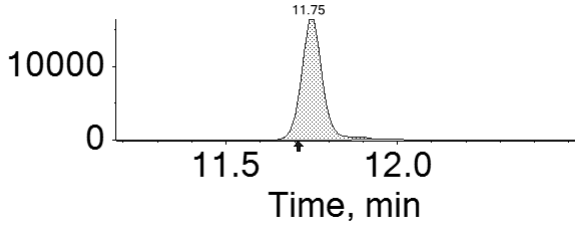
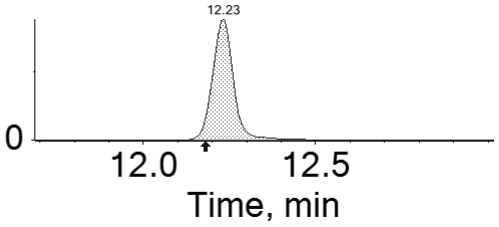
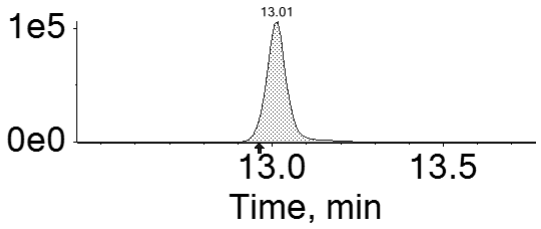
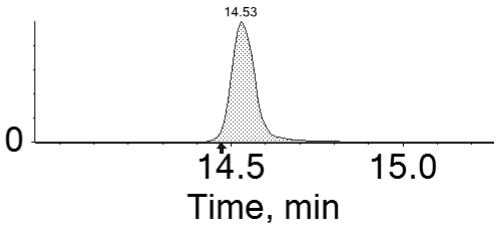
Sample Name	CCV-Low	**Injection Vial**	2
Sample ID	CAL-19206-006-01	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-24T11:31:17	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190624A.wiff		
Result Table	190624AM		
Sample Comment			

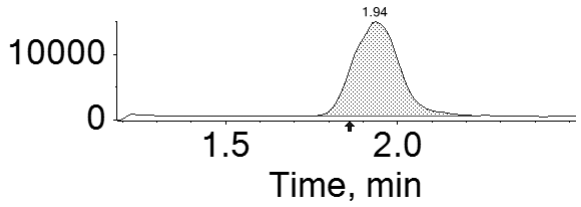
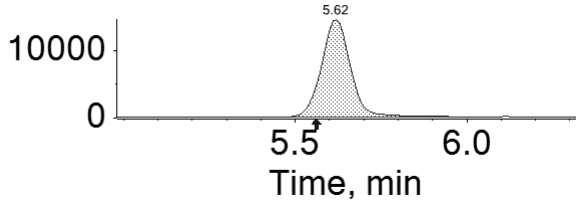
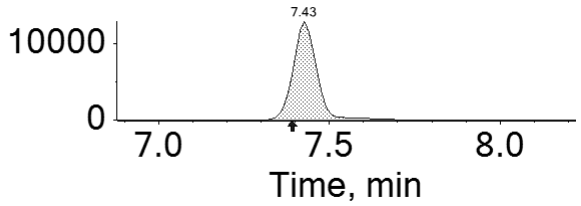
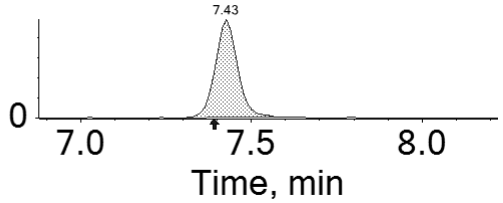
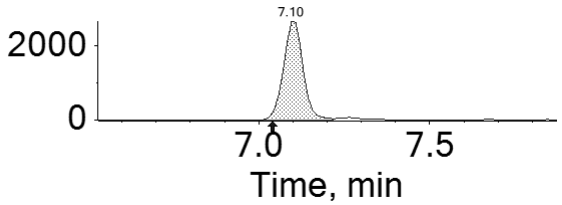
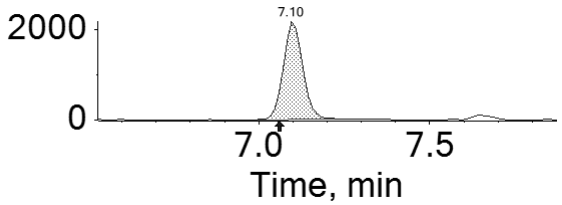
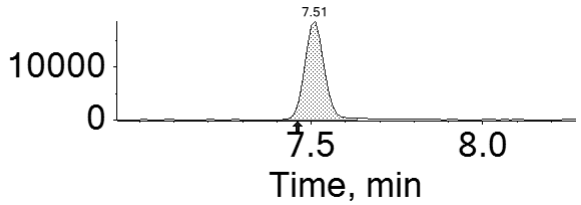
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.231e6	1.93	1.00	-
13C5_PFPeA	8.670e5	5.61	1.00	-
13C3_PFBS	6.255e5	7.42	1.00	-
13C2_4:2FTS	1.174e5	7.10	1.00	-
13C5_PFHxA	8.267e5	7.50	1.00	-
13C4_PFHpA	9.439e5	8.72	1.00	-
13C3_PFHxS	5.893e5	9.98	1.00	-
13C2_6:2FTS	1.020e5	9.33	1.00	-
13C8_PFOA	6.503e5	9.72	1.00	-
13C9_PFNA	5.393e5	10.59	1.00	-
13C8_PFOS	3.779e5	11.82	1.00	-
13C2_8:2FTS	7.946e4	11.03	1.00	-
13C6_PFDA	3.286e5	11.43	1.00	-
d3-MeFOSAA	7.913e4	11.41	1.00	-
13C8_FOSA	6.064e5	12.95	1.00	-
d5-EtFOSAA	7.061e4	11.75	1.00	-
13C7_PFUdA	3.687e5	12.23	1.00	-
13C2_PFDoA	4.394e5	13.01	1.00	-
13C2_PFTeDA	2.436e5	14.53	1.00	-

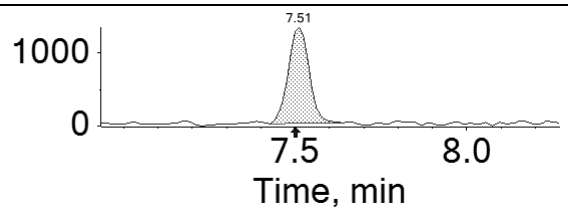
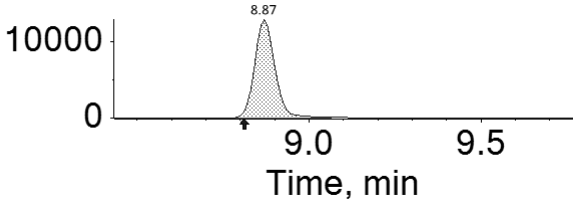
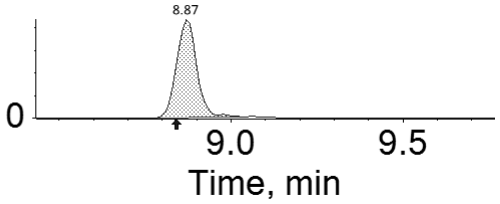
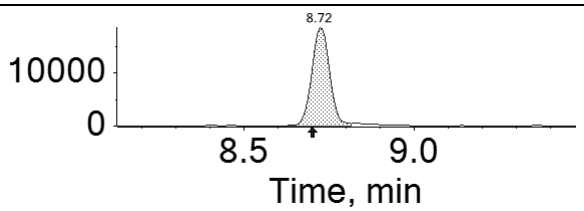
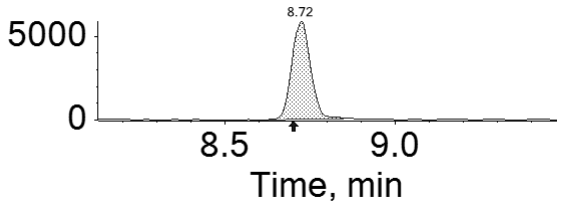
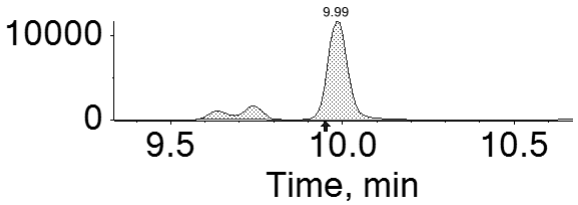
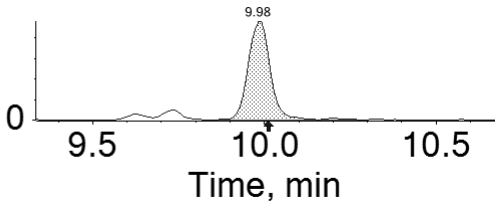
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.355e+05	1.94	N/A	0.514
PFPeA	8.417e+04	5.62	N/A	0.470
PFBS	6.192e+04	7.43	N/A	0.462
PFBS_2	2.194e+04	7.43	N/A	0.461
4:2FTS	1.062e+04	7.10	N/A	0.467
4:2FTS_2	8.554e+03	7.10	N/A	0.545
PFHxA	7.319e+04	7.51	N/A	0.483
PFHxA_2	5.547e+03	7.51	N/A	0.440
PFPeS	5.283e+04	8.87	N/A	0.493
PFPeS_2	1.783e+04	8.87	N/A	0.438
PFHpA	6.749e+04	8.72	N/A	0.452
PFHpA_2	2.253e+04	8.72	N/A	0.447
PFHxS	5.869e+04	9.99	N/A	0.447
PFHxS_2	2.163e+04	9.98	N/A	0.411
6:2FTS	1.362e+04	9.34	N/A	0.511
6:2FTS_2	9.116e+03	9.33	N/A	0.450
PFOA	8.030e+04	9.72	N/A	0.485
PFOA_2	3.074e+04	9.72	N/A	0.492
PFHpS	5.680e+04	10.94	N/A	0.508
PFHpS_2	1.723e+04	10.94	N/A	0.532
PFNA	4.074e+04	10.60	N/A	0.484
PFNA_2	1.450e+04	10.60	N/A	0.498
PFOS	4.324e+04	11.83	N/A	0.514
PFOS_2	1.039e+04	11.82	N/A	0.434
8:2FTS	8.204e+03	11.04	N/A	0.514
8:2FTS_2	7.638e+03	11.04	N/A	0.535
PFDA	3.617e+04	11.43	N/A	0.486
PFDA_2	8.709e+03	11.43	N/A	0.455
PFNS	4.020e+04	12.66	N/A	0.475
PFNS_2	1.250e+04	12.66	N/A	0.426
N-MeFOSAA	1.217e+04	11.42	N/A	0.479
N-MeFOSAA_2	6.045e+03	11.42	N/A	0.455
FOSA	3.768e+04	12.96	N/A	0.453
N-EtFOSAA	8.921e+03	11.77	N/A	0.453
N-EtFOSAA_2	4.709e+03	11.77	N/A	0.450
PFUdA	2.531e+04	12.24	N/A	0.464
PFUdA_2	5.467e+03	12.23	N/A	0.453
PFDS	3.061e+04	13.47	N/A	0.532
PFDS_2	1.038e+04	13.47	N/A	0.529
PFDoA	2.880e+04	13.02	N/A	0.497
PFDoA_2	5.189e+03	13.02	N/A	0.523
PFTrDA	2.818e+04	13.79	N/A	0.445
PFTrDA_2	5.587e+03	13.79	N/A	0.477
PFTeDA	1.934e+04	14.54	N/A	0.482
PFTeDA_2	2.538e+03	14.54	N/A	0.462
13C4_PFOA	8.331e+05	9.72	N/A	1.560
13C4_PFOS	4.639e+05	11.81	N/A	1.643

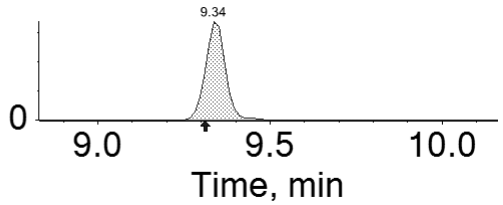
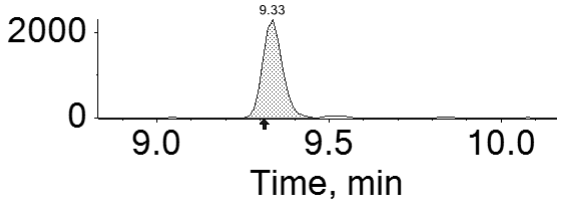
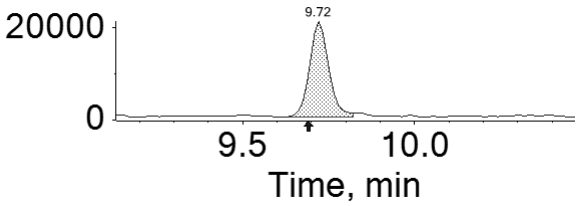
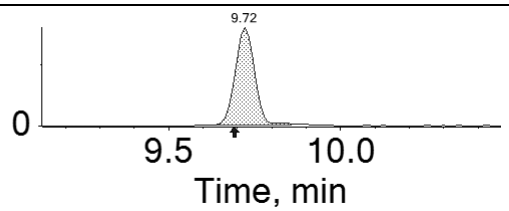
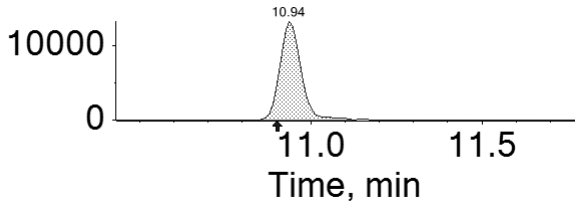
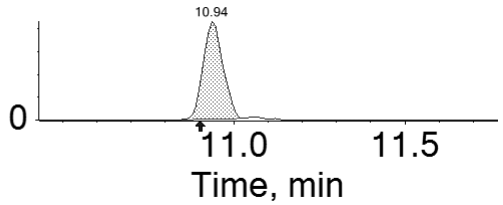
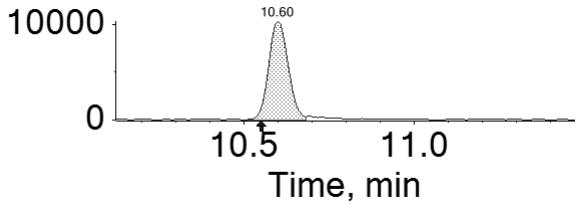
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.93(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.61(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.42(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.10(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.50(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.72(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.98(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

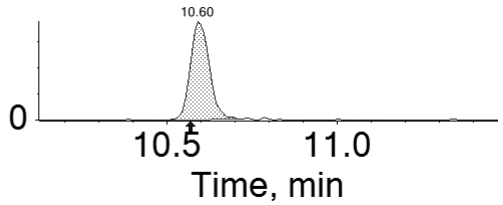
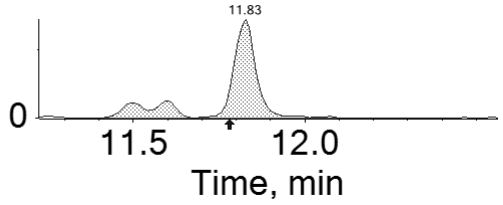
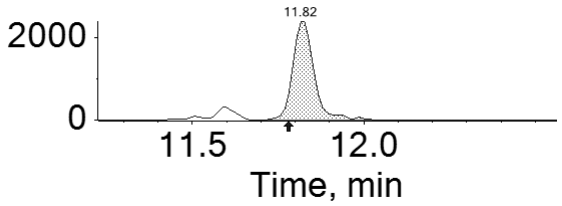
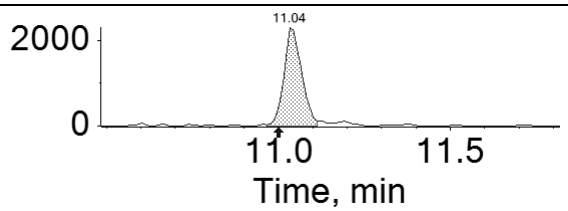
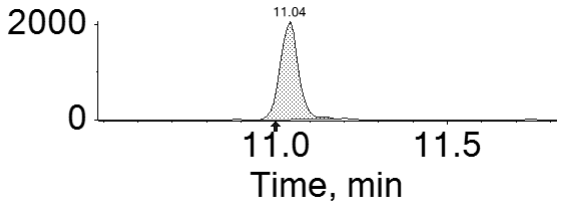
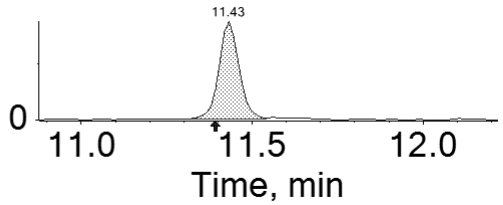
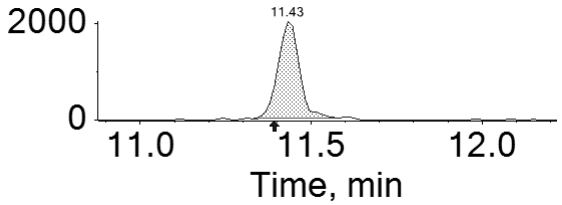
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.33(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.72(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.59(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.82(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.03(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.43(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.41(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

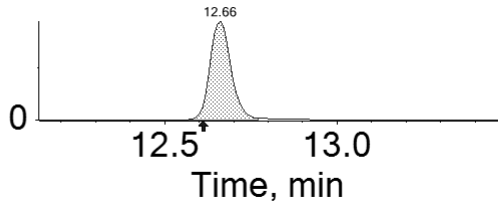
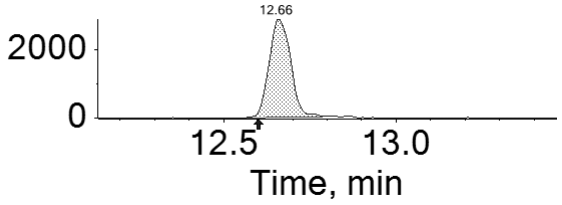
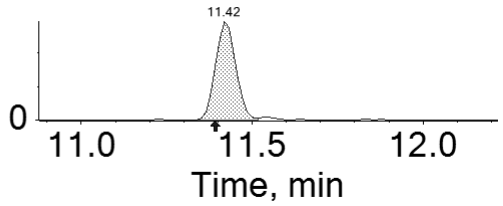
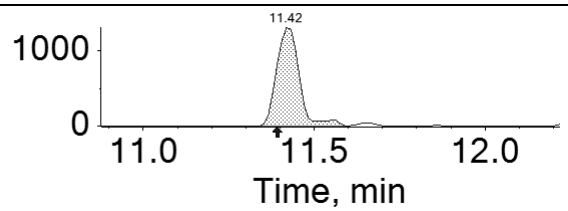
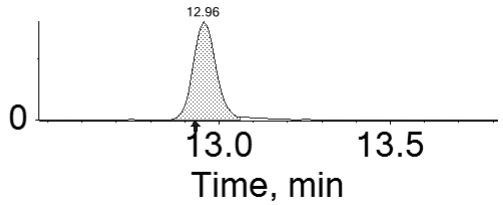
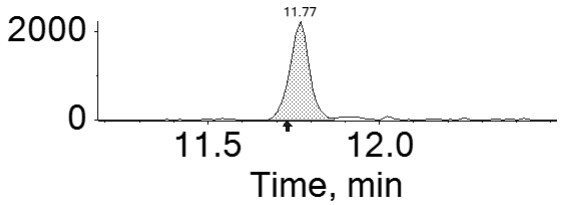
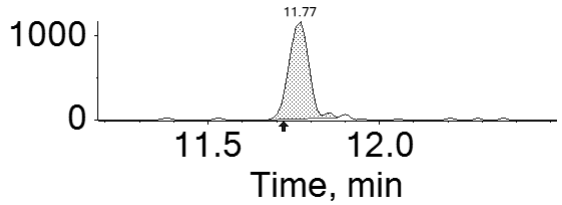
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.95(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.75(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.23(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 13.01(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.53(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

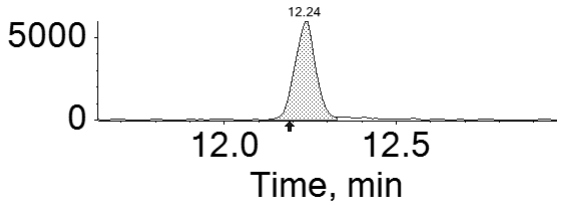
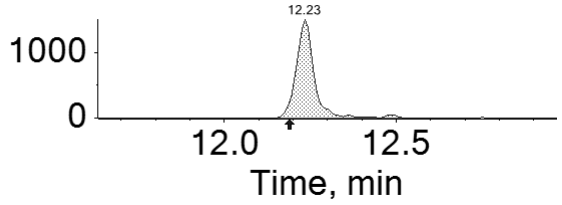
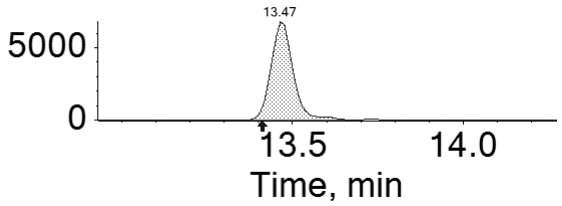
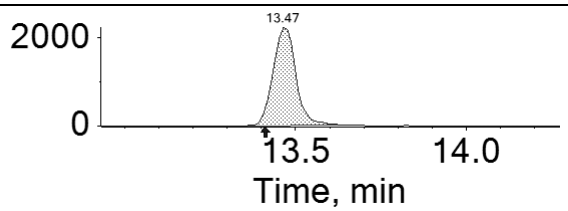
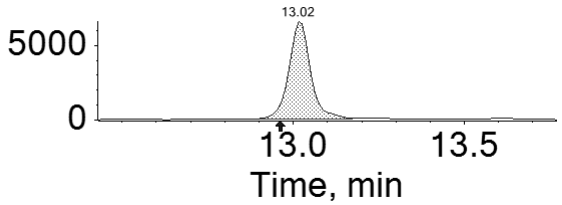
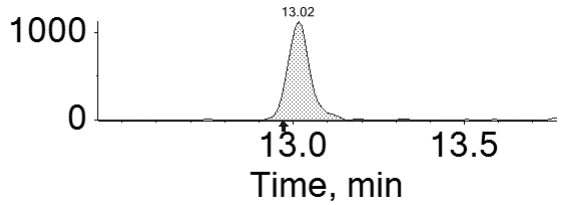
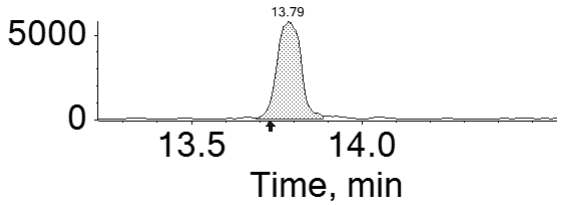
PFBA (213.0 / 169.0) RT (Exp. RT): 1.94 (1.86) min Calculated conc: 0.514 Area Ratio: 1.101e-1 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.62 (5.56) min Calculated conc: 0.470 Area Ratio: 9.709e-2 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.43 (7.39) min Calculated conc: 0.462 Area Ratio: 9.900e-2 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.43 (7.39) min Calculated conc: 0.461 Area Ratio: 3.507e-2 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.10 (7.04) min Calculated conc: 0.467 Area Ratio: 9.046e-2 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.10 (7.06) min Calculated conc: 0.545 Area Ratio: 7.285e-2 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.51 (7.46) min Calculated conc: 0.483 Area Ratio: 8.854e-2 Sample Type: (Unknown)	

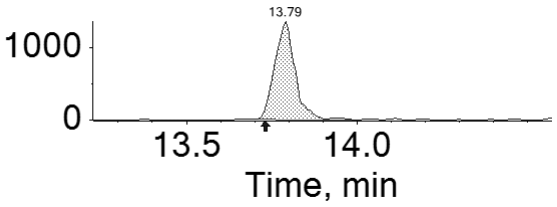
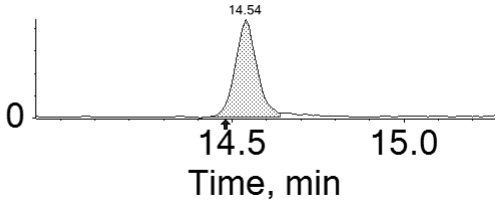
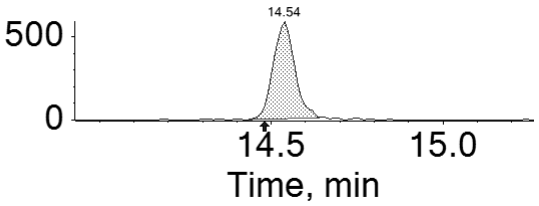
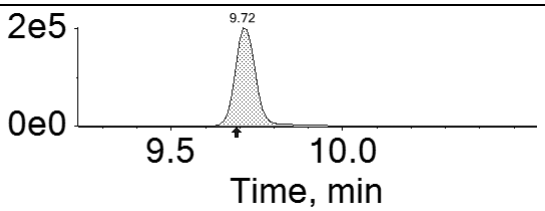
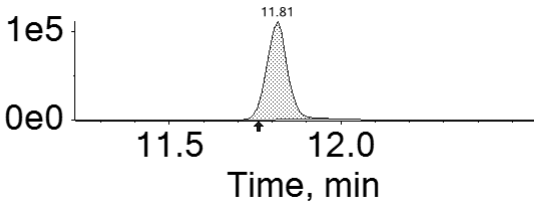
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.51 (7.50) min Calculated conc: 0.440 Area Ratio: 6.711e-3 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.87 (8.81) min Calculated conc: 0.493 Area Ratio: 5.596e-2 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.87 (8.84) min Calculated conc: 0.438 Area Ratio: 1.889e-2 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.72 (8.70) min Calculated conc: 0.452 Area Ratio: 7.150e-2 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.72 (8.70) min Calculated conc: 0.447 Area Ratio: 2.386e-2 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.99 (9.95) min Calculated conc: 0.447 Area Ratio: 9.958e-2 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.98 (10.01) min Calculated conc: 0.411 Area Ratio: 3.669e-2 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.34 (9.31) min Calculated conc: 0.511 Area Ratio: 1.336e-1 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.33 (9.31) min Calculated conc: 0.450 Area Ratio: 8.937e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.72 (9.69) min Calculated conc: 0.485 Area Ratio: 1.235e-1 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.72 (9.69) min Calculated conc: 0.492 Area Ratio: 4.728e-2 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.94 (10.90) min Calculated conc: 0.508 Area Ratio: 1.053e-1 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.94 (10.90) min Calculated conc: 0.532 Area Ratio: 3.196e-2 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.60 (10.55) min Calculated conc: 0.484 Area Ratio: 7.553e-2 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.60 (10.57) min Calculated conc: 0.498 Area Ratio: 2.689e-2 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.83 (11.78) min Calculated conc: 0.514 Area Ratio: 1.144e-1 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.82 (11.78) min Calculated conc: 0.434 Area Ratio: 2.748e-2 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.04 (11.00) min Calculated conc: 0.514 Area Ratio: 1.032e-1 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.04 (11.00) min Calculated conc: 0.535 Area Ratio: 9.613e-2 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.486 Area Ratio: 1.101e-1 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.455 Area Ratio: 2.650e-2 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.66 (12.61) min Calculated conc: 0.475 Area Ratio: 7.455e-2 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.66 (12.60) min Calculated conc: 0.426 Area Ratio: 3.391e-2 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 0.479 Area Ratio: 1.538e-1 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.42 (11.39) min Calculated conc: 0.455 Area Ratio: 7.640e-2 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 0.453 Area Ratio: 6.214e-2 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.77 (11.73) min Calculated conc: 0.453 Area Ratio: 1.263e-1 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.77 (11.72) min Calculated conc: 0.450 Area Ratio: 6.668e-2 Sample Type: (Unknown)	

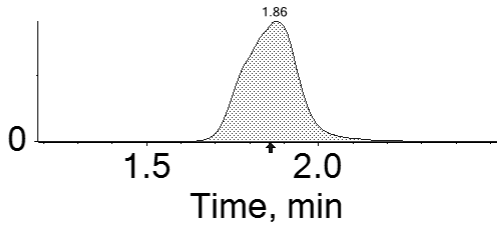
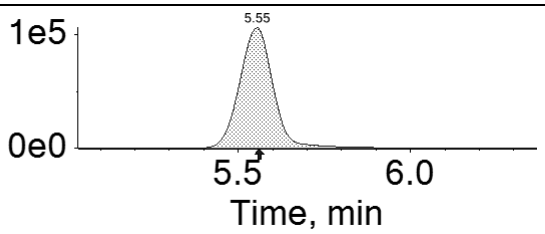
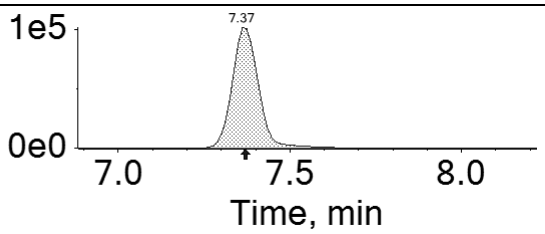
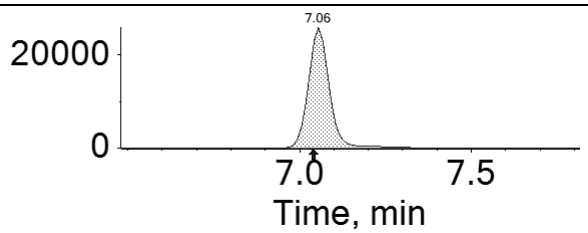
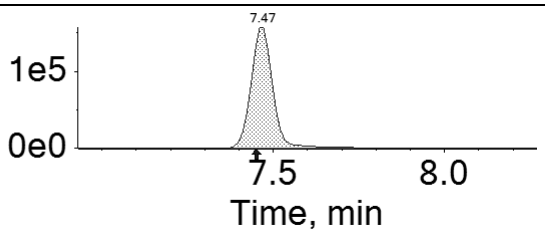
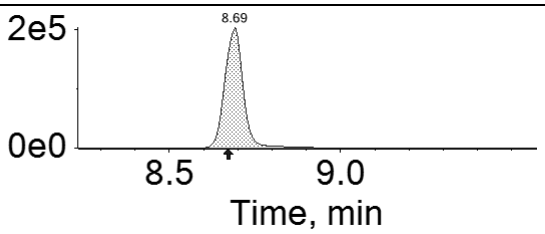
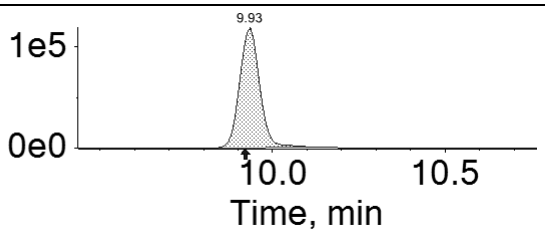
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.24 (12.19) min Calculated conc: 0.464 Area Ratio: 6.864e-2 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.23 (12.19) min Calculated conc: 0.453 Area Ratio: 1.483e-2 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.47 (13.41) min Calculated conc: 0.532 Area Ratio: 6.966e-2 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.47 (13.41) min Calculated conc: 0.529 Area Ratio: 2.363e-2 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 13.02 (12.96) min Calculated conc: 0.497 Area Ratio: 6.555e-2 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.02 (12.97) min Calculated conc: 0.523 Area Ratio: 1.181e-2 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.79 (13.73) min Calculated conc: 0.445 Area Ratio: 6.413e-2 Sample Type: (Unknown)	

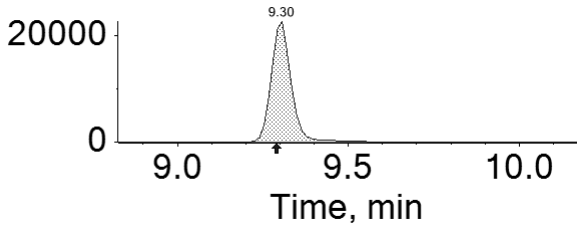
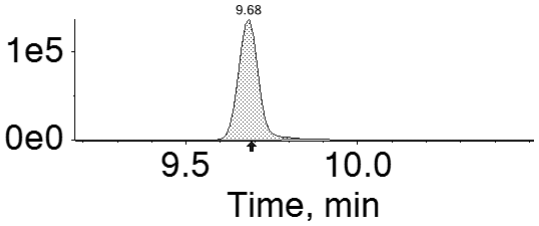
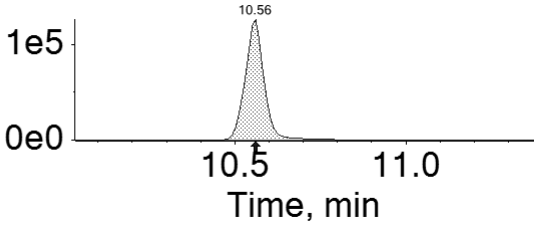
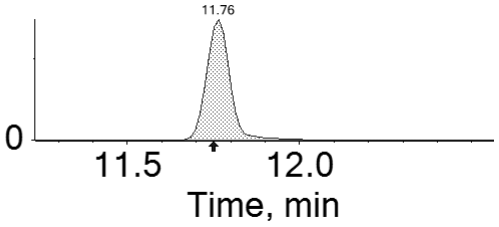
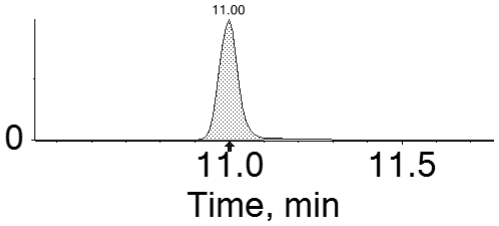
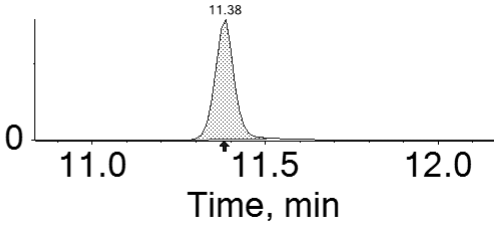
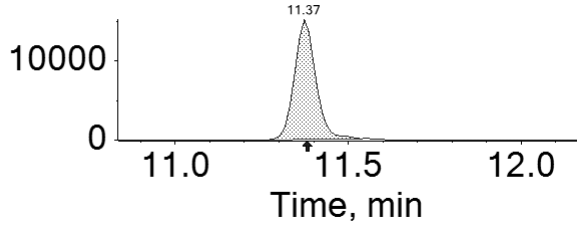
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.79 (13.73) min Calculated conc: 0.477 Area Ratio: 1.271e-2 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.54 (14.48) min Calculated conc: 0.482 Area Ratio: 7.936e-2 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.54 (14.48) min Calculated conc: 0.462 Area Ratio: 1.042e-2 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.72 (9.69) min Calculated conc: 1.560 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.81 (11.76) min Calculated conc: 1.643 Area Ratio: N/A Sample Type: (Unknown)	

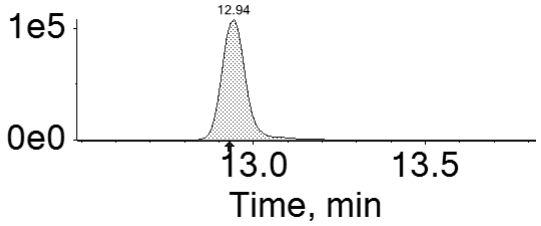
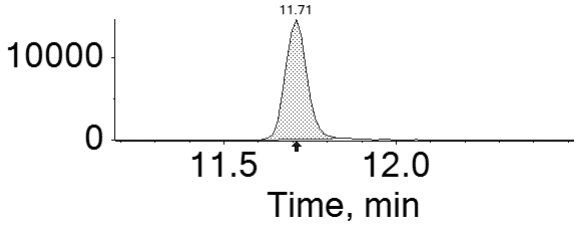
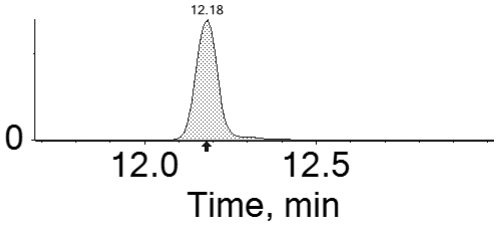
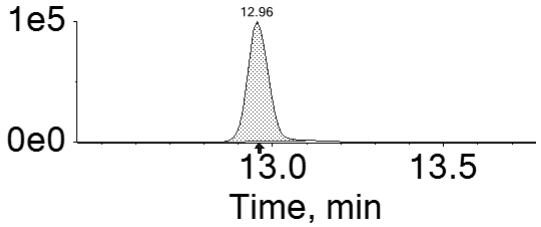
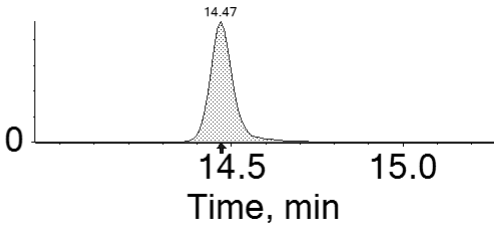
Sample Name	CCV-Med	**Injection Vial**	16
Sample ID	CAL-19206-006-04	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-24T18:12:00	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190624A.wiff		
Result Table	190624AM		
Sample Comment			

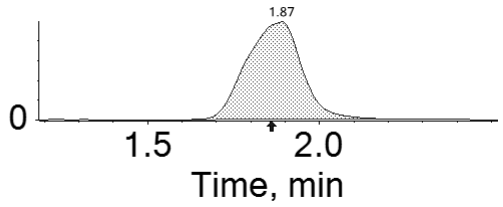
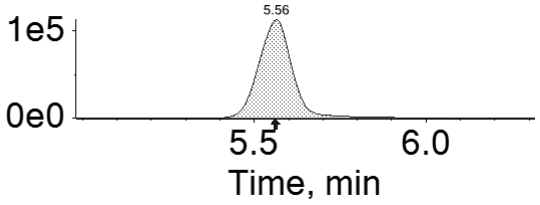
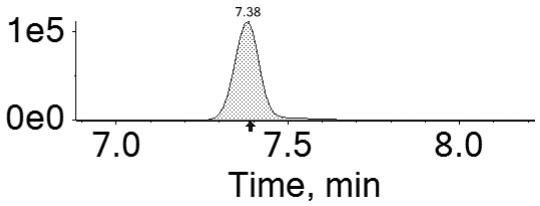
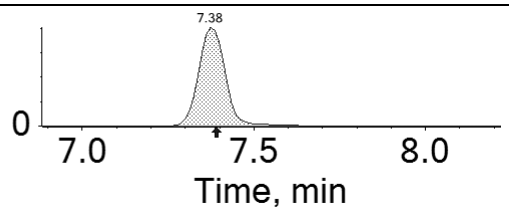
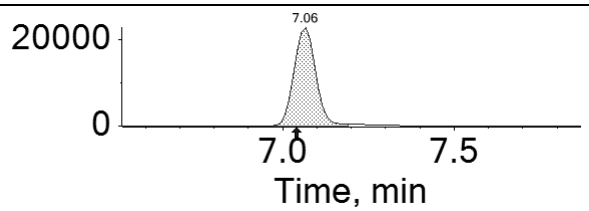
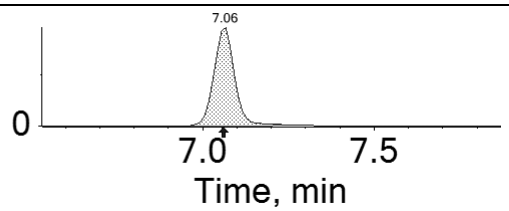
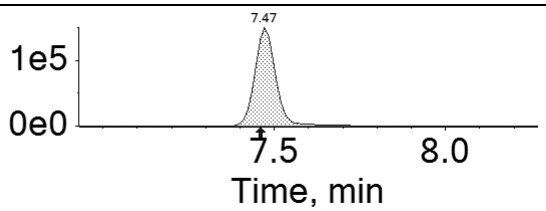
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
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13C5_PFPeA	7.099e5	5.55	1.00	-
13C3_PFBS	5.386e5	7.37	1.00	-
13C2_4:2FTS	1.097e5	7.06	1.00	-
13C5_PFHxA	6.876e5	7.47	1.00	-
13C4_PFHpA	7.599e5	8.69	1.00	-
13C3_PFHxS	4.775e5	9.93	1.00	-
13C2_6:2FTS	9.107e4	9.30	1.00	-
13C8_PFOA	5.599e5	9.68	1.00	-
13C9_PFNA	4.869e5	10.56	1.00	-
13C8_PFOS	3.452e5	11.76	1.00	-
13C2_8:2FTS	7.749e4	11.00	1.00	-
13C6_PFDA	3.003e5	11.38	1.00	-
d3-MeFOSAA	6.447e4	11.37	1.00	-
13C8_FOSA	5.288e5	12.94	1.00	-
d5-EtFOSAA	6.324e4	11.71	1.00	-
13C7_PFUdA	3.151e5	12.18	1.00	-
13C2_PFDoA	4.229e5	12.96	1.00	-
13C2_PFTeDA	2.218e5	14.47	1.00	-

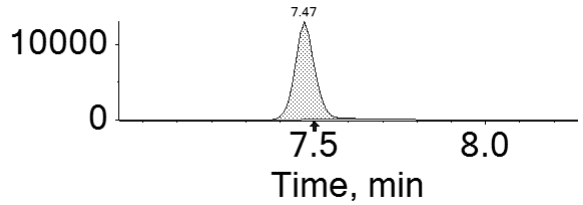
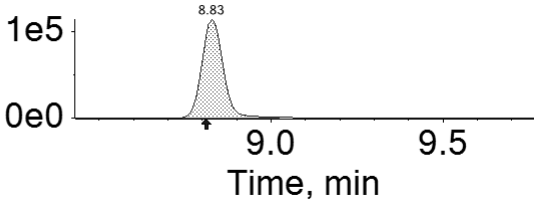
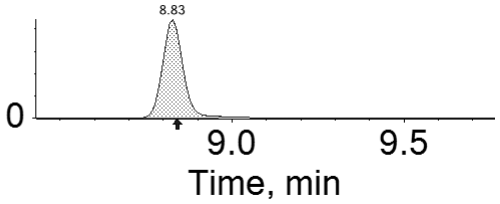
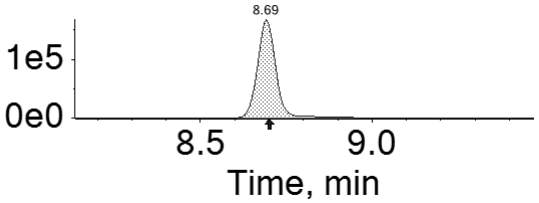
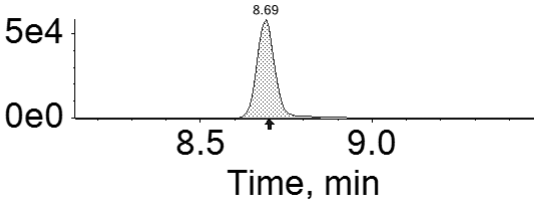
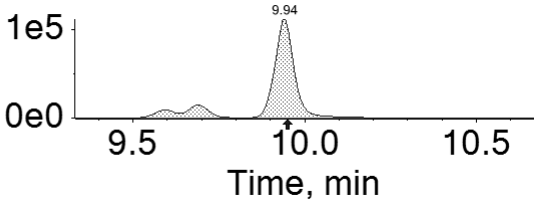
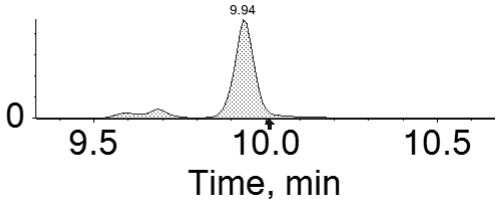
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.110e+06	1.87	N/A	5.095
PFPeA	7.520e+05	5.56	N/A	5.128
PFBS	5.905e+05	7.38	N/A	5.114
PFBS_2	2.181e+05	7.38	N/A	5.321
4:2FTS	1.008e+05	7.06	N/A	4.749
4:2FTS_2	8.030e+04	7.06	N/A	5.482
PFHxA	6.343e+05	7.47	N/A	5.029
PFHxA_2	5.239e+04	7.47	N/A	4.994
PFPeS	4.878e+05	8.83	N/A	5.658
PFPeS_2	1.804e+05	8.83	N/A	5.499
PFHpA	6.233e+05	8.69	N/A	5.186
PFHpA_2	2.124e+05	8.69	N/A	5.240
PFHxS	5.512e+05	9.94	N/A	5.176
PFHxS_2	2.223e+05	9.94	N/A	5.209
6:2FTS	1.395e+05	9.31	N/A	5.862
6:2FTS_2	9.409e+04	9.30	N/A	5.201
PFOA	7.514e+05	9.68	N/A	5.266
PFOA_2	2.796e+05	9.68	N/A	5.198
PFHpS	5.536e+05	10.89	N/A	5.488
PFHpS_2	1.575e+05	10.89	N/A	5.389
PFNA	4.036e+05	10.56	N/A	5.307
PFNA_2	1.325e+05	10.56	N/A	5.044
PFOS	3.948e+05	11.77	N/A	5.135
PFOS_2	1.119e+05	11.77	N/A	5.117
8:2FTS	9.208e+04	11.00	N/A	5.913
8:2FTS_2	7.780e+04	11.00	N/A	5.589
PFDA	3.341e+05	11.39	N/A	4.913
PFDA_2	7.743e+04	11.39	N/A	4.431
PFNS	3.785e+05	12.60	N/A	4.949
PFNS_2	1.232e+05	12.60	N/A	4.908
N-MeFOSAA	1.198e+05	11.39	N/A	5.786
N-MeFOSAA_2	5.989e+04	11.39	N/A	5.528
FOSA	3.891e+05	12.94	N/A	5.365
N-EtFOSAA	8.469e+04	11.73	N/A	4.798
N-EtFOSAA_2	4.817e+04	11.73	N/A	5.140
PFUdA	2.346e+05	12.19	N/A	5.038
PFUdA_2	5.302e+04	12.19	N/A	5.138
PFDS	2.963e+05	13.40	N/A	5.350
PFDS_2	9.627e+04	13.40	N/A	5.098
PFDoA	2.893e+05	12.96	N/A	5.185
PFDoA_2	4.702e+04	12.96	N/A	4.924
PFTrDA	3.018e+05	13.73	N/A	4.956
PFTrDA_2	5.918e+04	13.72	N/A	5.246
PFTeDA	1.890e+05	14.48	N/A	5.175
PFTeDA_2	2.605e+04	14.47	N/A	5.204
13C4_PFOA	7.406e+05	9.68	N/A	1.387
13C4_PFOS	4.236e+05	11.76	N/A	1.500

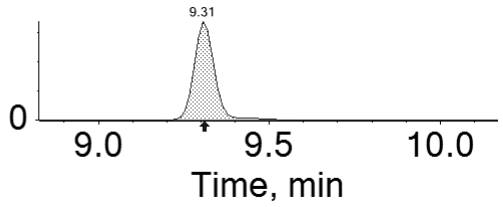
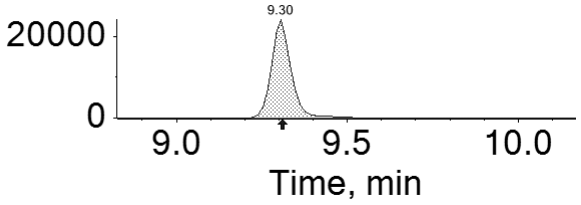
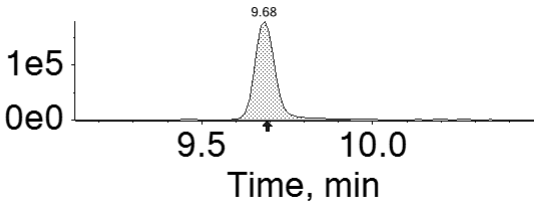
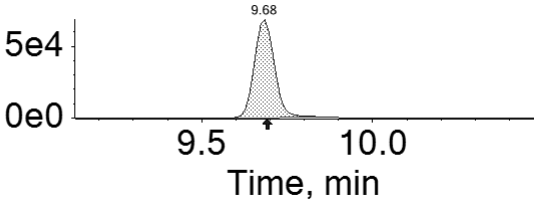
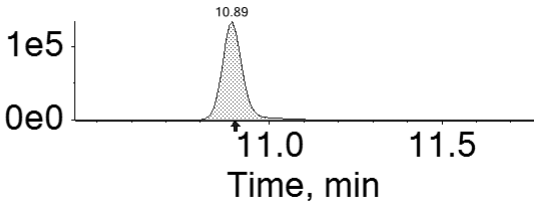
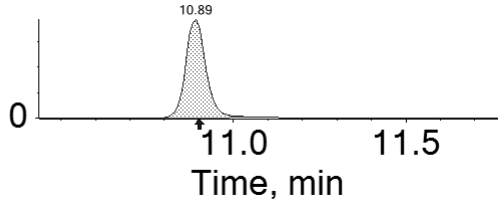
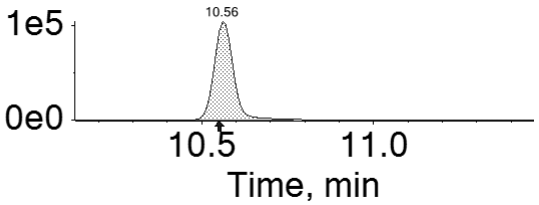
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.06(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.47(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.69(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

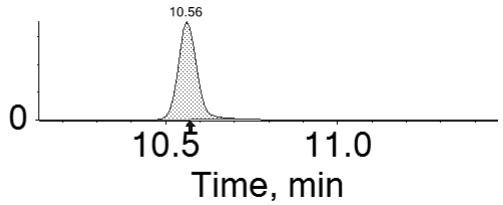
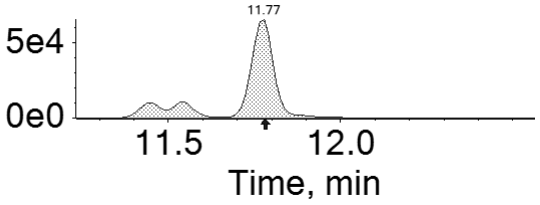
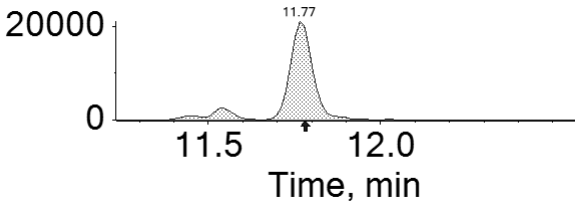
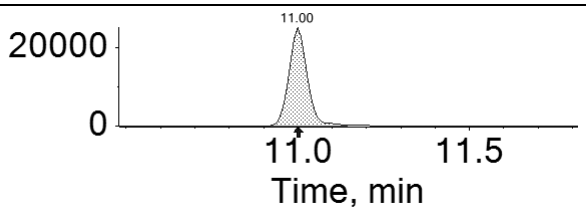
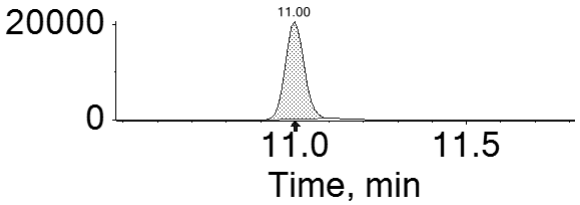
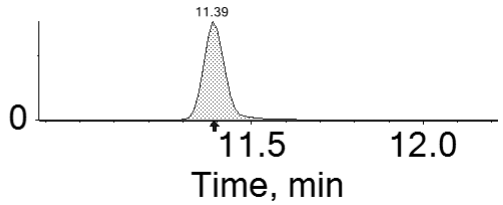
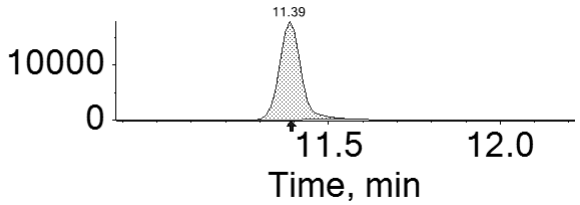
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.68(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.56(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

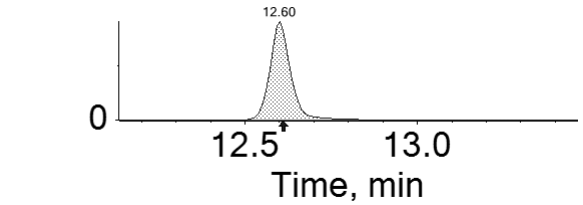
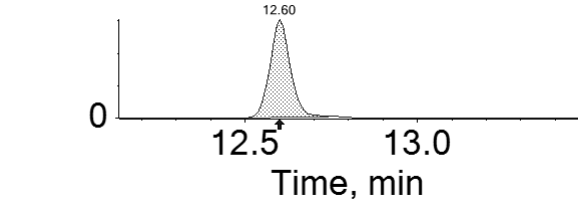
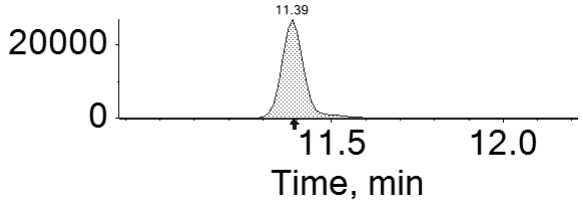
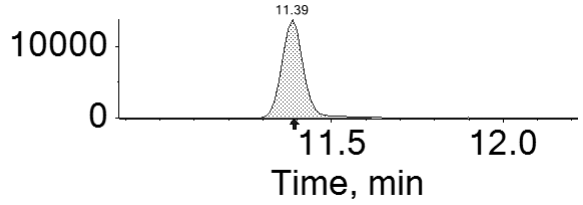
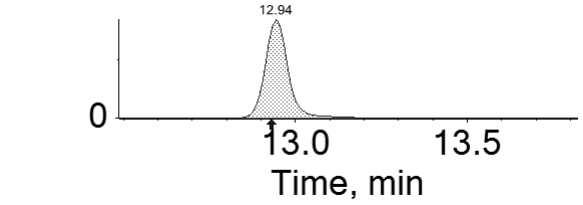
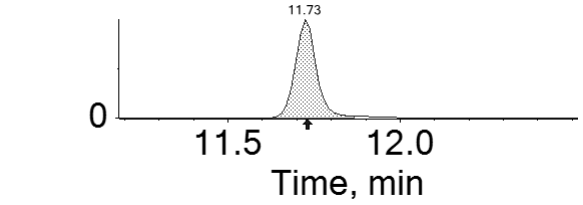
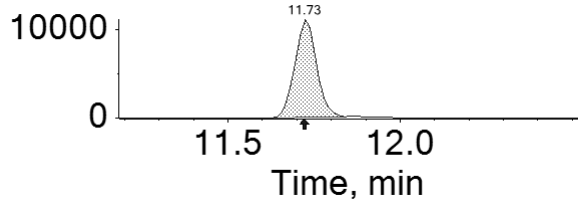
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.18(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.96(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.47(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

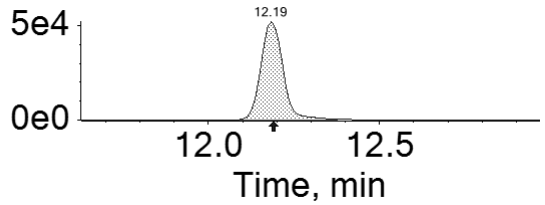
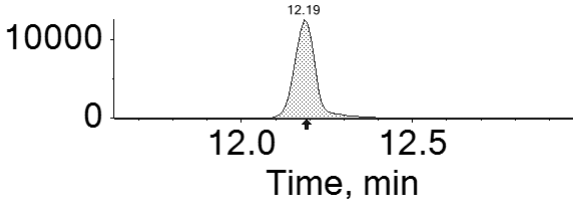
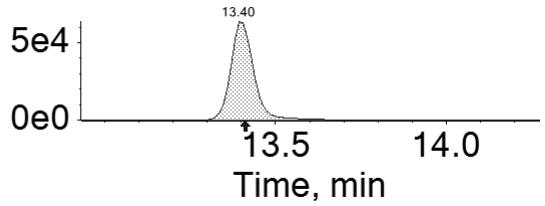
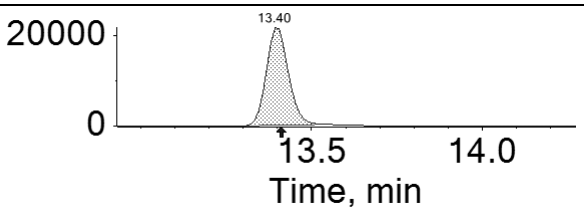
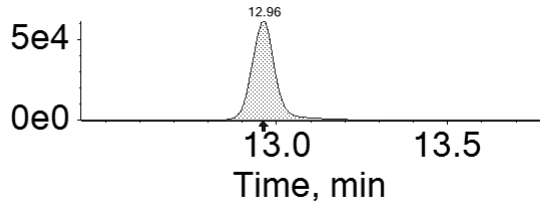
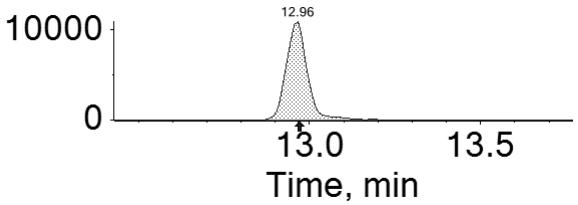
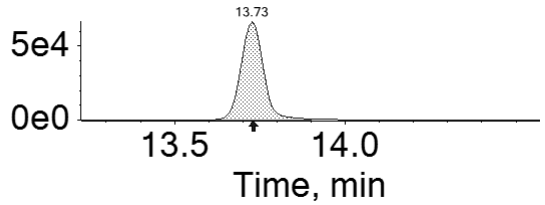
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.86) min Calculated conc: 5.095 Area Ratio: 1.092e0 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.56) min Calculated conc: 5.128 Area Ratio: 1.059e0 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 5.114 Area Ratio: 1.096e0 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 5.321 Area Ratio: 4.050e-1 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 4.749 Area Ratio: 9.196e-1 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 5.482 Area Ratio: 7.323e-1 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 5.029 Area Ratio: 9.225e-1 Sample Type: (Unknown)	

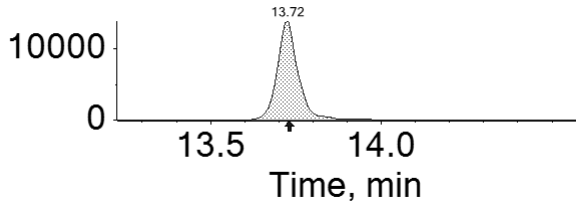
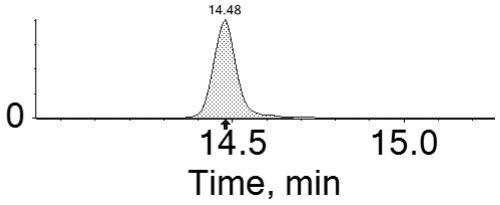
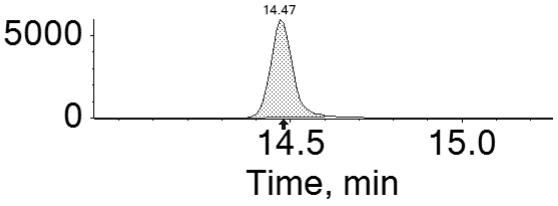
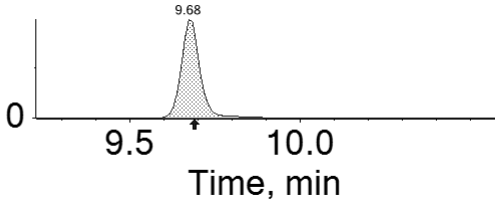
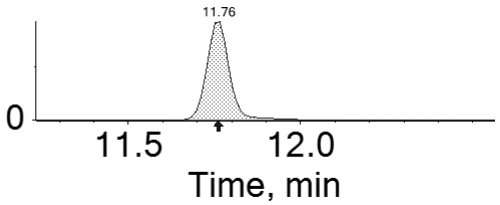
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 4.994 Area Ratio: 7.620e-2 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.83 (8.81) min Calculated conc: 5.658 Area Ratio: 6.420e-1 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.83 (8.84) min Calculated conc: 5.499 Area Ratio: 2.374e-1 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 5.186 Area Ratio: 8.203e-1 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.69 (8.70) min Calculated conc: 5.240 Area Ratio: 2.795e-1 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.94 (9.95) min Calculated conc: 5.176 Area Ratio: 1.154e0 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 5.209 Area Ratio: 4.656e-1 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.31 (9.31) min Calculated conc: 5.862 Area Ratio: 1.532e0 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 5.201 Area Ratio: 1.033e0 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 5.266 Area Ratio: 1.342e0 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 5.198 Area Ratio: 4.994e-1 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 5.488 Area Ratio: 1.137e0 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 5.389 Area Ratio: 3.234e-1 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: 5.307 Area Ratio: 8.289e-1 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: 5.044 Area Ratio: 2.722e-1 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 5.135 Area Ratio: 1.144e0 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 5.117 Area Ratio: 3.242e-1 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 5.913 Area Ratio: 1.188e0 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 5.589 Area Ratio: 1.004e0 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 4.913 Area Ratio: 1.113e0 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 4.431 Area Ratio: 2.578e-1 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.60 (12.61) min Calculated conc: 4.949 Area Ratio: 7.773e-1 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.60 (12.60) min Calculated conc: 4.908 Area Ratio: 3.910e-1 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 5.786 Area Ratio: 1.858e0 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 5.528 Area Ratio: 9.290e-1 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.94 (12.93) min Calculated conc: 5.365 Area Ratio: 7.358e-1 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.73 (11.73) min Calculated conc: 4.798 Area Ratio: 1.339e0 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.73 (11.72) min Calculated conc: 5.140 Area Ratio: 7.617e-1 Sample Type: (Unknown)	

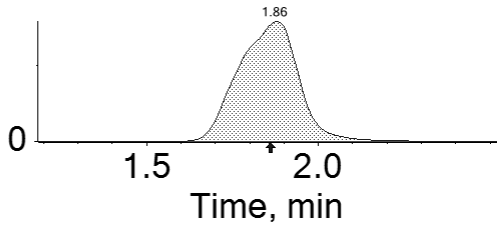
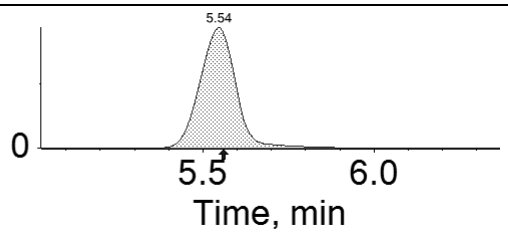
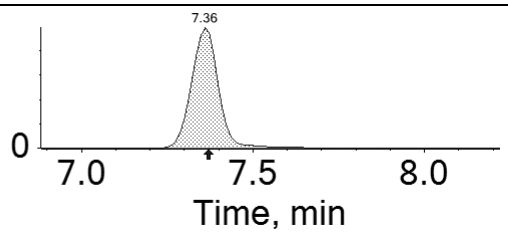
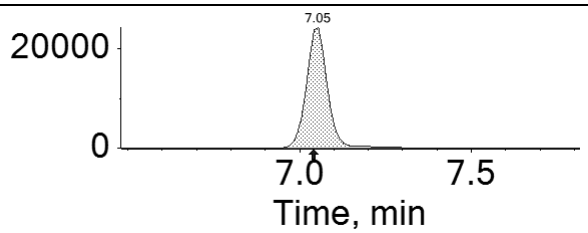
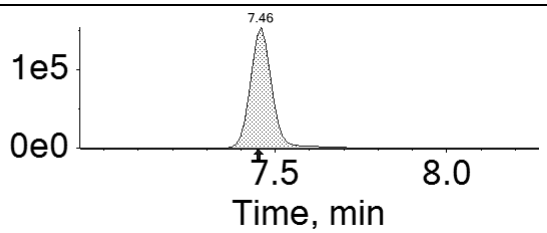
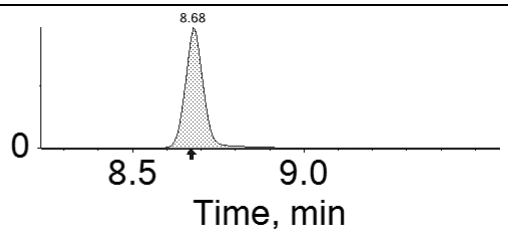
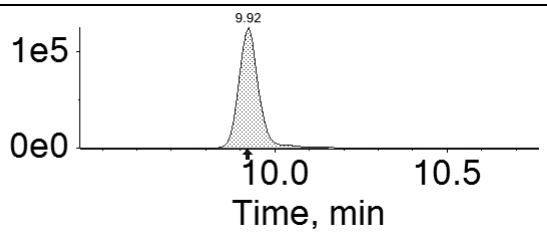
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 5.038 Area Ratio: 7.445e-1 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 5.138 Area Ratio: 1.683e-1 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 5.350 Area Ratio: 7.007e-1 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 5.098 Area Ratio: 2.276e-1 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.96 (12.96) min Calculated conc: 5.185 Area Ratio: 6.841e-1 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.96 (12.97) min Calculated conc: 4.924 Area Ratio: 1.112e-1 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.73 (13.73) min Calculated conc: 4.956 Area Ratio: 7.137e-1 Sample Type: (Unknown)	

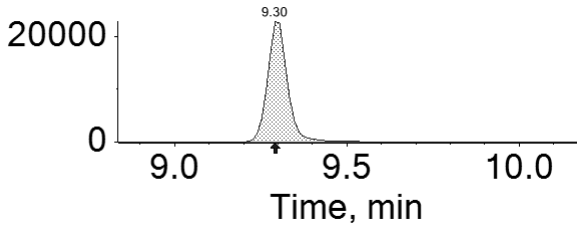
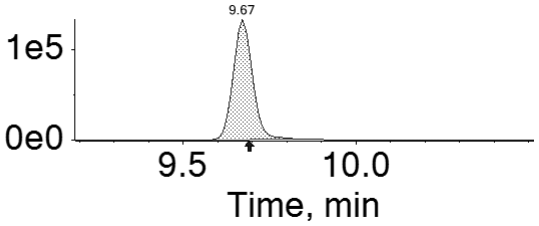
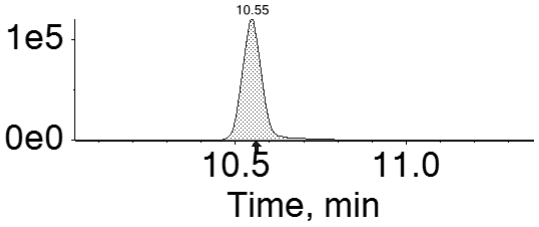
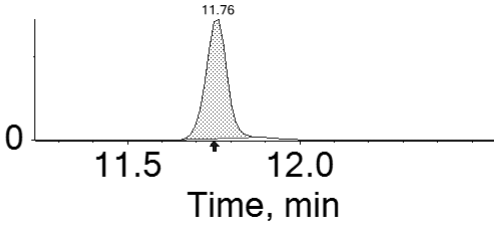
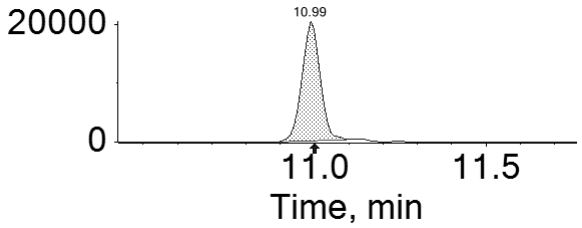
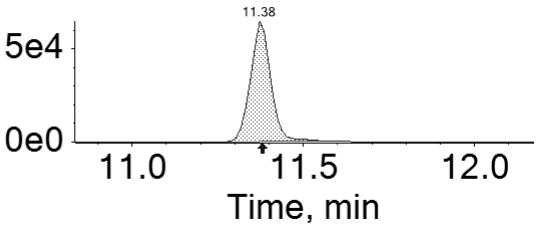
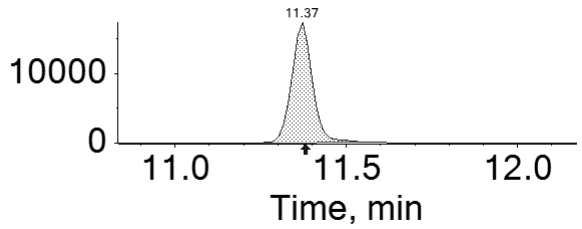
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: 5.246 Area Ratio: 1.399e-1 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.48 (14.48) min Calculated conc: 5.175 Area Ratio: 8.518e-1 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.47 (14.48) min Calculated conc: 5.204 Area Ratio: 1.174e-1 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 1.387 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.76 (11.76) min Calculated conc: 1.500 Area Ratio: N/A Sample Type: (Unknown)	

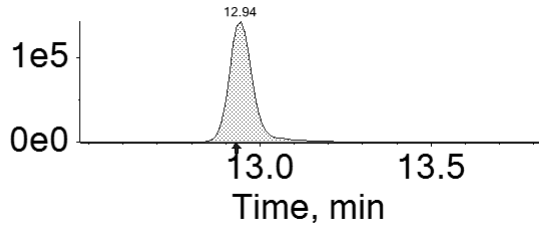
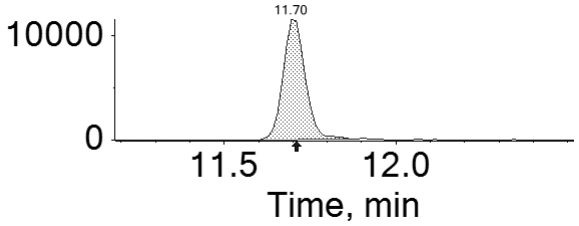
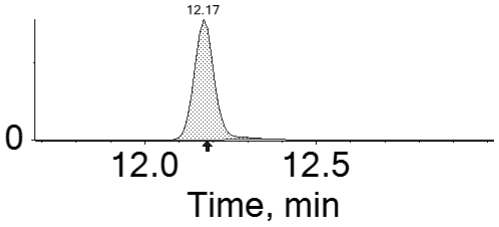
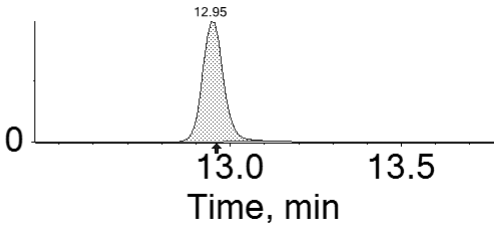
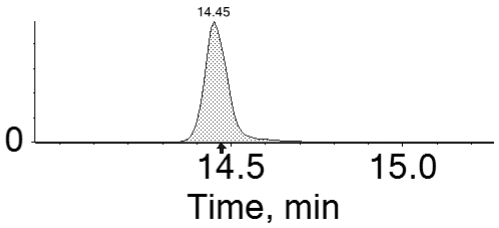
Sample Name	CCV-Low	**Injection Vial**	2
Sample ID	CAL-19206-006-01	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-25T08:52:42	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190624A.wiff		
Result Table	190624AM		
Sample Comment			

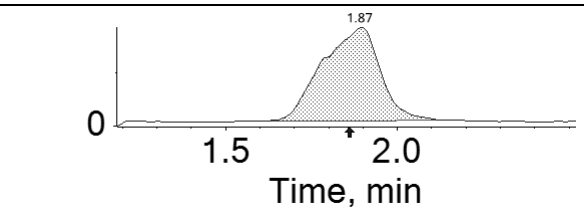
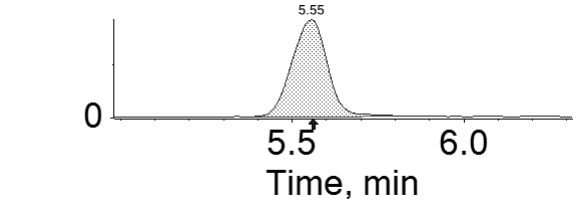
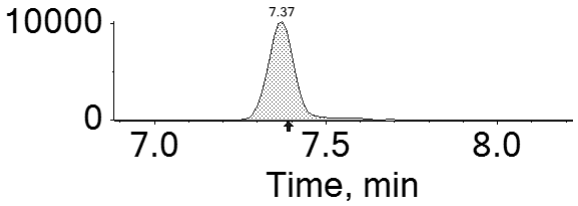
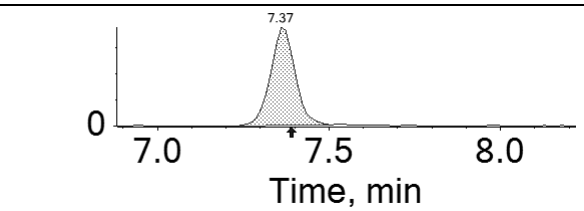
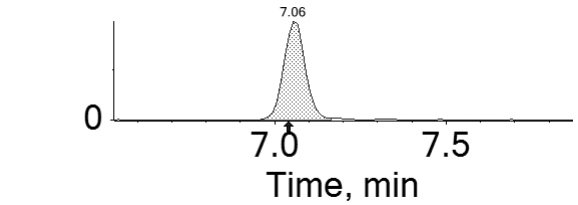
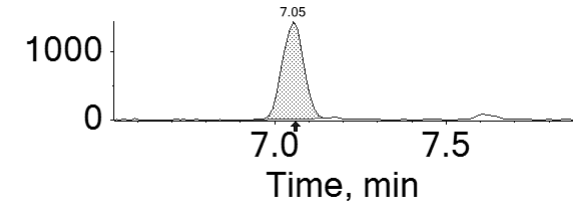
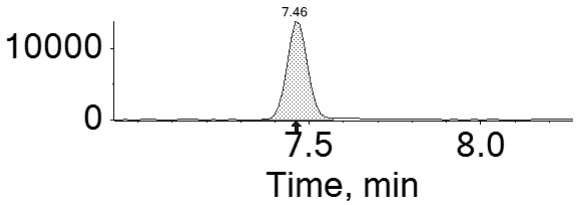
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	9.632e5	1.86	1.00	-
13C5_PFPeA	6.752e5	5.54	1.00	-
13C3_PFBS	5.374e5	7.36	1.00	-
13C2_4:2FTS	1.026e5	7.05	1.00	-
13C5_PFHxA	6.621e5	7.46	1.00	-
13C4_PFHpA	7.155e5	8.68	1.00	-
13C3_PFHxS	4.940e5	9.92	1.00	-
13C2_6:2FTS	9.198e4	9.30	1.00	-
13C8_PFOA	5.152e5	9.67	1.00	-
13C9_PFNA	4.878e5	10.55	1.00	-
13C8_PFOS	3.103e5	11.76	1.00	-
13C2_8:2FTS	7.447e4	10.99	1.00	-
13C6_PFDA	2.640e5	11.38	1.00	-
d3-MeFOSAA	7.281e4	11.37	1.00	-
13C8_FOSA	6.944e5	12.94	1.00	-
d5-EtFOSAA	5.178e4	11.70	1.00	-
13C7_PFUdA	3.172e5	12.17	1.00	-
13C2_PFDoA	4.253e5	12.95	1.00	-
13C2_PFTeDA	2.330e5	14.45	1.00	-

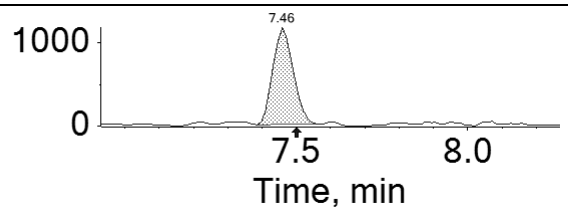
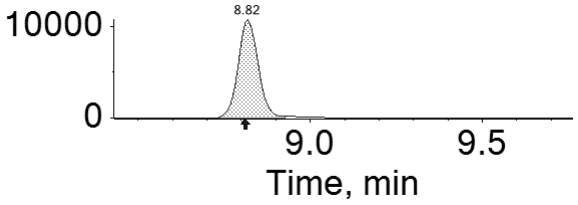
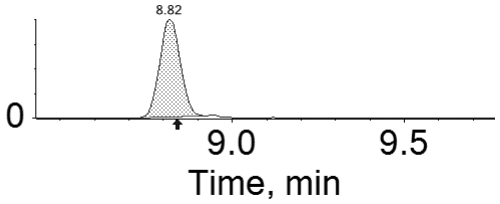
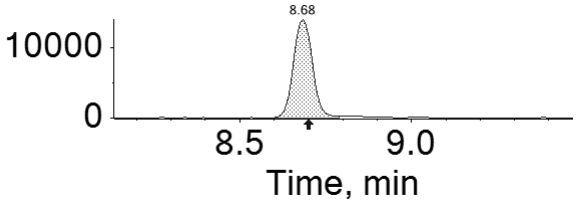
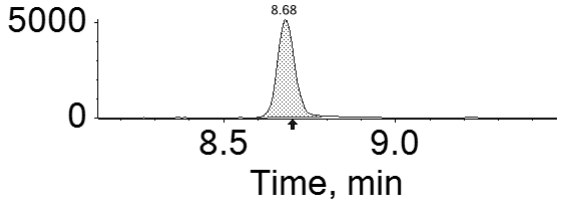
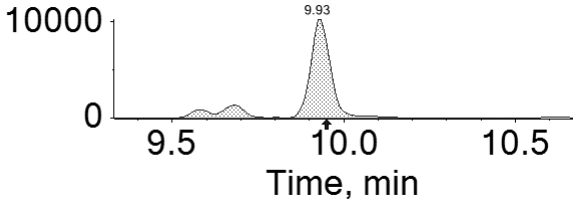
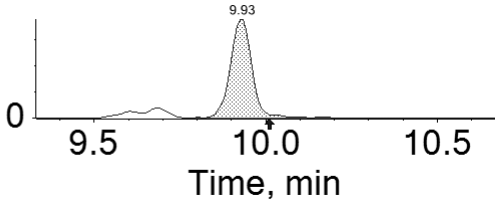
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.042e+05	1.87	N/A	<1 points
PFPeA	6.677e+04	5.55	N/A	<1 points
PFBS	5.559e+04	7.37	N/A	<1 points
PFBS_2	1.878e+04	7.37	N/A	<1 points
4:2FTS	8.659e+03	7.06	N/A	<1 points
4:2FTS_2	6.261e+03	7.05	N/A	<1 points
PFHxA	5.764e+04	7.46	N/A	<1 points
PFHxA_2	4.838e+03	7.46	N/A	<1 points
PFPeS	4.359e+04	8.82	N/A	<1 points
PFPeS_2	1.668e+04	8.82	N/A	<1 points
PFHpA	5.371e+04	8.68	N/A	<1 points
PFHpA_2	1.821e+04	8.68	N/A	<1 points
PFHxS	5.200e+04	9.93	N/A	<1 points
PFHxS_2	1.661e+04	9.93	N/A	<1 points
6:2FTS	1.162e+04	9.30	N/A	<1 points
6:2FTS_2	8.188e+03	9.30	N/A	<1 points
PFOA	6.097e+04	9.68	N/A	<1 points
PFOA_2	2.377e+04	9.68	N/A	<1 points
PFHpS	5.137e+04	10.88	N/A	<1 points
PFHpS_2	1.404e+04	10.88	N/A	<1 points
PFNA	3.325e+04	10.56	N/A	<1 points
PFNA_2	1.130e+04	10.56	N/A	<1 points
PFOS	3.944e+04	11.76	N/A	<1 points
PFOS_2	9.269e+03	11.77	N/A	<1 points
8:2FTS	7.350e+03	11.00	N/A	<1 points
8:2FTS_2	6.570e+03	10.99	N/A	<1 points
PFDA	2.962e+04	11.38	N/A	<1 points
PFDA_2	7.849e+03	11.38	N/A	<1 points
PFNS	3.999e+04	12.59	N/A	<1 points
PFNS_2	1.266e+04	12.59	N/A	<1 points
N-MeFOSAA	1.069e+04	11.38	N/A	<1 points
N-MeFOSAA_2	5.751e+03	11.38	N/A	<1 points
FOSA	4.442e+04	12.94	N/A	<1 points
N-EtFOSAA	8.276e+03	11.72	N/A	<1 points
N-EtFOSAA_2	3.779e+03	11.72	N/A	<1 points
PFUdA	2.144e+04	12.18	N/A	<1 points
PFUdA_2	3.743e+03	12.18	N/A	<1 points
PFDS	2.694e+04	13.39	N/A	<1 points
PFDS_2	1.021e+04	13.39	N/A	<1 points
PFDoA	2.653e+04	12.95	N/A	<1 points
PFDoA_2	5.018e+03	12.95	N/A	<1 points
PFTrDA	2.915e+04	13.72	N/A	<1 points
PFTrDA_2	5.491e+03	13.71	N/A	<1 points
PFTeDA	1.861e+04	14.46	N/A	<1 points
PFTeDA_2	2.411e+03	14.46	N/A	<1 points
13C4_PFOA	6.946e+05	9.67	N/A	<1 points
13C4_PFOS	4.082e+05	11.75	N/A	<1 points

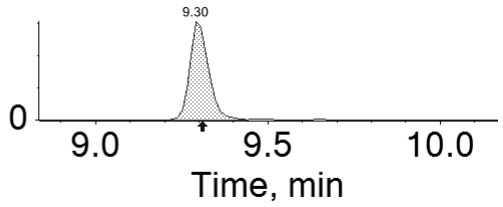
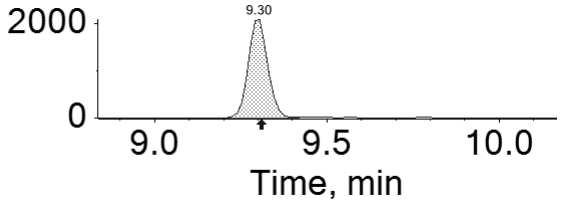
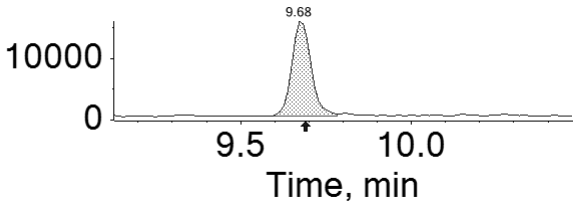
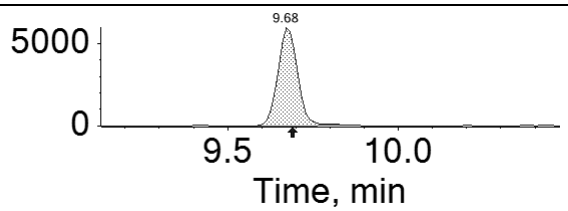
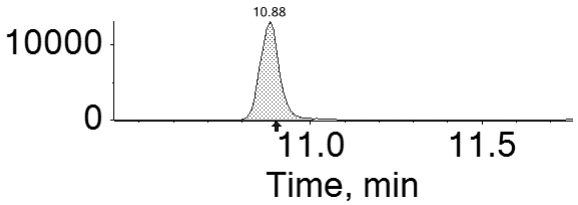
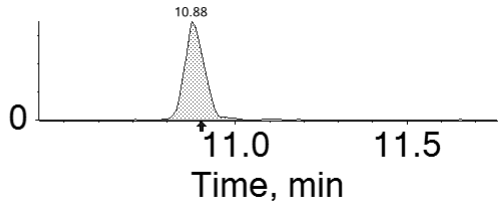
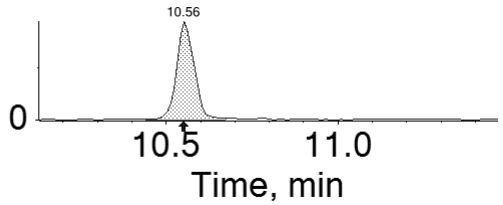
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.86(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.54(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.46(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.92(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

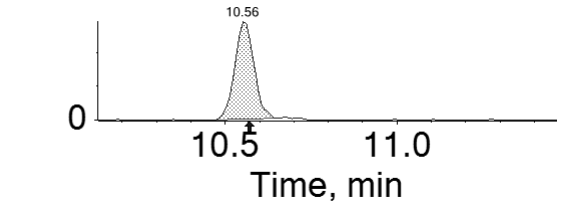
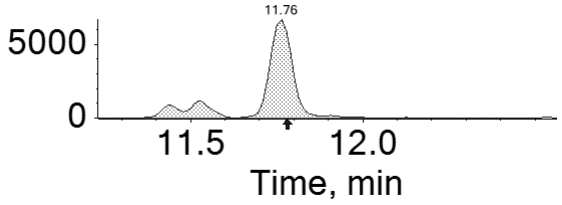
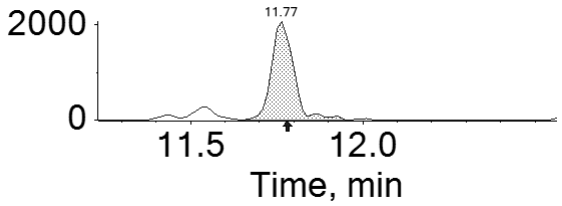
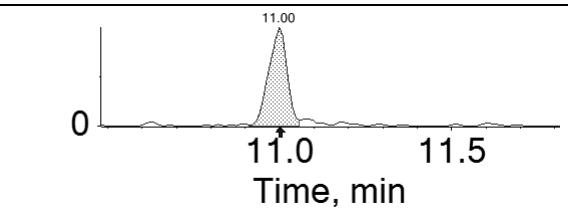
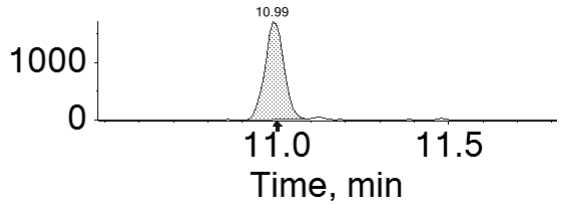
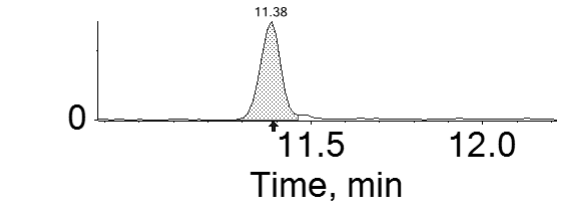
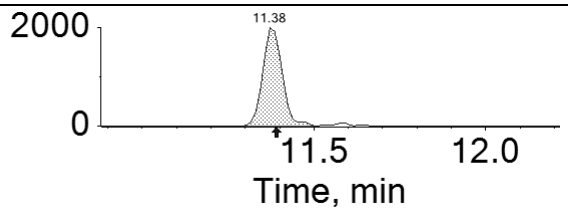
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

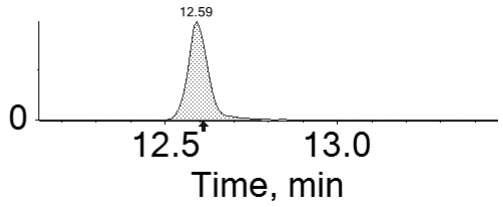
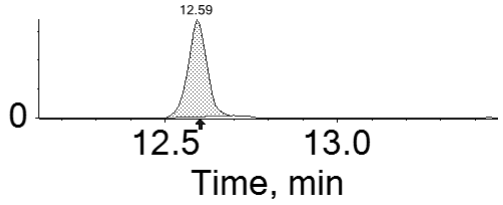
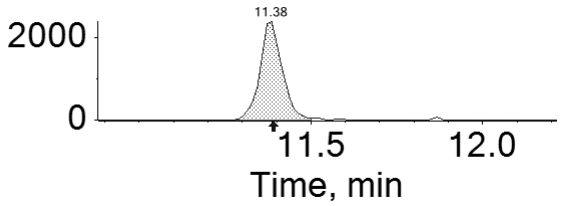
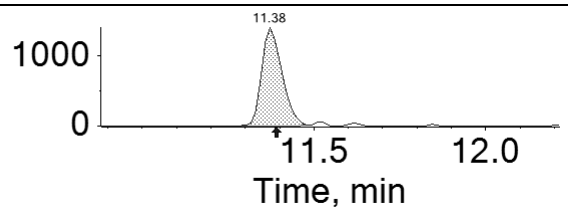
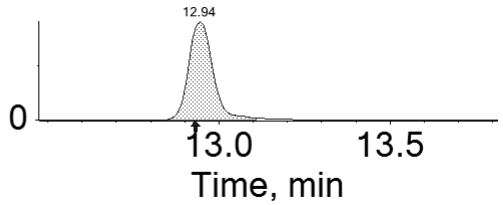
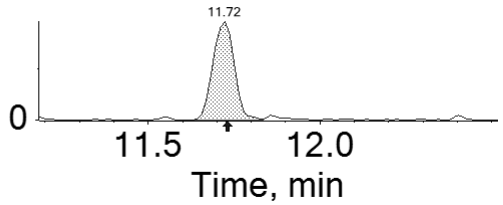
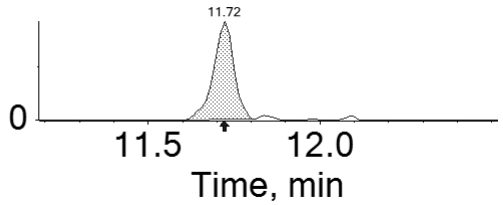
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.95(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.45(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

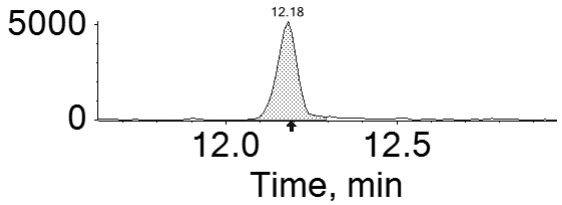
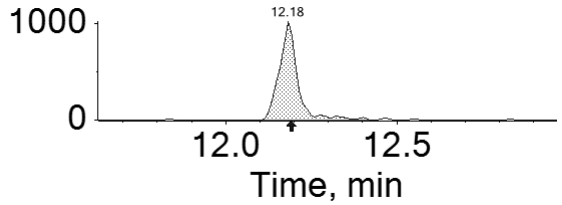
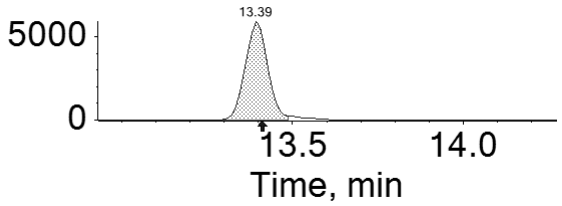
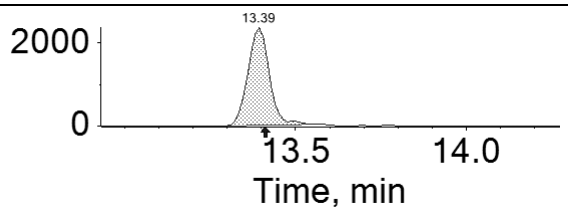
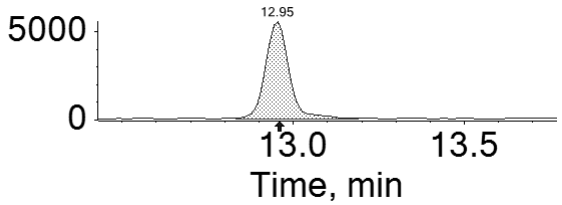
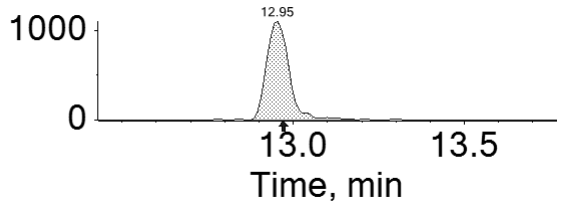
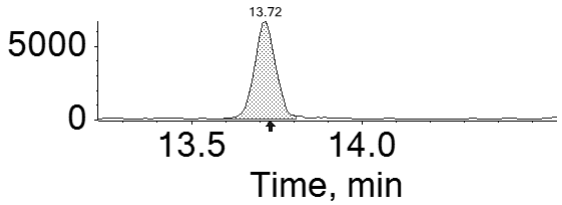
PFBA (213.0 / 169.0) RT (Exp. RT): 1.87 (1.86) min Calculated conc: <1 points Area Ratio: 1.082e-1 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.55 (5.56) min Calculated conc: <1 points Area Ratio: 9.890e-2 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: <1 points Area Ratio: 1.034e-1 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.37 (7.39) min Calculated conc: <1 points Area Ratio: 3.494e-2 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: <1 points Area Ratio: 8.436e-2 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.05 (7.06) min Calculated conc: <1 points Area Ratio: 6.099e-2 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.46 (7.46) min Calculated conc: <1 points Area Ratio: 8.706e-2 Sample Type: (Unknown)	

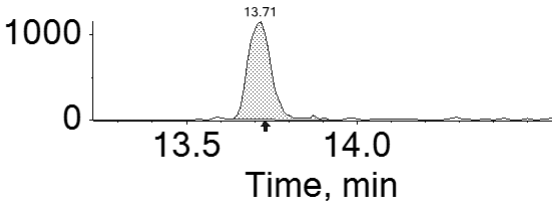
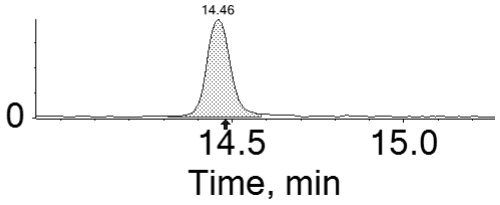
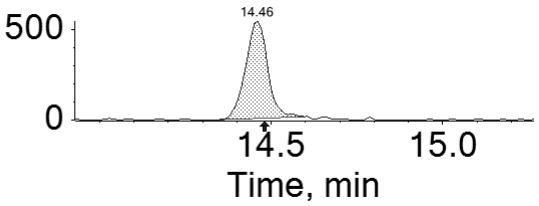
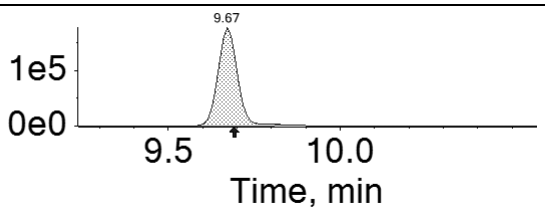
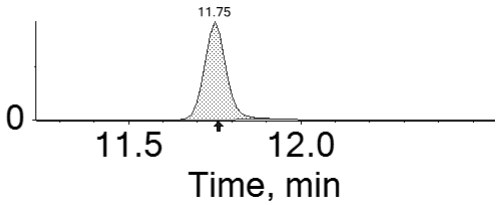
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.46 (7.50) min Calculated conc: <1 points Area Ratio: 7.307e-3 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: <1 points Area Ratio: 6.092e-2 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.82 (8.84) min Calculated conc: <1 points Area Ratio: 2.331e-2 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 7.507e-2 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 2.545e-2 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: <1 points Area Ratio: 1.053e-1 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: <1 points Area Ratio: 3.363e-2 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 1.263e-1 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 8.901e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: <1 points Area Ratio: 1.183e-1 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: <1 points Area Ratio: 4.614e-2 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: <1 points Area Ratio: 1.053e-1 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: <1 points Area Ratio: 2.877e-2 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: <1 points Area Ratio: 6.817e-2 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: <1 points Area Ratio: 2.317e-2 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: <1 points Area Ratio: 1.271e-1 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: <1 points Area Ratio: 2.987e-2 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: <1 points Area Ratio: 9.870e-2 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: <1 points Area Ratio: 8.822e-2 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 1.122e-1 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 2.973e-2 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: <1 points Area Ratio: 8.199e-2 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: <1 points Area Ratio: 3.993e-2 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 1.469e-1 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 7.898e-2 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.94 (12.93) min Calculated conc: <1 points Area Ratio: 6.397e-2 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: <1 points Area Ratio: 1.598e-1 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: <1 points Area Ratio: 7.297e-2 Sample Type: (Unknown)	

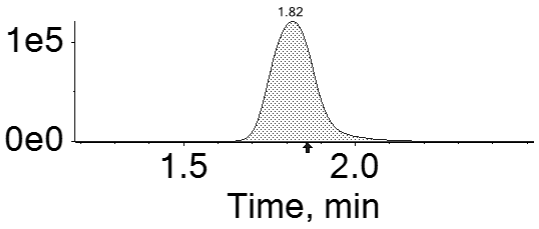
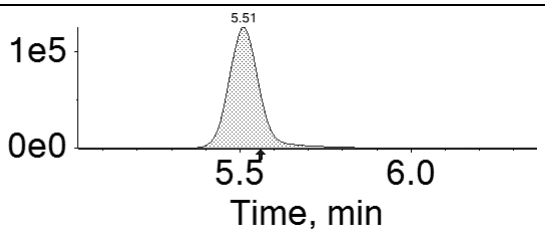
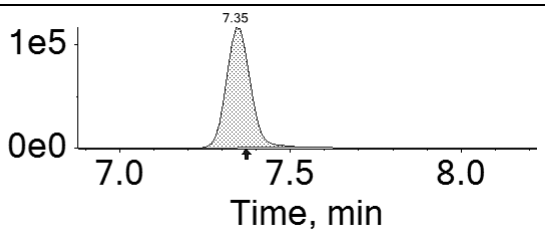
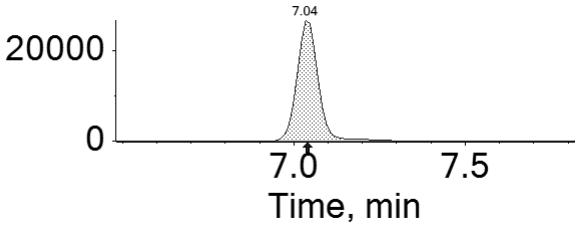
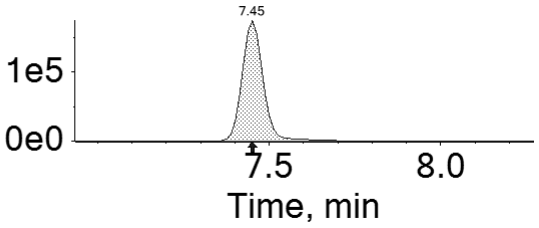
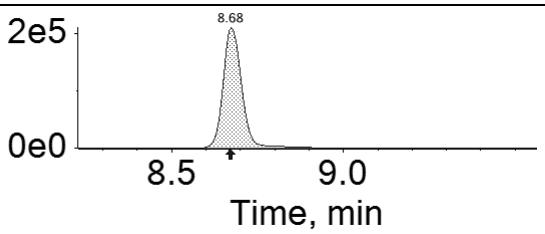
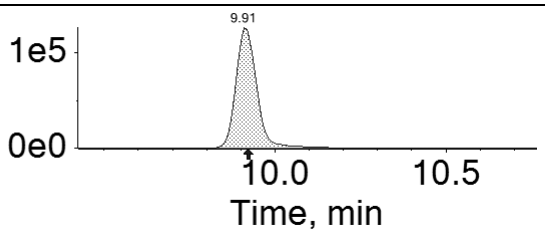
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: <1 points Area Ratio: 6.760e-2 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: <1 points Area Ratio: 1.180e-2 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: <1 points Area Ratio: 6.334e-2 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.39 (13.41) min Calculated conc: <1 points Area Ratio: 2.401e-2 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.95 (12.96) min Calculated conc: <1 points Area Ratio: 6.238e-2 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: <1 points Area Ratio: 1.180e-2 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: <1 points Area Ratio: 6.854e-2 Sample Type: (Unknown)	

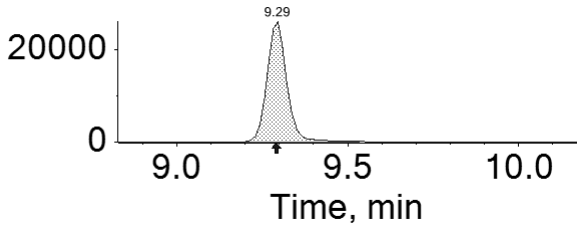
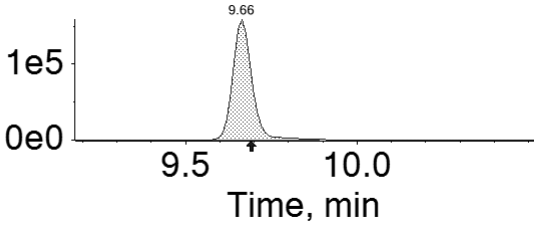
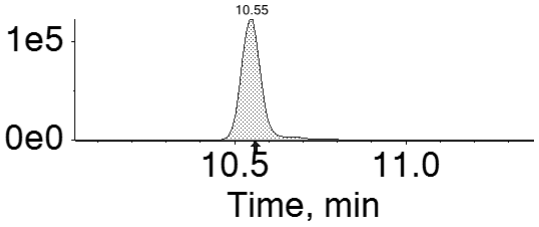
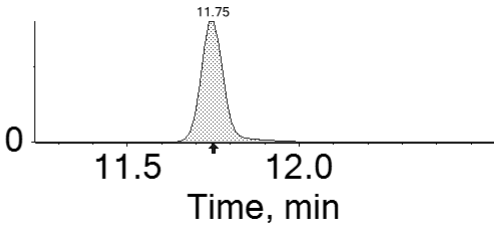
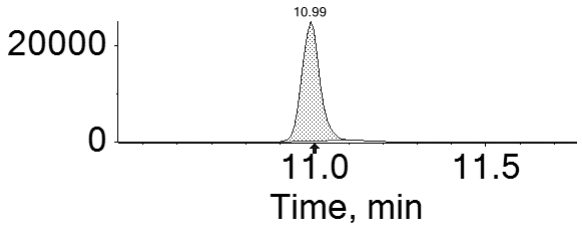
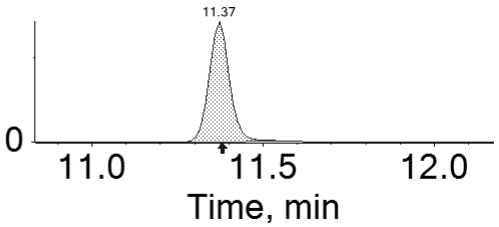
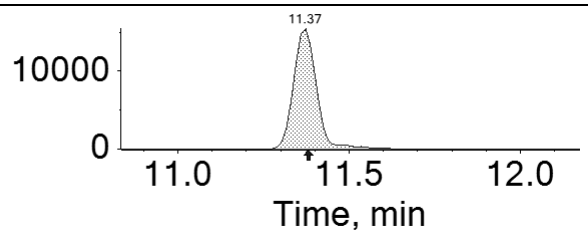
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: <1 points Area Ratio: 1.291e-2 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: <1 points Area Ratio: 7.986e-2 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: <1 points Area Ratio: 1.035e-2 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Unknown)	

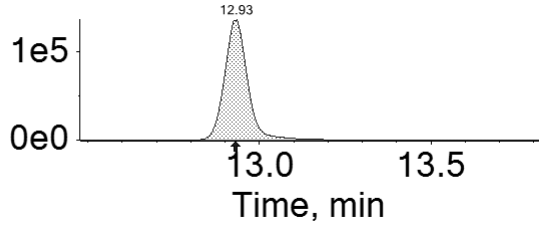
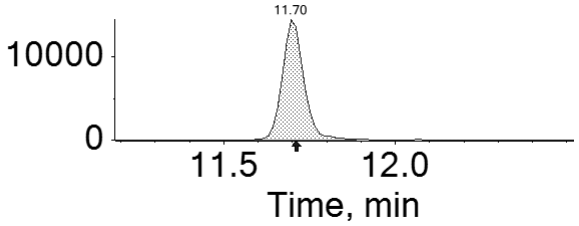
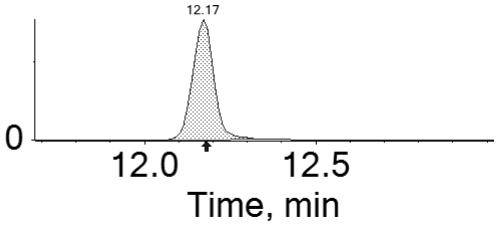
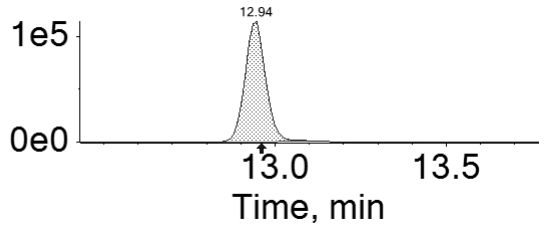
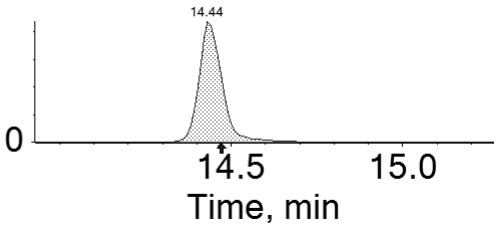
Sample Name	CCV-Med	**Injection Vial**	13
Sample ID	CAL-19206-006-04	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-25T14:12:52	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190625A.wiff		
Result Table	190625AM		
Sample Comment			

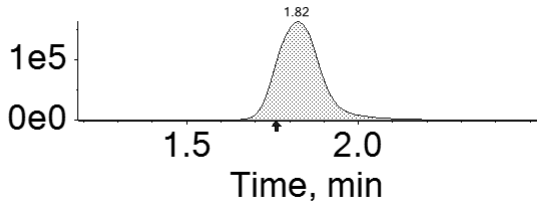
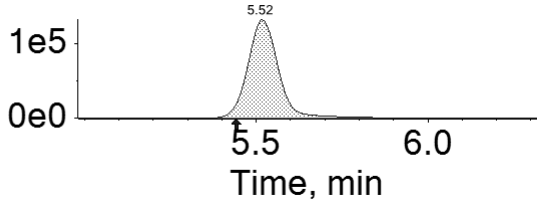
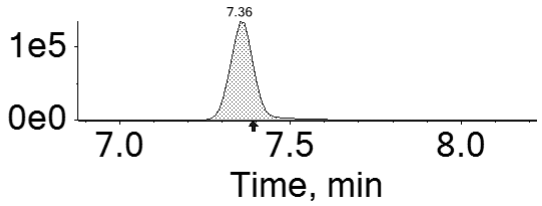
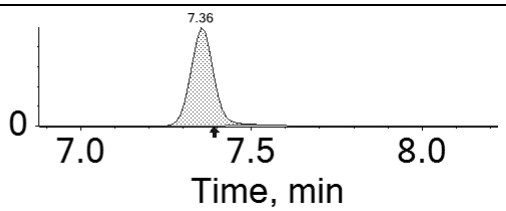
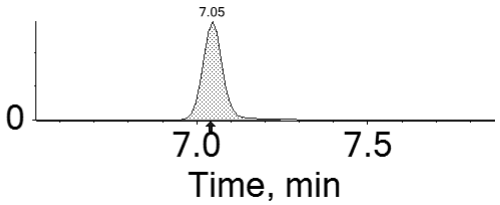
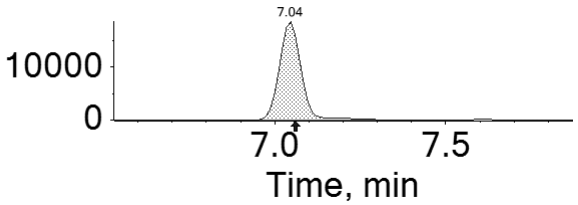
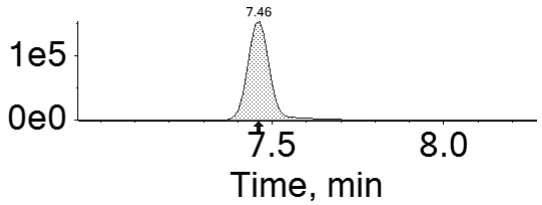
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.092e6	1.82	1.00	-
13C5_PFPeA	7.785e5	5.51	1.00	-
13C3_PFBS	5.671e5	7.35	1.00	-
13C2_4:2FTS	1.128e5	7.04	1.00	-
13C5_PFHxA	7.421e5	7.45	1.00	-
13C4_PFHpA	7.954e5	8.68	1.00	-
13C3_PFHxS	5.296e5	9.91	1.00	-
13C2_6:2FTS	1.038e5	9.29	1.00	-
13C8_PFOA	6.106e5	9.66	1.00	-
13C9_PFNA	5.098e5	10.55	1.00	-
13C8_PFOS	3.701e5	11.75	1.00	-
13C2_8:2FTS	9.114e4	10.99	1.00	-
13C6_PFDA	2.941e5	11.37	1.00	-
d3-MeFOSAA	7.197e4	11.37	1.00	-
13C8_FOSA	6.397e5	12.93	1.00	-
d5-EtFOSAA	6.249e4	11.70	1.00	-
13C7_PFUdA	3.289e5	12.17	1.00	-
13C2_PFDoA	4.789e5	12.94	1.00	-
13C2_PFTeDA	2.031e5	14.44	1.00	-

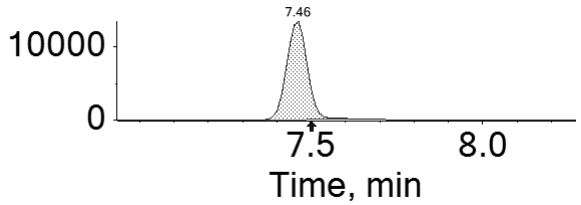
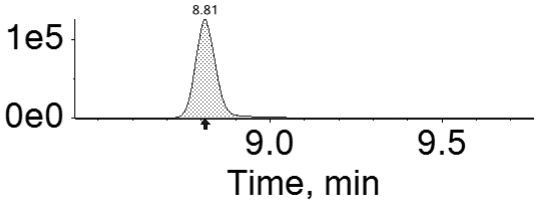
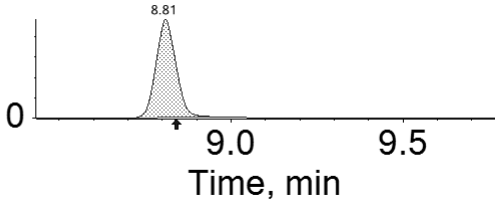
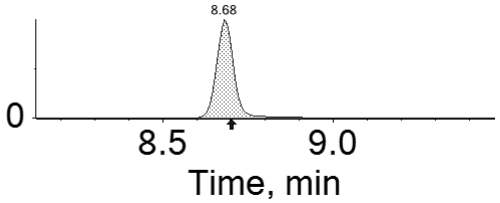
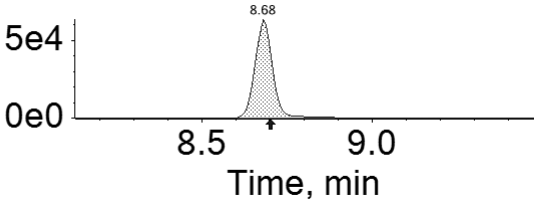
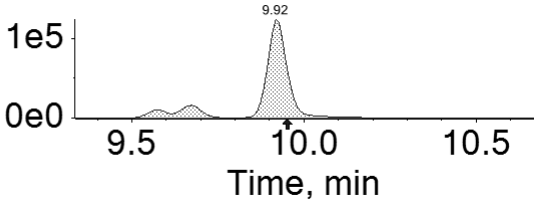
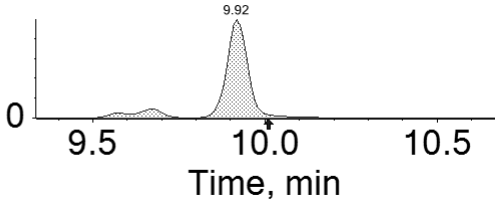
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.445e+06	1.82	5.00	<1 points
PFPeA	8.148e+05	5.52	5.00	<1 points
PFBS	6.635e+05	7.36	5.00	<1 points
PFBS_2	2.326e+05	7.36	5.00	<1 points
4:2FTS	1.196e+05	7.05	5.00	<1 points
4:2FTS_2	8.221e+04	7.04	5.00	<1 points
PFHxA	6.856e+05	7.46	5.00	<1 points
PFHxA_2	5.666e+04	7.46	5.00	<1 points
PFPeS	5.261e+05	8.81	5.00	<1 points
PFPeS_2	1.927e+05	8.81	5.00	<1 points
PFHpA	7.028e+05	8.68	5.00	<1 points
PFHpA_2	2.260e+05	8.68	5.00	<1 points
PFHxS	6.129e+05	9.92	5.00	<1 points
PFHxS_2	2.470e+05	9.92	5.00	<1 points
6:2FTS	1.423e+05	9.30	5.00	<1 points
6:2FTS_2	1.038e+05	9.30	5.00	<1 points
PFOA	7.888e+05	9.67	5.00	<1 points
PFOA_2	2.627e+05	9.67	5.00	<1 points
PFHpS	6.126e+05	10.87	5.00	<1 points
PFHpS_2	1.774e+05	10.87	5.00	<1 points
PFNA	3.988e+05	10.56	5.00	<1 points
PFNA_2	1.322e+05	10.56	5.00	<1 points
PFOS	4.370e+05	11.76	5.00	<1 points
PFOS_2	1.220e+05	11.76	5.00	<1 points
8:2FTS	9.829e+04	10.99	5.00	<1 points
8:2FTS_2	8.845e+04	10.99	5.00	<1 points
PFDA	3.336e+05	11.38	5.00	<1 points
PFDA_2	9.151e+04	11.38	5.00	<1 points
PFNS	4.484e+05	12.58	5.00	<1 points
PFNS_2	1.465e+05	12.58	5.00	<1 points
N-MeFOSAA	1.320e+05	11.38	5.00	<1 points
N-MeFOSAA_2	6.040e+04	11.38	5.00	<1 points
FOSA	4.657e+05	12.93	5.00	<1 points
N-EtFOSAA	8.974e+04	11.72	5.00	<1 points
N-EtFOSAA_2	5.091e+04	11.72	5.00	<1 points
PFUdA	2.607e+05	12.17	5.00	<1 points
PFUdA_2	4.844e+04	12.17	5.00	<1 points
PFDS	3.325e+05	13.38	5.00	<1 points
PFDS_2	1.140e+05	13.37	5.00	<1 points
PFDoA	3.067e+05	12.94	5.00	<1 points
PFDoA_2	5.113e+04	12.95	5.00	<1 points
PFTrDA	3.230e+05	13.70	5.00	<1 points
PFTrDA_2	5.780e+04	13.70	5.00	<1 points
PFTeDA	1.837e+05	14.44	5.00	<1 points
PFTeDA_2	2.177e+04	14.44	5.00	<1 points
13C4_PFOA	7.047e+05	9.67	1.00	<1 points
13C4_PFOS	4.383e+05	11.74	1.00	<1 points

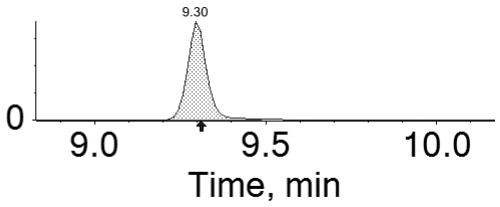
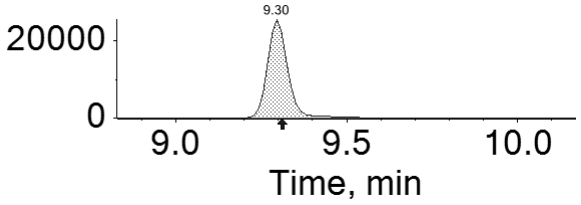
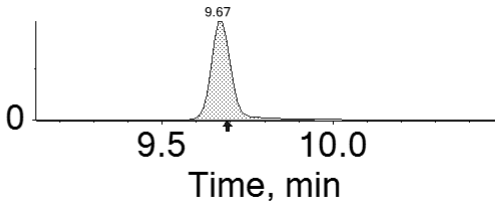
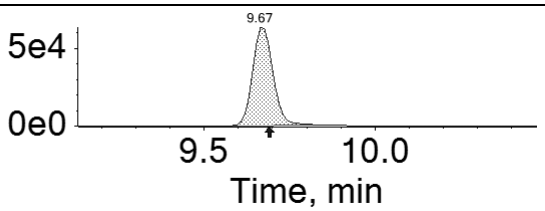
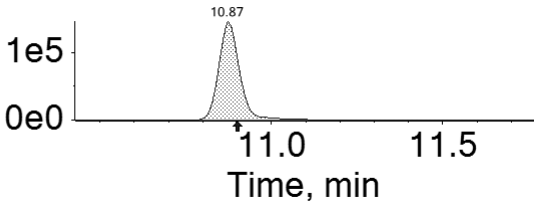
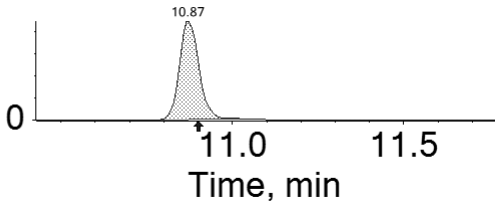
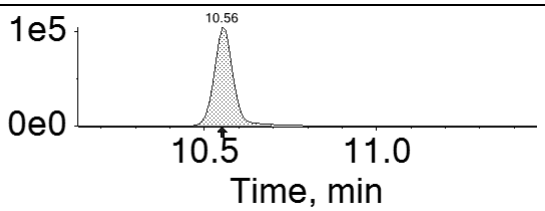
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.82(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.51(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.35(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.04(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.45(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.91(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

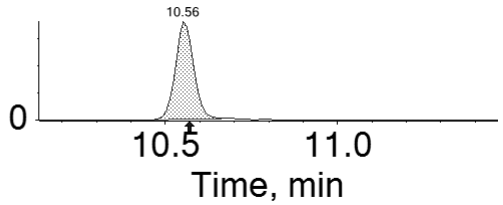
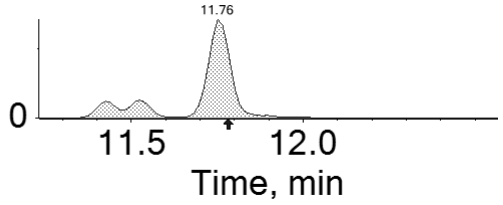
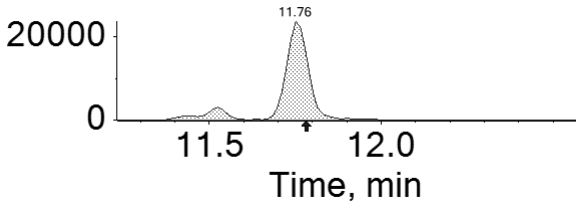
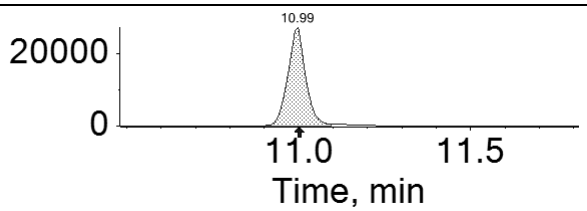
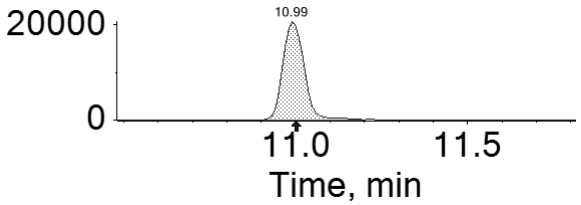
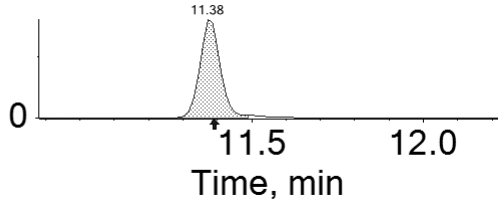
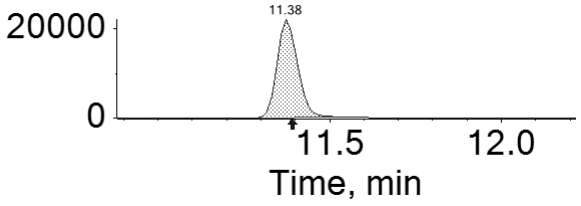
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.29(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.66(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

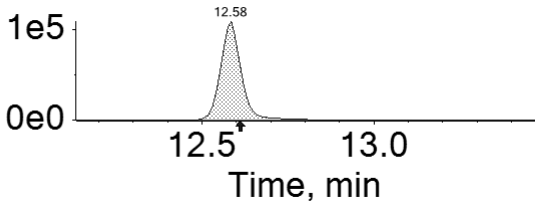
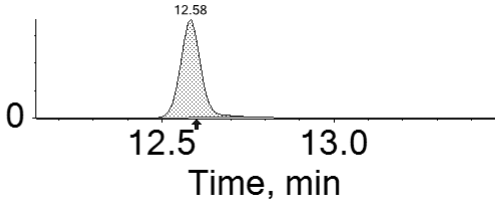
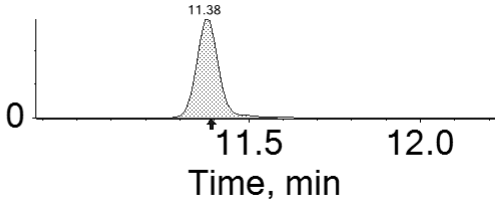
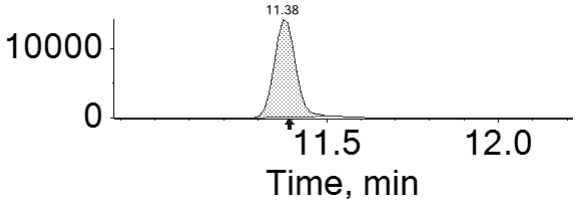
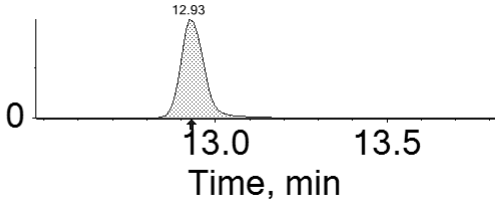
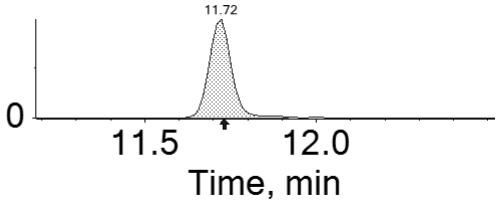
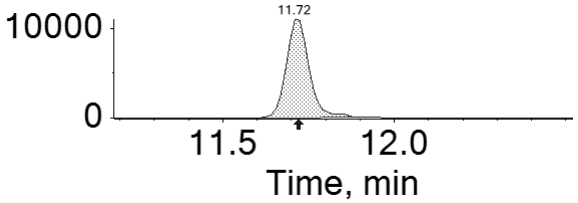
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.93(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.44(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

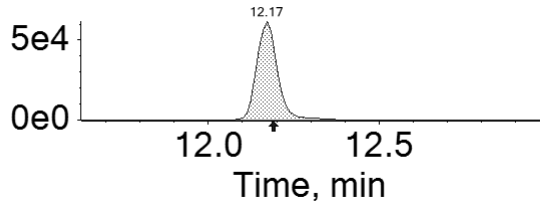
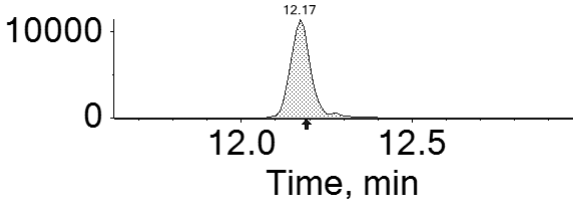
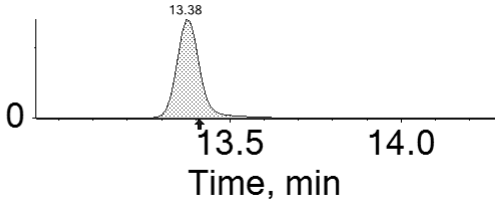
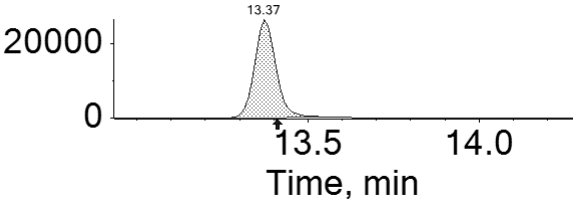
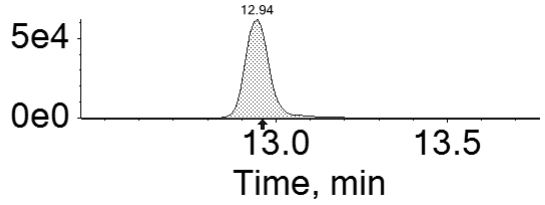
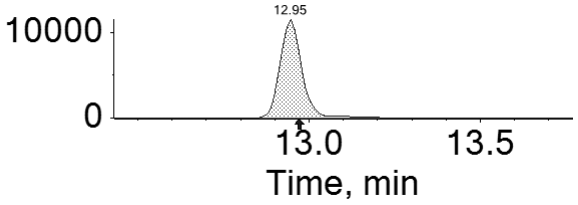
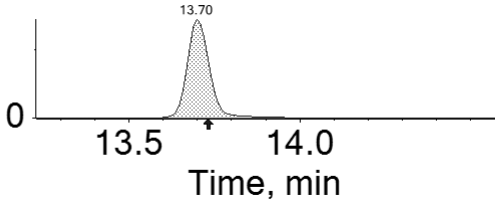
PFBA (213.0 / 169.0) RT (Exp. RT): 1.82 (1.76) min Calculated conc: <1 points Area Ratio: 1.324e0 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.52 (5.44) min Calculated conc: <1 points Area Ratio: 1.047e0 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.36 (7.39) min Calculated conc: <1 points Area Ratio: 1.170e0 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.36 (7.39) min Calculated conc: <1 points Area Ratio: 4.101e-1 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.05 (7.04) min Calculated conc: <1 points Area Ratio: 1.060e0 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.04 (7.06) min Calculated conc: <1 points Area Ratio: 7.291e-1 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.46 (7.46) min Calculated conc: <1 points Area Ratio: 9.239e-1 Sample Type: (Quality Control)	

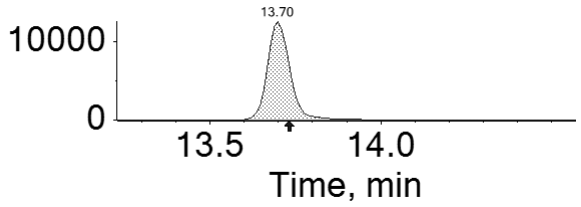
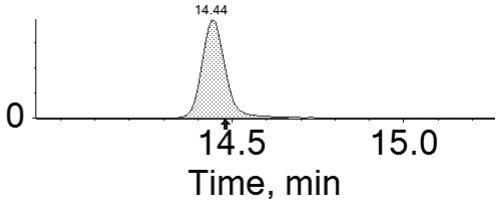
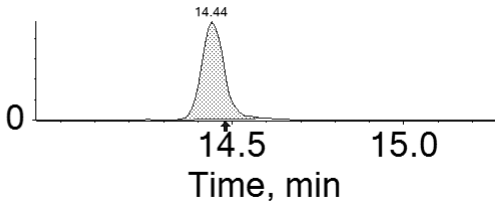
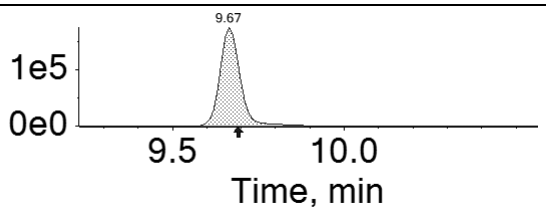
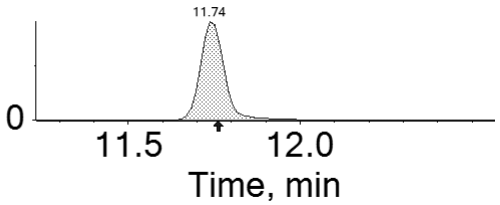
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.46 (7.50) min Calculated conc: <1 points Area Ratio: 7.635e-2 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.81 (8.81) min Calculated conc: <1 points Area Ratio: 6.614e-1 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.81 (8.84) min Calculated conc: <1 points Area Ratio: 2.423e-1 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 8.836e-1 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 2.841e-1 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.92 (9.95) min Calculated conc: <1 points Area Ratio: 1.157e0 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.92 (10.01) min Calculated conc: <1 points Area Ratio: 4.664e-1 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 1.370e0 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 9.997e-1 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: 1.292e0 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: 4.302e-1 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: <1 points Area Ratio: 1.202e0 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: <1 points Area Ratio: 3.479e-1 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: <1 points Area Ratio: 7.823e-1 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: <1 points Area Ratio: 2.593e-1 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: <1 points Area Ratio: 1.181e0 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: <1 points Area Ratio: 3.296e-1 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: <1 points Area Ratio: 1.078e0 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: <1 points Area Ratio: 9.705e-1 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 1.134e0 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 3.111e-1 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.58 (12.61) min Calculated conc: <1 points Area Ratio: 8.796e-1 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.58 (12.60) min Calculated conc: <1 points Area Ratio: 4.453e-1 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 1.834e0 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 8.392e-1 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: <1 points Area Ratio: 7.280e-1 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: <1 points Area Ratio: 1.436e0 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: <1 points Area Ratio: 8.146e-1 Sample Type: (Quality Control)	

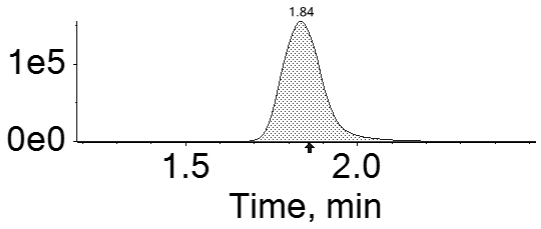
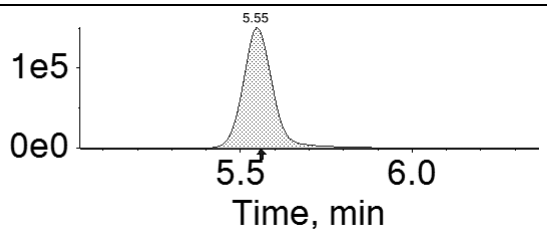
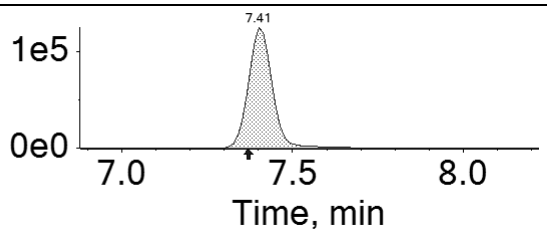
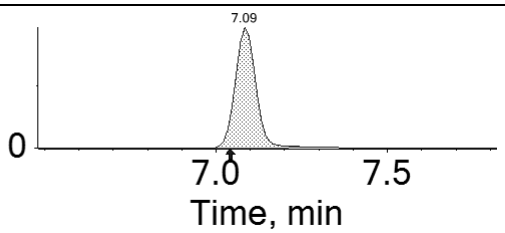
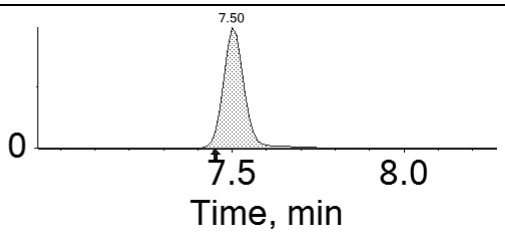
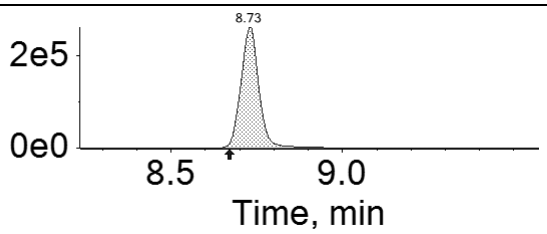
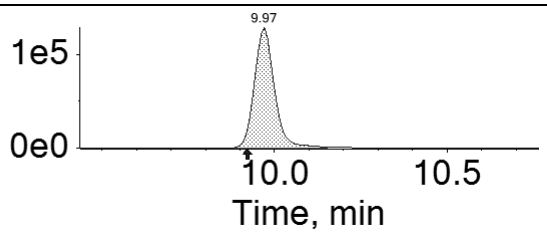
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: <1 points Area Ratio: 7.926e-1 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: <1 points Area Ratio: 1.473e-1 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.38 (13.41) min Calculated conc: <1 points Area Ratio: 6.943e-1 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.37 (13.41) min Calculated conc: <1 points Area Ratio: 2.381e-1 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.94 (12.96) min Calculated conc: <1 points Area Ratio: 6.404e-1 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: <1 points Area Ratio: 1.068e-1 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: <1 points Area Ratio: 6.744e-1 Sample Type: (Quality Control)	

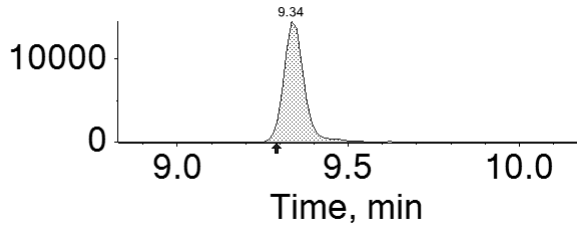
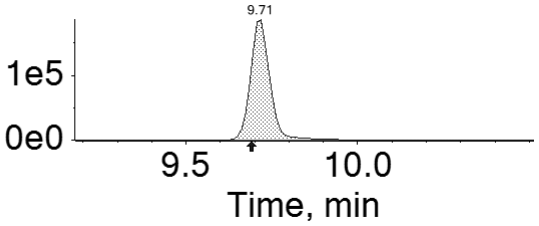
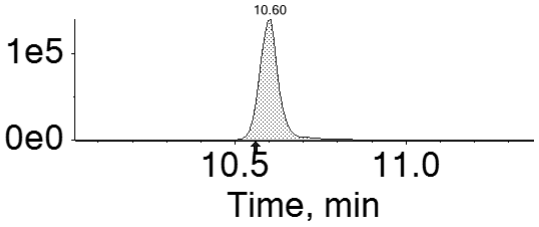
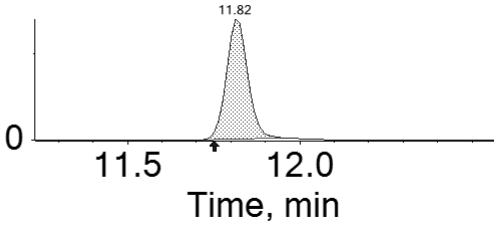
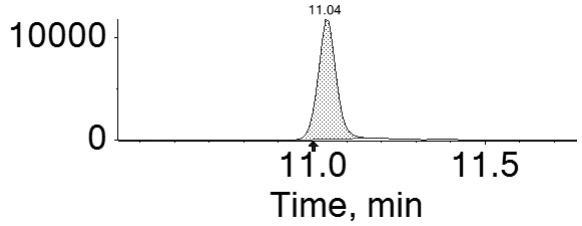
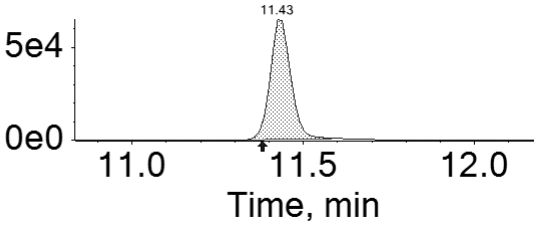
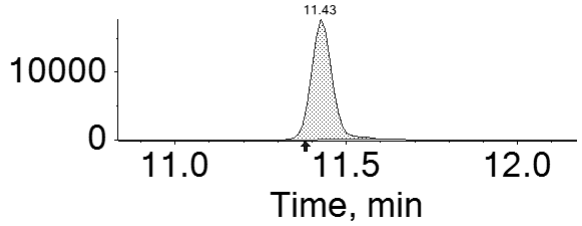
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: <1 points Area Ratio: 1.207e-1 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.44 (14.48) min Calculated conc: <1 points Area Ratio: 9.043e-1 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.44 (14.48) min Calculated conc: <1 points Area Ratio: 1.072e-1 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.74 (11.76) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Quality Control)	

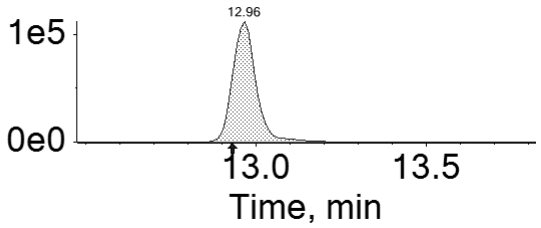
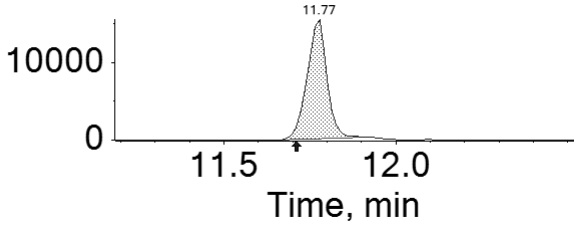
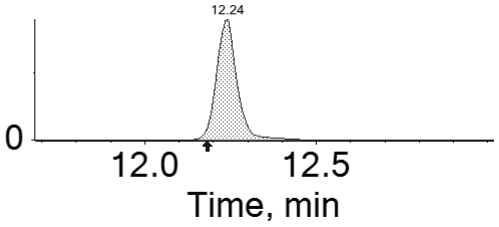
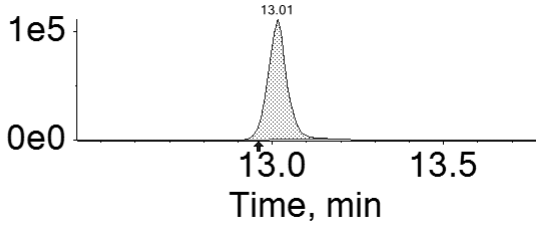
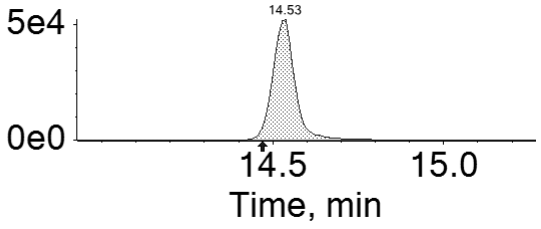
Sample Name	CCV-Low	**Injection Vial**	2
Sample ID	CAL-19206-006-01	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-07-01T13:06:40	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190701A.wiff		
Result Table	190701AM		
Sample Comment			

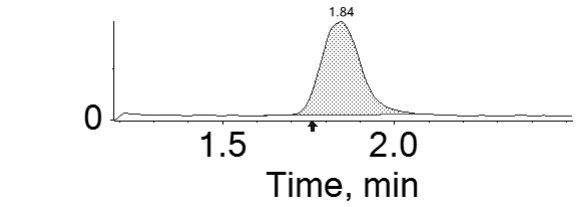
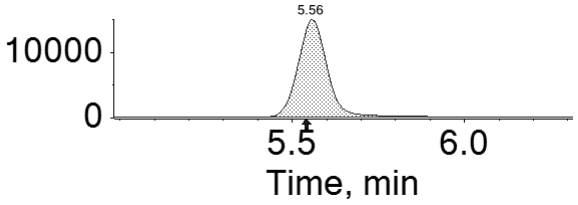
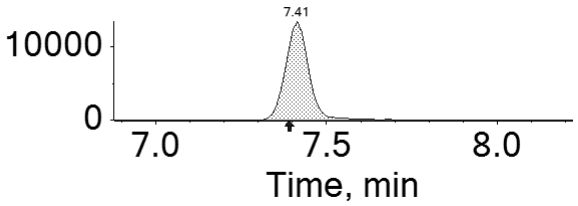
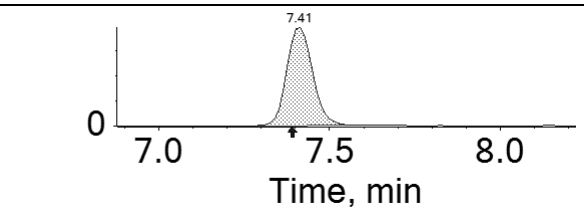
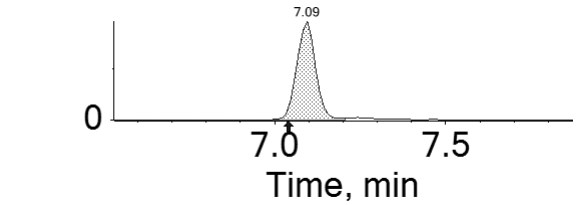
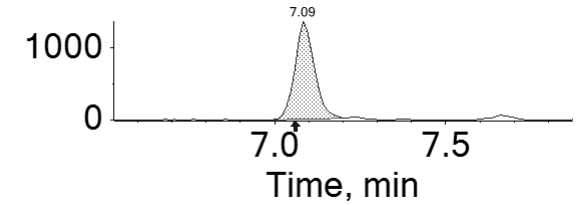
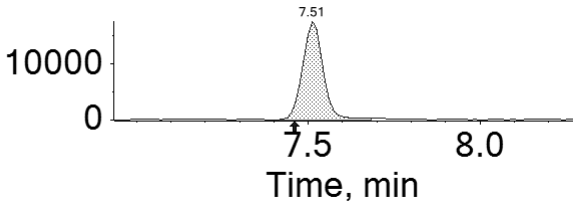
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.271e6	1.84	1.00	-
13C5_PFPeA	9.028e5	5.55	1.00	-
13C3_PFBS	6.049e5	7.41	1.00	-
13C2_4:2FTS	8.013e4	7.09	1.00	-
13C5_PFHxA	8.252e5	7.50	1.00	-
13C4_PFHpA	9.598e5	8.73	1.00	-
13C3_PFHxS	5.142e5	9.97	1.00	-
13C2_6:2FTS	6.016e4	9.34	1.00	-
13C8_PFOA	7.258e5	9.71	1.00	-
13C9_PFNA	5.485e5	10.60	1.00	-
13C8_PFOS	2.999e5	11.82	1.00	-
13C2_8:2FTS	4.268e4	11.04	1.00	-
13C6_PFDA	2.692e5	11.43	1.00	-
d3-MeFOSAA	7.471e4	11.43	1.00	-
13C8_FOSA	5.359e5	12.96	1.00	-
d5-EtFOSAA	6.150e4	11.77	1.00	-
13C7_PFUdA	3.717e5	12.24	1.00	-
13C2_PFDoA	4.215e5	13.01	1.00	-
13C2_PFTeDA	2.370e5	14.53	1.00	-

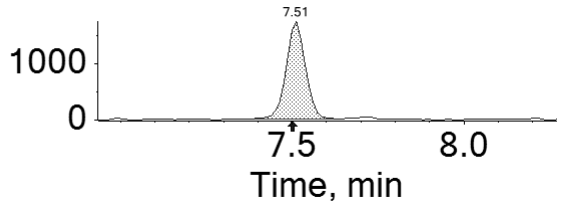
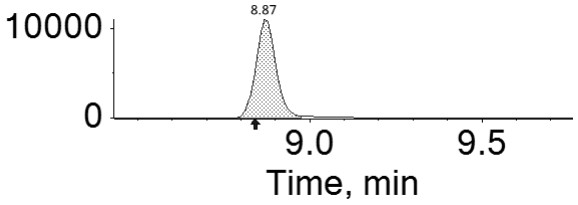
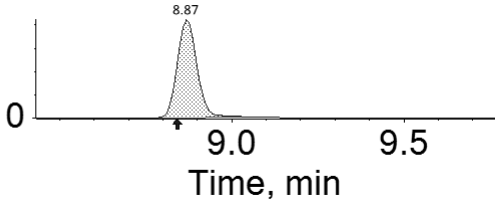
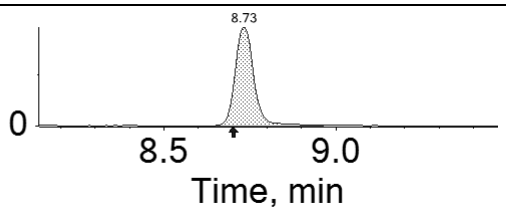
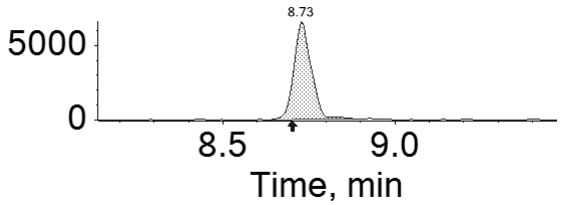
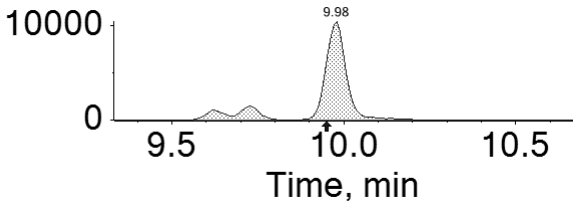
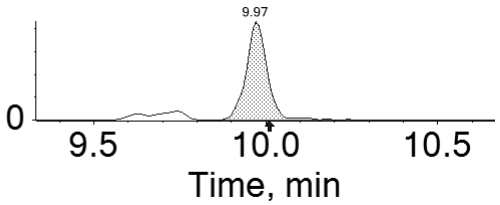
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.461e+05	1.84	N/A	0.515
PFPeA	8.743e+04	5.56	N/A	0.470
PFBS	6.343e+04	7.41	N/A	0.492
PFBS_2	2.074e+04	7.41	N/A	0.454
4:2FTS	7.432e+03	7.09	N/A	0.484
4:2FTS_2	5.375e+03	7.09	N/A	0.524
PFHxA	7.285e+04	7.51	N/A	0.463
PFHxA_2	6.826e+03	7.51	N/A	0.532
PFPeS	4.460e+04	8.87	N/A	0.476
PFPeS_2	1.687e+04	8.87	N/A	0.486
PFHpA	7.262e+04	8.73	N/A	0.469
PFHpA_2	2.289e+04	8.73	N/A	0.452
PFHxS	5.280e+04	9.98	N/A	0.461
PFHxS_2	1.841e+04	9.97	N/A	0.412
6:2FTS	8.731e+03	9.34	N/A	0.520
6:2FTS_2	6.059e+03	9.34	N/A	0.499
PFOA	8.775e+04	9.72	N/A	0.450
PFOA_2	3.059e+04	9.72	N/A	0.451
PFHpS	4.962e+04	10.94	N/A	0.497
PFHpS_2	1.420e+04	10.94	N/A	0.485
PFNA	4.321e+04	10.60	N/A	0.487
PFNA_2	1.470e+04	10.60	N/A	0.492
PFOS	3.440e+04	11.83	N/A	0.453
PFOS_2	1.011e+04	11.83	N/A	0.492
8:2FTS	4.946e+03	11.05	N/A	0.572
8:2FTS_2	4.739e+03	11.04	N/A	0.629
PFDA	3.399e+04	11.44	N/A	0.523
PFDA_2	9.287e+03	11.44	N/A	0.590
PFNS	3.689e+04	12.66	N/A	0.512
PFNS_2	1.219e+04	12.66	N/A	0.511
N-MeFOSAA	1.184e+04	11.43	N/A	0.460
N-MeFOSAA_2	7.330e+03	11.44	N/A	0.544
FOSA	3.392e+04	12.97	N/A	0.468
N-EtFOSAA	7.893e+03	11.78	N/A	0.436
N-EtFOSAA_2	3.613e+03	11.78	N/A	0.358
PFUdA	2.467e+04	12.24	N/A	0.478
PFUdA_2	5.402e+03	12.24	N/A	0.485
PFDS	2.639e+04	13.46	N/A	0.578
PFDS_2	9.271e+03	13.46	N/A	0.612
PFDoA	3.002e+04	13.02	N/A	0.549
PFDoA_2	4.795e+03	13.02	N/A	0.506
PFTrDA	2.386e+04	13.78	N/A	0.446
PFTrDA_2	5.555e+03	13.78	N/A	0.537
PFTeDA	1.849e+04	14.54	N/A	0.462
PFTeDA_2	2.619e+03	14.53	N/A	0.514
13C4_PFOA	8.566e+05	9.71	N/A	1.958
13C4_PFOS	3.830e+05	11.82	N/A	1.941

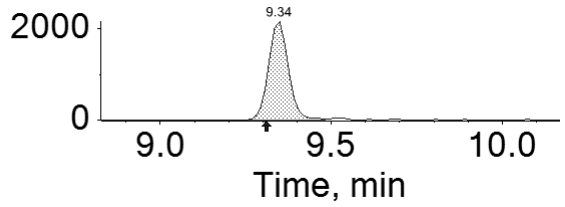
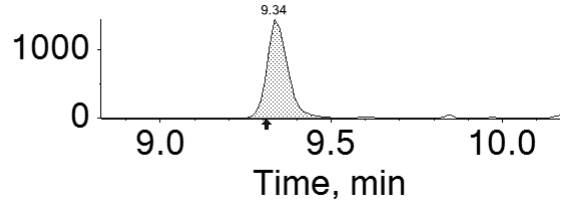
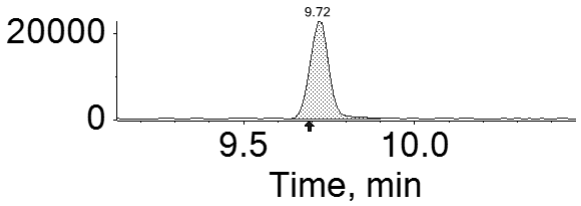
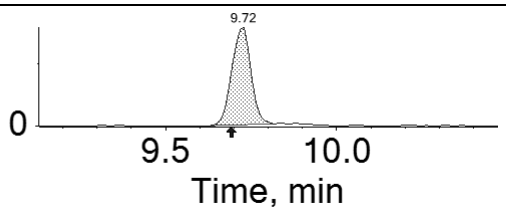
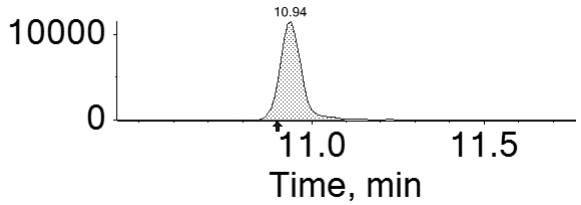
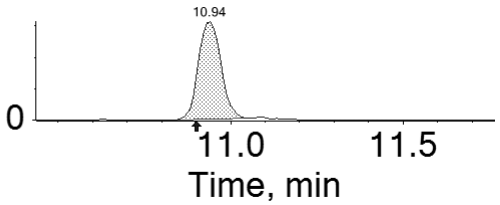
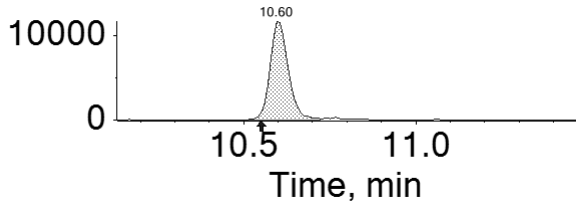
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.84(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.55(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.41(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.09(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.50(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.73(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.97(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

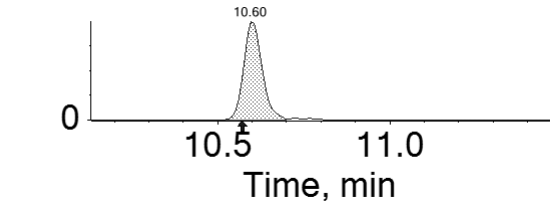
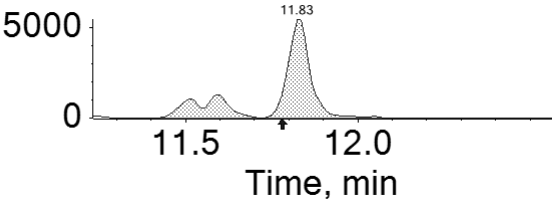
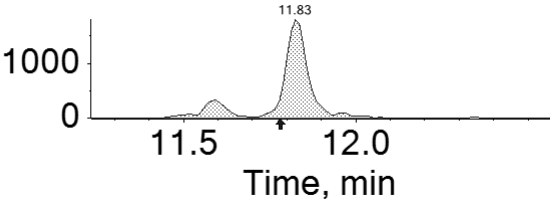
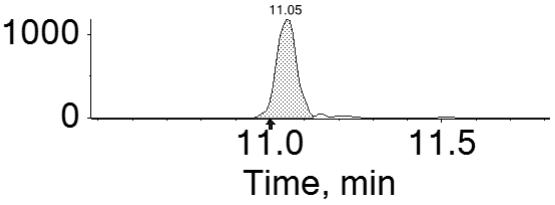
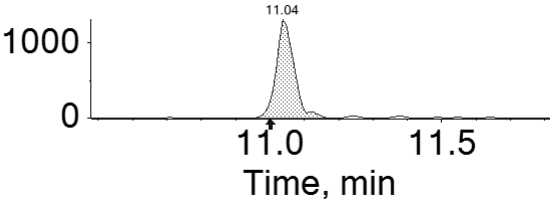
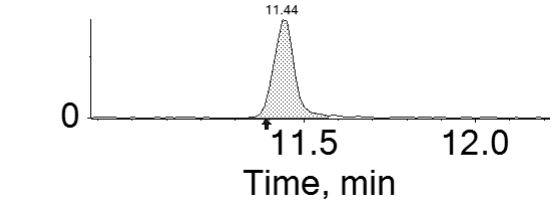
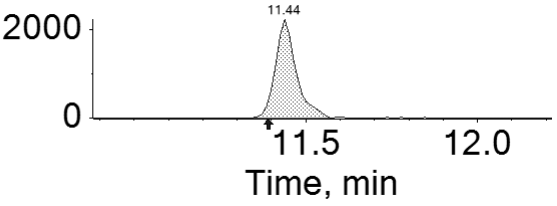
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.34(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.71(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.60(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.82(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.04(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.43(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.43(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

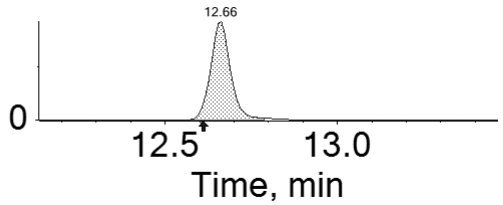
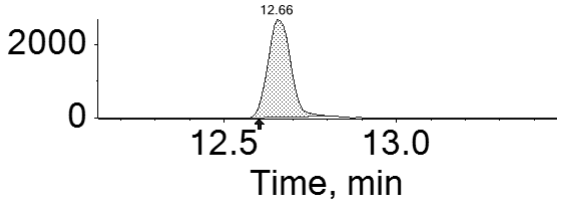
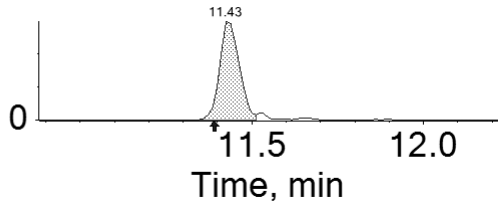
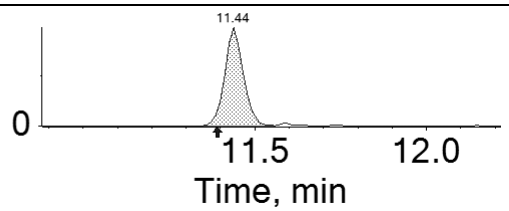
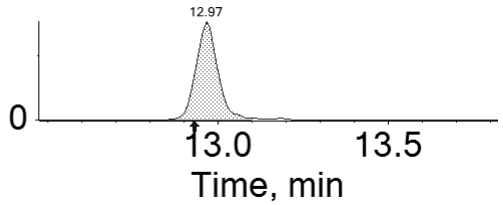
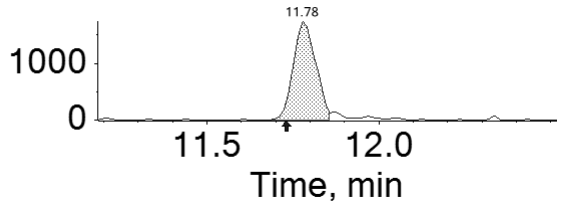
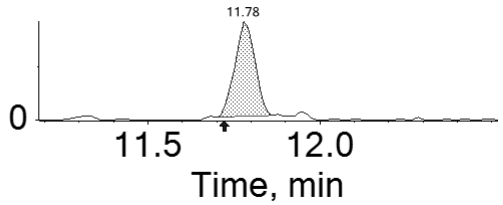
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.77(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.24(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 13.01(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.53(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

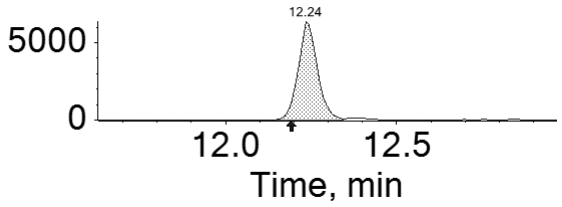
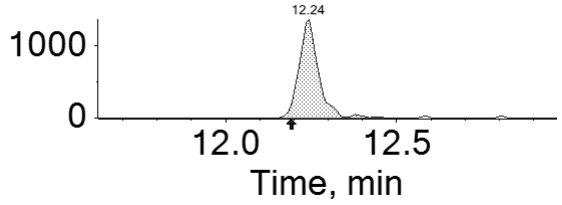
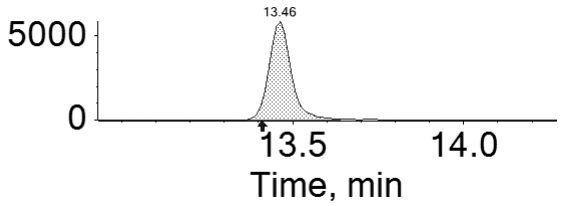
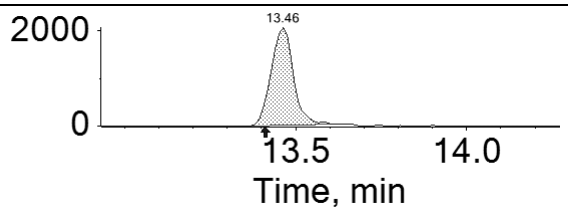
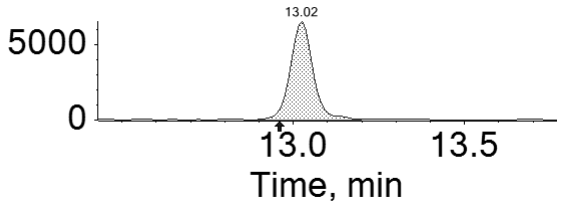
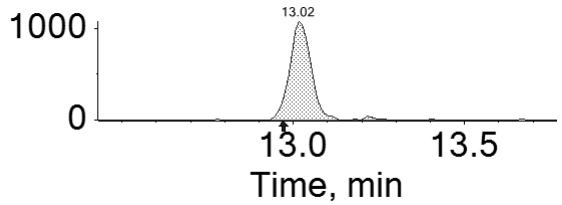
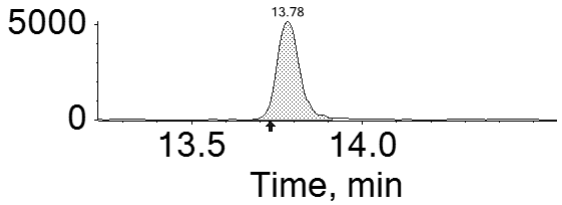
PFBA (213.0 / 169.0) RT (Exp. RT): 1.84 (1.76) min Calculated conc: 0.515 Area Ratio: 1.149e-1 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.54) min Calculated conc: 0.470 Area Ratio: 9.684e-2 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.41 (7.39) min Calculated conc: 0.492 Area Ratio: 1.049e-1 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.41 (7.39) min Calculated conc: 0.454 Area Ratio: 3.429e-2 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.09 (7.04) min Calculated conc: 0.484 Area Ratio: 9.274e-2 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.09 (7.06) min Calculated conc: 0.524 Area Ratio: 6.707e-2 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.51 (7.46) min Calculated conc: 0.463 Area Ratio: 8.828e-2 Sample Type: (Unknown)	

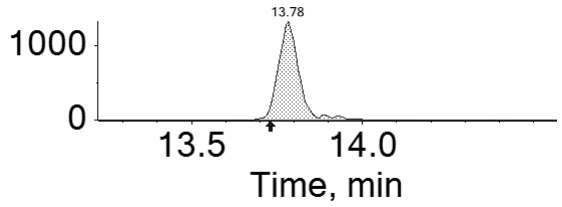
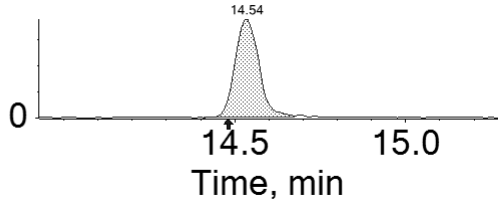
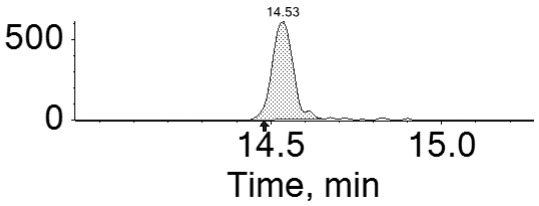
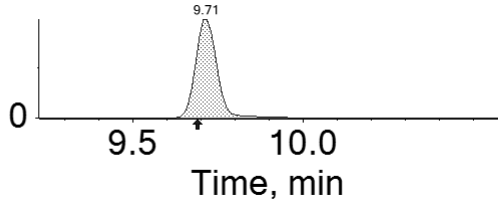
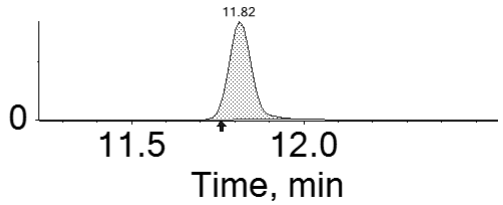
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.51 (7.50) min Calculated conc: 0.532 Area Ratio: 8.272e-3 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.87 (8.84) min Calculated conc: 0.476 Area Ratio: 4.647e-2 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.87 (8.84) min Calculated conc: 0.486 Area Ratio: 1.757e-2 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.73 (8.70) min Calculated conc: 0.469 Area Ratio: 7.566e-2 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.73 (8.70) min Calculated conc: 0.452 Area Ratio: 2.385e-2 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.98 (9.95) min Calculated conc: 0.461 Area Ratio: 1.027e-1 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.97 (10.01) min Calculated conc: 0.412 Area Ratio: 3.581e-2 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.34 (9.31) min Calculated conc: 0.520 Area Ratio: 1.451e-1 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.34 (9.31) min Calculated conc: 0.499 Area Ratio: 1.007e-1 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.72 (9.69) min Calculated conc: 0.450 Area Ratio: 1.209e-1 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.72 (9.69) min Calculated conc: 0.451 Area Ratio: 4.215e-2 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.94 (10.90) min Calculated conc: 0.497 Area Ratio: 9.047e-2 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.94 (10.90) min Calculated conc: 0.485 Area Ratio: 2.589e-2 Sample Type: (Unknown)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.60 (10.55) min Calculated conc: 0.487 Area Ratio: 7.878e-2 Sample Type: (Unknown)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.60 (10.57) min Calculated conc: 0.492 Area Ratio: 2.681e-2 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.83 (11.78) min Calculated conc: 0.453 Area Ratio: 1.147e-1 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.83 (11.78) min Calculated conc: 0.492 Area Ratio: 3.369e-2 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.05 (11.00) min Calculated conc: 0.572 Area Ratio: 1.159e-1 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.04 (11.00) min Calculated conc: 0.629 Area Ratio: 1.110e-1 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.44 (11.39) min Calculated conc: 0.523 Area Ratio: 1.263e-1 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.44 (11.39) min Calculated conc: 0.590 Area Ratio: 3.449e-2 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.66 (12.61) min Calculated conc: 0.512 Area Ratio: 9.924e-2 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.66 (12.60) min Calculated conc: 0.511 Area Ratio: 3.280e-2 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.43 (11.39) min Calculated conc: 0.460 Area Ratio: 1.585e-1 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.44 (11.39) min Calculated conc: 0.544 Area Ratio: 9.812e-2 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.97 (12.93) min Calculated conc: 0.468 Area Ratio: 6.329e-2 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.78 (11.73) min Calculated conc: 0.436 Area Ratio: 1.283e-1 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.78 (11.72) min Calculated conc: 0.358 Area Ratio: 5.874e-2 Sample Type: (Unknown)	

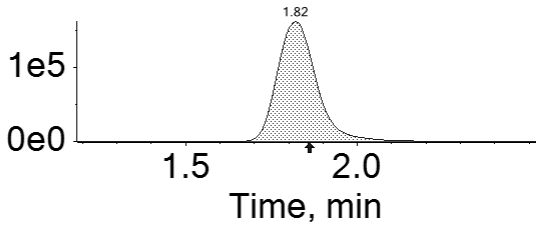
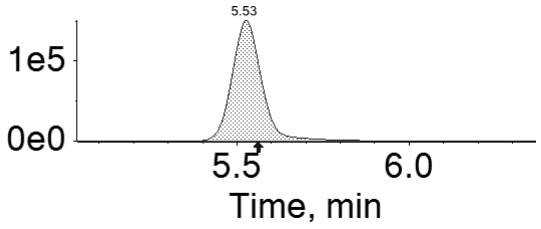
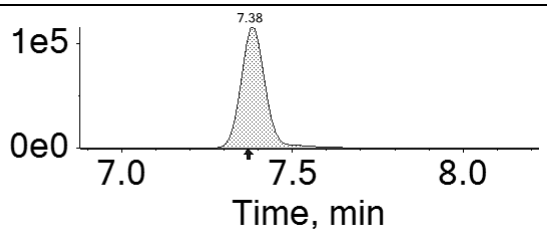
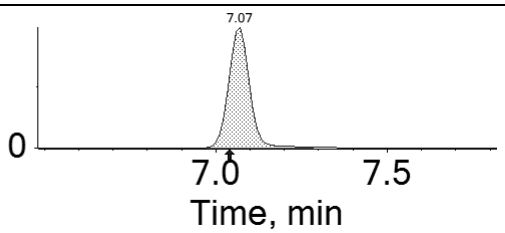
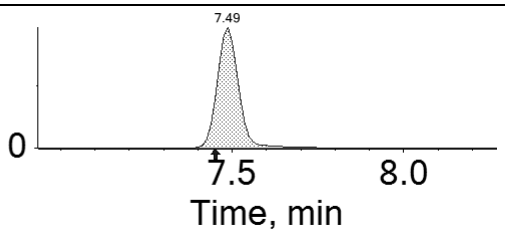
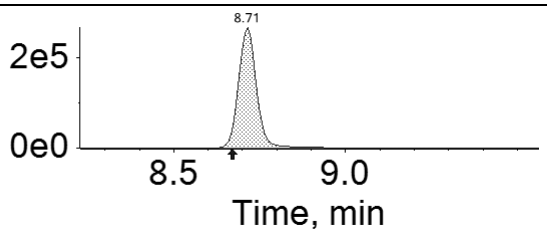
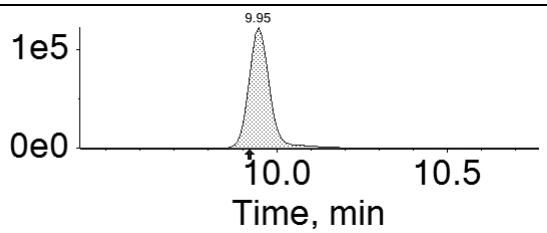
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.24 (12.19) min Calculated conc: 0.478 Area Ratio: 6.637e-2 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.24 (12.19) min Calculated conc: 0.485 Area Ratio: 1.453e-2 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.46 (13.41) min Calculated conc: 0.578 Area Ratio: 6.261e-2 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.46 (13.41) min Calculated conc: 0.612 Area Ratio: 2.200e-2 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 13.02 (12.96) min Calculated conc: 0.549 Area Ratio: 7.123e-2 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 13.02 (12.97) min Calculated conc: 0.506 Area Ratio: 1.138e-2 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.78 (13.73) min Calculated conc: 0.446 Area Ratio: 5.662e-2 Sample Type: (Unknown)	

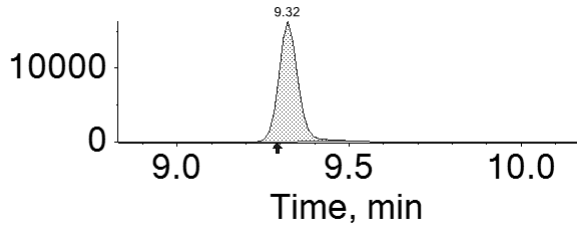
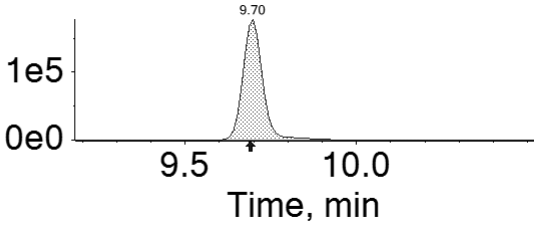
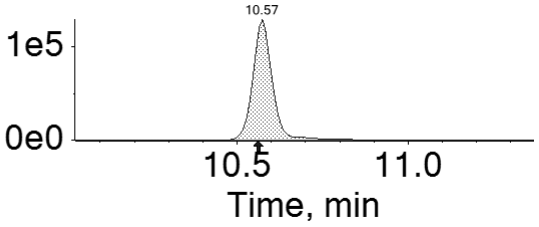
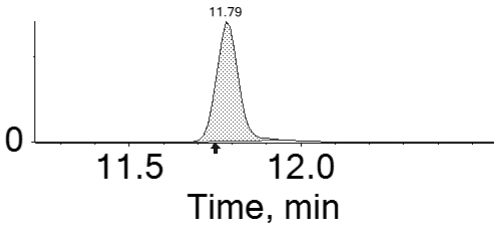
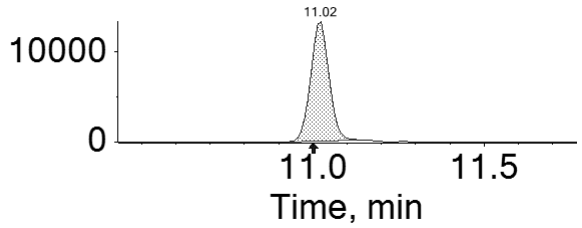
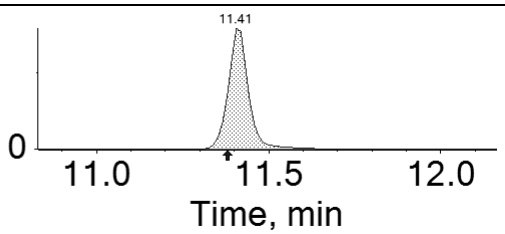
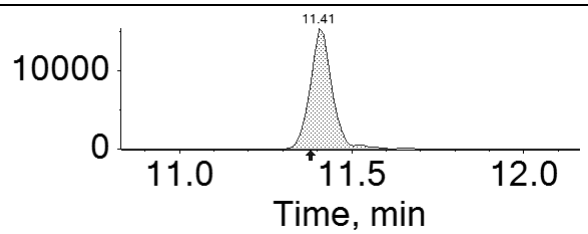
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.78 (13.73) min Calculated conc: 0.537 Area Ratio: 1.318e-2 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.54 (14.48) min Calculated conc: 0.462 Area Ratio: 7.801e-2 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.53 (14.48) min Calculated conc: 0.514 Area Ratio: 1.105e-2 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.71 (9.69) min Calculated conc: 1.958 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.82 (11.76) min Calculated conc: 1.941 Area Ratio: N/A Sample Type: (Unknown)	

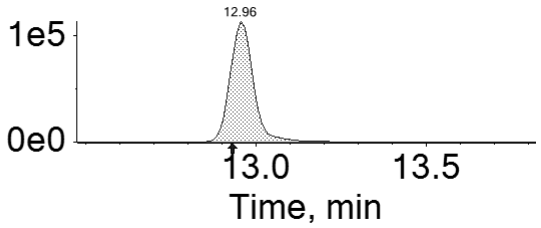
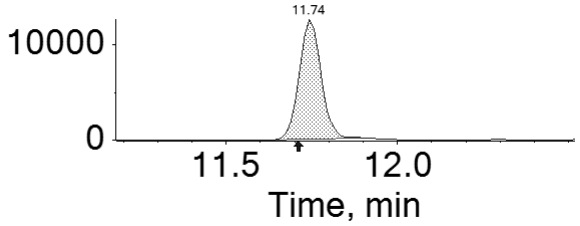
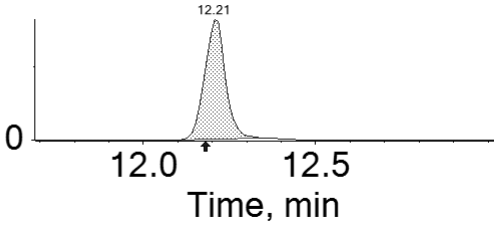
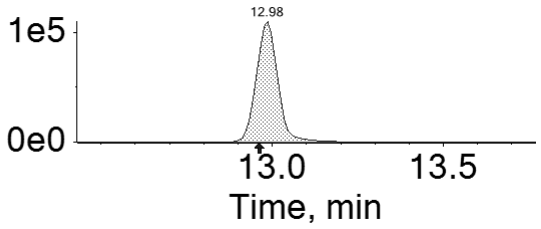
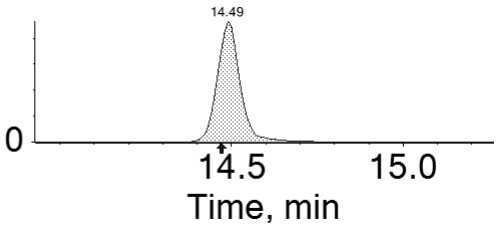
Sample Name	CCV-Med	**Injection Vial**	8
Sample ID	CAL-19206-006-04	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-07-01T15:46:45	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190701A.wiff		
Result Table	190701AM		
Sample Comment			

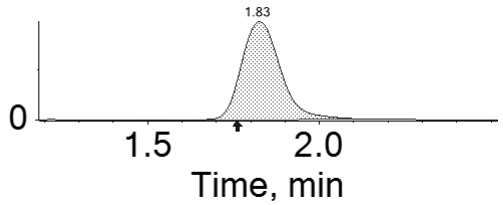
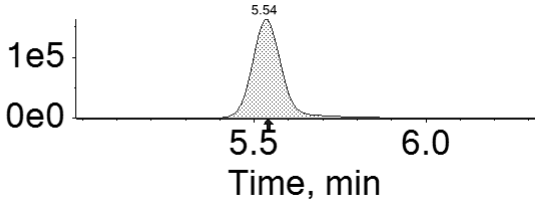
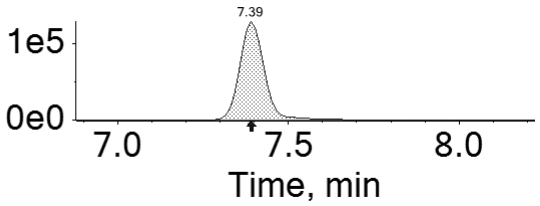
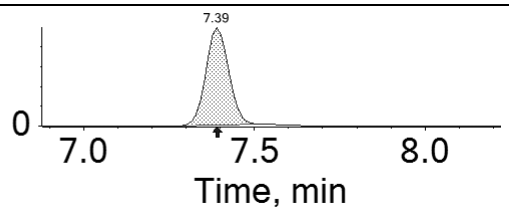
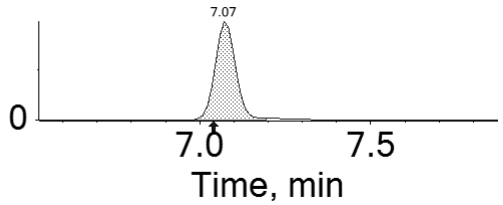
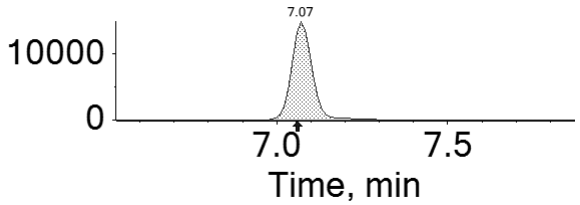
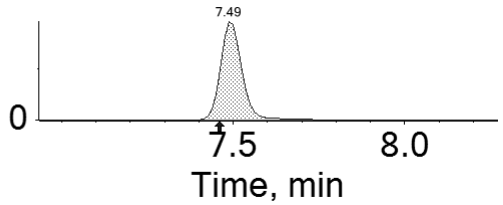
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.283e6	1.82	1.00	-
13C5_PFPeA	9.018e5	5.53	1.00	-
13C3_PFBS	5.741e5	7.38	1.00	-
13C2_4:2FTS	8.359e4	7.07	1.00	-
13C5_PFHxA	8.374e5	7.49	1.00	-
13C4_PFHpA	9.716e5	8.71	1.00	-
13C3_PFHxS	5.150e5	9.95	1.00	-
13C2_6:2FTS	6.299e4	9.32	1.00	-
13C8_PFOA	7.102e5	9.70	1.00	-
13C9_PFNA	5.102e5	10.57	1.00	-
13C8_PFOS	3.117e5	11.79	1.00	-
13C2_8:2FTS	4.965e4	11.02	1.00	-
13C6_PFDA	3.189e5	11.41	1.00	-
d3-MeFOSAA	6.804e4	11.41	1.00	-
13C8_FOSA	5.430e5	12.96	1.00	-
d5-EtFOSAA	5.589e4	11.74	1.00	-
13C7_PFUdA	3.415e5	12.21	1.00	-
13C2_PFDoA	4.770e5	12.98	1.00	-
13C2_PFTeDA	2.149e5	14.49	1.00	-

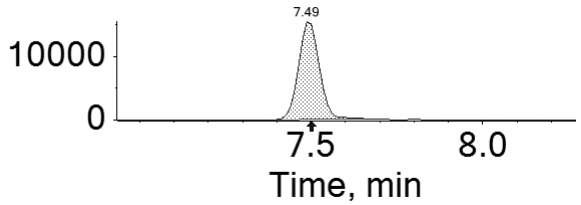
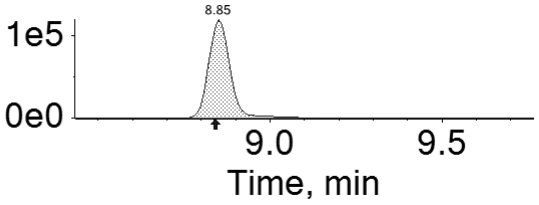
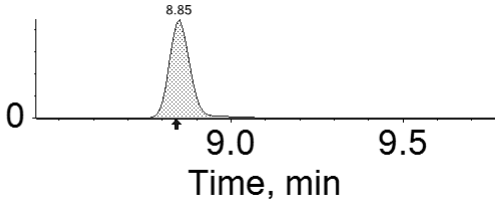
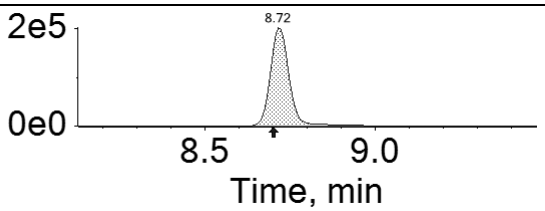
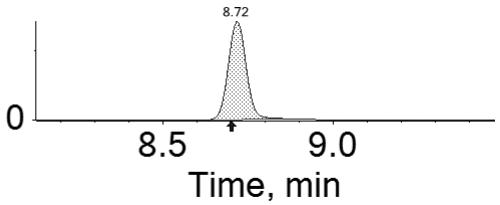
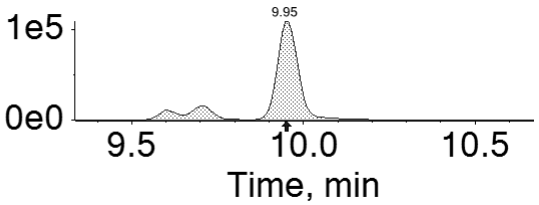
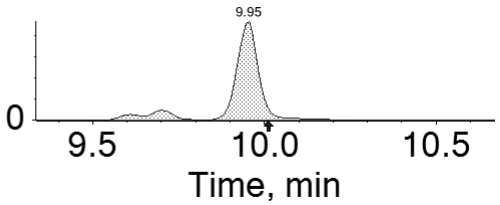
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.551e+06	1.83	N/A	5.422
PFPeA	9.689e+05	5.54	N/A	5.220
PFBS	6.427e+05	7.39	N/A	5.256
PFBS_2	2.287e+05	7.39	N/A	5.275
4:2FTS	8.216e+04	7.07	N/A	5.127
4:2FTS_2	6.211e+04	7.07	N/A	5.802
PFHxA	8.274e+05	7.49	N/A	5.181
PFHxA_2	6.478e+04	7.49	N/A	4.973
PFPeS	5.151e+05	8.85	N/A	5.429
PFPeS_2	1.863e+05	8.85	N/A	5.306
PFHpA	7.700e+05	8.72	N/A	4.915
PFHpA_2	2.597e+05	8.72	N/A	5.066
PFHxS	5.821e+05	9.95	N/A	5.072
PFHxS_2	2.349e+05	9.95	N/A	5.246
6:2FTS	9.642e+04	9.33	N/A	5.489
6:2FTS_2	6.824e+04	9.33	N/A	5.370
PFOA	9.217e+05	9.70	N/A	4.833
PFOA_2	3.290e+05	9.70	N/A	4.953
PFHpS	5.682e+05	10.91	N/A	6.115
PFHpS_2	1.468e+05	10.91	N/A	5.394
PFNA	4.885e+05	10.58	N/A	5.918
PFNA_2	1.634e+05	10.58	N/A	5.875
PFOS	4.041e+05	11.80	N/A	5.117
PFOS_2	1.009e+05	11.79	N/A	4.727
8:2FTS	5.015e+04	11.03	N/A	4.985
8:2FTS_2	4.791e+04	11.02	N/A	5.463
PFDA	4.393e+05	11.41	N/A	5.702
PFDA_2	8.720e+04	11.41	N/A	4.676
PFNS	4.006e+05	12.63	N/A	6.054
PFNS_2	1.334e+05	12.62	N/A	6.082
N-MeFOSAA	1.363e+05	11.42	N/A	5.820
N-MeFOSAA_2	7.049e+04	11.42	N/A	5.739
FOSA	3.695e+05	12.96	N/A	5.036
N-EtFOSAA	8.382e+04	11.76	N/A	5.096
N-EtFOSAA_2	4.806e+04	11.76	N/A	5.234
PFUdA	2.484e+05	12.21	N/A	5.237
PFUdA_2	5.539e+04	12.21	N/A	5.414
PFDS	2.744e+05	13.42	N/A	5.308
PFDS_2	9.616e+04	13.42	N/A	5.611
PFDoA	2.997e+05	12.99	N/A	4.845
PFDoA_2	5.372e+04	12.99	N/A	5.005
PFTrDA	3.080e+05	13.75	N/A	5.084
PFTrDA_2	5.665e+04	13.75	N/A	4.837
PFTeDA	1.746e+05	14.49	N/A	4.812
PFTeDA_2	2.425e+04	14.49	N/A	5.247
13C4_PFOA	8.643e+05	9.70	N/A	1.976
13C4_PFOS	3.866e+05	11.78	N/A	1.959

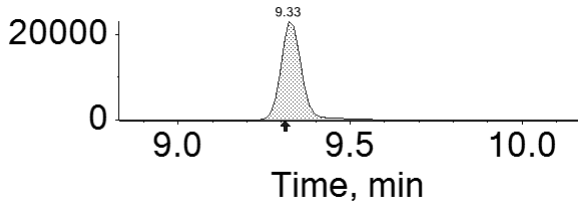
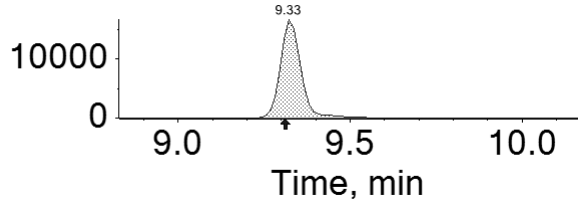
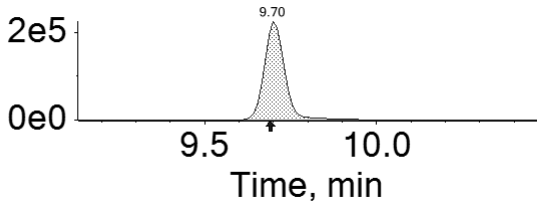
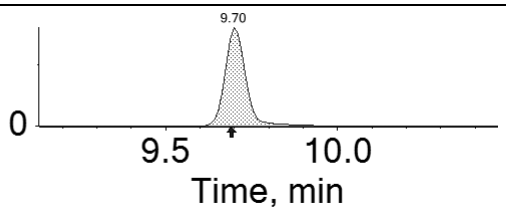
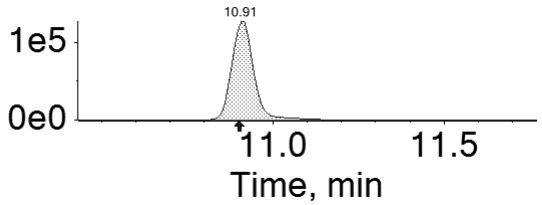
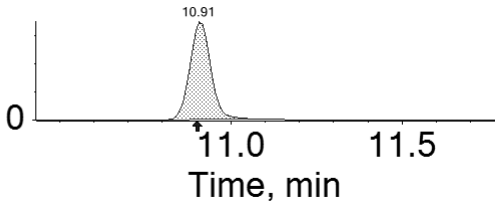
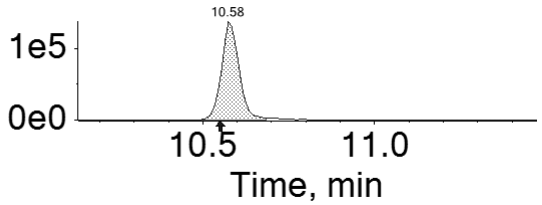
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.82(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.53(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.38(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.07(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.49(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.71(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.95(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

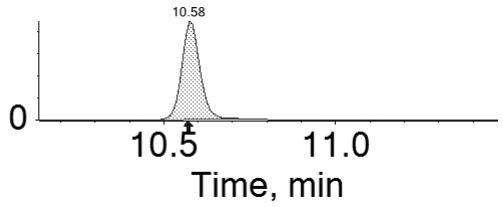
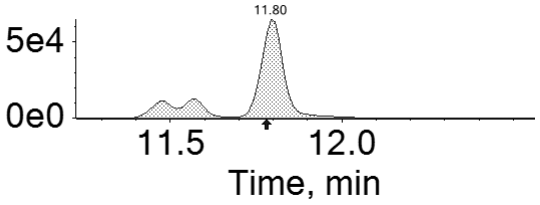
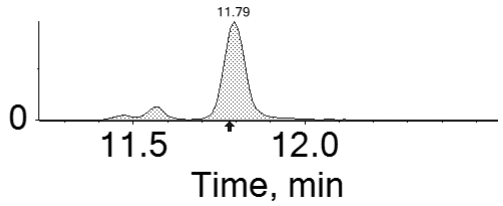
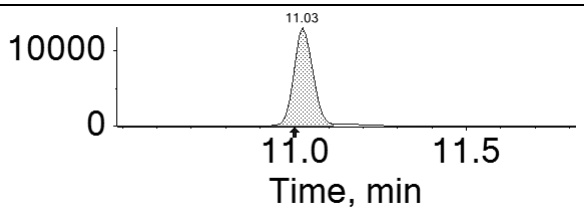
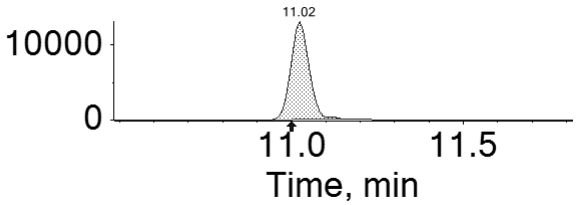
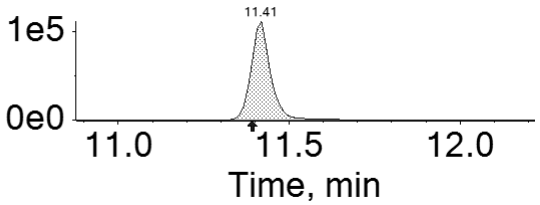
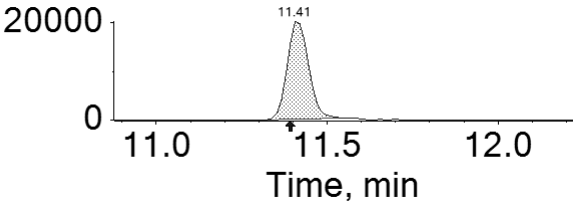
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.32(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.70(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.57(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.79(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.02(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.41(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.41(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

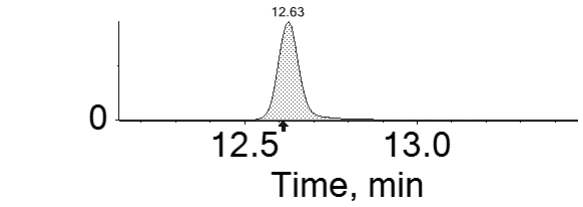
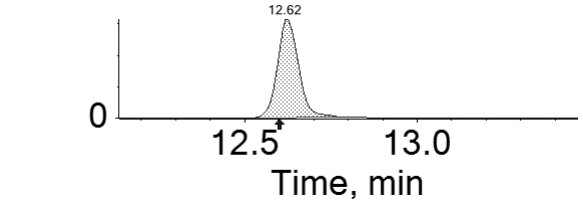
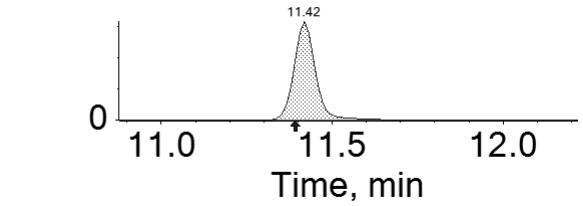
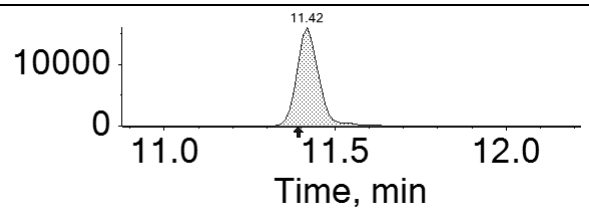
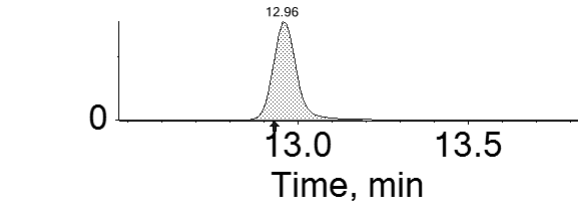
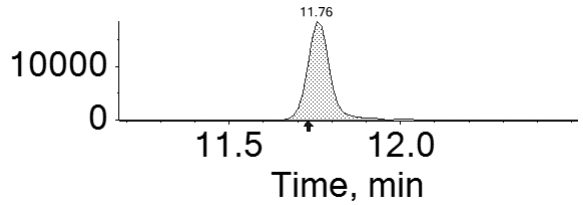
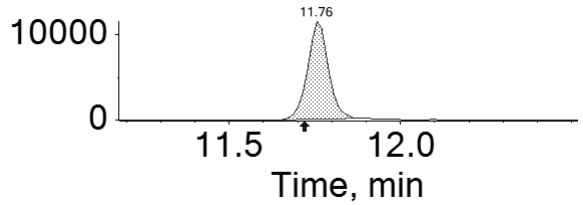
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.96(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.74(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.21(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.98(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.49(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

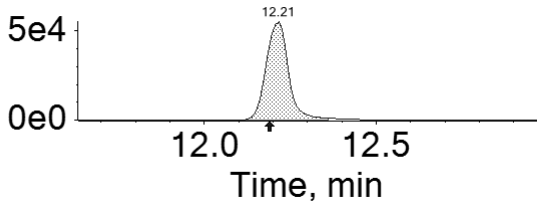
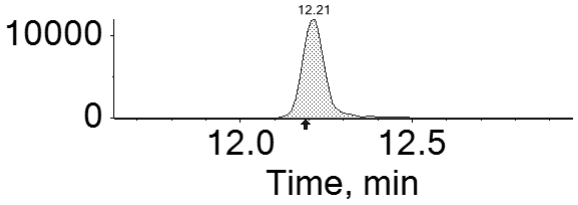
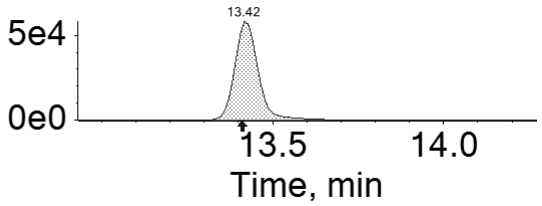
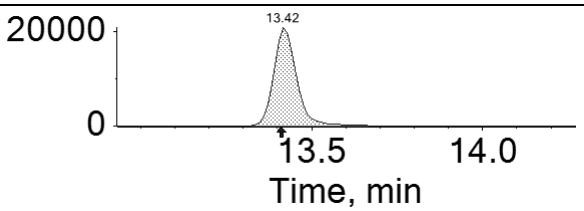
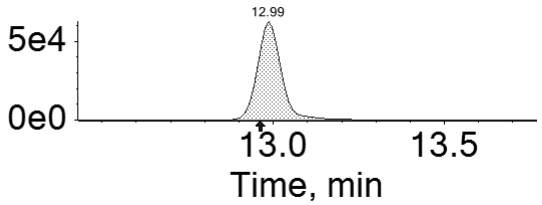
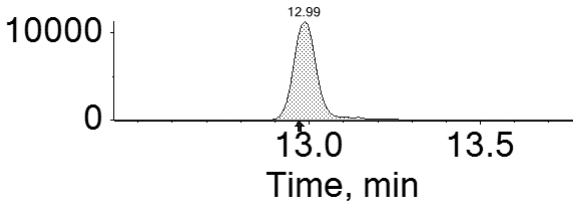
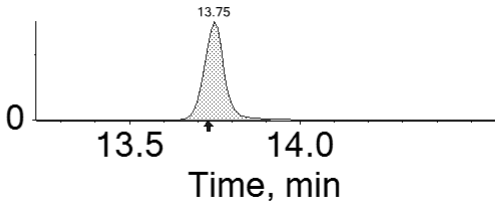
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4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.07 (7.06) min Calculated conc: 5.802 Area Ratio: 7.430e-1 Sample Type: (Unknown)	
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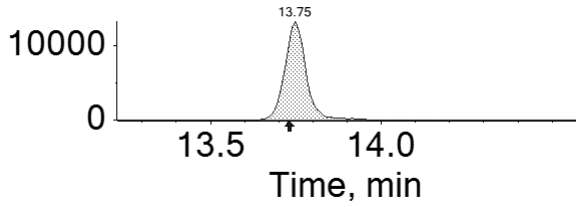
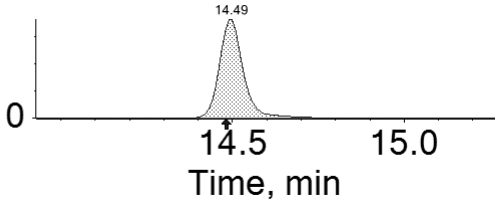
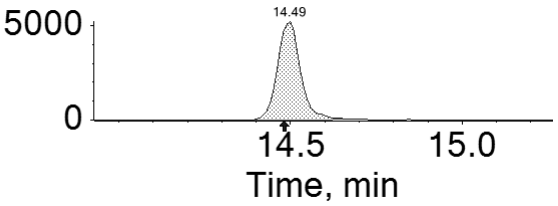
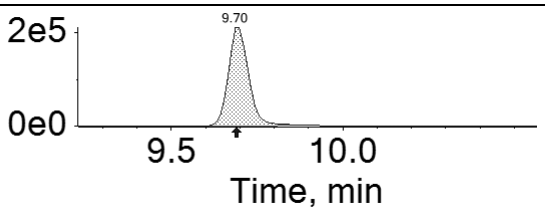
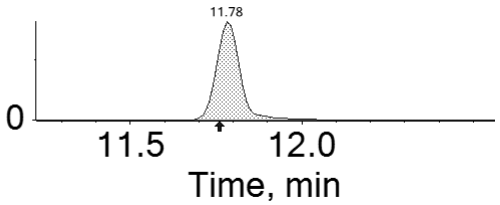
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PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 4.953 Area Ratio: 4.633e-1 Sample Type: (Unknown)	
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PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.58 (10.57) min Calculated conc: 5.875 Area Ratio: 3.203e-1 Sample Type: (Unknown)	
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8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.02 (11.00) min Calculated conc: 5.463 Area Ratio: 9.649e-1 Sample Type: (Unknown)	
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PFUdA (563.0 / 519.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 5.237 Area Ratio: 7.275e-1 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.21 (12.19) min Calculated conc: 5.414 Area Ratio: 1.622e-1 Sample Type: (Unknown)	
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PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.99 (12.97) min Calculated conc: 5.005 Area Ratio: 1.126e-1 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 5.084 Area Ratio: 6.456e-1 Sample Type: (Unknown)	

PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.75 (13.73) min Calculated conc: 4.837 Area Ratio: 1.188e-1 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 4.812 Area Ratio: 8.125e-1 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.49 (14.48) min Calculated conc: 5.247 Area Ratio: 1.129e-1 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.70 (9.69) min Calculated conc: 1.976 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.78 (11.76) min Calculated conc: 1.959 Area Ratio: N/A Sample Type: (Unknown)	

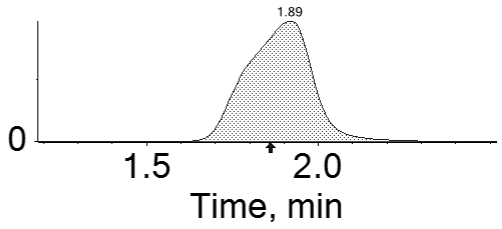
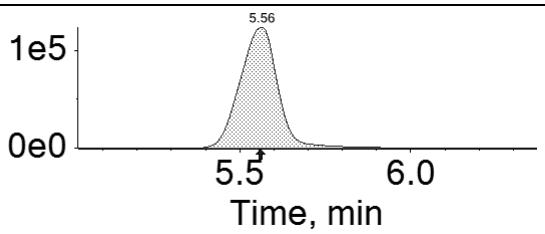
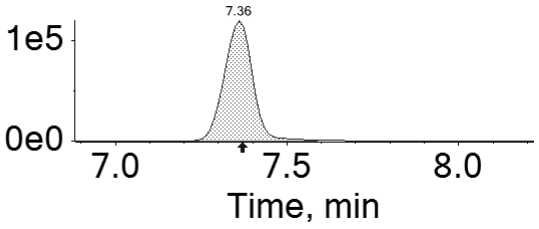
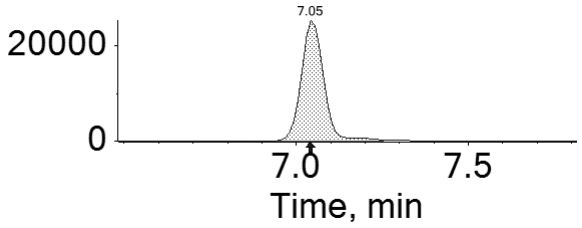
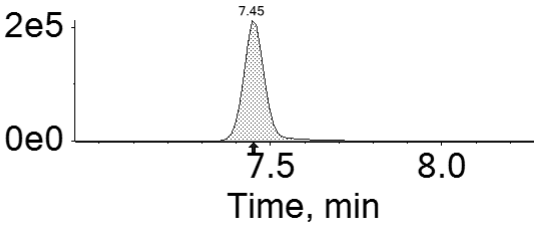
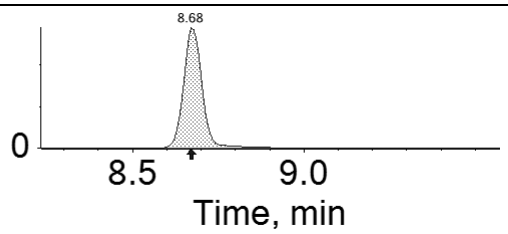
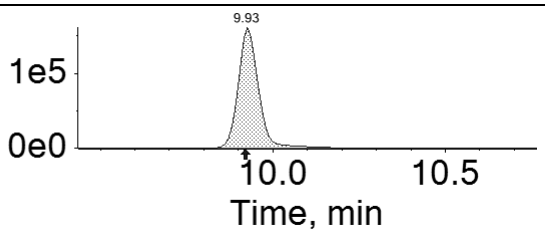
Appendix F

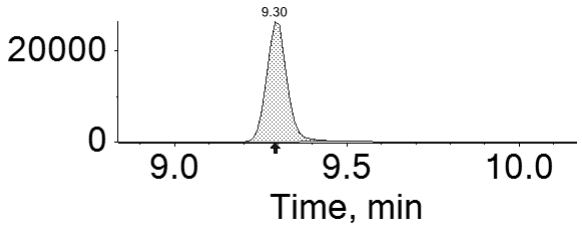
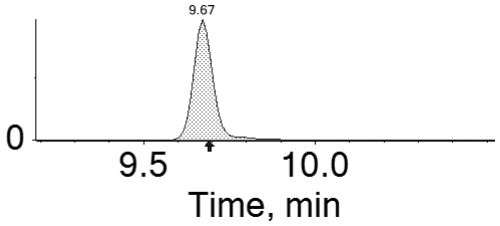
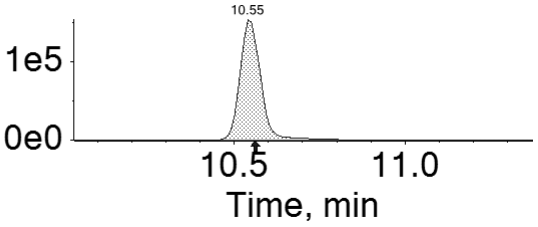
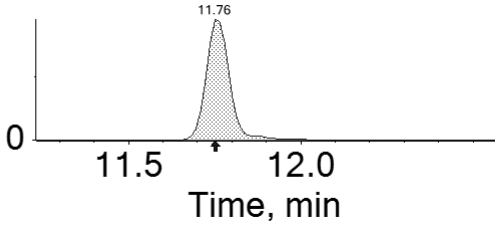
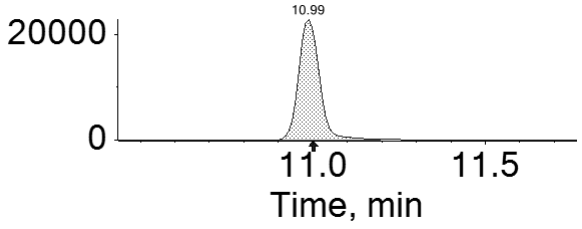
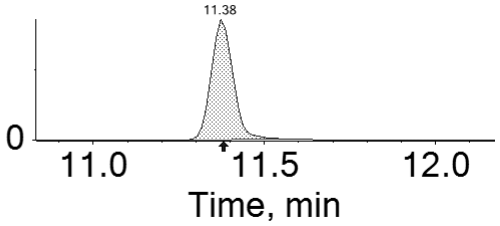
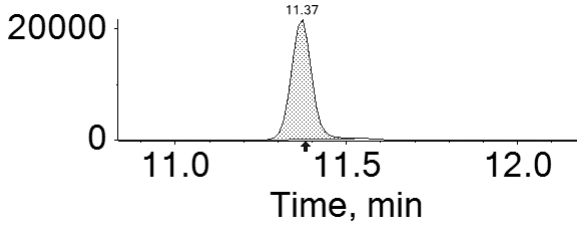
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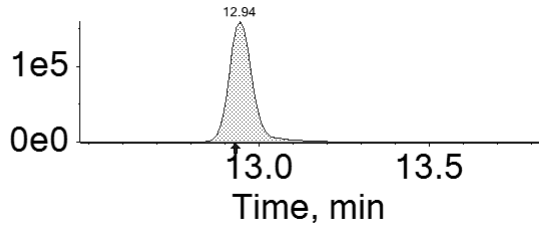
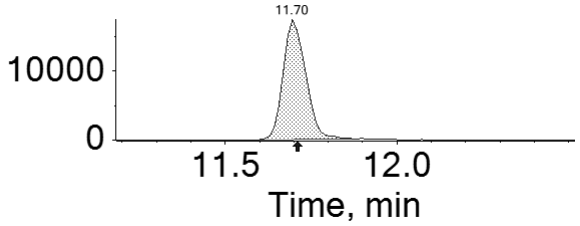
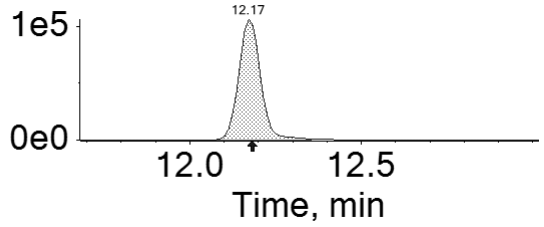
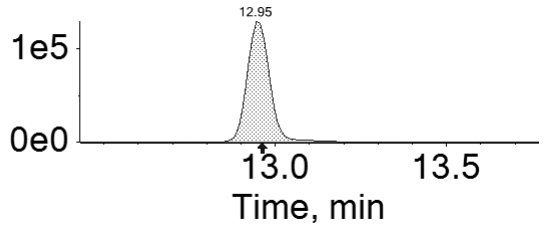
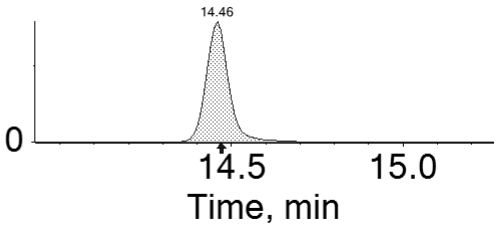
Sample Name	BLANK-71171	**Injection Vial**	19
Sample ID	BLANK-71171	**Injection Volume**	10.00
Sample Type	Unknown	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T03:39:02	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

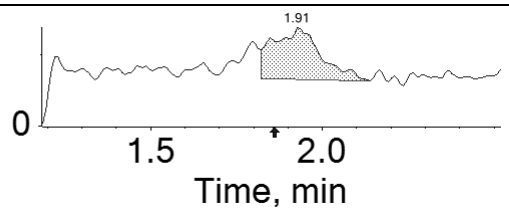
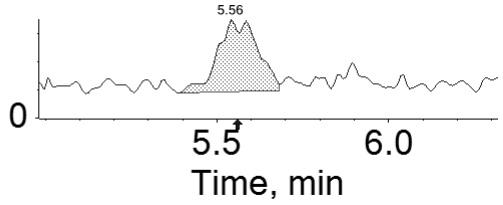
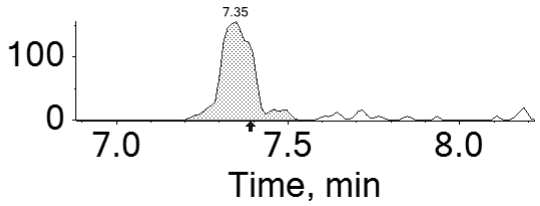
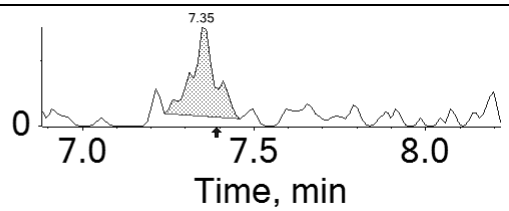
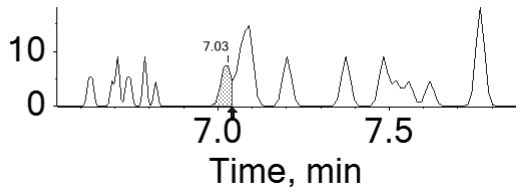
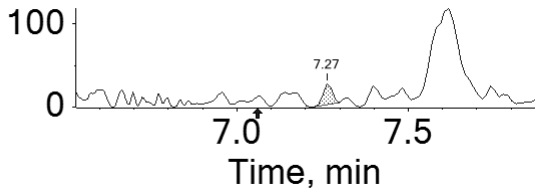
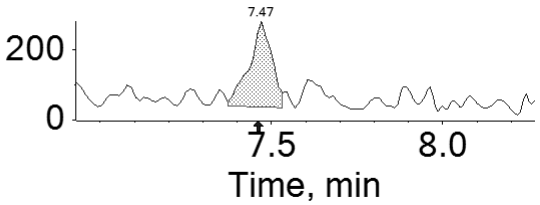
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.294e6	1.89	1.00	-
13C5_PFPeA	9.435e5	5.56	1.00	-
13C3_PFBS	6.846e5	7.36	1.00	-
13C2_4:2FTS	1.139e5	7.05	1.00	-
13C5_PFHxA	9.138e5	7.45	1.00	-
13C4_PFHpA	1.087e6	8.68	1.00	-
13C3_PFHxS	6.518e5	9.93	1.00	-
13C2_6:2FTS	1.086e5	9.30	1.00	-
13C8_PFOA	7.712e5	9.67	1.00	-
13C9_PFNA	6.472e5	10.55	1.00	-
13C8_PFOS	4.530e5	11.76	1.00	-
13C2_8:2FTS	9.497e4	10.99	1.00	-
13C6_PFDA	3.817e5	11.38	1.00	-
d3-MeFOSAA	9.045e4	11.37	1.00	-
13C8_FOSA	7.687e5	12.94	1.00	-
d5-EtFOSAA	7.953e4	11.70	1.00	-
13C7_PFUdA	4.672e5	12.17	1.00	-
13C2_PFDoA	5.881e5	12.95	1.00	-
13C2_PFTeDA	3.608e5	14.46	1.00	-

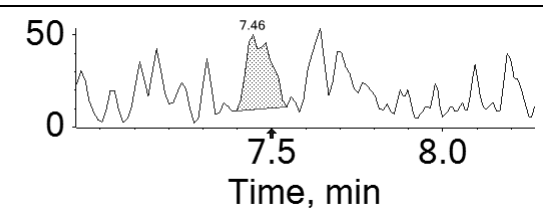
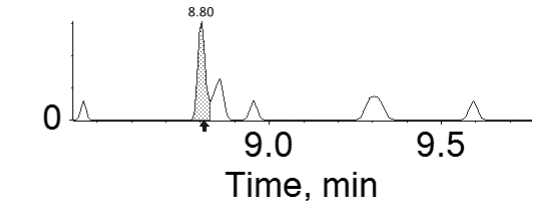
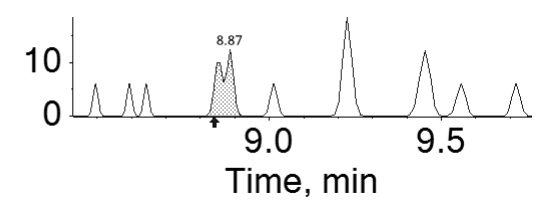
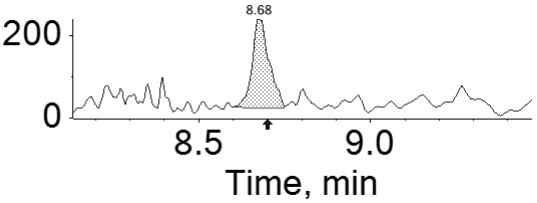
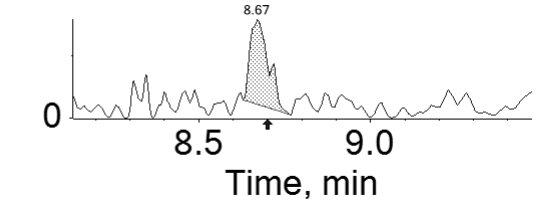
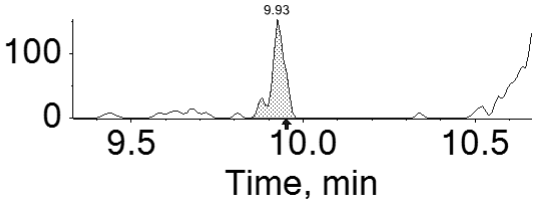
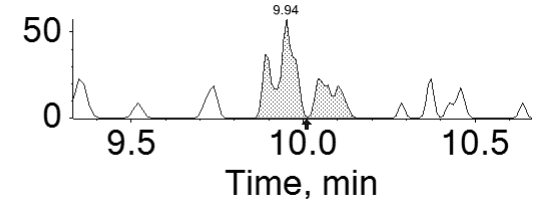
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	3.543e+03	1.91	N/A	0.013
PFPeA	2.091e+03	5.56	N/A	0.011
PFBS	1.047e+03	7.35	N/A	0.007
PFBS_2	3.246e+02	7.35	N/A	0.006
4:2FTS	1.535e+01	7.03	N/A	0.001
4:2FTS_2	4.680e+01	7.27	N/A	0.003
PFHxA	1.123e+03	7.47	N/A	0.007
PFHxA_2	2.004e+02	7.46	N/A	0.014
PFPeS	4.744e+01	8.80	N/A	0.000
PFPeS_2	3.576e+01	8.87	N/A	0.001
PFHpA	7.475e+02	8.68	N/A	0.004
PFHpA_2	2.565e+02	8.67	N/A	0.004
PFHxS	4.008e+02	9.93	N/A	0.003
PFHxS_2	3.284e+02	9.94	N/A	0.006
6:2FTS	2.402e+03	9.30	N/A	0.085
6:2FTS_2	1.726e+03	9.30	N/A	0.080
PFOA	3.996e+03	9.68	N/A	0.021
PFOA_2	5.291e+02	9.68	N/A	0.007
PFHpS	4.680e+01	10.89	N/A	0.000
PFHpS_2	3.105e+01	10.88	N/A	0.001
PFNA	1.104e+03	10.56	N/A	0.011
PFNA_2	2.795e+02	10.57	N/A	0.008
PFOS	1.952e+03	11.61	N/A	0.019
PFOS_2	2.219e+02	11.76	N/A	0.008
8:2FTS	4.747e+01	10.95	N/A	0.002
8:2FTS_2	1.613e+01	11.03	N/A	0.001
PFDA	1.090e+03	11.39	N/A	0.013
PFDA_2	2.743e+01	11.33	N/A	0.001
PFNS	9.250e+01	12.62	N/A	0.001
PFNS_2	1.154e+01	12.69	N/A	0.000
N-MeFOSAA	2.537e+01	11.46	N/A	0.001
N-MeFOSAA_2	4.872e+01	11.62	N/A	0.003
FOSA	1.124e+02	12.95	N/A	0.001
N-EtFOSAA	1.584e+02	11.70	N/A	0.007
N-EtFOSAA_2	7.444e+01	11.62	N/A	0.006
PFUdA	4.443e+02	12.19	N/A	0.006
PFUdA_2	5.337e+01	12.17	N/A	0.004
PFDS	1.047e+01	13.43	N/A	0.000
PFDS_2	3.699e+01	13.56	N/A	0.001
PFDoA	6.545e+01	13.00	N/A	0.001
PFDoA_2	1.001e+02	12.93	N/A	0.008
PFTrDA	3.540e+02	13.70	N/A	0.004
PFTrDA_2	5.324e+00	13.76	N/A	0.000
PFTeDA	7.143e+02	14.45	N/A	0.012
PFTeDA_2	4.239e+01	14.52	N/A	0.005
13C4_PFOA	8.165e+05	9.67	N/A	1.529
13C4_PFOS	4.205e+05	11.75	N/A	1.489

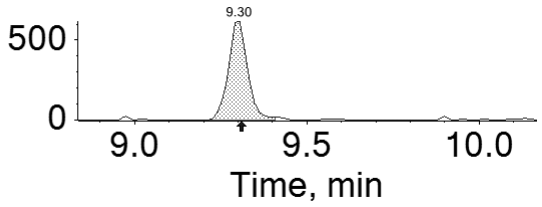
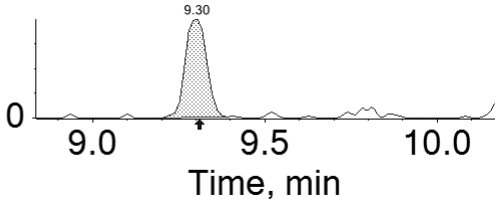
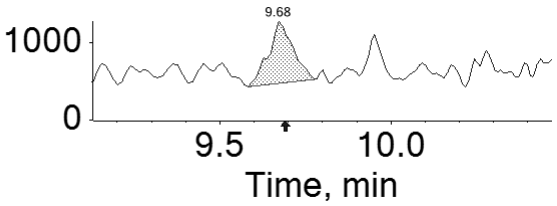
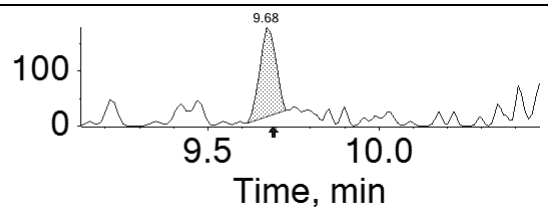
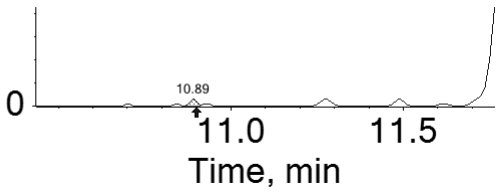
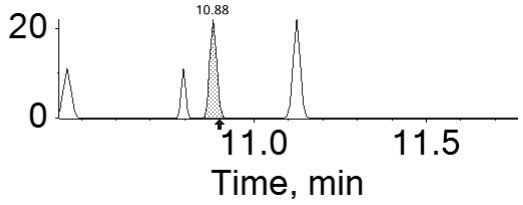
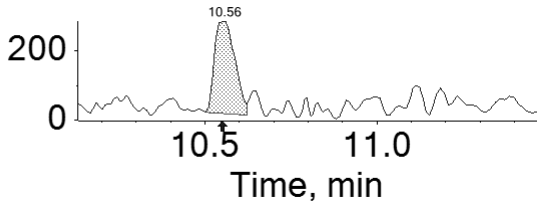
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.89(1.86) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.56(5.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.36(7.37) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Unknown)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.45(7.45) min Concentration: 1.00 Sample Type: (Unknown)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Unknown)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Unknown)	

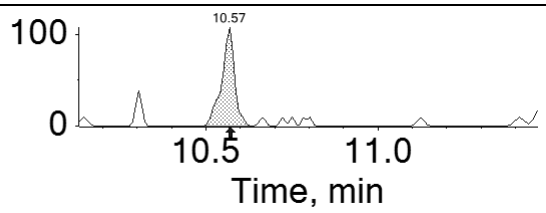
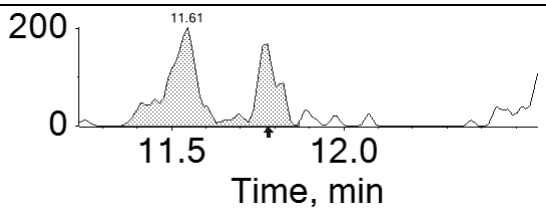
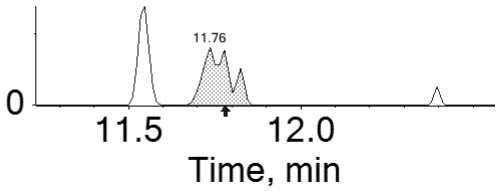
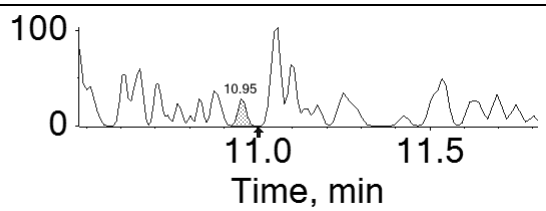
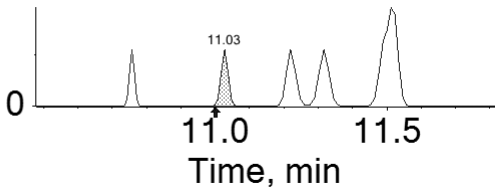
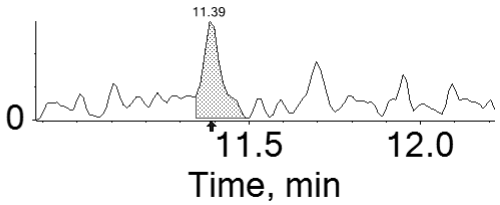
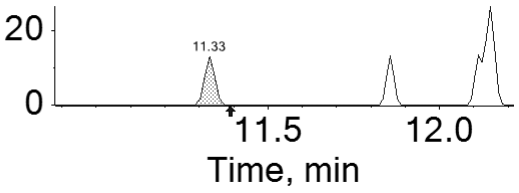
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Unknown)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Unknown)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Unknown)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Unknown)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Unknown)	

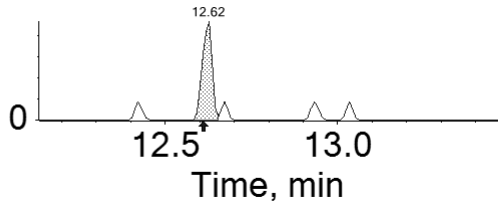
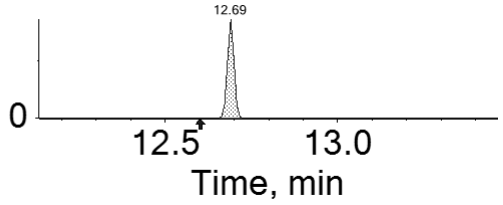
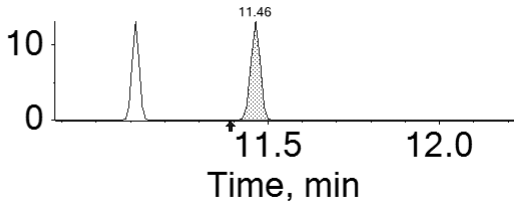
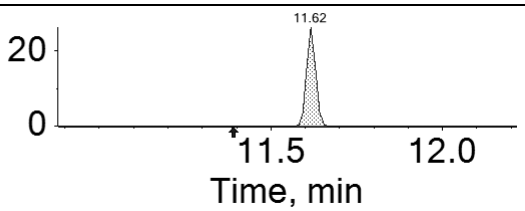
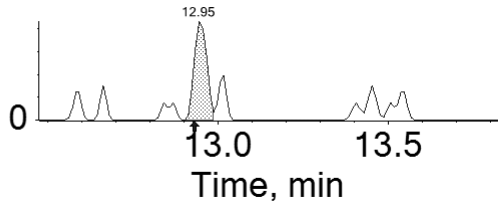
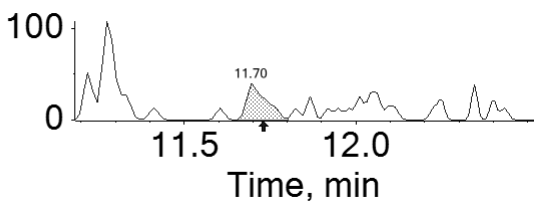
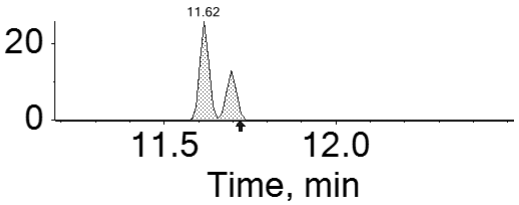
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.94(12.93) min Concentration: 1.00 Sample Type: (Unknown)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Unknown)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.95(12.96) min Concentration: 1.00 Sample Type: (Unknown)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.46(14.47) min Concentration: 1.00 Sample Type: (Unknown)	

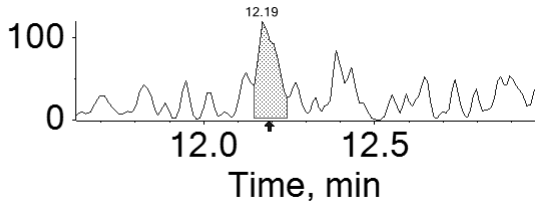
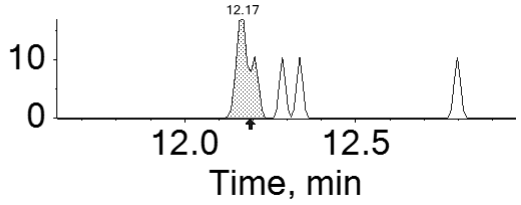
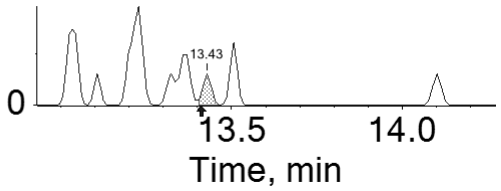
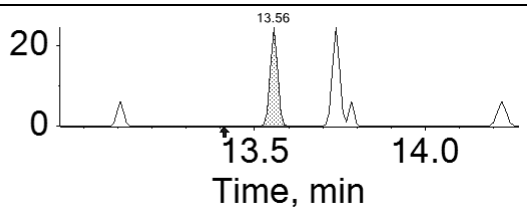
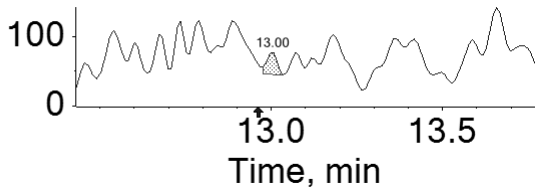
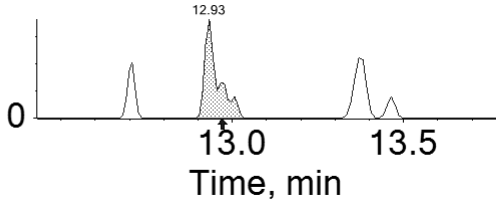
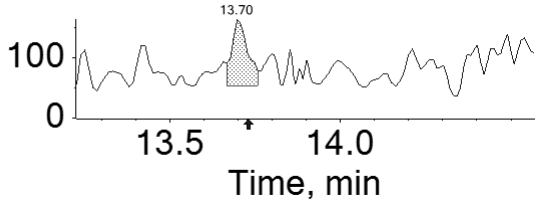
PFBA (213.0 / 169.0) RT (Exp. RT): 1.91 (1.86) min Calculated conc: 0.013 Area Ratio: 2.738e-3 Sample Type: (Unknown)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.56 (5.56) min Calculated conc: 0.011 Area Ratio: 2.216e-3 Sample Type: (Unknown)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.35 (7.39) min Calculated conc: 0.007 Area Ratio: 1.530e-3 Sample Type: (Unknown)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.35 (7.39) min Calculated conc: 0.006 Area Ratio: 4.741e-4 Sample Type: (Unknown)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.03 (7.04) min Calculated conc: 0.001 Area Ratio: 1.347e-4 Sample Type: (Unknown)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.27 (7.06) min Calculated conc: 0.003 Area Ratio: 4.108e-4 Sample Type: (Unknown)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 0.007 Area Ratio: 1.229e-3 Sample Type: (Unknown)	

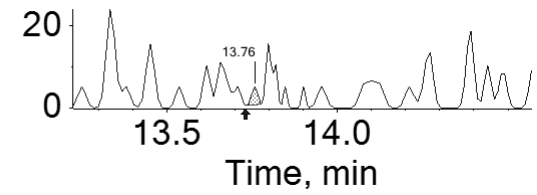
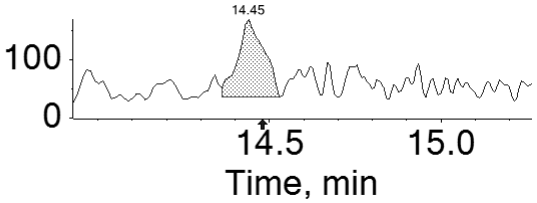
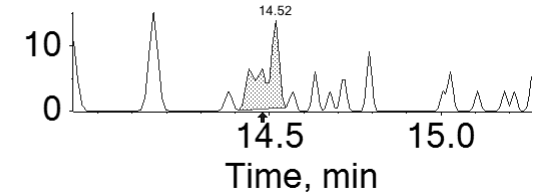
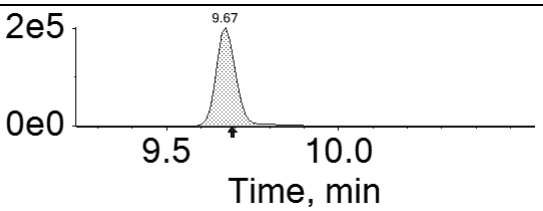
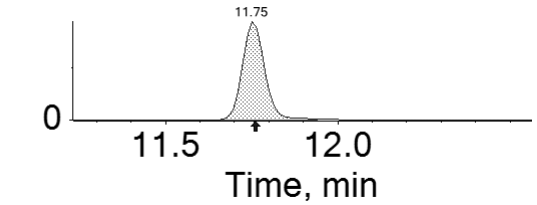
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.46 (7.50) min Calculated conc: 0.014 Area Ratio: 2.193e-4 Sample Type: (Unknown)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.80 (8.81) min Calculated conc: 0.000 Area Ratio: 4.365e-5 Sample Type: (Unknown)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.87 (8.84) min Calculated conc: 0.001 Area Ratio: 3.290e-5 Sample Type: (Unknown)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 0.004 Area Ratio: 6.878e-4 Sample Type: (Unknown)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.67 (8.70) min Calculated conc: 0.004 Area Ratio: 2.360e-4 Sample Type: (Unknown)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: 0.003 Area Ratio: 6.149e-4 Sample Type: (Unknown)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.94 (10.01) min Calculated conc: 0.006 Area Ratio: 5.038e-4 Sample Type: (Unknown)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.085 Area Ratio: 2.212e-2 Sample Type: (Unknown)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 0.080 Area Ratio: 1.589e-2 Sample Type: (Unknown)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.021 Area Ratio: 5.182e-3 Sample Type: (Unknown)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 0.007 Area Ratio: 6.861e-4 Sample Type: (Unknown)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.89 (10.90) min Calculated conc: 0.000 Area Ratio: 7.231e-5 Sample Type: (Unknown)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 0.001 Area Ratio: 4.798e-5 Sample Type: (Unknown)	
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PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.57 (10.57) min Calculated conc: 0.008 Area Ratio: 4.318e-4 Sample Type: (Unknown)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.61 (11.78) min Calculated conc: 0.019 Area Ratio: 4.309e-3 Sample Type: (Unknown)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: 0.008 Area Ratio: 4.899e-4 Sample Type: (Unknown)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.95 (11.00) min Calculated conc: 0.002 Area Ratio: 4.998e-4 Sample Type: (Unknown)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.03 (11.00) min Calculated conc: 0.001 Area Ratio: 1.699e-4 Sample Type: (Unknown)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: 0.013 Area Ratio: 2.856e-3 Sample Type: (Unknown)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.33 (11.39) min Calculated conc: 0.001 Area Ratio: 7.188e-5 Sample Type: (Unknown)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.62 (12.61) min Calculated conc: 0.001 Area Ratio: 1.429e-4 Sample Type: (Unknown)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.69 (12.60) min Calculated conc: 0.000 Area Ratio: 2.470e-5 Sample Type: (Unknown)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.46 (11.39) min Calculated conc: 0.001 Area Ratio: 2.805e-4 Sample Type: (Unknown)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.62 (11.39) min Calculated conc: 0.003 Area Ratio: 5.387e-4 Sample Type: (Unknown)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.95 (12.93) min Calculated conc: 0.001 Area Ratio: 1.462e-4 Sample Type: (Unknown)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.70 (11.73) min Calculated conc: 0.007 Area Ratio: 1.992e-3 Sample Type: (Unknown)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.62 (11.72) min Calculated conc: 0.006 Area Ratio: 9.360e-4 Sample Type: (Unknown)	

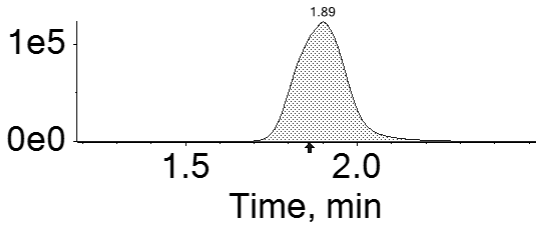
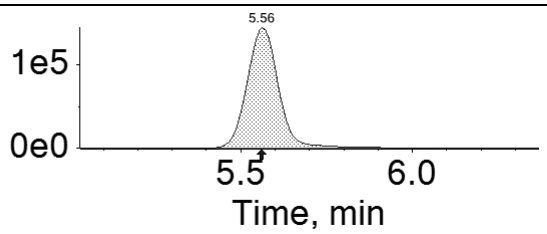
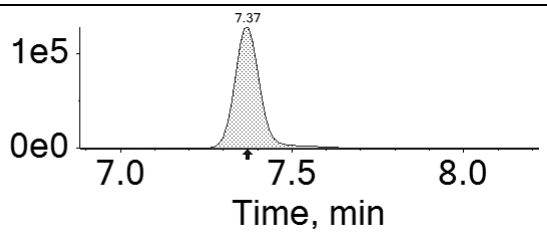
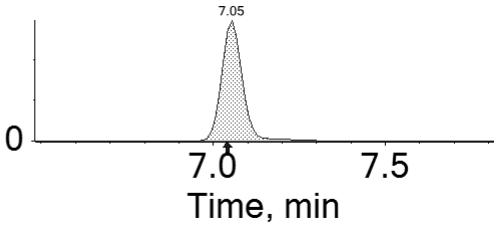
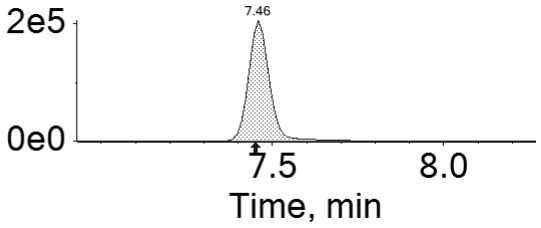
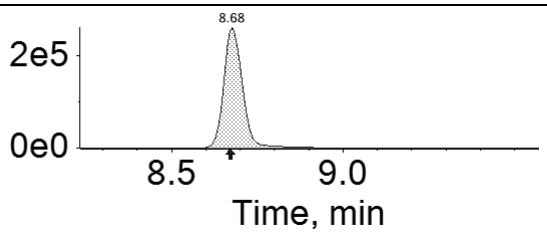
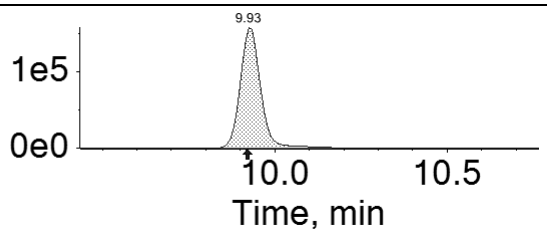
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 0.006 Area Ratio: 9.509e-4 Sample Type: (Unknown)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: 0.004 Area Ratio: 1.142e-4 Sample Type: (Unknown)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.43 (13.41) min Calculated conc: 0.000 Area Ratio: 1.780e-5 Sample Type: (Unknown)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.56 (13.41) min Calculated conc: 0.001 Area Ratio: 6.290e-5 Sample Type: (Unknown)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 13.00 (12.96) min Calculated conc: 0.001 Area Ratio: 1.113e-4 Sample Type: (Unknown)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.93 (12.97) min Calculated conc: 0.008 Area Ratio: 1.702e-4 Sample Type: (Unknown)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: 0.004 Area Ratio: 6.020e-4 Sample Type: (Unknown)	

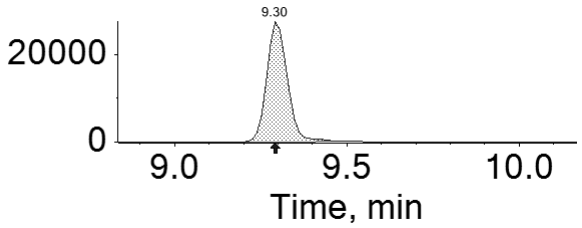
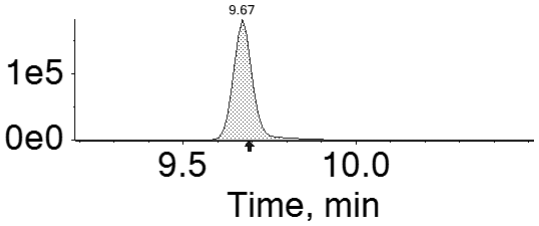
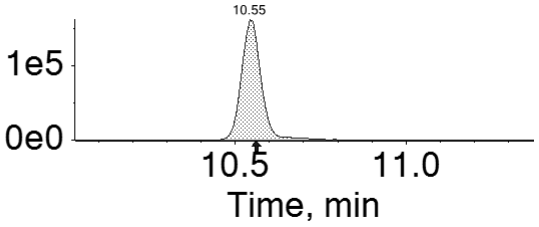
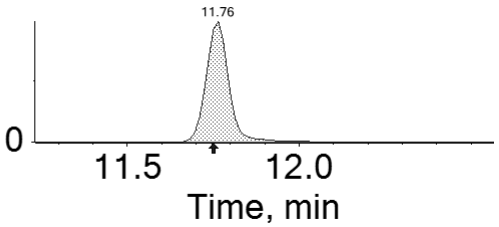
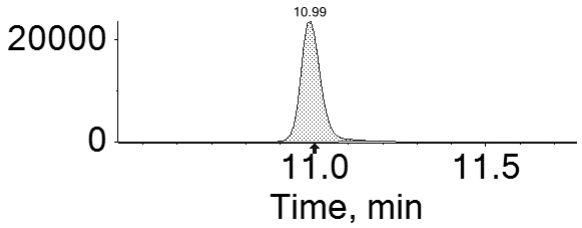
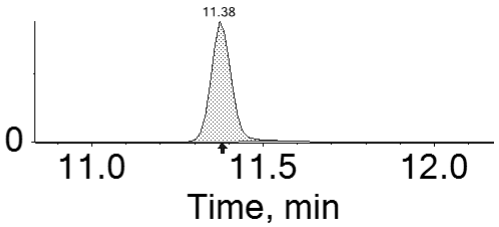
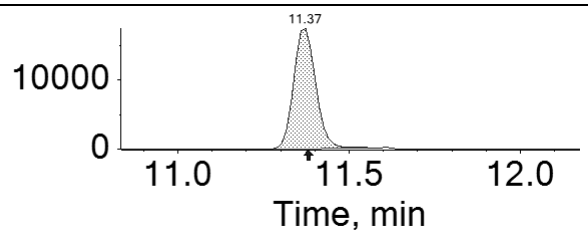
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.76 (13.73) min Calculated conc: 0.000 Area Ratio: 9.054e-6 Sample Type: (Unknown)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.45 (14.48) min Calculated conc: 0.012 Area Ratio: 1.980e-3 Sample Type: (Unknown)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.52 (14.48) min Calculated conc: 0.005 Area Ratio: 1.175e-4 Sample Type: (Unknown)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.529 Area Ratio: N/A Sample Type: (Unknown)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: 1.489 Area Ratio: N/A Sample Type: (Unknown)	

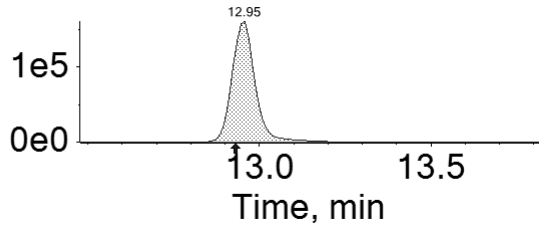
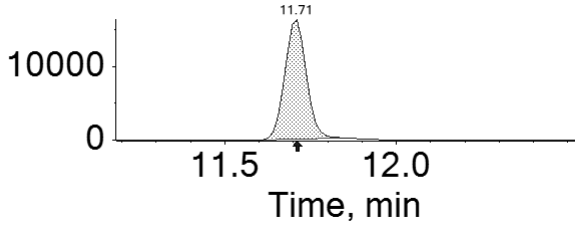
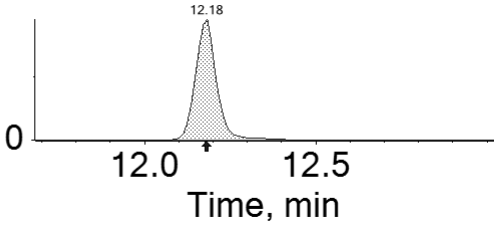
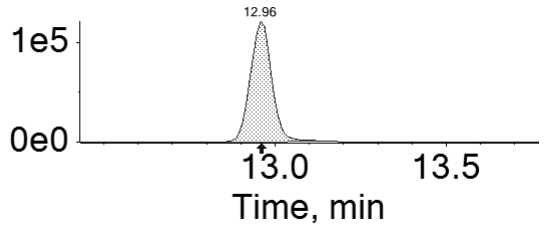
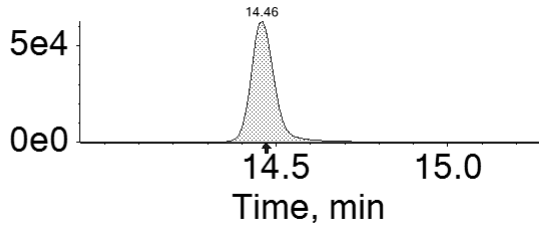
Sample Name	LCS-71172	**Injection Vial**	20
Sample ID	LCS-71172	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-22T04:05:43	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190621C.wiff		
Result Table	190621AM		
Sample Comment			

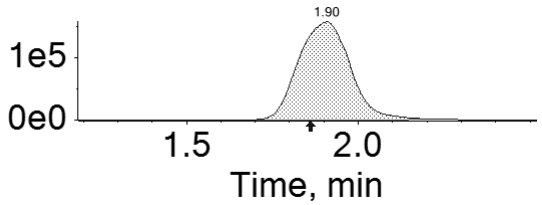
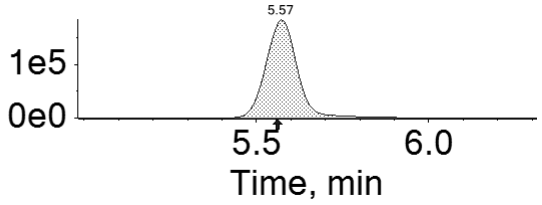
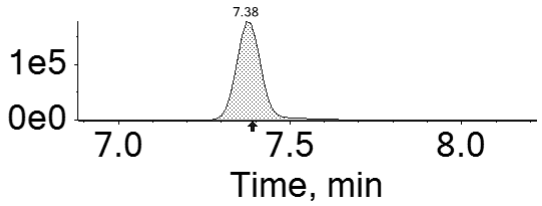
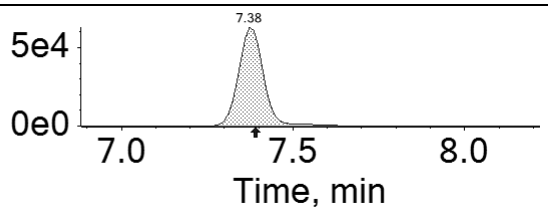
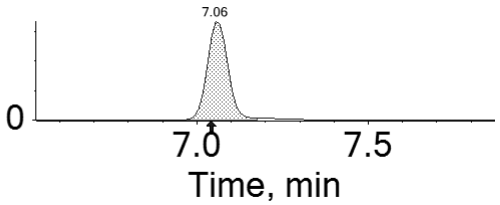
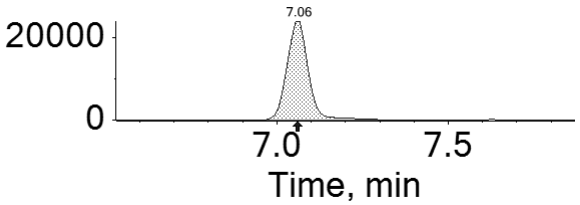
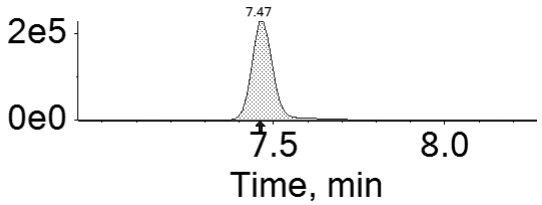
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.266e6	1.89	1.00	-
13C5_PFPeA	9.070e5	5.56	1.00	-
13C3_PFBS	6.575e5	7.37	1.00	-
13C2_4:2FTS	1.238e5	7.05	1.00	-
13C5_PFHxA	8.662e5	7.46	1.00	-
13C4_PFHpA	9.891e5	8.68	1.00	-
13C3_PFHxS	6.421e5	9.93	1.00	-
13C2_6:2FTS	1.142e5	9.30	1.00	-
13C8_PFOA	7.069e5	9.67	1.00	-
13C9_PFNA	6.531e5	10.55	1.00	-
13C8_PFOS	4.451e5	11.76	1.00	-
13C2_8:2FTS	9.630e4	10.99	1.00	-
13C6_PFDA	3.617e5	11.38	1.00	-
d3-MeFOSAA	7.856e4	11.37	1.00	-
13C8_FOSA	7.594e5	12.95	1.00	-
d5-EtFOSAA	7.112e4	11.71	1.00	-
13C7_PFUdA	4.044e5	12.18	1.00	-
13C2_PFDoA	5.243e5	12.96	1.00	-
13C2_PFTeDA	2.998e5	14.46	1.00	-

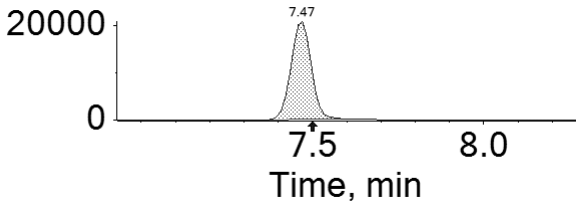
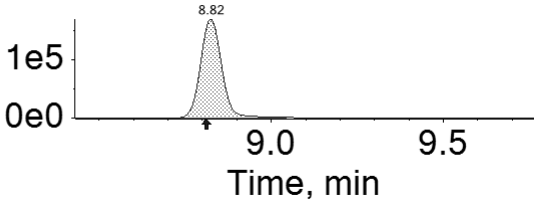
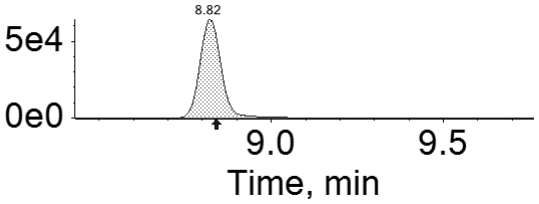
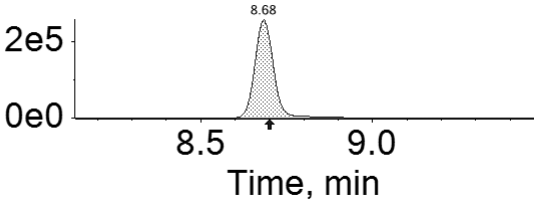
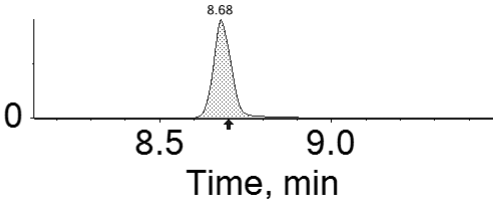
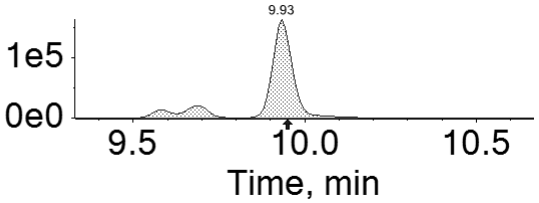
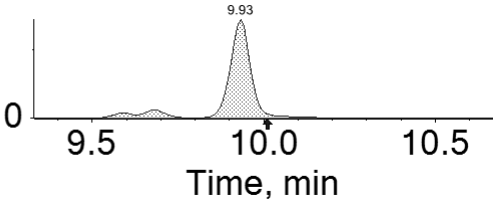
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.651e+06	1.90	5.00	6.089
PFPeA	1.160e+06	5.57	5.00	6.190
PFBS	9.045e+05	7.38	5.00	6.417
PFBS_2	3.146e+05	7.38	5.00	6.288
4:2FTS	1.400e+05	7.06	5.00	5.840
4:2FTS_2	1.028e+05	7.06	5.00	6.214
PFHxA	9.982e+05	7.47	5.00	6.283
PFHxA_2	8.515e+04	7.47	5.00	6.442
PFPeS	7.265e+05	8.82	5.00	6.473
PFPeS_2	2.734e+05	8.82	5.00	6.403
PFHpA	9.862e+05	8.68	5.00	6.304
PFHpA_2	3.329e+05	8.68	5.00	6.308
PFHxS	8.210e+05	9.93	5.00	5.733
PFHxS_2	3.436e+05	9.93	5.00	5.987
6:2FTS	1.782e+05	9.30	5.00	5.971
6:2FTS_2	1.392e+05	9.30	5.00	6.136
PFOA	1.108e+06	9.68	5.00	6.306
PFOA_2	4.324e+05	9.68	5.00	6.366
PFHpS	8.130e+05	10.88	5.00	6.009
PFHpS_2	2.408e+05	10.88	5.00	6.145
PFNA	6.208e+05	10.55	5.00	6.086
PFNA_2	2.082e+05	10.55	5.00	5.907
PFOS	5.663e+05	11.77	5.00	5.712
PFOS_2	1.653e+05	11.77	5.00	5.860
8:2FTS	1.273e+05	11.00	5.00	6.578
8:2FTS_2	1.142e+05	10.99	5.00	6.603
PFDA	4.978e+05	11.38	5.00	6.077
PFDA_2	1.319e+05	11.38	5.00	6.268
PFNS	5.930e+05	12.61	5.00	5.781
PFNS_2	1.968e+05	12.60	5.00	6.110
N-MeFOSAA	1.626e+05	11.38	5.00	6.445
N-MeFOSAA_2	8.546e+04	11.38	5.00	6.473
FOSA	6.283e+05	12.96	5.00	6.034
N-EtFOSAA	1.172e+05	11.72	5.00	5.905
N-EtFOSAA_2	6.138e+04	11.72	5.00	5.824
PFUdA	3.617e+05	12.18	5.00	6.051
PFUdA_2	7.694e+04	12.19	5.00	6.033
PFDS	4.246e+05	13.40	5.00	6.184
PFDS_2	1.492e+05	13.40	5.00	6.374
PFDoA	4.209e+05	12.96	5.00	6.085
PFDoA_2	7.198e+04	12.96	5.00	6.079
PFTrDA	4.388e+05	13.72	5.00	5.812
PFTrDA_2	8.760e+04	13.72	5.00	6.264
PFTeDA	2.971e+05	14.47	5.00	6.019
PFTeDA_2	4.068e+04	14.46	5.00	6.013
13C4_PFOA	8.632e+05	9.67	5.00	1.617
13C4_PFOS	4.766e+05	11.76	5.00	1.688

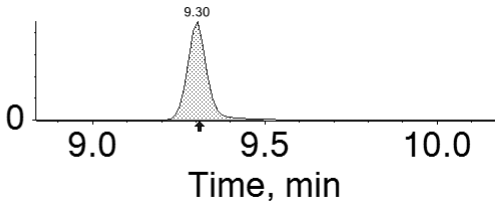
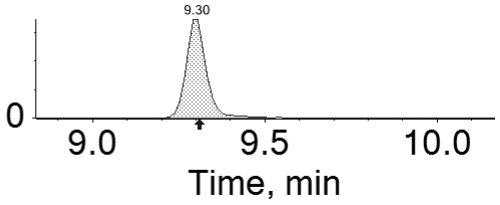
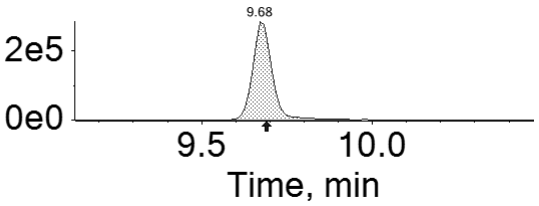
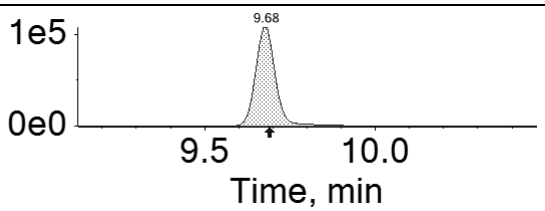
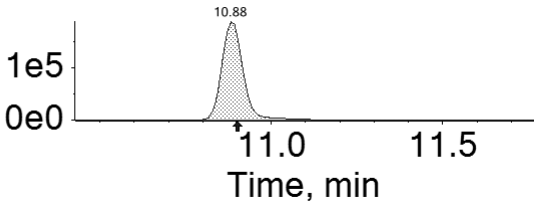
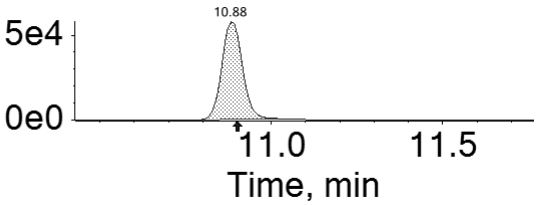
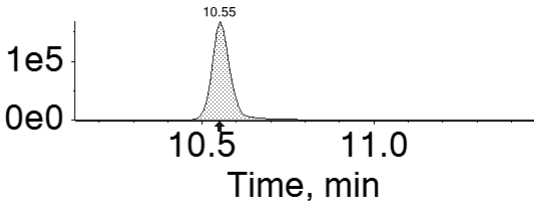
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.89(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.56(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.37(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.05(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.46(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.93(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

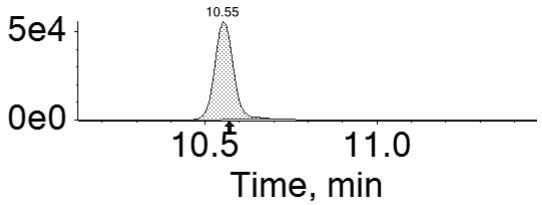
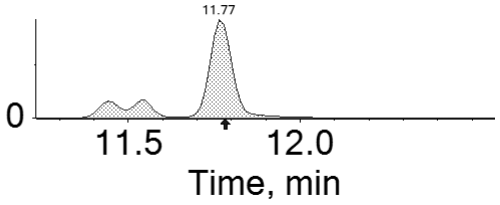
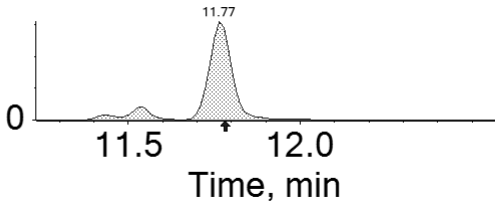
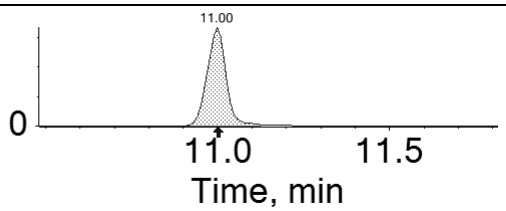
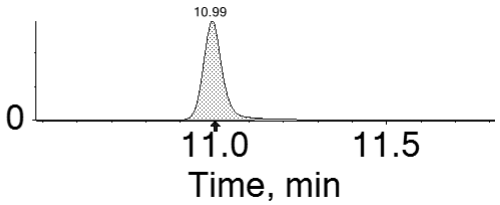
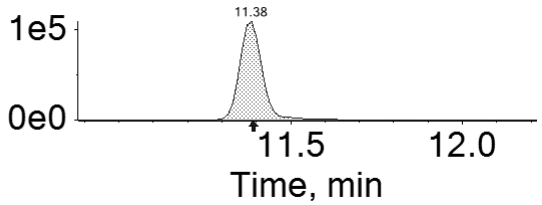
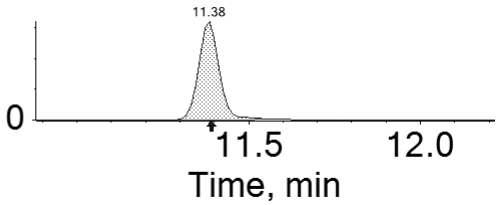
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.76(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

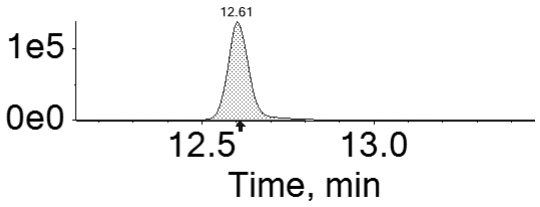
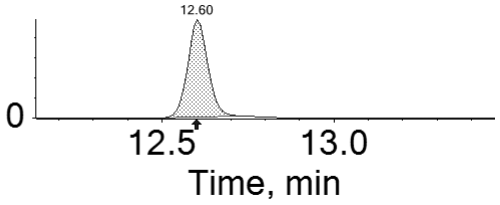
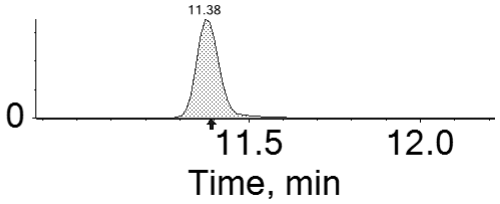
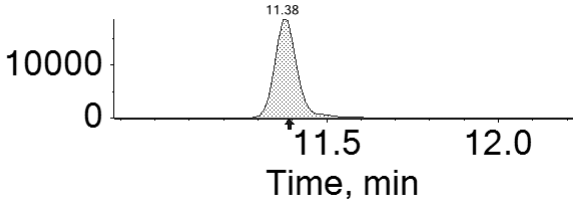
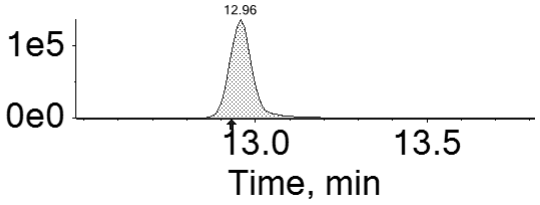
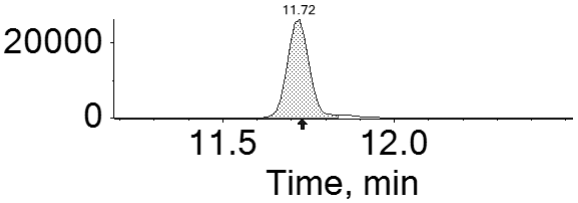
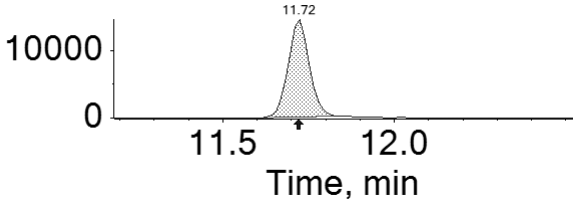
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.95(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.18(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.96(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.46(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

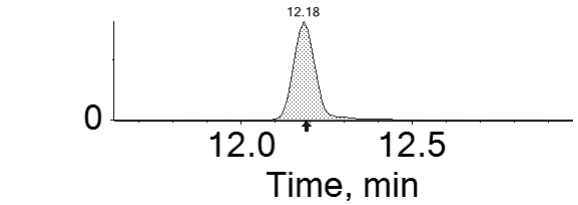
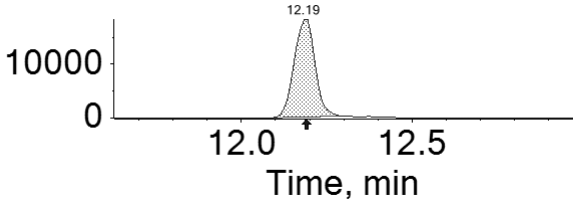
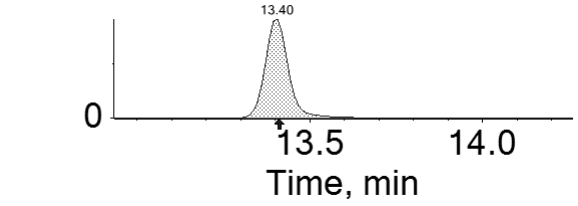
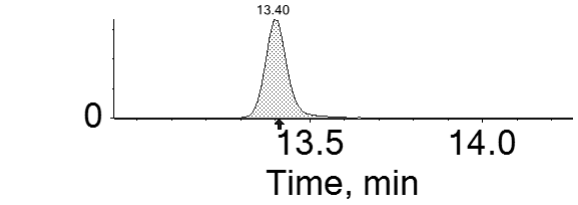
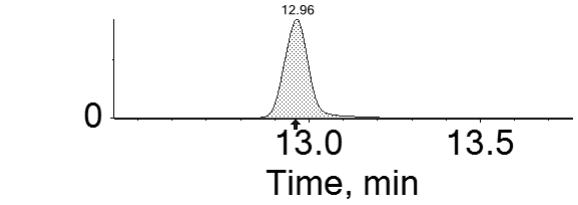
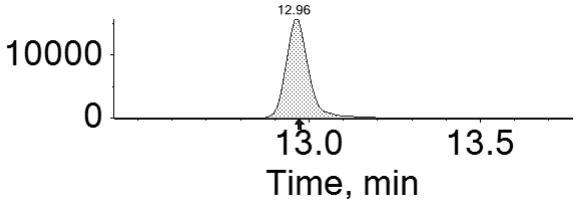
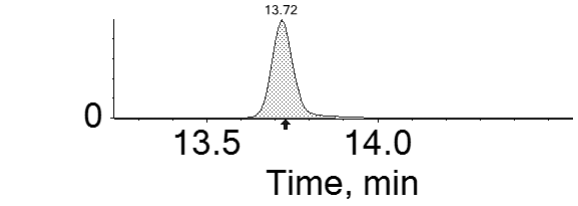
PFBA (213.0 / 169.0) RT (Exp. RT): 1.90 (1.86) min Calculated conc: 6.089 Area Ratio: 1.305e0 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.57 (5.56) min Calculated conc: 6.190 Area Ratio: 1.279e0 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 6.417 Area Ratio: 1.376e0 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.38 (7.39) min Calculated conc: 6.288 Area Ratio: 4.786e-1 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.06 (7.04) min Calculated conc: 5.840 Area Ratio: 1.131e0 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.06 (7.06) min Calculated conc: 6.214 Area Ratio: 8.301e-1 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.47 (7.46) min Calculated conc: 6.283 Area Ratio: 1.152e0 Sample Type: (Quality Control)	

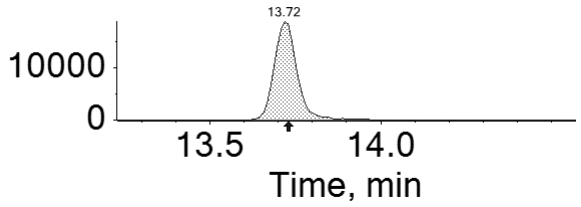
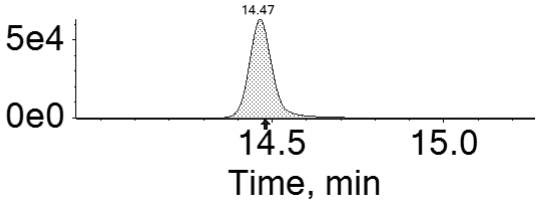
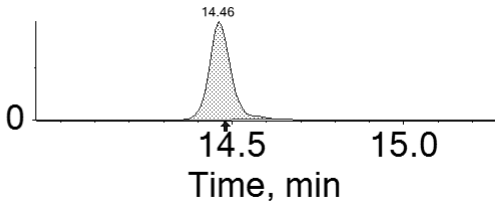
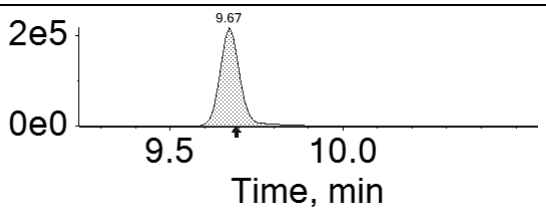
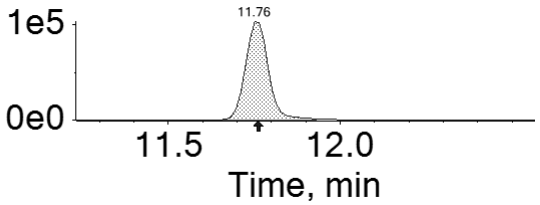
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.47 (7.50) min Calculated conc: 6.442 Area Ratio: 9.830e-2 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.82 (8.81) min Calculated conc: 6.473 Area Ratio: 7.345e-1 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.82 (8.84) min Calculated conc: 6.403 Area Ratio: 2.764e-1 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 6.304 Area Ratio: 9.971e-1 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: 6.308 Area Ratio: 3.365e-1 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: 5.733 Area Ratio: 1.279e0 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: 5.987 Area Ratio: 5.351e-1 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 5.971 Area Ratio: 1.561e0 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: 6.136 Area Ratio: 1.219e0 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 6.306 Area Ratio: 1.568e0 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: 6.366 Area Ratio: 6.116e-1 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 6.009 Area Ratio: 1.245e0 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: 6.145 Area Ratio: 3.688e-1 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.55 (10.55) min Calculated conc: 6.086 Area Ratio: 9.506e-1 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.55 (10.57) min Calculated conc: 5.907 Area Ratio: 3.188e-1 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 5.712 Area Ratio: 1.272e0 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.77 (11.78) min Calculated conc: 5.860 Area Ratio: 3.713e-1 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: 6.578 Area Ratio: 1.322e0 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: 6.603 Area Ratio: 1.186e0 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 6.077 Area Ratio: 1.376e0 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 6.268 Area Ratio: 3.647e-1 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.61 (12.61) min Calculated conc: 5.781 Area Ratio: 9.080e-1 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.60 (12.60) min Calculated conc: 6.110 Area Ratio: 4.867e-1 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 6.445 Area Ratio: 2.070e0 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: 6.473 Area Ratio: 1.088e0 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.96 (12.93) min Calculated conc: 6.034 Area Ratio: 8.274e-1 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: 5.905 Area Ratio: 1.648e0 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: 5.824 Area Ratio: 8.630e-1 Sample Type: (Quality Control)	

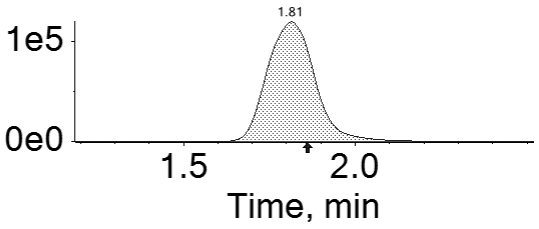
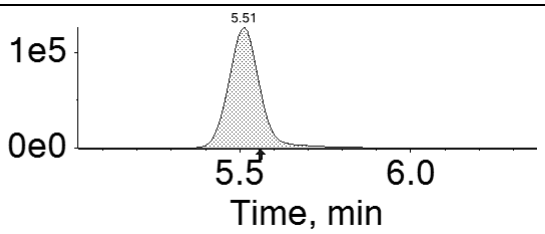
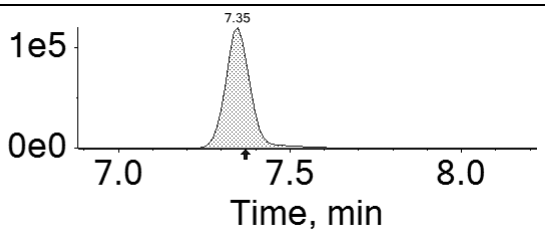
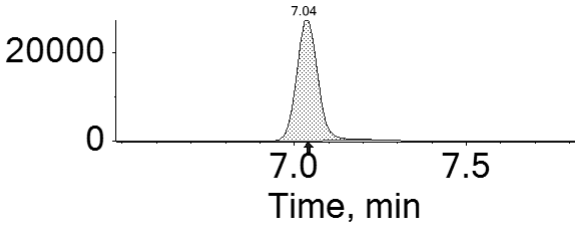
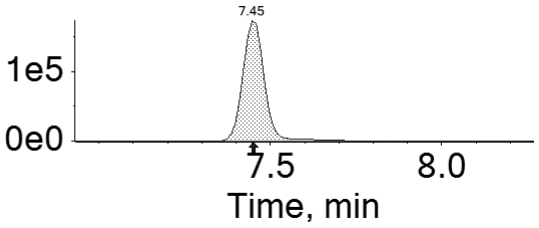
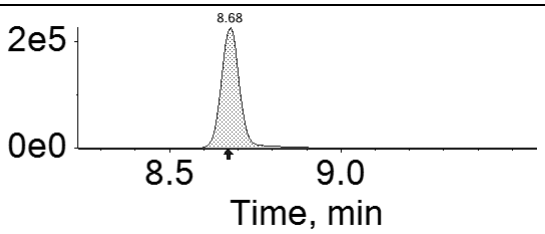
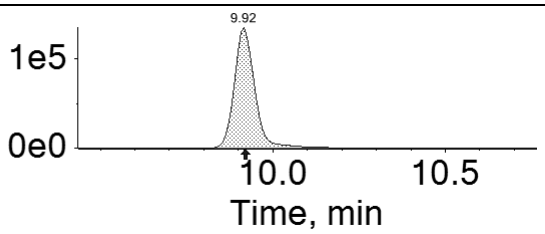
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: 6.051 Area Ratio: 8.943e-1 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.19 (12.19) min Calculated conc: 6.033 Area Ratio: 1.903e-1 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 6.184 Area Ratio: 8.099e-1 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.40 (13.41) min Calculated conc: 6.374 Area Ratio: 2.846e-1 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.96 (12.96) min Calculated conc: 6.085 Area Ratio: 8.028e-1 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.96 (12.97) min Calculated conc: 6.079 Area Ratio: 1.373e-1 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: 5.812 Area Ratio: 8.369e-1 Sample Type: (Quality Control)	

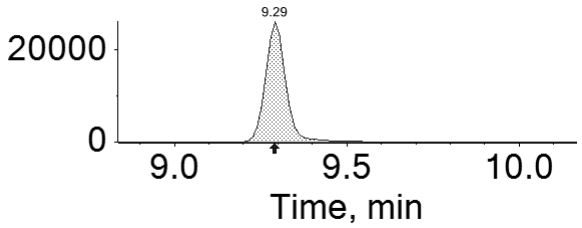
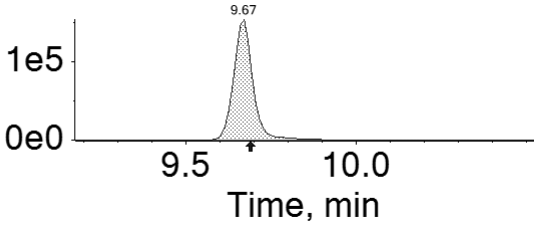
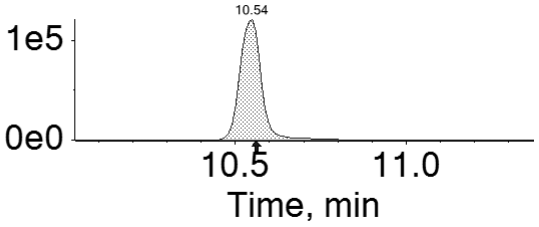
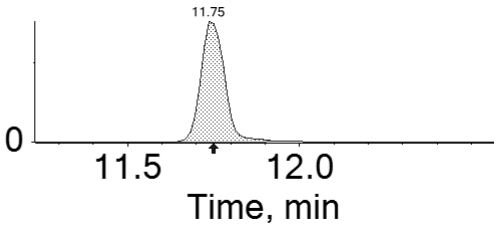
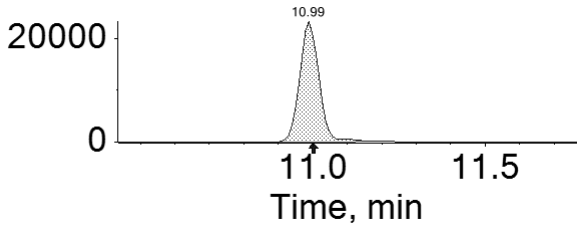
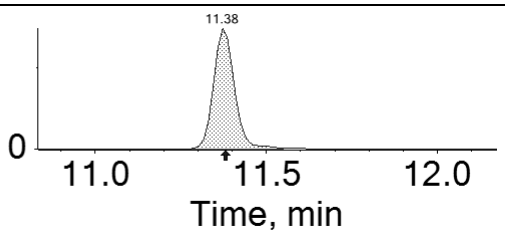
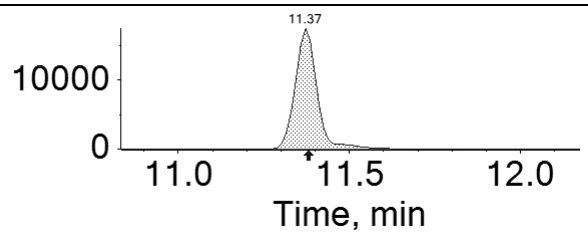
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.72 (13.73) min Calculated conc: 6.264 Area Ratio: 1.671e-1 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.47 (14.48) min Calculated conc: 6.019 Area Ratio: 9.909e-1 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: 6.013 Area Ratio: 1.357e-1 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: 1.617 Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.76 (11.76) min Calculated conc: 1.688 Area Ratio: N/A Sample Type: (Quality Control)	

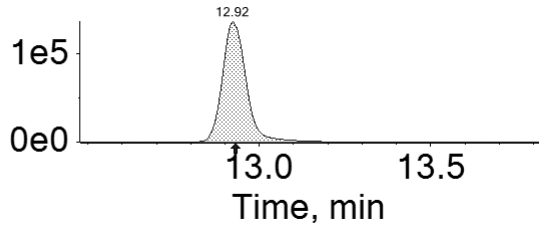
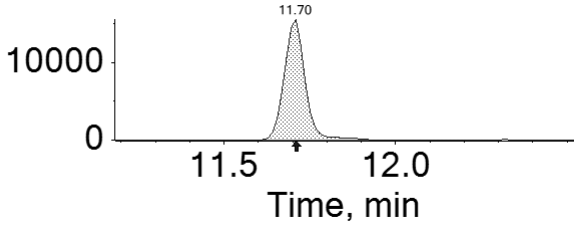
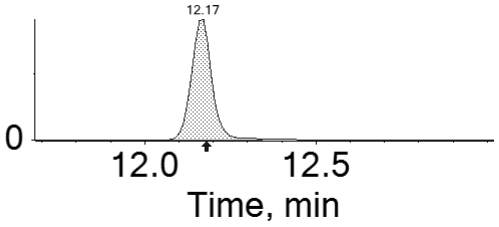
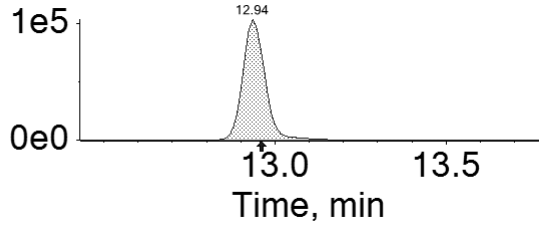
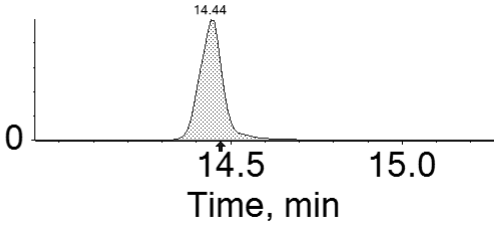
Sample Name	10478022003-MS	**Injection Vial**	11
Sample ID	10478022003-MS	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-25T13:19:30	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190625A.wiff		
Result Table	190625AM		
Sample Comment			

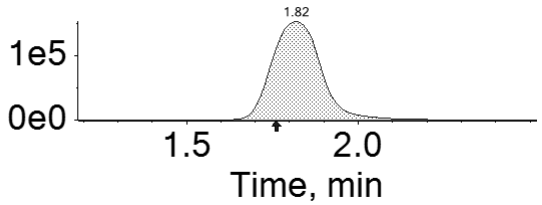
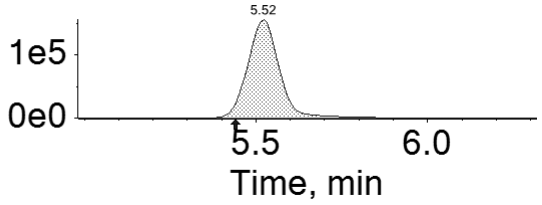
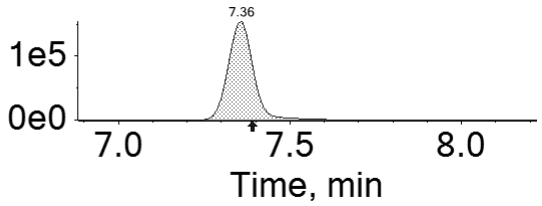
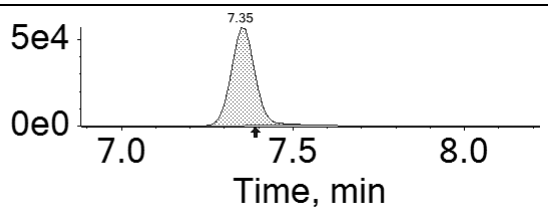
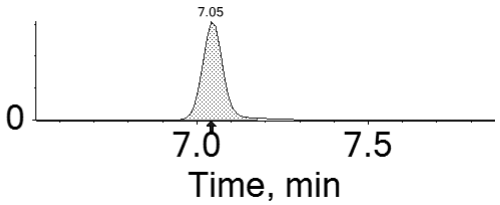
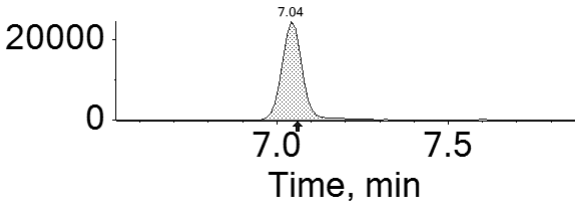
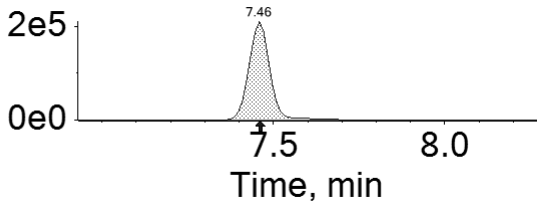
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.147e6	1.81	1.00	-
13C5_PFPeA	7.977e5	5.51	1.00	-
13C3_PFBS	5.951e5	7.35	1.00	-
13C2_4:2FTS	1.181e5	7.04	1.00	-
13C5_PFHxA	7.581e5	7.45	1.00	-
13C4_PFHpA	8.509e5	8.68	1.00	-
13C3_PFHxS	5.522e5	9.92	1.00	-
13C2_6:2FTS	1.064e5	9.29	1.00	-
13C8_PFOA	6.035e5	9.67	1.00	-
13C9_PFNA	5.325e5	10.54	1.00	-
13C8_PFOS	3.628e5	11.75	1.00	-
13C2_8:2FTS	8.990e4	10.99	1.00	-
13C6_PFDA	3.121e5	11.38	1.00	-
d3-MeFOSAA	7.679e4	11.37	1.00	-
13C8_FOSA	6.648e5	12.92	1.00	-
d5-EtFOSAA	6.540e4	11.70	1.00	-
13C7_PFUdA	3.761e5	12.17	1.00	-
13C2_PFDoA	4.652e5	12.94	1.00	-
13C2_PFTeDA	2.354e5	14.44	1.00	-

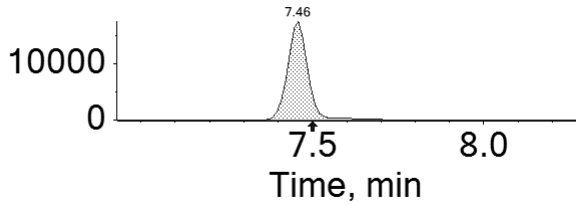
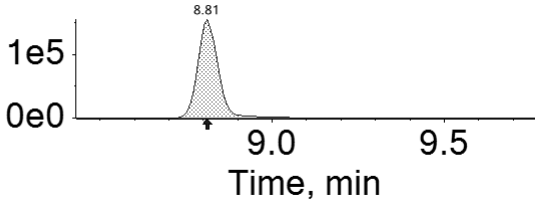
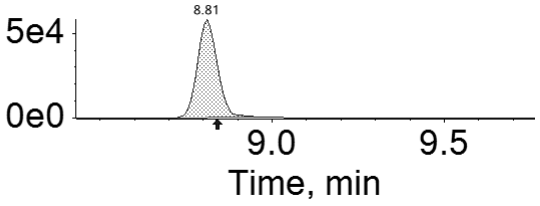
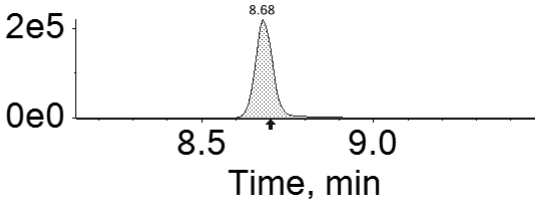
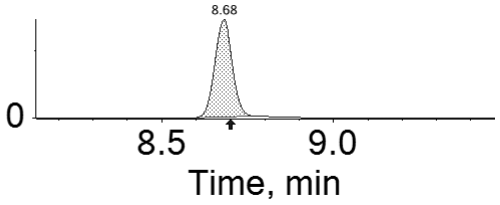
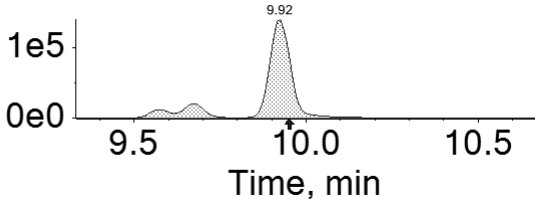
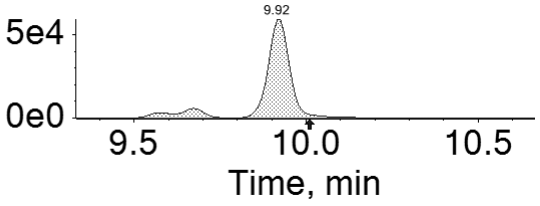
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.502e+06	1.82	5.00	<1 points
PFPeA	9.868e+05	5.52	5.00	<1 points
PFBS	7.895e+05	7.36	5.00	<1 points
PFBS_2	2.736e+05	7.35	5.00	<1 points
4:2FTS	1.298e+05	7.05	5.00	<1 points
4:2FTS_2	1.009e+05	7.04	5.00	<1 points
PFHxA	8.912e+05	7.46	5.00	<1 points
PFHxA_2	7.105e+04	7.46	5.00	<1 points
PFPeS	6.374e+05	8.81	5.00	<1 points
PFPeS_2	2.333e+05	8.81	5.00	<1 points
PFHpA	8.060e+05	8.68	5.00	<1 points
PFHpA_2	2.556e+05	8.68	5.00	<1 points
PFHxS	7.403e+05	9.92	5.00	<1 points
PFHxS_2	3.005e+05	9.92	5.00	<1 points
6:2FTS	1.777e+05	9.30	5.00	<1 points
6:2FTS_2	1.315e+05	9.30	5.00	<1 points
PFOA	9.627e+05	9.67	5.00	<1 points
PFOA_2	3.552e+05	9.67	5.00	<1 points
PFHpS	7.551e+05	10.87	5.00	<1 points
PFHpS_2	2.197e+05	10.87	5.00	<1 points
PFNA	4.952e+05	10.55	5.00	<1 points
PFNA_2	1.632e+05	10.55	5.00	<1 points
PFOS	5.463e+05	11.76	5.00	<1 points
PFOS_2	1.393e+05	11.76	5.00	<1 points
8:2FTS	1.209e+05	10.99	5.00	<1 points
8:2FTS_2	9.886e+04	10.99	5.00	<1 points
PFDA	4.313e+05	11.38	5.00	<1 points
PFDA_2	1.061e+05	11.38	5.00	<1 points
PFNS	5.265e+05	12.58	5.00	<1 points
PFNS_2	1.812e+05	12.58	5.00	<1 points
N-MeFOSAA	1.465e+05	11.38	5.00	<1 points
N-MeFOSAA_2	7.307e+04	11.38	5.00	<1 points
FOSA	5.585e+05	12.93	5.00	<1 points
N-EtFOSAA	1.042e+05	11.72	5.00	<1 points
N-EtFOSAA_2	5.522e+04	11.72	5.00	<1 points
PFUdA	3.250e+05	12.17	5.00	<1 points
PFUdA_2	6.849e+04	12.17	5.00	<1 points
PFDS	3.894e+05	13.37	5.00	<1 points
PFDS_2	1.398e+05	13.37	5.00	<1 points
PFDoA	3.910e+05	12.94	5.00	<1 points
PFDoA_2	6.440e+04	12.94	5.00	<1 points
PFTrDA	4.241e+05	13.70	5.00	<1 points
PFTrDA_2	7.365e+04	13.70	5.00	<1 points
PFTeDA	2.440e+05	14.44	5.00	<1 points
PFTeDA_2	2.997e+04	14.44	5.00	<1 points
13C4_PFOA	7.447e+05	9.67	1.00	<1 points
13C4_PFOS	4.490e+05	11.75	1.00	<1 points

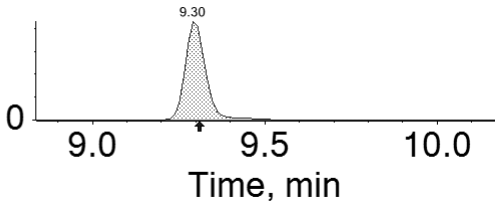
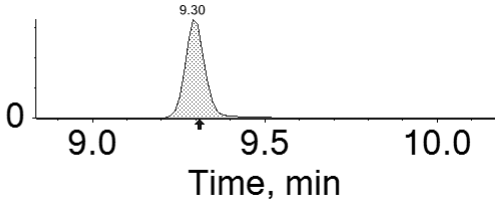
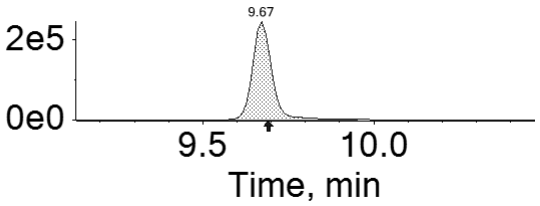
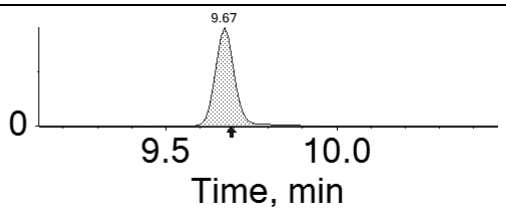
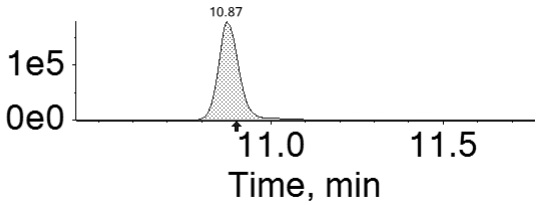
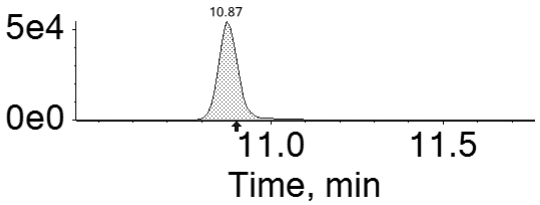
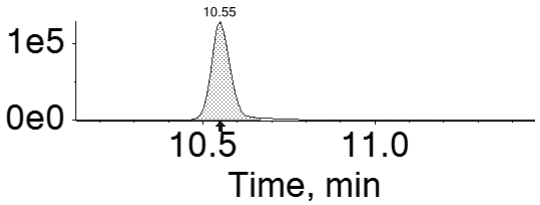
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.81(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.51(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.35(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.04(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.45(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.92(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

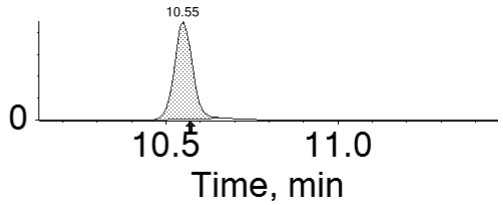
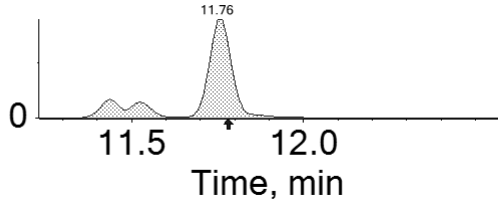
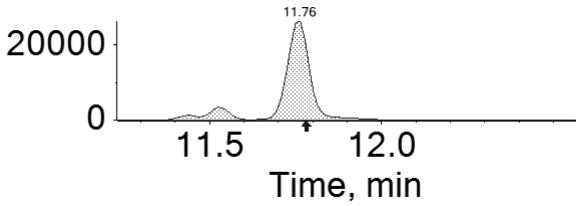
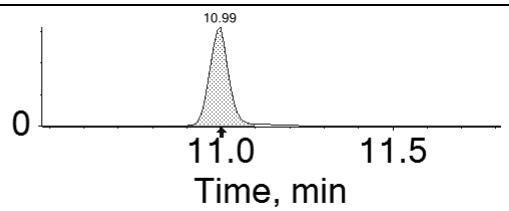
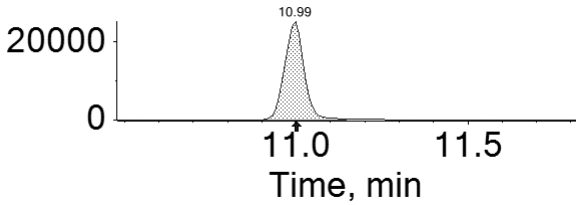
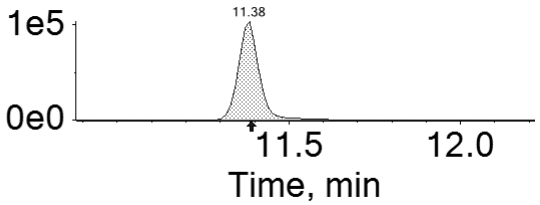
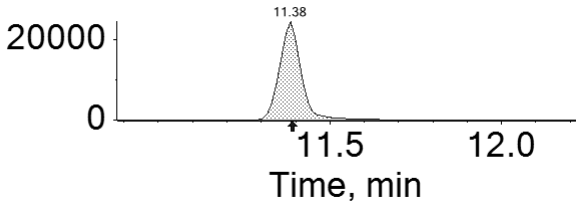
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.29(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.54(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 10.99(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.37(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

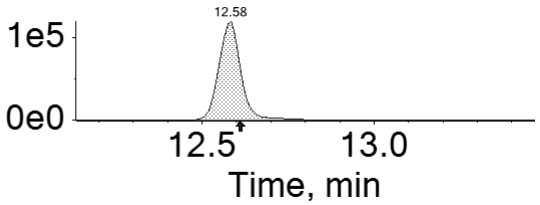
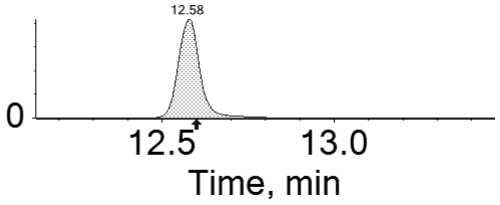
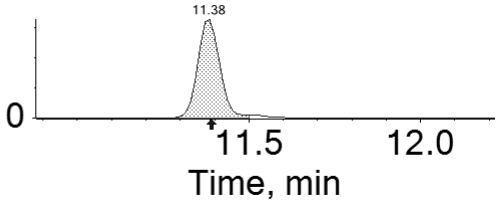
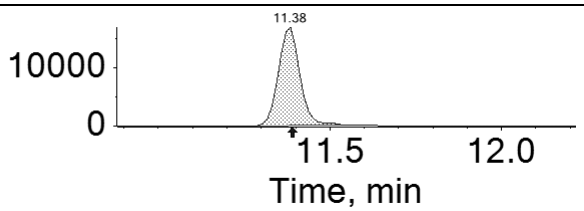
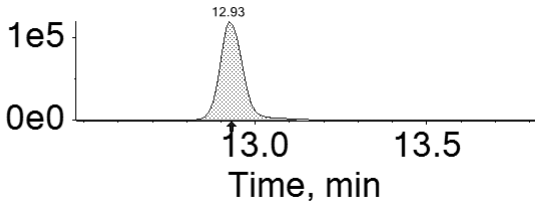
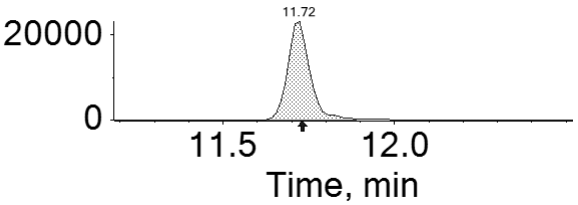
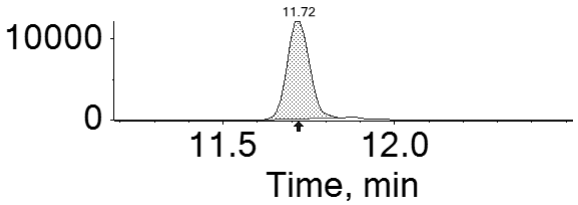
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.92(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.70(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.94(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.44(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

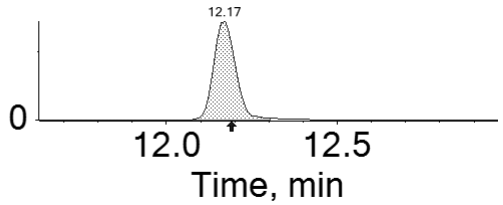
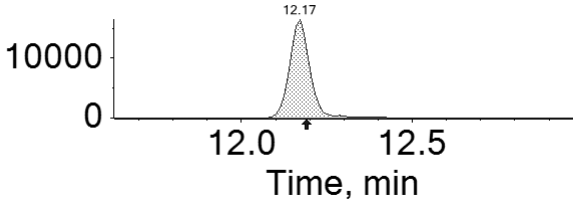
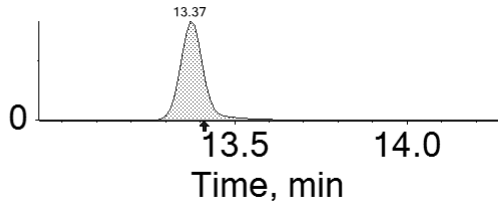
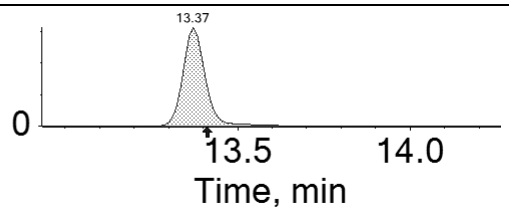
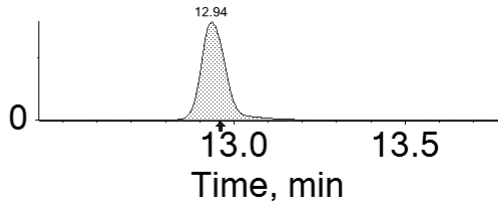
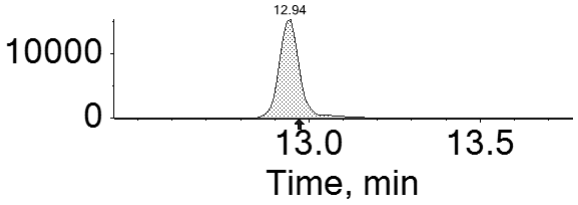
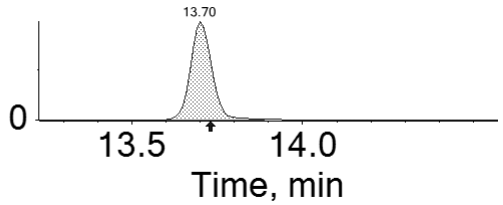
PFBA (213.0 / 169.0) RT (Exp. RT): 1.82 (1.76) min Calculated conc: <1 points Area Ratio: 1.310e0 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.52 (5.44) min Calculated conc: <1 points Area Ratio: 1.237e0 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.36 (7.39) min Calculated conc: <1 points Area Ratio: 1.327e0 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.35 (7.39) min Calculated conc: <1 points Area Ratio: 4.599e-1 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.05 (7.04) min Calculated conc: <1 points Area Ratio: 1.100e0 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.04 (7.06) min Calculated conc: <1 points Area Ratio: 8.545e-1 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.46 (7.46) min Calculated conc: <1 points Area Ratio: 1.175e0 Sample Type: (Quality Control)	

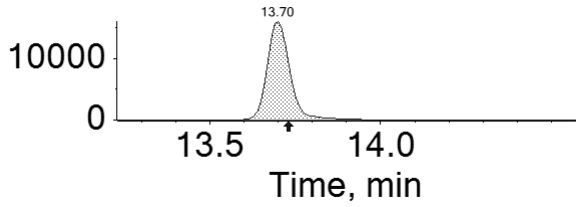
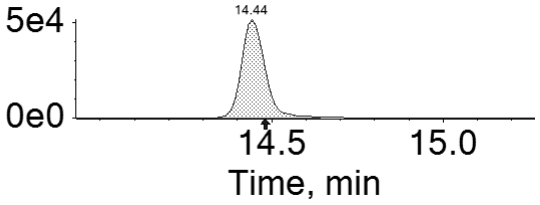
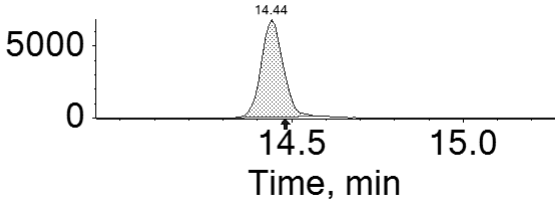
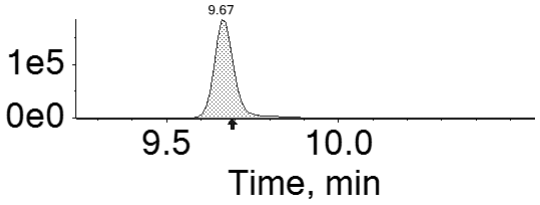
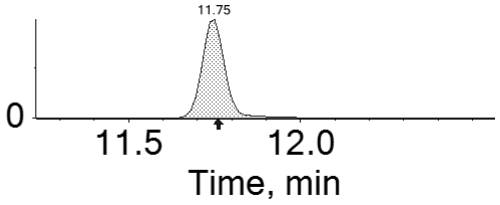
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.46 (7.50) min Calculated conc: <1 points Area Ratio: 9.372e-2 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.81 (8.81) min Calculated conc: <1 points Area Ratio: 7.492e-1 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.81 (8.84) min Calculated conc: <1 points Area Ratio: 2.742e-1 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 9.473e-1 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 3.005e-1 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.92 (9.95) min Calculated conc: <1 points Area Ratio: 1.341e0 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.92 (10.01) min Calculated conc: <1 points Area Ratio: 5.442e-1 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 1.669e0 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 1.235e0 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: 1.595e0 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: 5.886e-1 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: <1 points Area Ratio: 1.418e0 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.87 (10.90) min Calculated conc: <1 points Area Ratio: 4.125e-1 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.55 (10.55) min Calculated conc: <1 points Area Ratio: 9.300e-1 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.55 (10.57) min Calculated conc: <1 points Area Ratio: 3.064e-1 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: <1 points Area Ratio: 1.506e0 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: <1 points Area Ratio: 3.839e-1 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: <1 points Area Ratio: 1.345e0 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 10.99 (11.00) min Calculated conc: <1 points Area Ratio: 1.100e0 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 1.382e0 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 3.401e-1 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.58 (12.61) min Calculated conc: <1 points Area Ratio: 9.887e-1 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.58 (12.60) min Calculated conc: <1 points Area Ratio: 4.819e-1 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 1.907e0 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.38 (11.39) min Calculated conc: <1 points Area Ratio: 9.515e-1 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.93 (12.93) min Calculated conc: <1 points Area Ratio: 8.402e-1 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.72 (11.73) min Calculated conc: <1 points Area Ratio: 1.593e0 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.72 (11.72) min Calculated conc: <1 points Area Ratio: 8.443e-1 Sample Type: (Quality Control)	

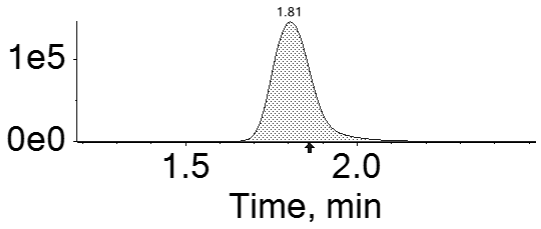
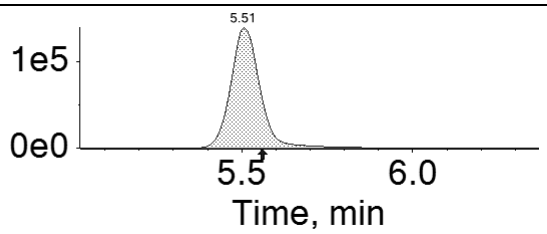
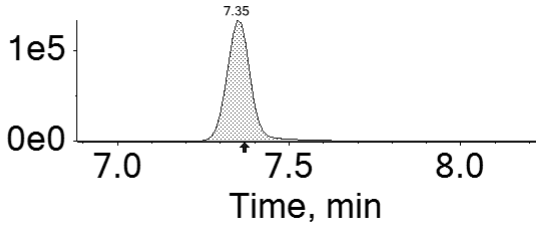
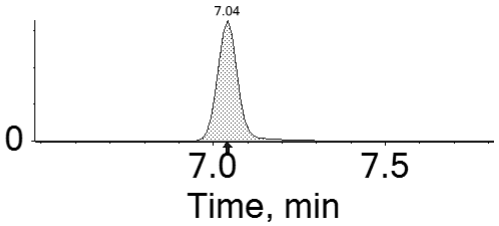
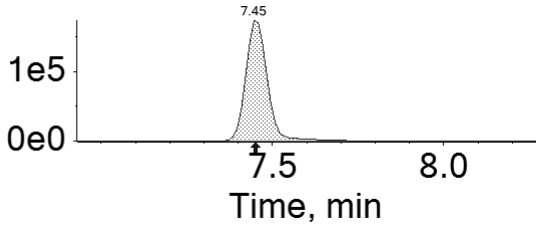
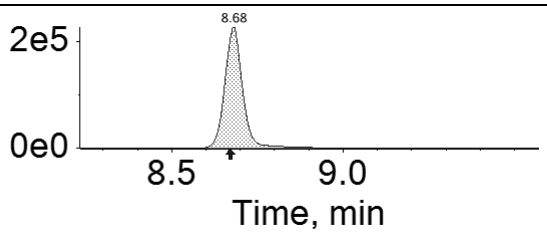
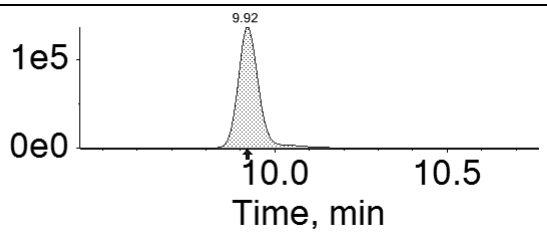
PFUdA (563.0 / 519.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: <1 points Area Ratio: 8.642e-1 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.17 (12.19) min Calculated conc: <1 points Area Ratio: 1.821e-1 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.37 (13.41) min Calculated conc: <1 points Area Ratio: 8.370e-1 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.37 (13.41) min Calculated conc: <1 points Area Ratio: 3.005e-1 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.94 (12.96) min Calculated conc: <1 points Area Ratio: 8.405e-1 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.94 (12.97) min Calculated conc: <1 points Area Ratio: 1.384e-1 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: <1 points Area Ratio: 9.116e-1 Sample Type: (Quality Control)	

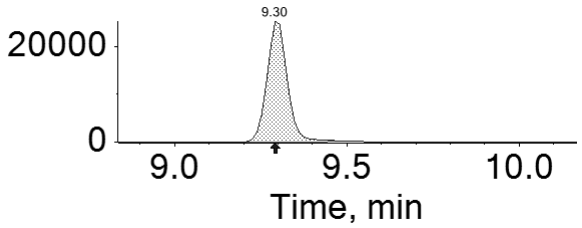
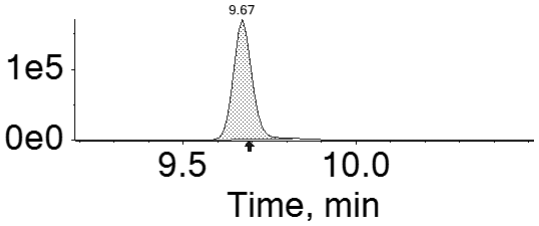
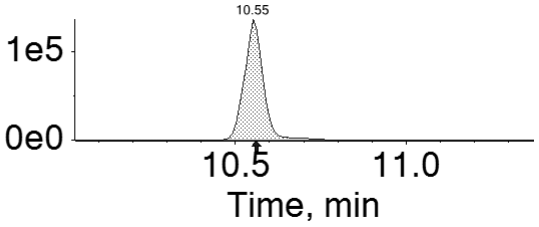
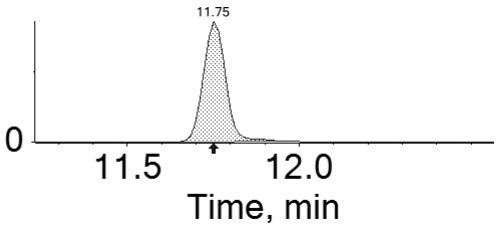
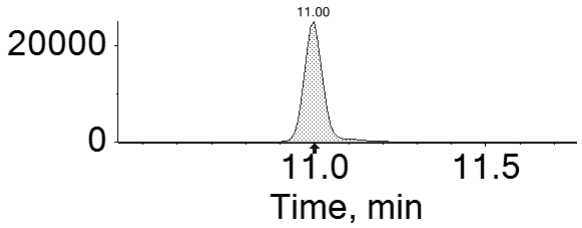
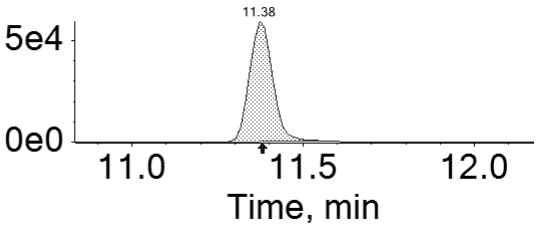
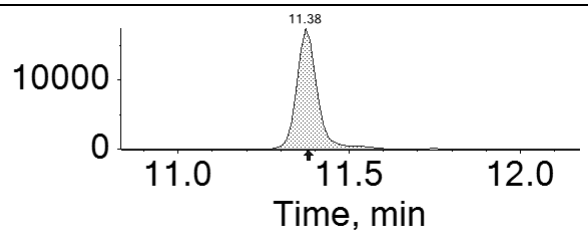
PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.70 (13.73) min Calculated conc: <1 points Area Ratio: 1.583e-1 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.44 (14.48) min Calculated conc: <1 points Area Ratio: 1.037e0 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.44 (14.48) min Calculated conc: <1 points Area Ratio: 1.273e-1 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Quality Control)	

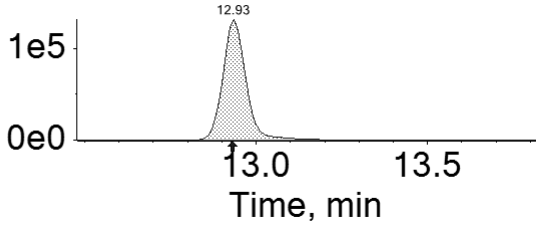
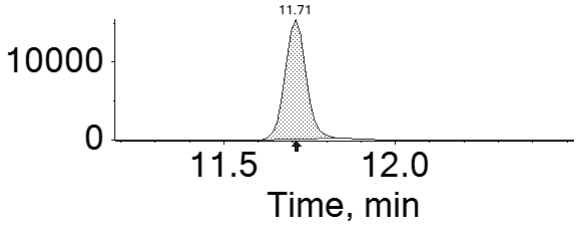
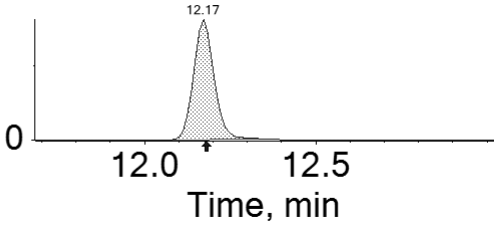
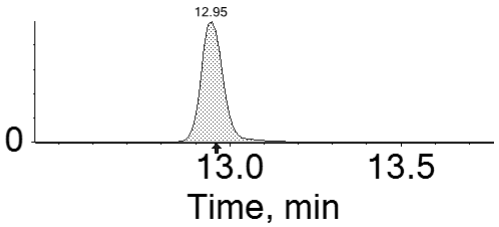
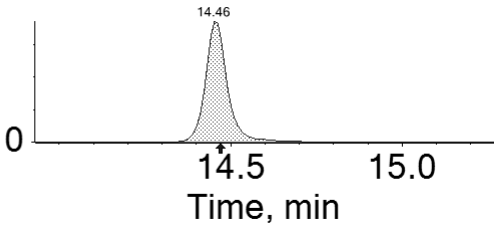
Sample Name	10478022003-MSD	**Injection Vial**	12
Sample ID	10478022003-MSD	**Injection Volume**	10.00
Sample Type	Quality Control	**Algorithm Used**	MQ4
Acquisition Date	2019-06-25T13:46:11	**Dilution Factor**	1.00
Acquisition Method	PFAS_DOD with switch1.dam	**Weight to Volume**	N/A
Project	PFAS 537	**Instrument Name**	10LCMS01
Data File	190625A.wiff		
Result Table	190625AM		
Sample Comment			

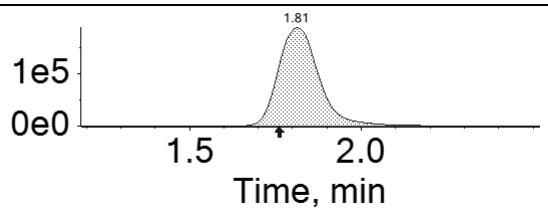
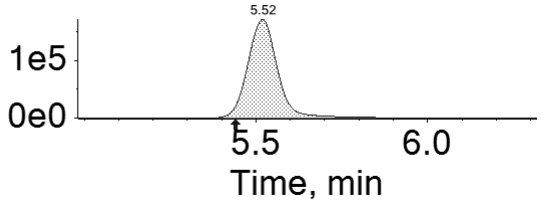
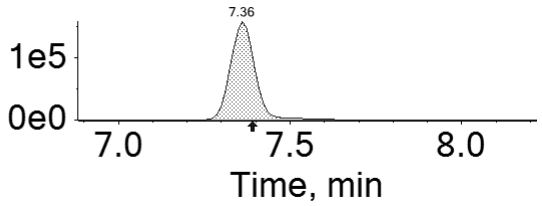
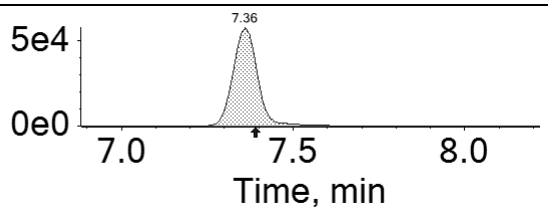
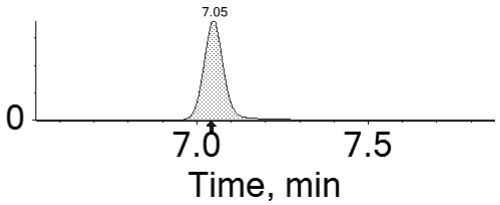
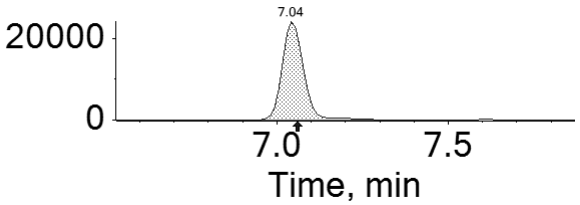
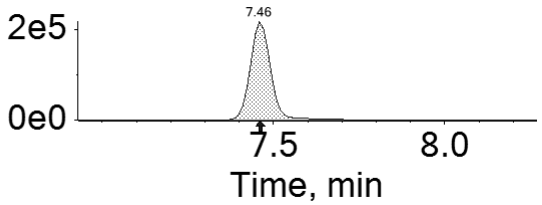
Internal Standard	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
13C4_PFBA	1.167e6	1.81	1.00	-
13C5_PFPeA	8.277e5	5.51	1.00	-
13C3_PFBS	6.454e5	7.35	1.00	-
13C2_4:2FTS	1.355e5	7.04	1.00	-
13C5_PFHxA	7.569e5	7.45	1.00	-
13C4_PFHpA	8.148e5	8.68	1.00	-
13C3_PFHxS	5.659e5	9.92	1.00	-
13C2_6:2FTS	1.032e5	9.30	1.00	-
13C8_PFOA	6.315e5	9.67	1.00	-
13C9_PFNA	5.205e5	10.55	1.00	-
13C8_PFOS	3.822e5	11.75	1.00	-
13C2_8:2FTS	9.562e4	11.00	1.00	-
13C6_PFDA	2.783e5	11.38	1.00	-
d3-MeFOSAA	7.241e4	11.38	1.00	-
13C8_FOSA	6.191e5	12.93	1.00	-
d5-EtFOSAA	6.530e4	11.71	1.00	-
13C7_PFUdA	3.344e5	12.17	1.00	-
13C2_PFDoA	4.498e5	12.95	1.00	-
13C2_PFTeDA	1.652e5	14.46	1.00	-

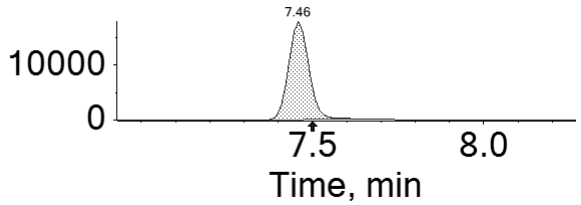
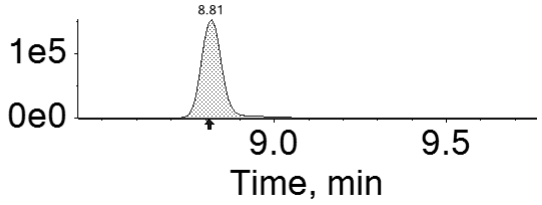
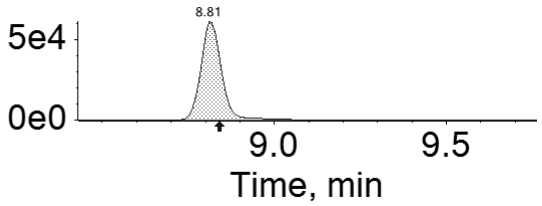
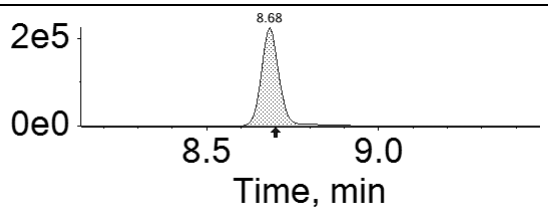
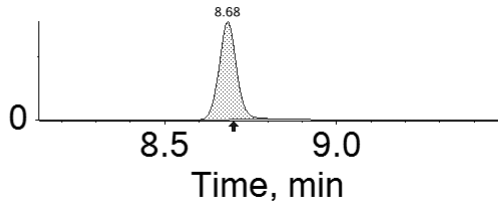
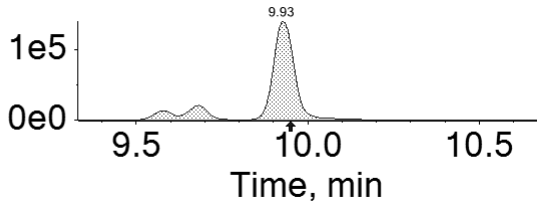
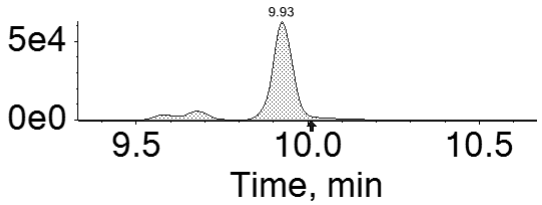
Target Analyte	Area (cps)	RT (min)	Target conc. ()	Calc. Conc. ()
PFBA	1.532e+06	1.81	5.00	<1 points
PFPeA	1.021e+06	5.52	5.00	<1 points
PFBS	7.896e+05	7.36	5.00	<1 points
PFBS_2	2.846e+05	7.36	5.00	<1 points
4:2FTS	1.490e+05	7.05	5.00	<1 points
4:2FTS_2	1.030e+05	7.04	5.00	<1 points
PFHxA	9.030e+05	7.46	5.00	<1 points
PFHxA_2	7.337e+04	7.46	5.00	<1 points
PFPeS	6.517e+05	8.81	5.00	<1 points
PFPeS_2	2.536e+05	8.81	5.00	<1 points
PFHpA	8.197e+05	8.68	5.00	<1 points
PFHpA_2	2.715e+05	8.68	5.00	<1 points
PFHxS	7.482e+05	9.93	5.00	<1 points
PFHxS_2	3.068e+05	9.93	5.00	<1 points
6:2FTS	1.891e+05	9.30	5.00	<1 points
6:2FTS_2	1.315e+05	9.30	5.00	<1 points
PFOA	9.648e+05	9.68	5.00	<1 points
PFOA_2	3.513e+05	9.68	5.00	<1 points
PFHpS	7.364e+05	10.88	5.00	<1 points
PFHpS_2	2.039e+05	10.88	5.00	<1 points
PFNA	4.759e+05	10.56	5.00	<1 points
PFNA_2	1.606e+05	10.56	5.00	<1 points
PFOS	5.212e+05	11.76	5.00	<1 points
PFOS_2	1.423e+05	11.76	5.00	<1 points
8:2FTS	1.234e+05	11.00	5.00	<1 points
8:2FTS_2	9.632e+04	11.00	5.00	<1 points
PFDA	4.068e+05	11.39	5.00	<1 points
PFDA_2	1.063e+05	11.39	5.00	<1 points
PFNS	5.144e+05	12.59	5.00	<1 points
PFNS_2	1.734e+05	12.59	5.00	<1 points
N-MeFOSAA	1.428e+05	11.39	5.00	<1 points
N-MeFOSAA_2	7.503e+04	11.39	5.00	<1 points
FOSA	5.003e+05	12.94	5.00	<1 points
N-EtFOSAA	1.009e+05	11.73	5.00	<1 points
N-EtFOSAA_2	6.082e+04	11.73	5.00	<1 points
PFUdA	2.904e+05	12.18	5.00	<1 points
PFUdA_2	6.084e+04	12.18	5.00	<1 points
PFDS	3.780e+05	13.38	5.00	<1 points
PFDS_2	1.281e+05	13.38	5.00	<1 points
PFDoA	3.403e+05	12.95	5.00	<1 points
PFDoA_2	5.490e+04	12.95	5.00	<1 points
PFTrDA	3.407e+05	13.71	5.00	<1 points
PFTrDA_2	5.505e+04	13.71	5.00	<1 points
PFTeDA	1.521e+05	14.46	5.00	<1 points
PFTeDA_2	1.947e+04	14.46	5.00	<1 points
13C4_PFOA	7.358e+05	9.67	1.00	<1 points
13C4_PFOS	4.139e+05	11.75	1.00	<1 points

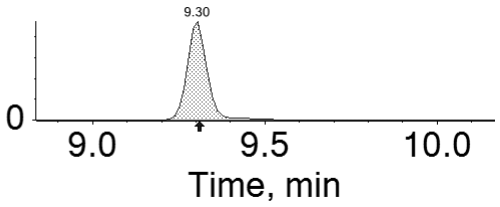
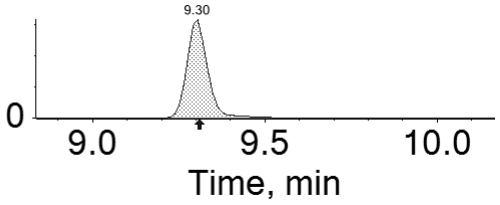
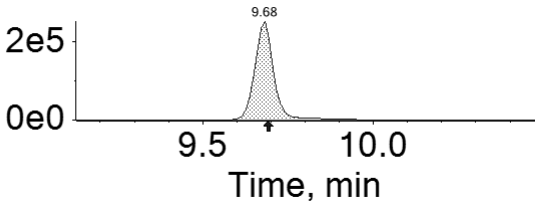
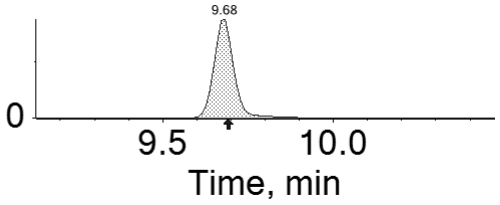
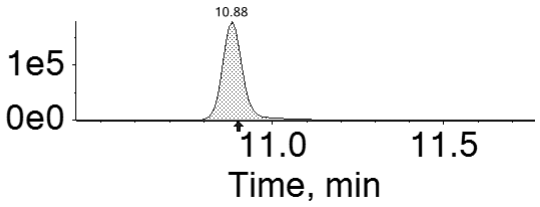
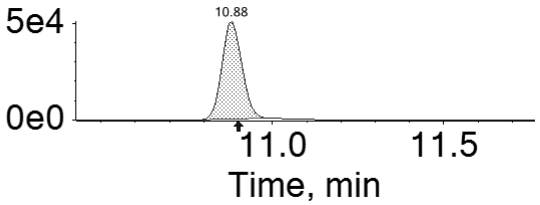
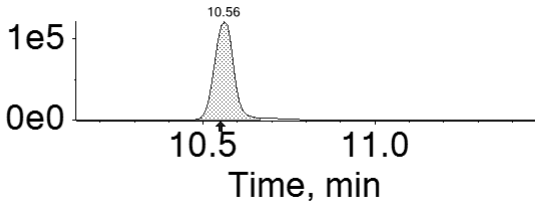
13C4_PFBA (Internal Standard) RT (Exp. RT): 1.81(1.86) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFPeA (Internal Standard) RT (Exp. RT): 5.51(5.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFBS (Internal Standard) RT (Exp. RT): 7.35(7.37) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_4:2FTS (Internal Standard) RT (Exp. RT): 7.04(7.04) min Concentration: 1.00 Sample Type: (Quality Control)	
13C5_PFHxA (Internal Standard) RT (Exp. RT): 7.45(7.45) min Concentration: 1.00 Sample Type: (Quality Control)	
13C4_PFHpA (Internal Standard) RT (Exp. RT): 8.68(8.67) min Concentration: 1.00 Sample Type: (Quality Control)	
13C3_PFHxS (Internal Standard) RT (Exp. RT): 9.92(9.92) min Concentration: 1.00 Sample Type: (Quality Control)	

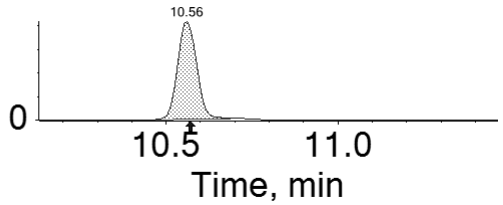
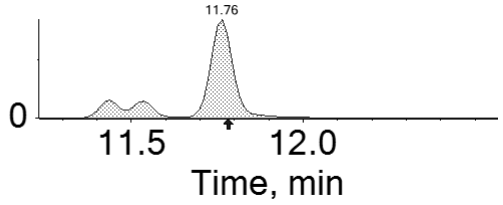
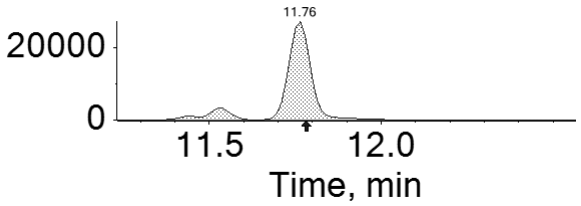
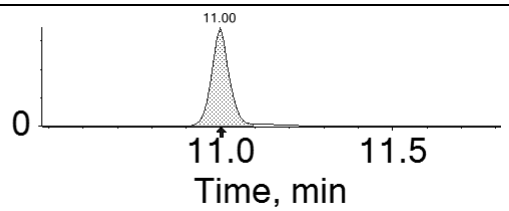
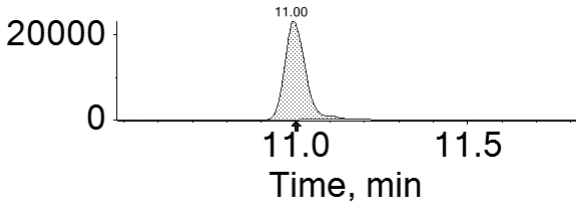
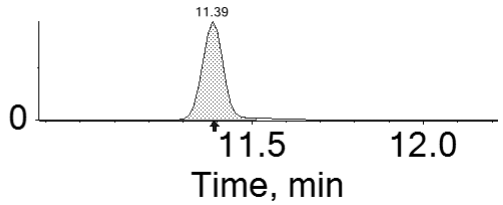
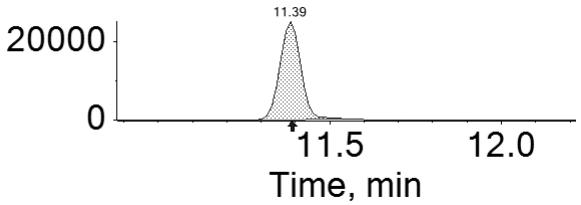
13C2_6:2FTS (Internal Standard) RT (Exp. RT): 9.30(9.29) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOA (Internal Standard) RT (Exp. RT): 9.67(9.69) min Concentration: 1.00 Sample Type: (Quality Control)	
13C9_PFNA (Internal Standard) RT (Exp. RT): 10.55(10.56) min Concentration: 1.00 Sample Type: (Quality Control)	
13C8_PFOS (Internal Standard) RT (Exp. RT): 11.75(11.75) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_8:2FTS (Internal Standard) RT (Exp. RT): 11.00(11.00) min Concentration: 1.00 Sample Type: (Quality Control)	
13C6_PFDA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	
d3-MeFOSAA (Internal Standard) RT (Exp. RT): 11.38(11.38) min Concentration: 1.00 Sample Type: (Quality Control)	

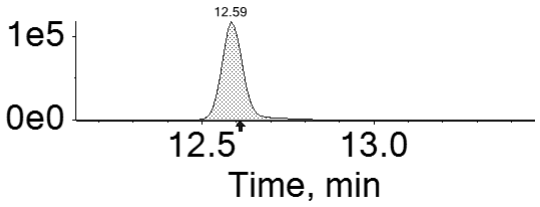
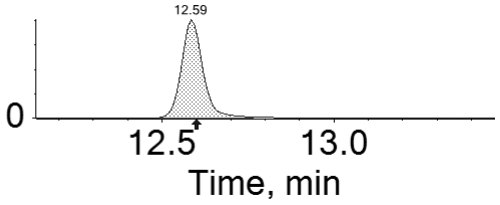
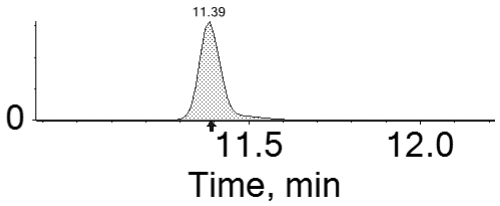
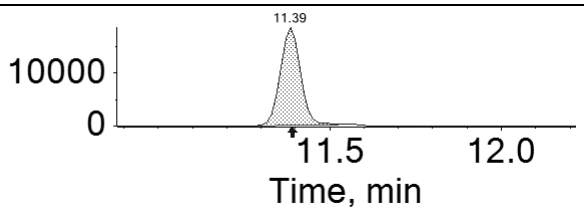
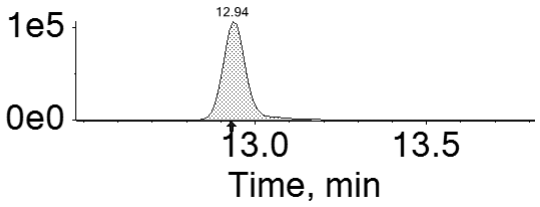
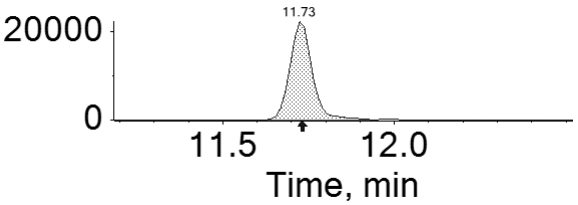
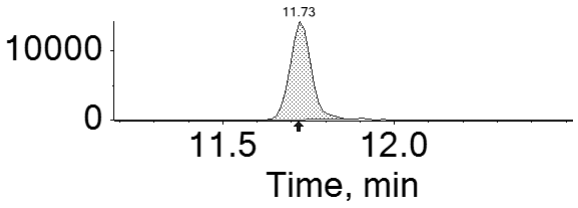
13C8_FOSA (Internal Standard) RT (Exp. RT): 12.93(12.93) min Concentration: 1.00 Sample Type: (Quality Control)	
d5-EtFOSAA (Internal Standard) RT (Exp. RT): 11.71(11.71) min Concentration: 1.00 Sample Type: (Quality Control)	
13C7_PFUdA (Internal Standard) RT (Exp. RT): 12.17(12.18) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFDoA (Internal Standard) RT (Exp. RT): 12.95(12.96) min Concentration: 1.00 Sample Type: (Quality Control)	
13C2_PFTeDA (Internal Standard) RT (Exp. RT): 14.46(14.47) min Concentration: 1.00 Sample Type: (Quality Control)	

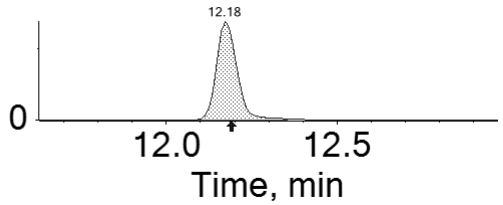
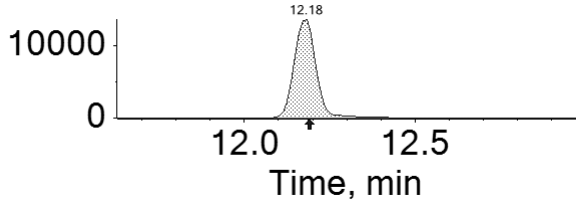
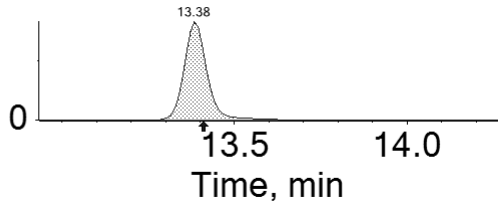
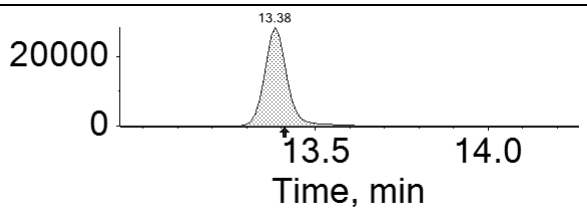
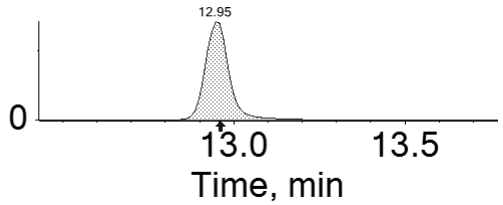
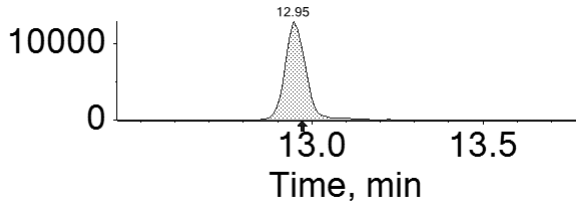
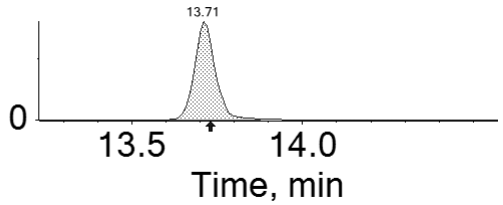
PFBA (213.0 / 169.0) RT (Exp. RT): 1.81 (1.76) min Calculated conc: <1 points Area Ratio: 1.313e0 Sample Type: (Quality Control)	
PFPeA (263.0 / 219.0) RT (Exp. RT): 5.52 (5.44) min Calculated conc: <1 points Area Ratio: 1.234e0 Sample Type: (Quality Control)	
PFBS (299.0 / 80.0) RT (Exp. RT): 7.36 (7.39) min Calculated conc: <1 points Area Ratio: 1.223e0 Sample Type: (Quality Control)	
PFBS_2 (299.0 / 99.0) RT (Exp. RT): 7.36 (7.39) min Calculated conc: <1 points Area Ratio: 4.410e-1 Sample Type: (Quality Control)	
4:2FTS (327.0 / 307.0) RT (Exp. RT): 7.05 (7.04) min Calculated conc: <1 points Area Ratio: 1.100e0 Sample Type: (Quality Control)	
4:2FTS_2 (327.0 / 81.0) RT (Exp. RT): 7.04 (7.06) min Calculated conc: <1 points Area Ratio: 7.603e-1 Sample Type: (Quality Control)	
PFHxA (313.0 / 269.0) RT (Exp. RT): 7.46 (7.46) min Calculated conc: <1 points Area Ratio: 1.193e0 Sample Type: (Quality Control)	

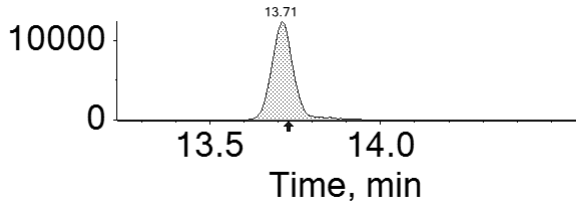
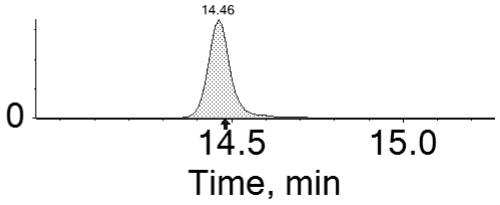
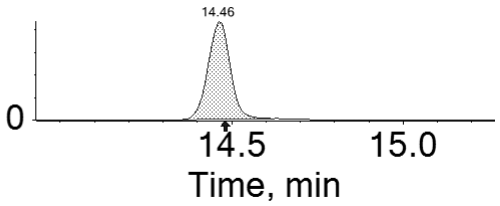
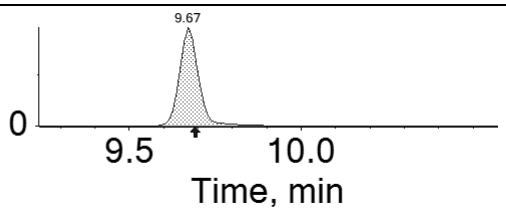
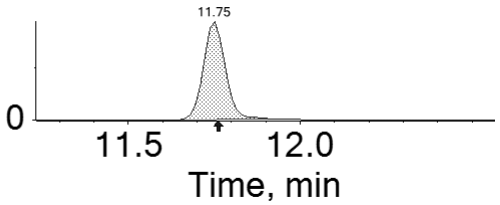
PFHxA_2 (313.0 / 119.0) RT (Exp. RT): 7.46 (7.50) min Calculated conc: <1 points Area Ratio: 9.694e-2 Sample Type: (Quality Control)	
PFPeS (349.0 / 80.0) RT (Exp. RT): 8.81 (8.81) min Calculated conc: <1 points Area Ratio: 7.998e-1 Sample Type: (Quality Control)	
PFPeS_2 (349.0 / 99.0) RT (Exp. RT): 8.81 (8.84) min Calculated conc: <1 points Area Ratio: 3.113e-1 Sample Type: (Quality Control)	
PFHpA (363.0 / 319.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 1.006e0 Sample Type: (Quality Control)	
PFHpA_2 (363.0 / 169.0) RT (Exp. RT): 8.68 (8.70) min Calculated conc: <1 points Area Ratio: 3.333e-1 Sample Type: (Quality Control)	
PFHxS (399.0 / 80.0) RT (Exp. RT): 9.93 (9.95) min Calculated conc: <1 points Area Ratio: 1.322e0 Sample Type: (Quality Control)	
PFHxS_2 (399.0 / 99.0) RT (Exp. RT): 9.93 (10.01) min Calculated conc: <1 points Area Ratio: 5.421e-1 Sample Type: (Quality Control)	

6:2FTS (427.0 / 407.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 1.832e0 Sample Type: (Quality Control)	
6:2FTS_2 (427.0 / 81.0) RT (Exp. RT): 9.30 (9.31) min Calculated conc: <1 points Area Ratio: 1.274e0 Sample Type: (Quality Control)	
PFOA (413.0 / 369.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: <1 points Area Ratio: 1.528e0 Sample Type: (Quality Control)	
PFOA_2 (413.0 / 169.0) RT (Exp. RT): 9.68 (9.69) min Calculated conc: <1 points Area Ratio: 5.564e-1 Sample Type: (Quality Control)	
PFHpS (449.0 / 80.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: <1 points Area Ratio: 1.415e0 Sample Type: (Quality Control)	
PFHpS_2 (449.0 / 99.0) RT (Exp. RT): 10.88 (10.90) min Calculated conc: <1 points Area Ratio: 3.917e-1 Sample Type: (Quality Control)	
PFNA (463.0 / 419.0) RT (Exp. RT): 10.56 (10.55) min Calculated conc: <1 points Area Ratio: 9.143e-1 Sample Type: (Quality Control)	

PFNA_2 (463.0 / 219.0) RT (Exp. RT): 10.56 (10.57) min Calculated conc: <1 points Area Ratio: 3.086e-1 Sample Type: (Quality Control)	
PFOS (499.0 / 80.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: <1 points Area Ratio: 1.364e0 Sample Type: (Quality Control)	
PFOS_2 (499.0 / 99.0) RT (Exp. RT): 11.76 (11.78) min Calculated conc: <1 points Area Ratio: 3.723e-1 Sample Type: (Quality Control)	
8:2FTS (527.0 / 507.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: <1 points Area Ratio: 1.290e0 Sample Type: (Quality Control)	
8:2FTS_2 (527.0 / 81.0) RT (Exp. RT): 11.00 (11.00) min Calculated conc: <1 points Area Ratio: 1.007e0 Sample Type: (Quality Control)	
PFDA (513.0 / 469.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: <1 points Area Ratio: 1.462e0 Sample Type: (Quality Control)	
PFDA_2 (513.0 / 219.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: <1 points Area Ratio: 3.821e-1 Sample Type: (Quality Control)	

PFNS (549.0 / 80.0) RT (Exp. RT): 12.59 (12.61) min Calculated conc: <1 points Area Ratio: 9.882e-1 Sample Type: (Quality Control)	
PFNS_2 (549.0 / 99.0) RT (Exp. RT): 12.59 (12.60) min Calculated conc: <1 points Area Ratio: 5.187e-1 Sample Type: (Quality Control)	
N-MeFOSAA (570.0 / 419.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: <1 points Area Ratio: 1.973e0 Sample Type: (Quality Control)	
N-MeFOSAA_2 (570.0 / 483.0) RT (Exp. RT): 11.39 (11.39) min Calculated conc: <1 points Area Ratio: 1.036e0 Sample Type: (Quality Control)	
FOSA (498.0 / 78.0) RT (Exp. RT): 12.94 (12.93) min Calculated conc: <1 points Area Ratio: 8.081e-1 Sample Type: (Quality Control)	
N-EtFOSAA (584.0 / 419.0) RT (Exp. RT): 11.73 (11.73) min Calculated conc: <1 points Area Ratio: 1.546e0 Sample Type: (Quality Control)	
N-EtFOSAA_2 (584.0 / 483.0) RT (Exp. RT): 11.73 (11.72) min Calculated conc: <1 points Area Ratio: 9.314e-1 Sample Type: (Quality Control)	

PFUdA (563.0 / 519.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: <1 points Area Ratio: 8.686e-1 Sample Type: (Quality Control)	
PFUdA_2 (563.0 / 269.0) RT (Exp. RT): 12.18 (12.19) min Calculated conc: <1 points Area Ratio: 1.819e-1 Sample Type: (Quality Control)	
PFDS (599.0 / 80.0) RT (Exp. RT): 13.38 (13.41) min Calculated conc: <1 points Area Ratio: 8.403e-1 Sample Type: (Quality Control)	
PFDS_2 (599.0 / 99.0) RT (Exp. RT): 13.38 (13.41) min Calculated conc: <1 points Area Ratio: 2.848e-1 Sample Type: (Quality Control)	
PFDoA (613.0 / 569.0) RT (Exp. RT): 12.95 (12.96) min Calculated conc: <1 points Area Ratio: 7.566e-1 Sample Type: (Quality Control)	
PFDoA_2 (613.0 / 169.0) RT (Exp. RT): 12.95 (12.97) min Calculated conc: <1 points Area Ratio: 1.221e-1 Sample Type: (Quality Control)	
PFTrDA (663.0 / 619.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: <1 points Area Ratio: 7.576e-1 Sample Type: (Quality Control)	

PFTrDA_2 (663.0 / 169.0) RT (Exp. RT): 13.71 (13.73) min Calculated conc: <1 points Area Ratio: 1.224e-1 Sample Type: (Quality Control)	
PFTeDA (713.0 / 669.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: <1 points Area Ratio: 9.212e-1 Sample Type: (Quality Control)	
PFTeDA_2 (713.0 / 169.0) RT (Exp. RT): 14.46 (14.48) min Calculated conc: <1 points Area Ratio: 1.179e-1 Sample Type: (Quality Control)	
13C4_PFOA (417.0 / 372.0) RT (Exp. RT): 9.67 (9.69) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Quality Control)	
13C4_PFOS (503.0 / 80.0) RT (Exp. RT): 11.75 (11.76) min Calculated conc: <1 points Area Ratio: N/A Sample Type: (Quality Control)	

1,4-Dioxane Laboratory Report

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 10478608

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

June 19, 2019

Barbara Jones
Cardinal Resources, Inc.
4410 Broadway Blvd.
Monroeville, PA 15146

RE: Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Dear Barbara Jones:
Enclosed are the analytical results for sample(s) received by the laboratory on June 07, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Timothy Sandager
timothy.sandager@pacelabs.com
(612)607-6456
Project Manager

Enclosures

cc: J. O'Connor, Cardinal Resources

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

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SAMPLE SUMMARY

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10478608001	**OW-5**	Water	06/04/19 16:15	06/07/19 10:00
10478608002	**OW-13R**	Water	06/05/19 15:25	06/07/19 10:00
10478608003	**OW-24**	Water	06/06/19 08:50	06/07/19 10:00
10478608004	**OW-24 DUP**	Water	06/06/19 08:50	06/07/19 10:00
10478608005	**Pump Blank**	Water	06/06/19 12:00	06/07/19 10:00
10478608006	**Field Blank**	Water	06/06/19 13:15	06/07/19 10:00
10478608007	**LAB PREPARED TRIP BLANK**	Water	06/04/19 00:00	06/07/19 10:00

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SAMPLE ANALYTE COUNT

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10478608001	**OW-5**	EPA 8260B Mod.	DS2	2	PASI-M
10478608002	**OW-13R**	EPA 8260B Mod.	DS2	2	PASI-M
10478608003	**OW-24**	EPA 8260B Mod.	DS2	2	PASI-M
10478608004	**OW-24 DUP**	EPA 8260B Mod.	DS2	2	PASI-M
10478608005	**Pump Blank**	EPA 8260B Mod.	DS2	2	PASI-M
10478608006	**Field Blank**	EPA 8260B Mod.	DS2	2	PASI-M
10478608007	**LAB PREPARED TRIP BLANK**	EPA 8260B Mod.	DS2	2	PASI-M

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ANALYTICAL RESULTS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Sample: OW-5 **Lab ID: 10478608001** Collected: 06/04/19 16:15 Received: 06/07/19 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	**3.9**	ug/L	3.0	1		06/16/19 17:55	123-91-1	
Surrogates								
Toluene-d8 (S)	92	%.	75-132	1		06/16/19 17:55	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Sample: OW-13R **Lab ID: 10478608002** Collected: 06/05/19 15:25 Received: 06/07/19 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	ND	ug/L	3.0	1		06/16/19 16:43	123-91-1	M1
Surrogates								
Toluene-d8 (S)	85	%.	75-132	1		06/16/19 16:43	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Sample: OW-24 **Lab ID: 10478608003** Collected: 06/06/19 08:50 Received: 06/07/19 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	ND	ug/L	3.0	1		06/16/19 18:14	123-91-1	
Surrogates								
Toluene-d8 (S)	87	%.	75-132	1		06/16/19 18:14	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Sample: OW-24 DUP **Lab ID: 10478608004** Collected: 06/06/19 08:50 Received: 06/07/19 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	**4.2**	ug/L	3.0	1		06/16/19 18:32	123-91-1	
Surrogates								
Toluene-d8 (S)	91	%.	75-132	1		06/16/19 18:32	2037-26-5	

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ANALYTICAL RESULTS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Sample: Pump Blank **Lab ID: 10478608005** Collected: 06/06/19 12:00 Received: 06/07/19 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	ND	ug/L	3.0	1		06/16/19 16:24	123-91-1	
Surrogates								
Toluene-d8 (S)	92	%.	75-132	1		06/16/19 16:24	2037-26-5	

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ANALYTICAL RESULTS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Sample: Field Blank **Lab ID: 10478608006** Collected: 06/06/19 13:15 Received: 06/07/19 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	ND	ug/L	3.0	1		06/16/19 16:06	123-91-1	
Surrogates								
Toluene-d8 (S)	95	%.	75-132	1		06/16/19 16:06	2037-26-5	

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ANALYTICAL RESULTS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Sample: LAB PREPARED TRIP BLANK **Lab ID: 10478608007** Collected: 06/04/19 00:00 Received: 06/07/19 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV SIM	Analytical Method: EPA 8260B Mod.							
1,4-Dioxane (SIM)	ND	ug/L	3.0	1		06/16/19 15:48	123-91-1	
Surrogates								
Toluene-d8 (S)	94	%.	75-132	1		06/16/19 15:48	2037-26-5	

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QUALITY CONTROL DATA

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

QC Batch: 613273 Analysis Method: EPA 8260B Mod.
QC Batch Method: EPA 8260B Mod. Analysis Description: 8260 MSV SIM
Associated Lab Samples: 10478608001, 10478608002, 10478608003, 10478608004, 10478608005, 10478608006, 10478608007

METHOD BLANK: 3314110 Matrix: Water
Associated Lab Samples: 10478608001, 10478608002, 10478608003, 10478608004, 10478608005, 10478608006, 10478608007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (SIM)	ug/L	ND	3.0	06/16/19 14:53	
Toluene-d8 (S)	%.	98	75-132	06/16/19 14:53	

LABORATORY CONTROL SAMPLE & LCSD: 3314111 3314112

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (SIM)	ug/L	10	8.4	7.8	84	78	75-125	8	20	
Toluene-d8 (S)	%.				94	89	75-132			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3314113 3314114

Parameter	Units	10478608002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (SIM)	ug/L	ND	10	10	13.0	13.6	130	136	65-128	5	30	M1
Toluene-d8 (S)	%.						90	96	75-132			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 104-0012 NY Superfund
Pace Project No.: 10478608

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10478608001	**OW-5**	EPA 8260B Mod.	613273		
10478608002	**OW-13R**	EPA 8260B Mod.	613273		
10478608003	**OW-24**	EPA 8260B Mod.	613273		
10478608004	**OW-24 DUP**	EPA 8260B Mod.	613273		
10478608005	**Pump Blank**	EPA 8260B Mod.	613273		
10478608006	**Field Blank**	EPA 8260B Mod.	613273		
10478608007	**LAB PREPARED TRIP BLANK**	EPA 8260B Mod.	613273		

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WO# : 10478608

10478608

/ Analytical Request Document

MENT. All relevant fields must be completed accurately.

Attn: Tim Sandeger

Section A Required Client Information:	Section B Required Project Information:	Invoice Information:
Company: Cardinal Resources	Report To: Barbara Jones	Attention: Barbara Jones
Address: 4410 Broadway Blvd. Monroeville, PA 15146	Copy To:	Company Name: Cardinal Resources
Email To: bjones@cardinalres.com	Purchase Order No.:	Address: 4410 Broadway Blvd, Monroeville PA 15146
Phone: 412-374-0989 Fax:	Project Name: NY Superfund	Pace Quote Reference:
Requested Due Date/TAT: STANDARD	Project Number: 104-0012	Pace Project Manager: Hogberg, Kirsten
		Pace Profile #: 40672

Page: of 2285477

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER ✓

Site Location STATE: NY

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START / Grab DATE	COLLECTED COMPOSITE START / Grab TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 1,4-Dioxane ONLY	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	OW-5	WT	G	6-4-19	16:15				3				✓					✓		001
2	OW-13R	WT	G	6-5-19	15:25				3				✓					✓		002
3	OW-13R MS	WT	G	6-5-19	15:26				3				✓					✓		"
4	OW-13R MSD	WT	G	6-5-19	15:26				3				✓					✓		"
5	OW-24	WT	G	6-6-19	8:50				3				✓					✓		003
6	OW-24 DUP	WT	G	6-6-19	8:50				3				✓					✓		004
7	~~OW-19~~ BMW	WT	G	6-6-19	11:40				3				✓					✓		BMW
8	Pump Blank	WT	G	6-6-19	12:00				3				✓					✓		005
9	Field Blank	WT	G	6-6-19	13:15				3				✓					✓		006
10	LAB PREPARED TRIP BLANK								2											007
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	RELINQUISHED			Pace	6.7.19	1000	2.2	Y	Y	Y
	TO FEDEX 1PM 6/6/2019			Barbara N. Jones	1000		2.2	Y	Y	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-C-010-rev.00, 09Nov2017

Pace Analytical	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 09May2019 Page 1 of 1
	Document No.: **F-MN-L-213-rev.28**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Cardinal Resources

Project #: **WO#: 10478608**

PM: TJS **Due Date: 06/21/19**

CLIENT: Cardinal Res

Courier: ☒Fed Ex ☐UPS ☐USPS ☐Client ☐Pace ☐SpeeDee ☐Commercial **See Exception** ☐

Tracking Number: 7971 3027 1137

Custody Seal on Cooler/Box Present? ☒Yes ☐No **Seals Intact?** ☒Yes ☐No **Biological Tissue Frozen?** ☐Yes ☐No ☒N/A

Packing Material: ☐Bubble Wrap ☒Bubble Bags ☐None ☐Other:_____ **Temp Blank?** ☒Yes ☐No

Thermometer: ☐T1(0461) ☒T2(1336) ☐T3(0459) ☐T4(0254) ☐T5(0489) **Type of Ice:** ☒Wet ☐Blue ☐None ☐Dry ☐Melted

Note: Each West Virginia Sample must have temp taken (no temp blanks)

Temp should be above freezing to 6°C **Cooler Temp Read w/temp blank:** 2.1 °C **Average Corrected Temp (no temp blank only):** °C **See Exceptions** ☐

Correction Factor: +0.1 **Cooler Temp Corrected w/temp blank:** 2.2 °C

USDA Regulated Soil: (☒N/A, water sample/Other:_____) **Date/Initials of Person Examining Contents:** GNZ 6.7.19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present and Filled Out?	☒Yes	☐No		1.
Chain of Custody Relinquished?	☒Yes	☐No		2.
Sampler Name and/or Signature on COC?	☐Yes	☒No	☐N/A	3.
Samples Arrived within Hold Time?	☒Yes	☐No		4.
Short Hold Time Analysis (<72 hr)?	☐Yes	☒No		5. ☐Fecal Coliform ☐HPC ☐Total Coliform/E coli ☐BOD/cBOD ☐Hex Chrome ☐Turbidity ☐Nitrate ☐Nitrite ☐Orthophos ☐Other_____
Rush Turn Around Time Requested?	☐Yes	☒No		6.
Sufficient Volume?	☒Yes	☐No		7.
Correct Containers Used? -Pace Containers Used?	☒Yes ☒Yes	☐No ☐No		8.
Containers Intact?	☒Yes	☐No		9.
Field Filtered Volume Received for Dissolved Tests?	☐Yes	☐No	☒N/A	10. Is sediment visible in the dissolved container? ☐Yes ☐No
Is sufficient information available to reconcile the samples to the COC? Matrix: ☒Water ☐Soil ☐Oil ☐Other_____	☒Yes	☐No		11. **If no, write ID/ Date/Time on Container Below:** **See Exception** ☐
All containers needing acid/base preservation have been checked?	☐Yes	☐No	☒N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	☐Yes	☐No	☒N/A	☐NaOH ☐HNO_3 ☐H_2SO_4 ☐Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☒Yes	☐No	☐N/A	Positive for Res. Chlorine? ☐Yes ☐No **pH Paper Lot#** **See Exception** ☐
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Headspace in VOA Vials (greater than 6mm)?	☒Yes	☐No	☐N/A	13. **See Exception** ☐
Trip Blank Present?	☒Yes	☐No	☐N/A	14.
Trip Blank Custody Seals Present?	☐Yes	☐No	☐N/A	Pace Trip Blank Lot # (if purchased): 210586

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** 06/11/19

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: CM1

Pace Analytical	Document Name: **Headspace Exception**	Document Revised: 17Dec2018 Page 1 of 1
	Document No.: **F-MN-C-276-Rev.01**	Issuing Authority: Pace Minnesota Quality Office

Sample ID	Headspace greater than 6mm	Headspace less than 6mm	No Headspace	Total Vials	Sediment Present?
OW-5	0	0	3	3	NO
OW-13R	0	0	3	3	NO
OW-13R MS	0	0	3	3	NO
OW-13R MSD	0	0	3	3	NO
OW-24	0	0	3	3	NO
OW-24 DUP	0	0	3	3	NO
Pump Blank	0	0	3	3	NO
Field blank	0	0	3	3	NO
Lab Prepared Trip Blank	1	1	0	2	NO

MSV SIM - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Minnesota SDG No.: 10478608 Contract: 104-0012 NY Superfund

Instrument ID: 10MSV8

LAB SAMPLE ID	SAMPLE NAME	TOL8
3314110	3314110BLANK	98
3314111	3314111LCS	94
3314112	3314112LCSD	89
3314113	3314113MS	90
3314114	3314114MSD	96
10478608001	OW-5	92
10478608002	OW-13R	85
10478608003	OW-24	87
10478608004	OW-24 DUP	91
10478608005	Pump Blank	92
10478608006	Field Blank	95
10478608007	LAB PREPARED TRIP BLANK	94

	QC LIMITS
(TOL8) = Toluene-d8 (S)	(75-132)

* Values outside of QC Limits

MSV SIM - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Minnesota
Lab Sample ID: 3314111LCS
Date Extracted: 06/16/2019
Date Analyzed (1): 06/16/2019
Instrument: 10MSV8
LCS Lot No: 213817
Lab File ID: 061619A.B\167008L.D
SDG No.: 10478608

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
1,4-Dioxane (SIM)	10.0	8.4	84	75-125

Spike Recovery: 0 out of 1 outside limits.

MSV SIM - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Instrument ID (2): 10MSV8 Lab Sample ID (2): 3314112LCSD

Date Analyzed 06/16/2019 Lab File ID (2): 061619A.B\167009.D

COMPOUND	AMOUNT ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,4-Dioxane (SIM)	10.0	7.8	78	8	0-20	75-125

RPD: 0 out of 1 outside limits.

Spike Recovery: 0 out of 1 outside limits.

06/21/2019 11:32

MSV SIM - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Minnesota

Matrix Spike - Sample No: 3314113MS

Date Extracted: 06/16/2019

Date Analyzed (1): 06/16/2019

Instrument: 10MSV8

Lab File ID: 061619A.B\167018.D

Parent Sample ID: OW-13R

SDG No.: 10478608

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
1,4-Dioxane (SIM)	10.0	ND	13.0	130	65-128

Spike Recovery: 1 out of 1 outside limits.

MSV SIM - FORM III VOA-2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Instrument (2): 10MSV8 Matrix Spike Duplicate - Sample No: 3314114MSD

Lab File ID (2): 061619A.B\167019.D Date Analyzed (2): 06/16/2019

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	%RPD	QC LIMITS	
					RPD	REC.
1,4-Dioxane (SIM)	10.0	13.6	136	5	0-30	65-128

RPD: 0 out of 1 outside limits.

Spike Recovery: 1 out of 1 outside limits.

SAMPLE NO.

3314110BLANK

MSV SIM - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - Minnesota SDG No.: 10478608 Contract: 104-0012 NY Superfund

Instrument ID: 10MSV8 Matrix: Water Lab Sample ID: 3314110

Lab File ID: 061619A.B\167011.D Date Analyzed: 06/16/2019 Time: 14:53

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
3314111LCS	3314111	061619A.B\167008L.D	06/16/2019 13:59
3314112LCSD	3314112	061619A.B\167009.D	06/16/2019 14:17
LAB PREPARED TRIP BLANK	10478608007	061619A.B\167014.D	06/16/2019 15:48
Field Blank	10478608006	061619A.B\167015.D	06/16/2019 16:06
Pump Blank	10478608005	061619A.B\167016.D	06/16/2019 16:24
OW-13R	10478608002	061619A.B\167017.D	06/16/2019 16:43
3314113MS	3314113	061619A.B\167018.D	06/16/2019 17:01
3314114MSD	3314114	061619A.B\167019.D	06/16/2019 17:19
OW-5	10478608001	061619A.B\167021.D	06/16/2019 17:55
OW-24	10478608003	061619A.B\167022.D	06/16/2019 18:14
OW-24 DUP	10478608004	061619A.B\167023.D	06/16/2019 18:32

MSV SIM - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - Minnesota SDG No.: 10478608 Contract: 104-0012 NY Superfund
Lab File ID: 061119A.B\162003.D BFB Injection Date 06/11/2019
Instrument ID: 10MSV8 BFB Injection Time 08:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	26.34	
75	30.00 - 60.00% of mass 95	54.93	
95	Mass 95 relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.29	
173	Less than 2.00% of mass 174	0.90	(1.12)[1]
174	50.00 - 120.00% of mass 95	80.25	
175	5.00 - 9.00% of mass 174	5.63	(7.01)[1]
176	95.00 - 101.00% of mass 174	76.61	(95.46)[1]
177	5.00 - 9.00% of mass 176	4.94	(6.44)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
22496570CAL1	22496570CAL1	061119A.B\162005.D	06/11/2019	09:28
22496573CAL2	22496573CAL2	061119A.B\162006.D	06/11/2019	09:47
22496576CAL3	22496576CAL3	061119A.B\162007.D	06/11/2019	10:05
22496572CAL4	22496572CAL4	061119A.B\162008.D	06/11/2019	10:23
22496580CAL5	22496580CAL5	061119A.B\162009.D	06/11/2019	10:41
22496577CAL6	22496577CAL6	061119A.B\162010.D	06/11/2019	10:59
22496575CAL7	22496575CAL7	061119A.B\162011.D	06/11/2019	11:17
22496569CAL8	22496569CAL8	061119A.B\162012.D	06/11/2019	11:36
22496578CAL9	22496578CAL9	061119A.B\162013.D	06/11/2019	11:54
22496579ICV	22496579ICV	061119A.B\162017.D	06/11/2019	13:06

MSV SIM - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - Minnesota SDG No.: 10478608 Contract: 104-0012 NY Superfund
Lab File ID: 061619A.B\167007.D BFB Injection Date: 06/16/2019
Instrument ID: 10MSV8 BFB Injection Time: 13:29

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	26.75	
75	30.00 - 60.00% of mass 95	55.70	
95	Mass 95 relative abundance	100.00	
96	5.00 - 9.00% of mass 95	7.18	
173	Less than 2.00% of mass 174	0.89	(1.12)[1]
174	50.00 - 120.00% of mass 95	79.99	
175	5.00 - 9.00% of mass 174	6.19	(7.74)[1]
176	95.00 - 101.00% of mass 174	76.57	(95.73)[1]
177	5.00 - 9.00% of mass 176	5.52	(7.20)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
22496758CCV	22496758CCV	061619A.B\167008.D	06/16/2019	13:59
3314111LCS	3314111LCS	061619A.B\167008L.D	06/16/2019	13:59
3314112LCSD	3314112LCSD	061619A.B\167009.D	06/16/2019	14:17
3314110BLANK	3314110BLANK	061619A.B\167011.D	06/16/2019	14:53
LAB PREPARED TRIP BLANK	10478608007	061619A.B\167014.D	06/16/2019	15:48
Field Blank	10478608006	061619A.B\167015.D	06/16/2019	16:06
Pump Blank	10478608005	061619A.B\167016.D	06/16/2019	16:24
OW-13R	10478608002	061619A.B\167017.D	06/16/2019	16:43
3314113MS	3314113MS	061619A.B\167018.D	06/16/2019	17:01
3314114MSD	3314114MSD	061619A.B\167019.D	06/16/2019	17:19
OW-5	10478608001	061619A.B\167021.D	06/16/2019	17:55
OW-24	10478608003	061619A.B\167022.D	06/16/2019	18:14
OW-24 DUP	10478608004	061619A.B\167023.D	06/16/2019	18:32

MSV SIM - FORM VIII VOA-1
MSV SIM INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - Minnesota SDG No.: 10478608 Contract: 104-0012 NY Superfund

Sample ID : 22496758CCV Date Analyzed: 06/16/2019

Instrument ID: 10MSV8 GC Column: FULL Time Analyzed: 13:59

Lab File ID: 061619A.B\167008.D

		AREA 14D8IS	RT
12 HOUR STD		30618	4.104
UPPER LIMIT		61236	4.604
LOWER LIMIT		15309	3.604
LAB SAMPLE ID	SAMPLE NO.		
3314110	3314110BLANK	29324	4.105
3314111	3314111LCS	30618	4.104
3314112	3314112LCSD	32651	4.105
3314113	3314113MS	32105	4.105
3314114	3314114MSD	30493	4.105
10478608001	OW-5	29914	4.105
10478608002	OW-13R	33358	4.105
10478608003	OW-24	33123	4.105
10478608004	OW-24 DUP	31626	4.105
10478608005	Pump Blank	30652	4.105
10478608006	Field Blank	30183	4.109
10478608007	LAB PREPARED TRIP	30977	4.105

14D8IS = 1,4-Dioxane-d8 (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

OW-5

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota
Contract: 104-0012 NY Superfund
Date Received: 06/07/2019 10:00
Matrix: Water SDG No.: 10478608
Date Extracted: 06/16/2019 17:55
Lab Sample ID: 10478608001
Date Analyzed: 06/16/2019 17:55
Lab File ID: 061619A.B\167021.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	3.9	

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167021.d
Lab Smp Id: 10478608001 Client Smp ID: OW-5
Inj Date : 16-JUN-2019 17:55 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 10478608001
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

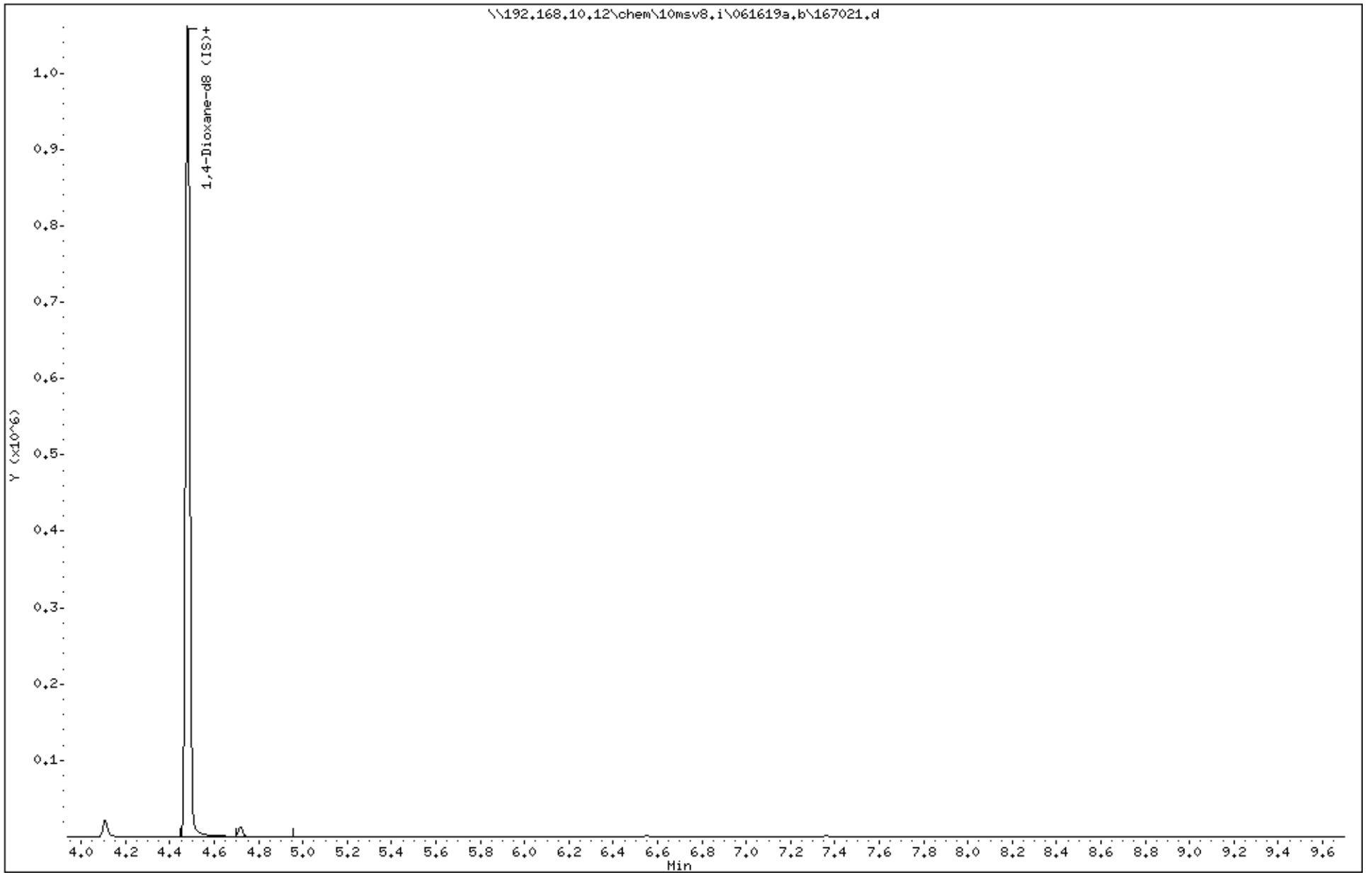
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	29914	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	762	3.92428	3.9(M)
$	3 Toluene-d8 (S)	98	4.479	4.478	(1.091)	686951	46.0123	46

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167021.d
Date : 16-JUN-2019 17:55
Client ID: OW-5
Instrument: 10msv8.i
Sample Info: 10478608001
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167021.d

Date : 16-JUN-2019 17:55

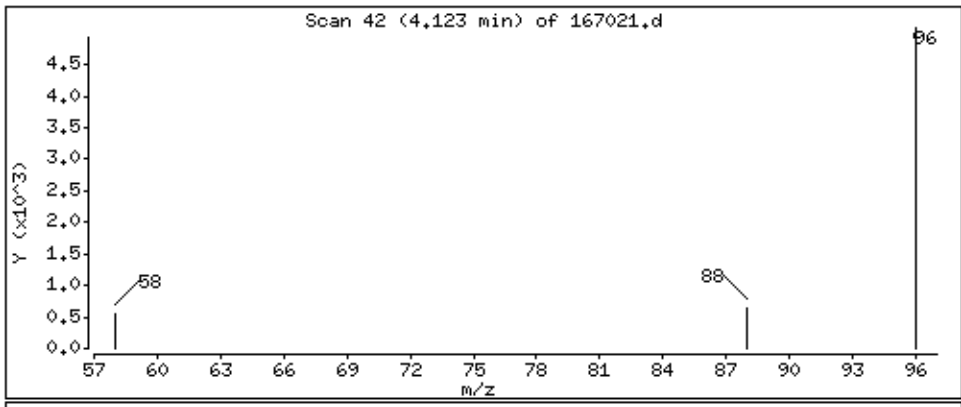
Client ID: OW-5 Instrument: 10msv8.i

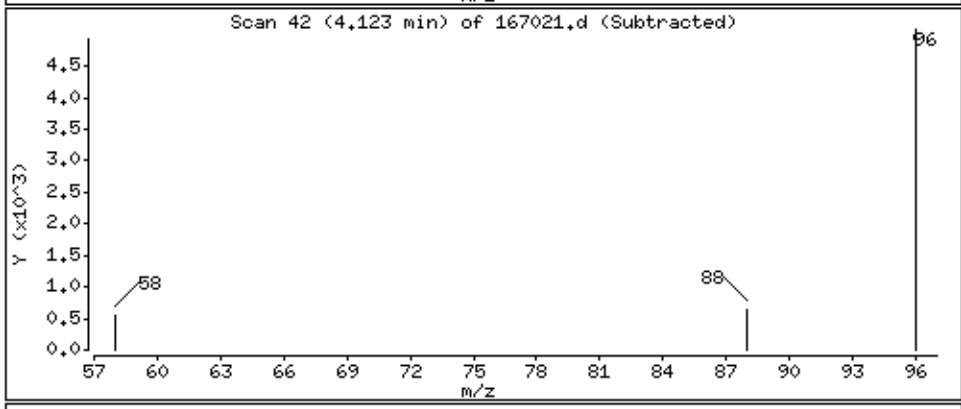
Sample Info: 10478608001

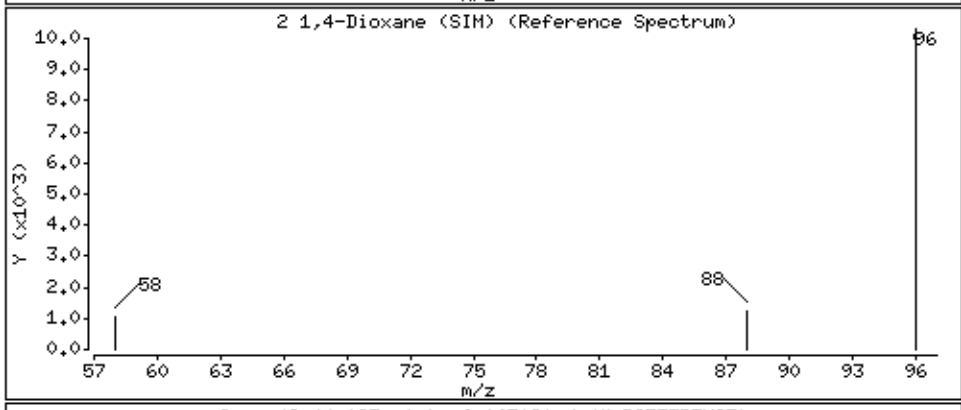
Purge Volume: 5.0 Operator: DS2

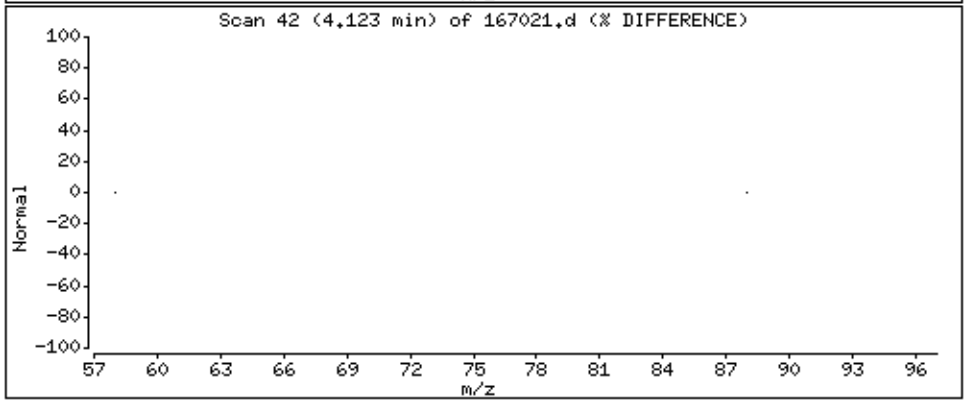
Column phase: Rtx-VMS SN1380750 Column diameter: 0.18

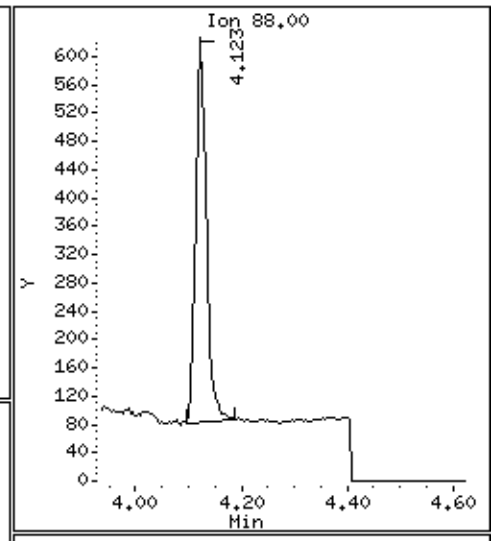
2 1,4-Dioxane (SIM) Concentration: 3.9 ug/L

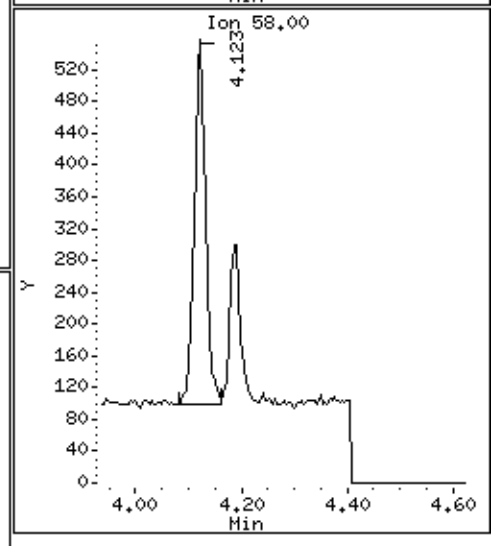






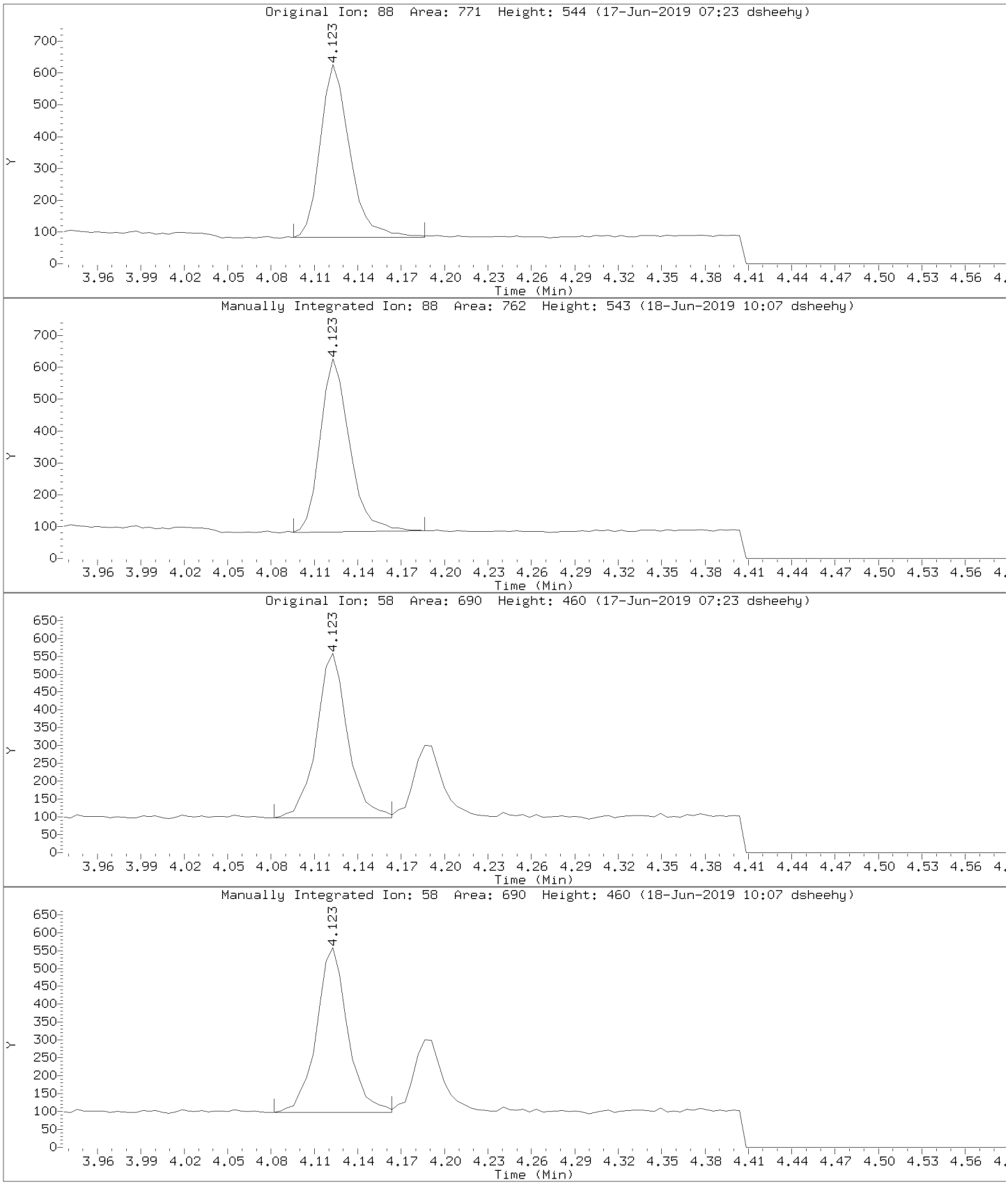






Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167021.d
Injection Date: 16-JUN-2019 17:55
Instrument: 10msv8.i
Lab Sample ID: 10478608001

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1



SAMPLE NO.

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

OW-13R

Lab Name: Pace Analytical - Minnesota Contract: 104-0012 NY Superfund
Date Received: 06/07/2019 10:00 Matrix: Water SDG No.: 10478608
Date Extracted: 06/16/2019 16:43 Lab Sample ID: 10478608002
Date Analyzed: 06/16/2019 16:43 Lab File ID: 061619A.B\167017.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	ND	U

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167017.d
Lab Smp Id: 10478608002 Client Smp ID: OW-13R
Inj Date : 16-JUN-2019 16:43 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 10478608002,,msp
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

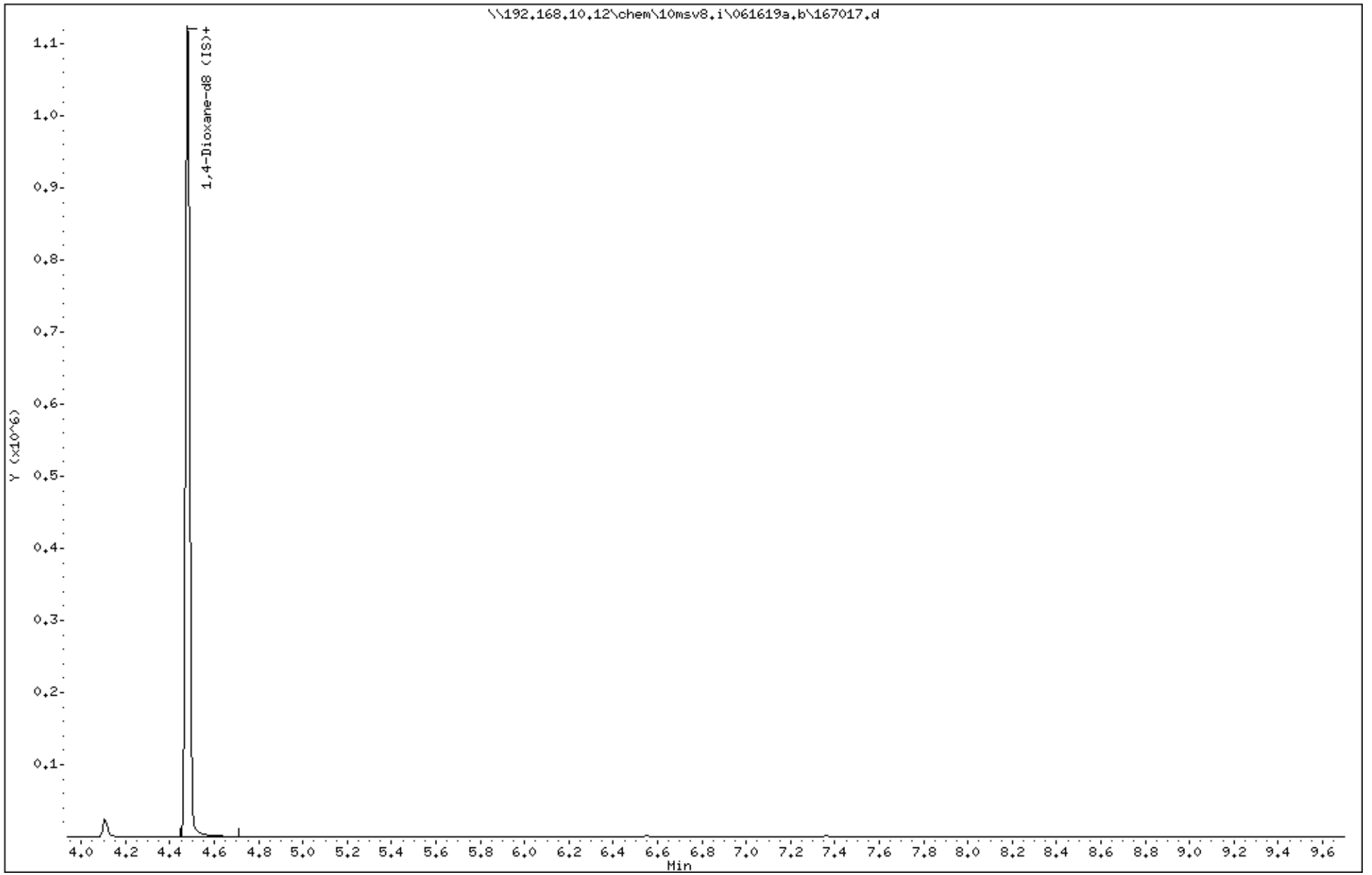
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	33358	2000.00		
	2 1,4-Dioxane (SIM)	88	Compound Not Detected.						(D)
$	3 Toluene-d8 (S)	98	4.478	4.478	(1.091)	710329	42.6660	43	

QC Flag Legend

D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167017.d
Date : 16-JUN-2019 16:43
Client ID: OW-13R
Instrument: 10msv8.i
Sample Info: 10478608002,,MSP
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167017.d
Injection Date: 16-JUN-2019 16:43
Instrument: 10msv8.i
Lab Sample ID: 10478608002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

OW-24

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota
Contract: 104-0012 NY Superfund
Date Received: 06/07/2019 10:00
Matrix: Water
SDG No.: 10478608
Date Extracted: 06/16/2019 18:14
Lab Sample ID: 10478608003
Date Analyzed: 06/16/2019 18:14
Lab File ID: 061619A.B\167022.D
Initial wt/vol: 5 mL
Final wt/vol: 5 mL
Dilution: 1
Instrument: 10MSV8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	ND	U

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167022.d
Lab Smp Id: 10478608003 Client Smp ID: OW-24
Inj Date : 16-JUN-2019 18:14 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 10478608003
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	33123	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	781	2.78931	2.8(M)
$	3 Toluene-d8 (S)	98	4.479	4.478	(1.091)	717910	43.4273	43

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167022.d
Date : 16-JUN-2019 18:14
Client ID: OW-24
Instrument: 10msv8.i
Sample Info: 10478608003
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167022.d

Date : 16-JUN-2019 18:14

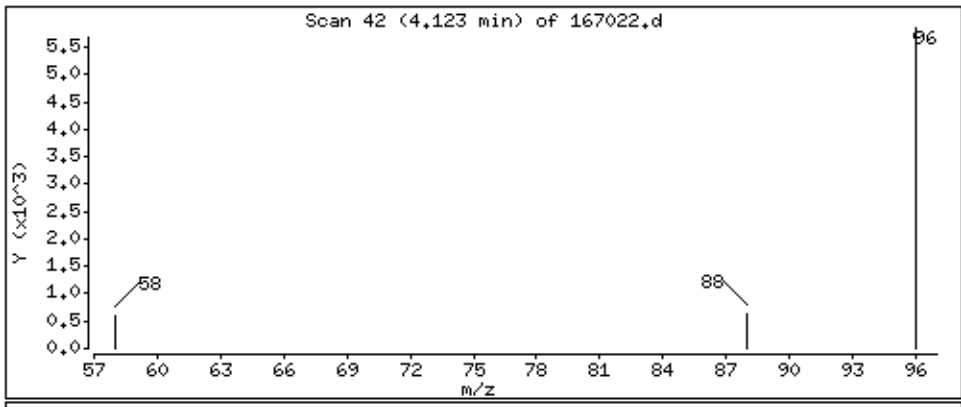
Client ID: OW-24 Instrument: 10msv8.i

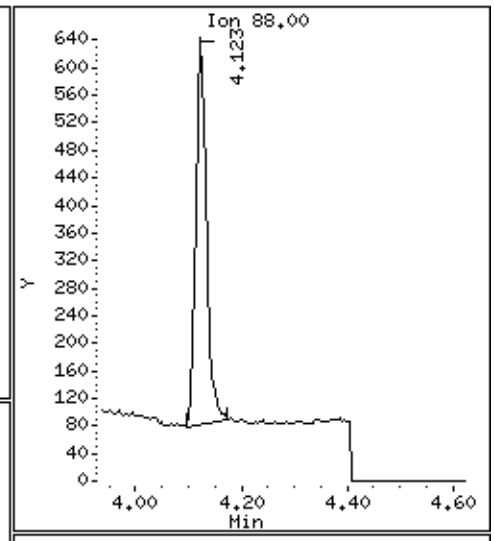
Sample Info: 10478608003

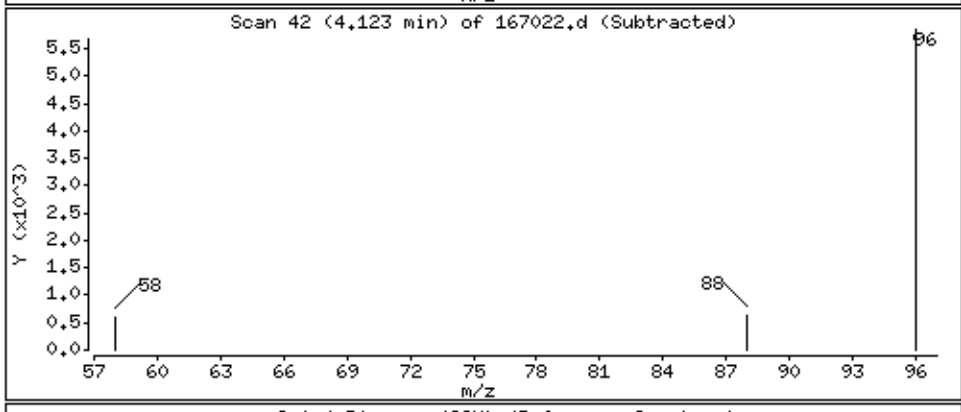
Purge Volume: 5.0 Operator: DS2

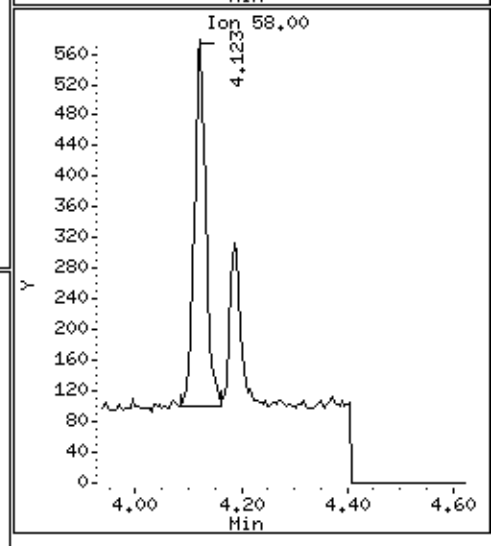
Column phase: Rtx-VMS SN1380750 Column diameter: 0.18

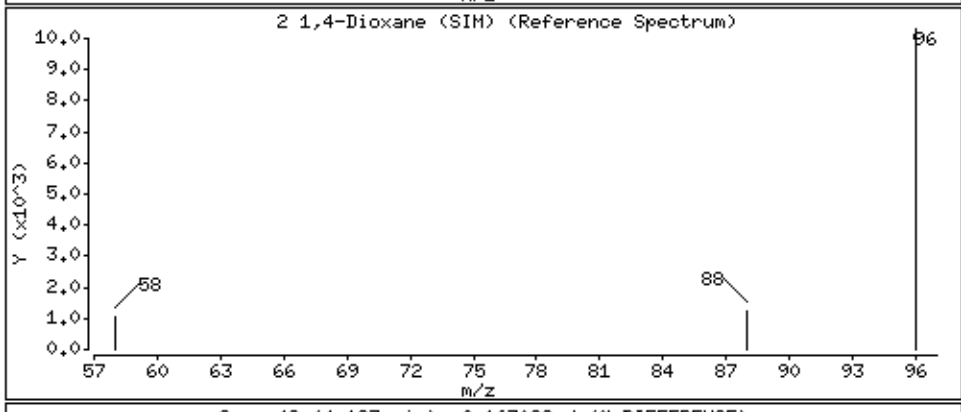
2 1,4-Dioxane (SIM) Concentration: 2.8 ug/L

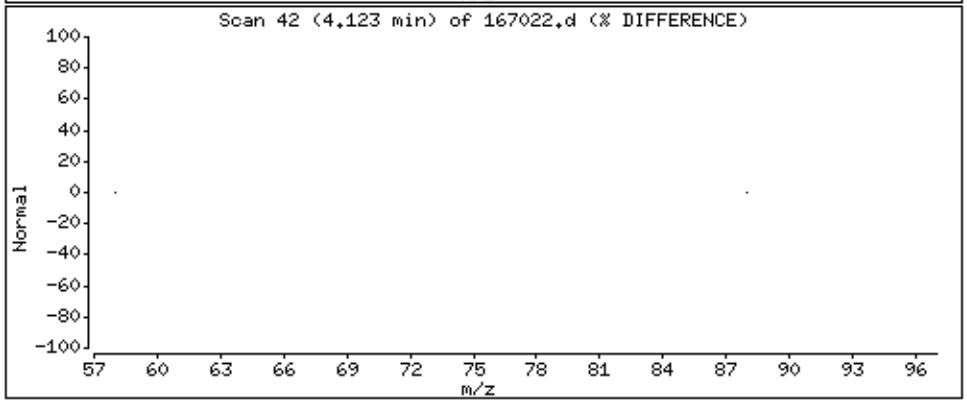






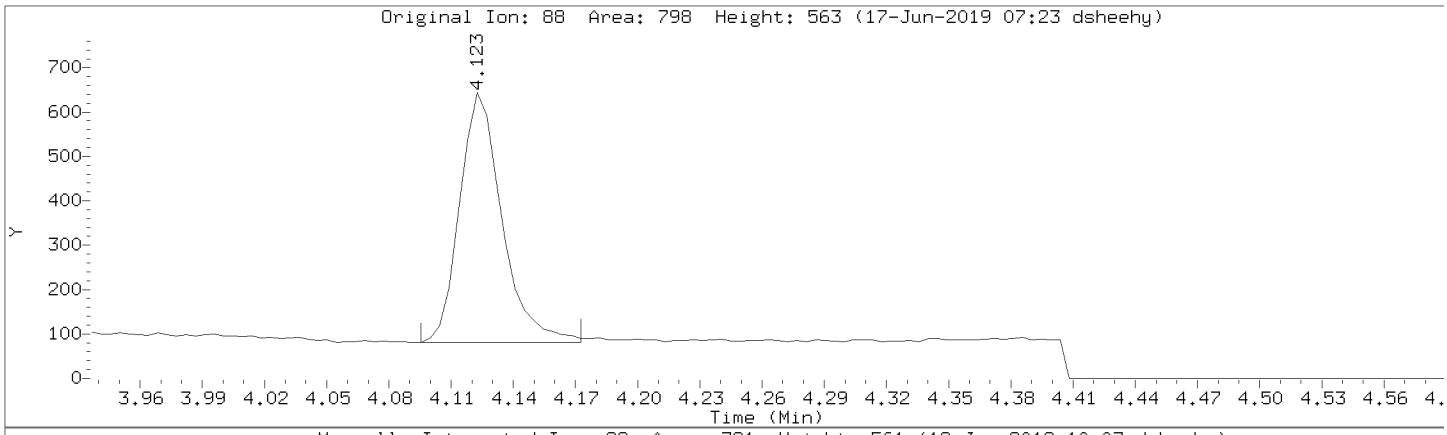


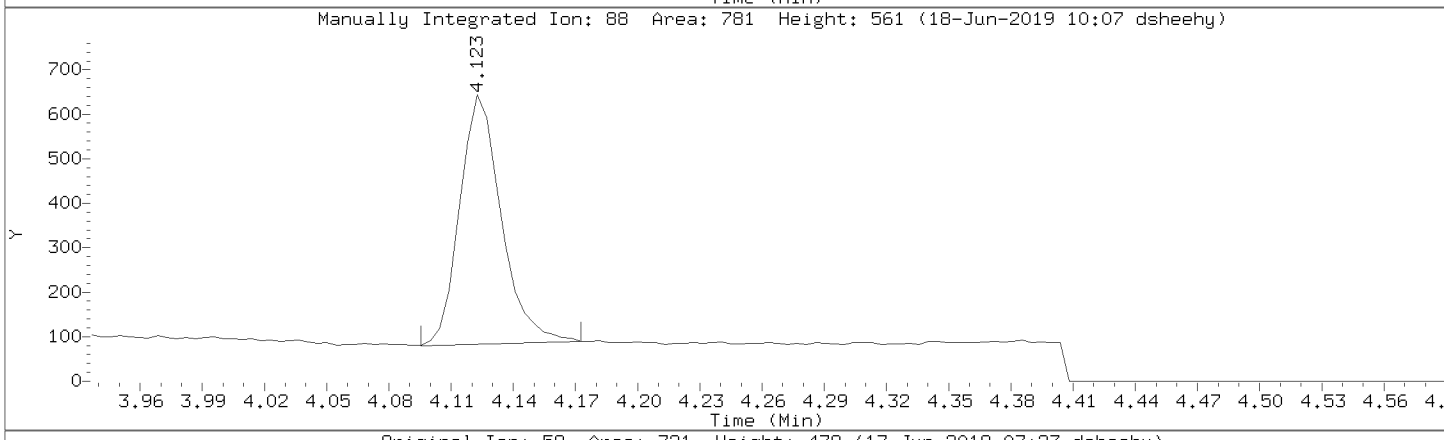


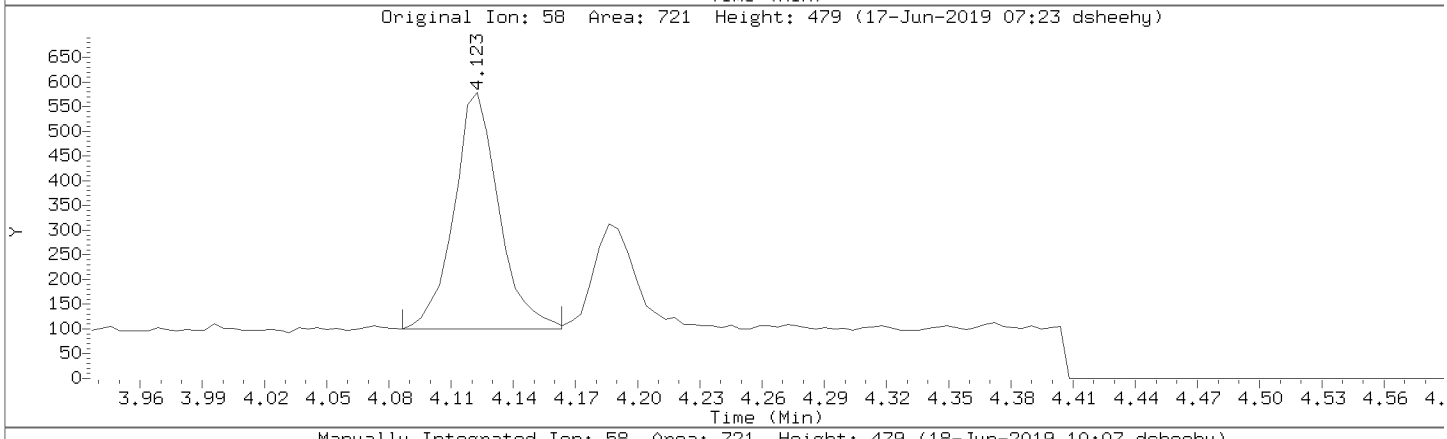


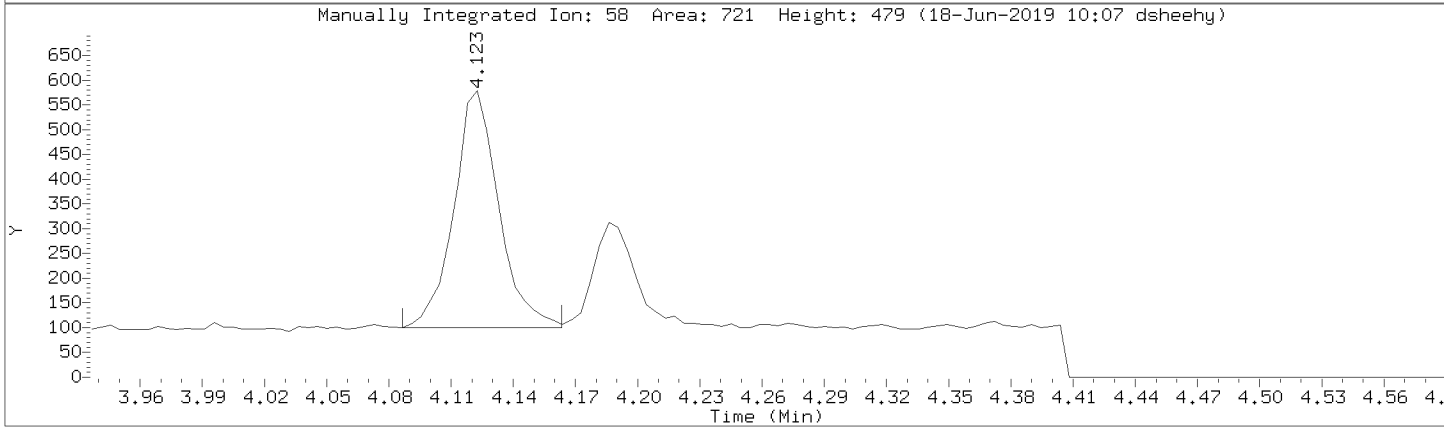
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167022.d
Injection Date: 16-JUN-2019 18:14
Instrument: 10msv8.i
Lab Sample ID: 10478608003

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









SAMPLE NO.

OW-24 DUP

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota
Contract: 104-0012 NY Superfund
Date Received: 06/07/2019 10:00
Matrix: Water SDG No.: 10478608
Date Extracted: 06/16/2019 18:32
Lab Sample ID: 10478608004
Date Analyzed: 06/16/2019 18:32
Lab File ID: 061619A.B\167023.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	4.2	

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167023.d
Lab Smp Id: 10478608004 Client Smp ID: OW-24 DUP
Inj Date : 16-JUN-2019 18:32 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 10478608004
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

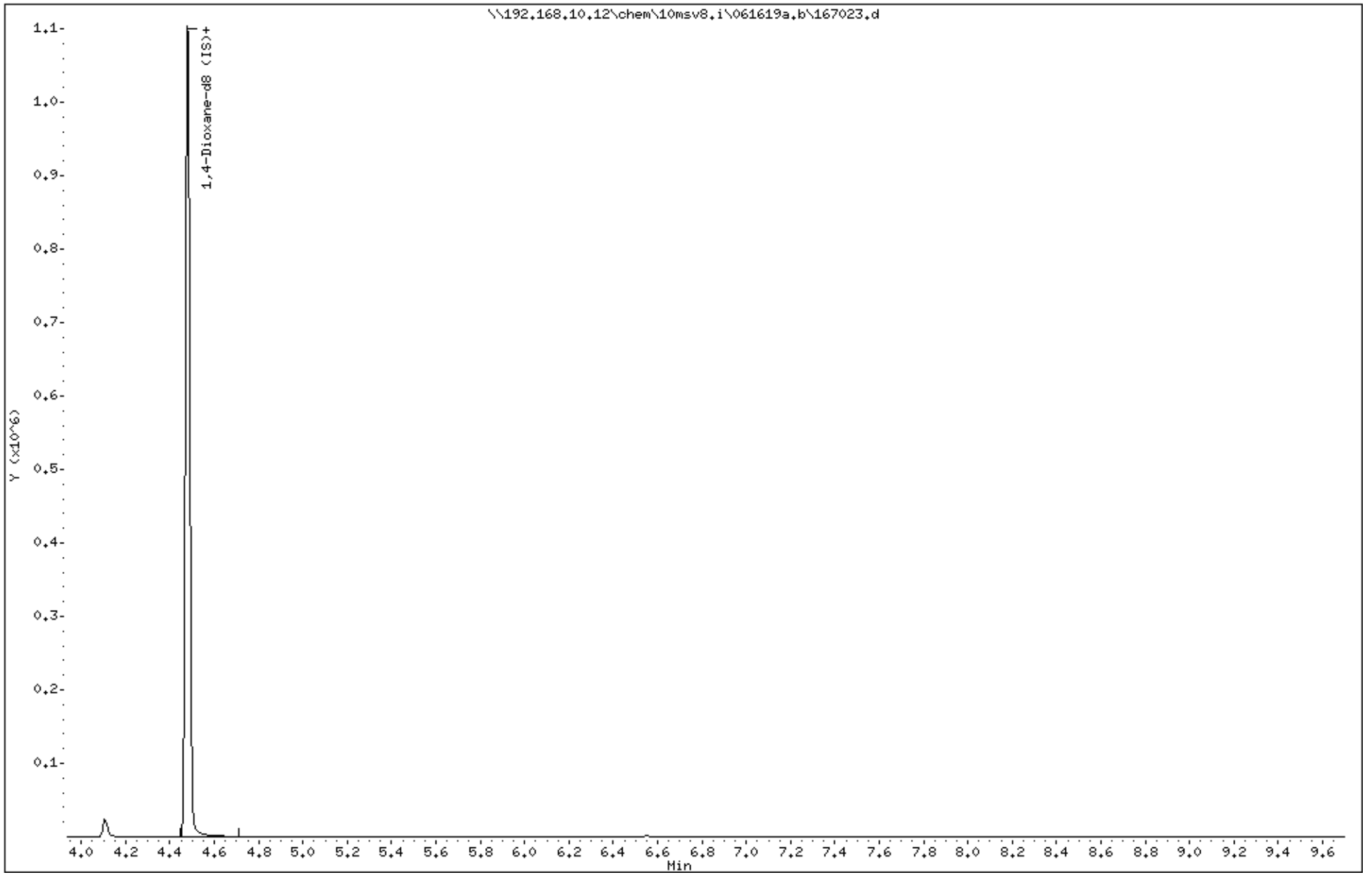
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	31626	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	823	4.24742	4.2(M)
$	3 Toluene-d8 (S)	98	4.479	4.478	(1.091)	717058	45.4290	45

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167023.d
Date : 16-JUN-2019 18:32
Client ID: OW-24 DUP
Instrument: 10msv8.i
Sample Info: 10478608004
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167023.d

Date : 16-JUN-2019 18:32

Client ID: OW-24 DUP

Instrument: 10msv8.i

Sample Info: 10478608004

Purge Volume: 5.0

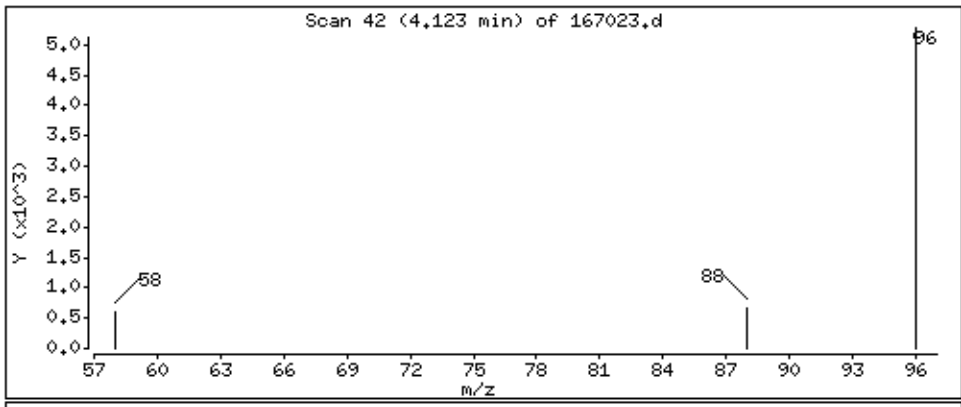
Operator: DS2

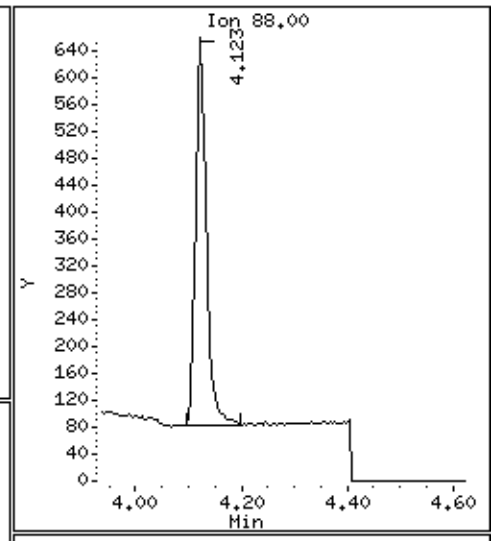
Column phase: Rtx-VMS SN1380750

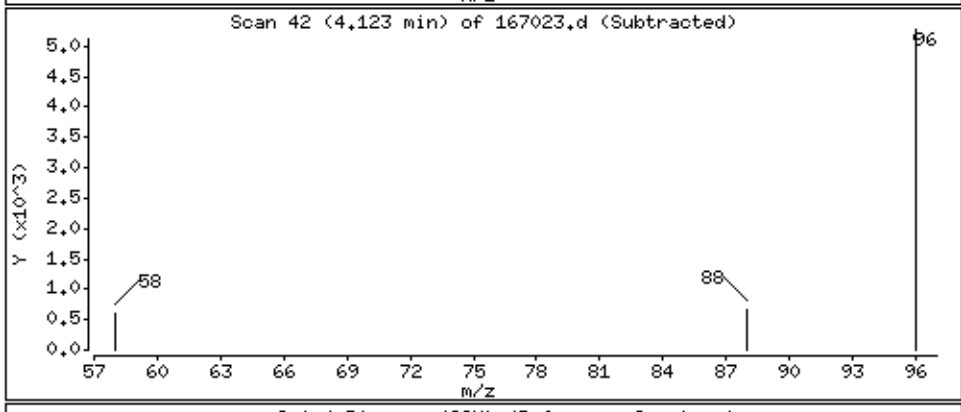
Column diameter: 0.18

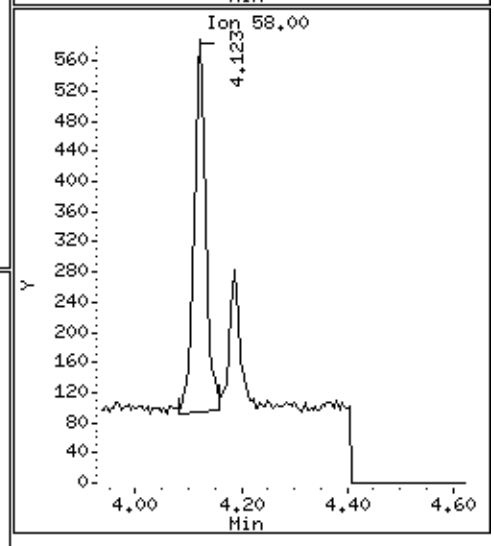
2 1,4-Dioxane (SIM)

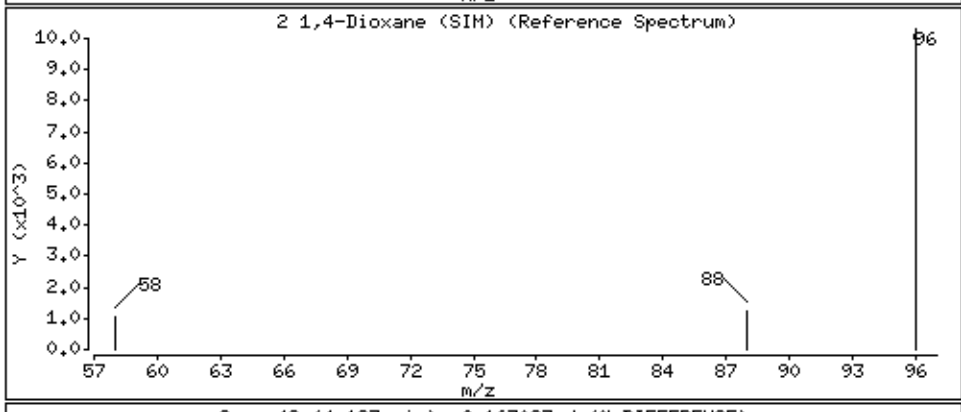
Concentration: 4.2 ug/L

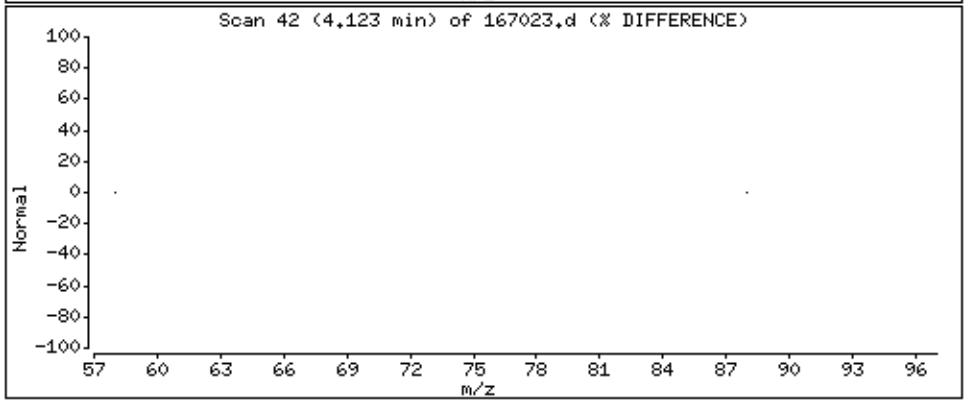






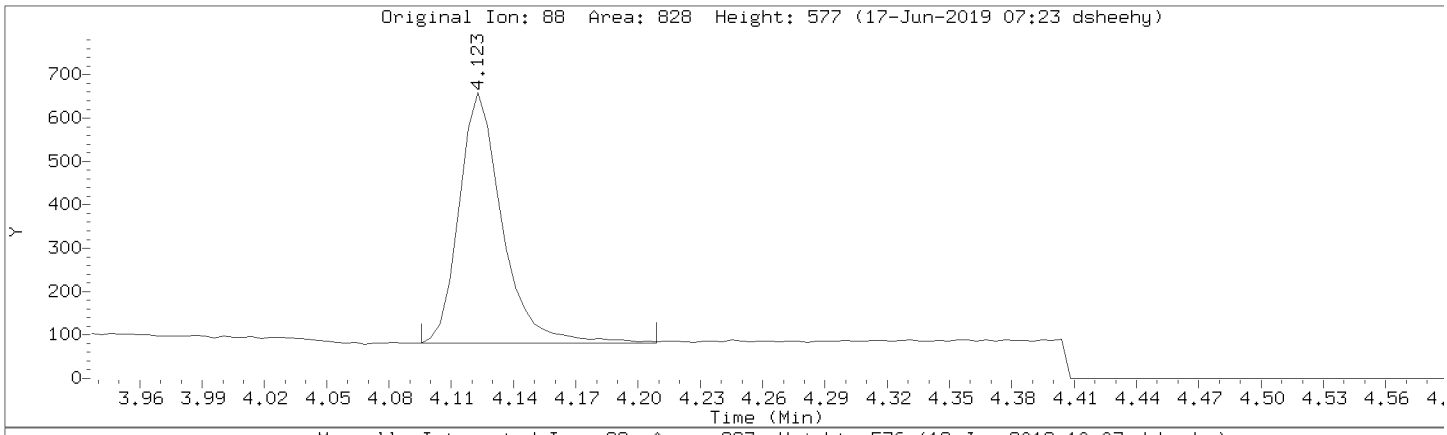


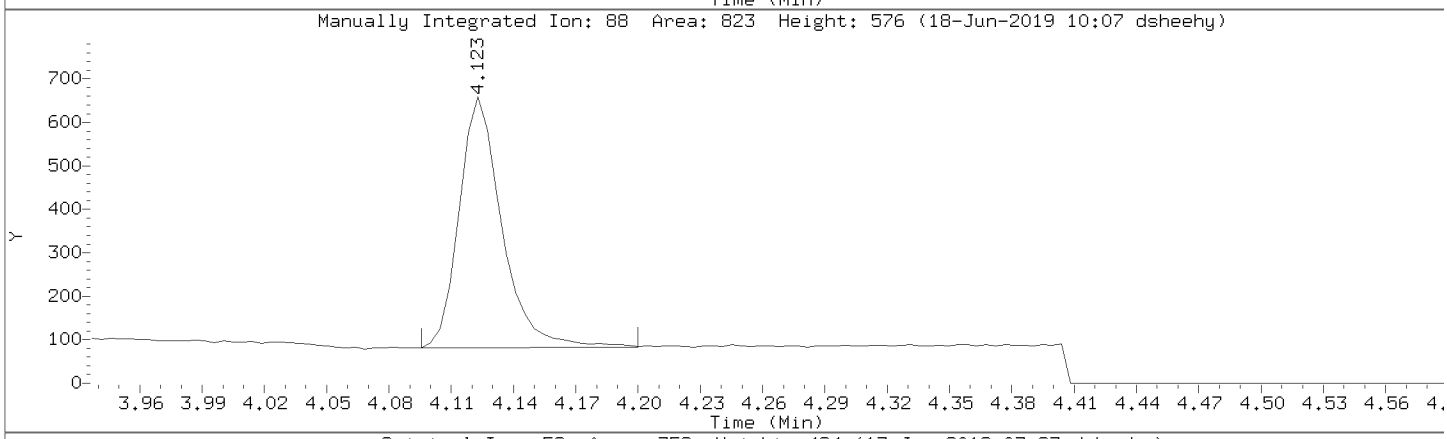


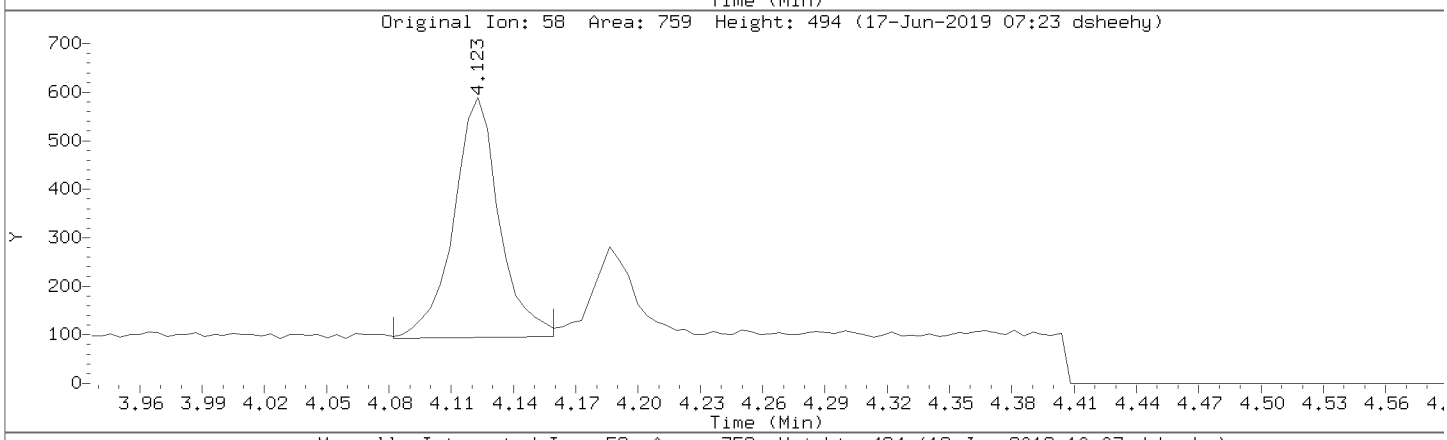


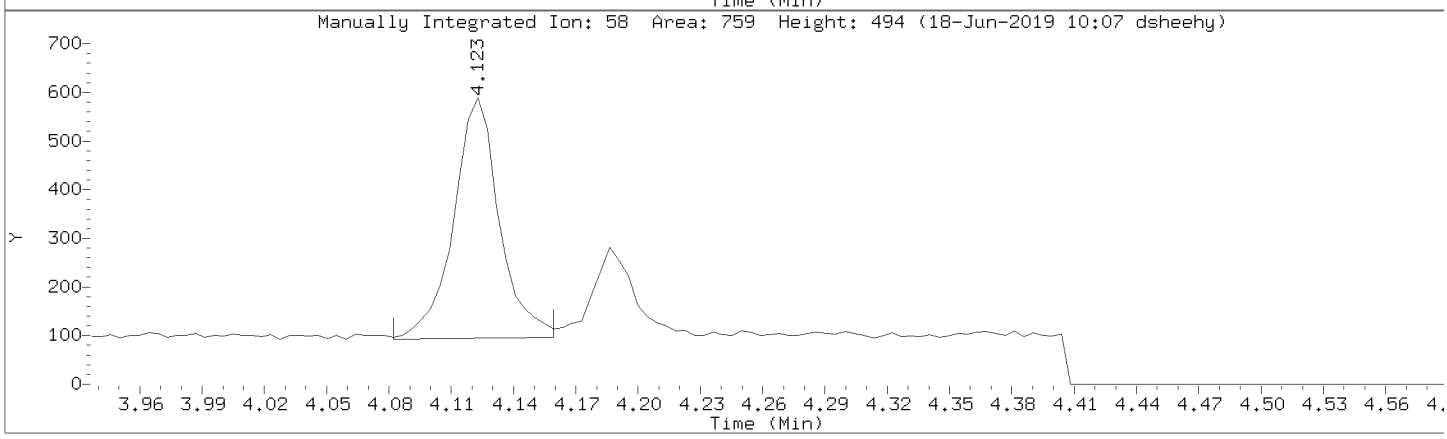
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167023.d
Injection Date: 16-JUN-2019 18:32
Instrument: 10msv8.i
Lab Sample ID: 10478608004

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









SAMPLE NO.

Pump Blank

MSV SIM - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota Contract: 104-0012 NY Superfund

Date Received: 06/07/2019 10:00 Matrix: Water SDG No.: 10478608

Date Extracted: 06/16/2019 16:24 Lab Sample ID: 10478608005

Date Analyzed: 06/16/2019 16:24 Lab File ID: 061619A.B\167016.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	ND	U

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167016.d
Lab Smp Id: 10478608005 Client Smp ID: Pump Blank
Inj Date : 16-JUN-2019 16:24 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 10478608005,,eb
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	30652	2000.00		
	2 1,4-Dioxane (SIM)	88	Compound Not Detected.						(D)
$	3 Toluene-d8 (S)	98	4.479	4.478	(1.091)	705409	46.1110	46	

QC Flag Legend

D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167016.d
Date : 16-JUN-2019 16:24
Client ID: Pump Blank
Instrument: 10msv8.i
Sample Info: 10478608005,,EB
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167016.d
Injection Date: 16-JUN-2019 16:24
Instrument: 10msv8.i
Lab Sample ID: 10478608005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

Field Blank

MSV SIM - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota Contract: 104-0012 NY Superfund

Date Received: 06/07/2019 10:00 Matrix: Water SDG No.: 10478608

Date Extracted: 06/16/2019 16:06 Lab Sample ID: 10478608006

Date Analyzed: 06/16/2019 16:06 Lab File ID: 061619A.B\167015.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	ND	U

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167015.d
Lab Smp Id: 10478608006 Client Smp ID: Field Blank
Inj Date : 16-JUN-2019 16:06 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 10478608006,,fb
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

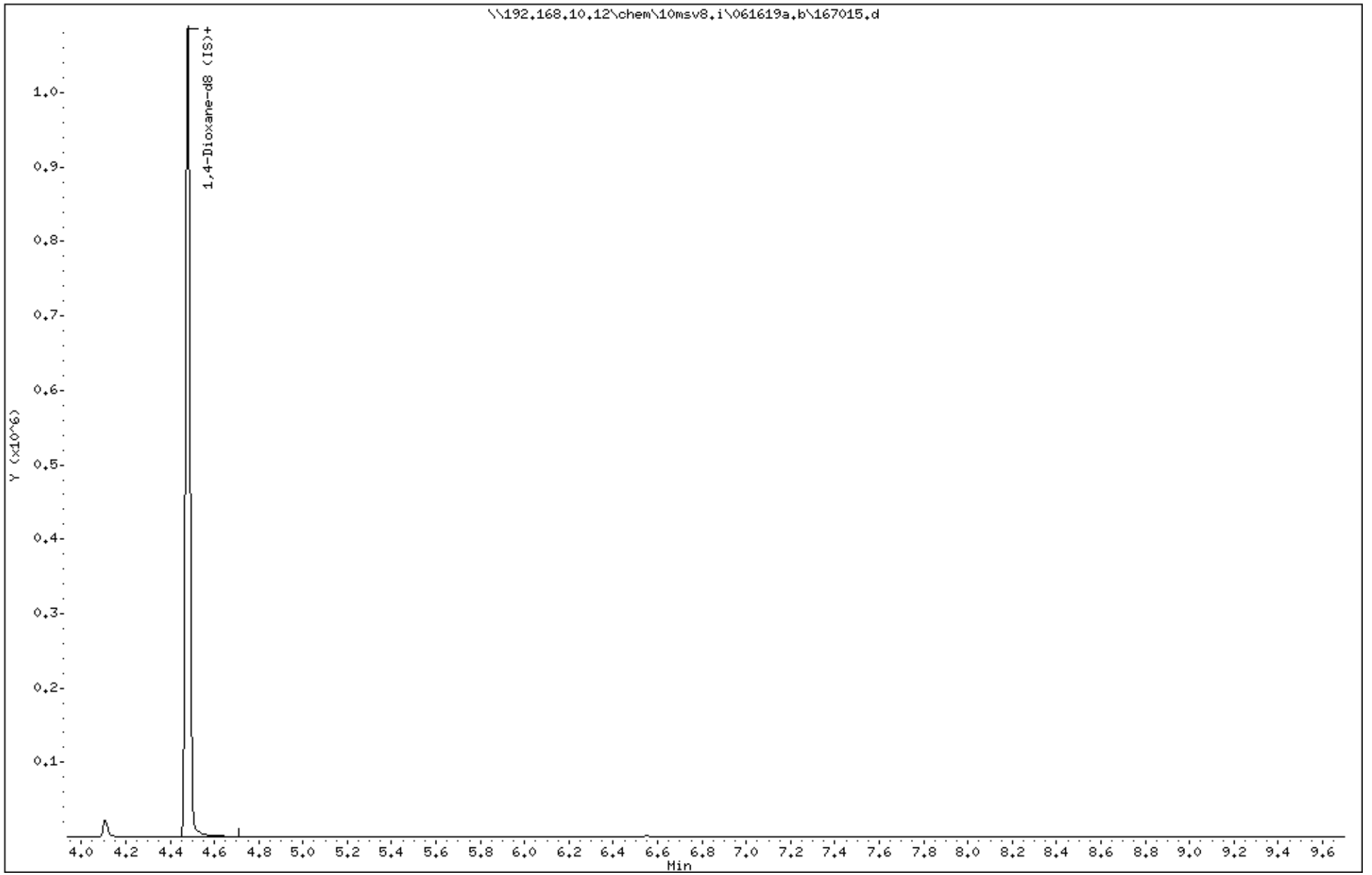
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
*	1 1,4-Dioxane-d8 (IS)	96	4.109	4.104	(1.000)	30183	2000.00		
	2 1,4-Dioxane (SIM)	88	Compound Not Detected.						(D)
$	3 Toluene-d8 (S)	98	4.480	4.478	(1.090)	715169	47.4755	47	

QC Flag Legend

D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167015.d
Date : 16-JUN-2019 16:06
Client ID: Field Blank
Instrument: 10msv8.i
Sample Info: 10478608006,,FB
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167015.d
Injection Date: 16-JUN-2019 16:06
Instrument: 10msv8.i
Lab Sample ID: 10478608006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

LAB PREPARED TRIP BLANK

MSV SIM - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota Contract: 104-0012 NY Superfund

Date Received: 06/07/2019 10:00 Matrix: Water SDG No.: 10478608

Date Extracted: 06/16/2019 15:48 Lab Sample ID: 10478608007

Date Analyzed: 06/16/2019 15:48 Lab File ID: 061619A.B\167014.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	ND	U

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167014.d
Lab Smp Id: 10478608007
Inj Date : 16-JUN-2019 15:48 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 10478608007,,tb
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

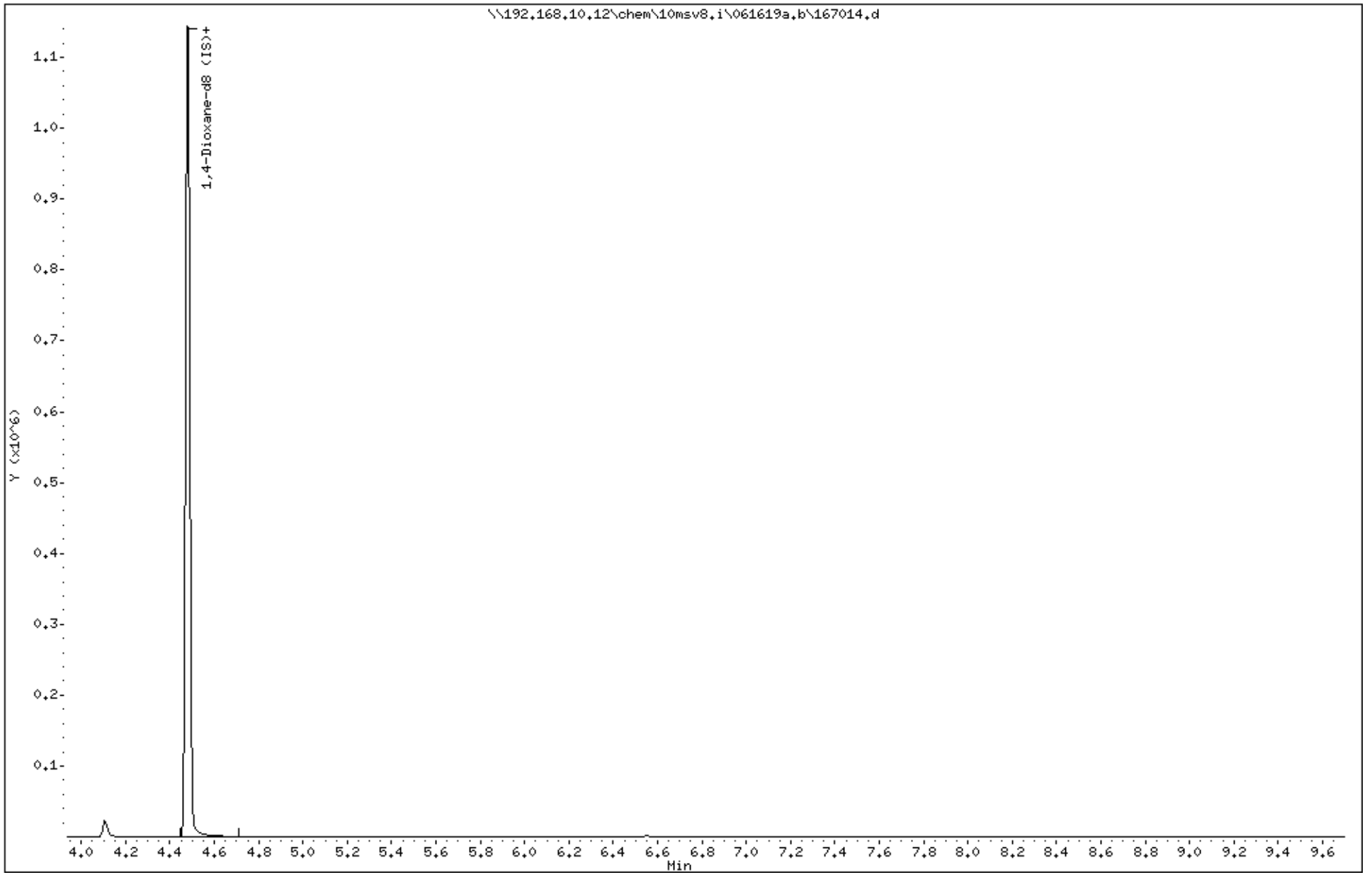
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	30977	2000.00		
	2 1,4-Dioxane (SIM)	88	Compound Not Detected.						(D)
$	3 Toluene-d8 (S)	98	4.479	4.478	(1.091)	725787	46.9454	47	

QC Flag Legend

D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167014.d
Date : 16-JUN-2019 15:48
Client ID:
Instrument: 10msv8.i
Sample Info: 10478608007,,TB
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167014.d
Injection Date: 16-JUN-2019 15:48
Instrument: 10msv8.i
Lab Sample ID: 10478608007
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

MSV SIM - FORM VI VOA-1

MSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10MSV8 GC Column: FULL SDG No.: 10478608

Calibration Date(s): 06/11/2019 06/11/2019 Calibration Time(s): 09:28 11:54

LAB FILE ID

CAL1 = 061119A.B\162005.D CAL2 = 061119A.B\162006.D CAL3 = 061119A.B\162007.D

CAL4 = 061119A.B\162008.D CAL5 = 061119A.B\162009.D CAL6 = 061119A.B\162010.D

CAL7 = 061119A.B\162011.D CAL8 = 061119A.B\162012.D CAL9 = 061119A.B\162013.D

COMPOUND	CURVE TYPE	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6
1,4-Dioxane (SIM)	Quadratic	80.91123	40.65195	16.38014	9.30551	7.45870	5.84191
Toluene-d8 (S)	Averaged	1109.5019	1058.9354	980.63461	941.48116	1003.3824	967.33311

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV SIM - FORM VI VOA-2

MSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10MSV8 GC Column: FULL SDG No.: 10478608

Calibration Date(s): 06/11/2019 06/11/2019 Calibration Time(s): 09:28 11:54

LAB FILE ID

CAL1 = 061119A.B\162005.D CAL2 = 061119A.B\162006.D CAL3 = 061119A.B\162007.D

CAL4 = 061119A.B\162008.D CAL5 = 061119A.B\162009.D CAL6 = 061119A.B\162010.D

CAL7 = 061119A.B\162011.D CAL8 = 061119A.B\162012.D CAL9 = 061119A.B\162013.D

COMPOUND	CURVE TYPE	CAL7	CAL8	CAL9
1,4-Dioxane (SIM)	Quadratic			
Toluene-d8 (S)	Averaged	1019.4863	960.83679	941.99310

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV SIM - FORM VI VOA-3

MSV SIM INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - Minnesota Instrument ID: 10MSV8 GC Column: FULL SDG No.: 10478608

Calibration Date(s): 06/11/2019 06/11/2019 Calibration Time(s): 09:28 11:54

LAB FILE ID

CAL1 = 061119A.B\162005.D CAL2 = 061119A.B\162006.D CAL3 = 061119A.B\162007.D

CAL4 = 061119A.B\162008.D CAL5 = 061119A.B\162009.D CAL6 = 061119A.B\162010.D

CAL7 = 061119A.B\162011.D CAL8 = 061119A.B\162012.D CAL9 = 061119A.B\162013.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,4-Dioxane (SIM)	Quadratic		0.99765	0.01917	3.03709	89.62547
Toluene-d8 (S)	Averaged	5.66613			998.17611	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162005.d
Lab Smp Id: CAL1,212761:1
Inj Date : 11-JUN-2019 09:28 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal1,212761:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 09:28 Cal File: 162005.d
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

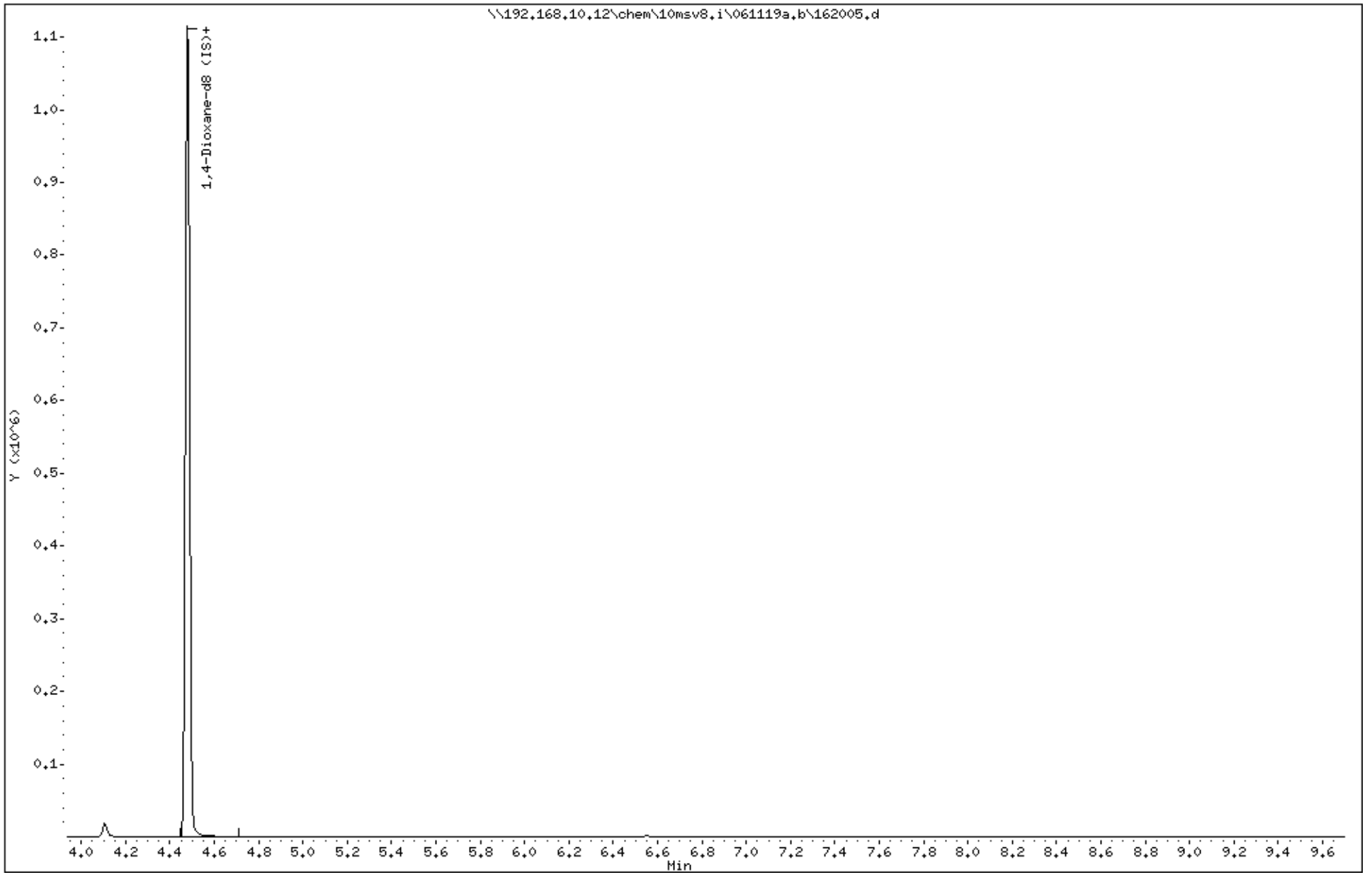
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	25460	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	515	0.50000	0.69(aM)
$	3 Toluene-d8 (S)	98	4.478	4.479	(1.091)	706198	50.0000	56

QC Flag Legend

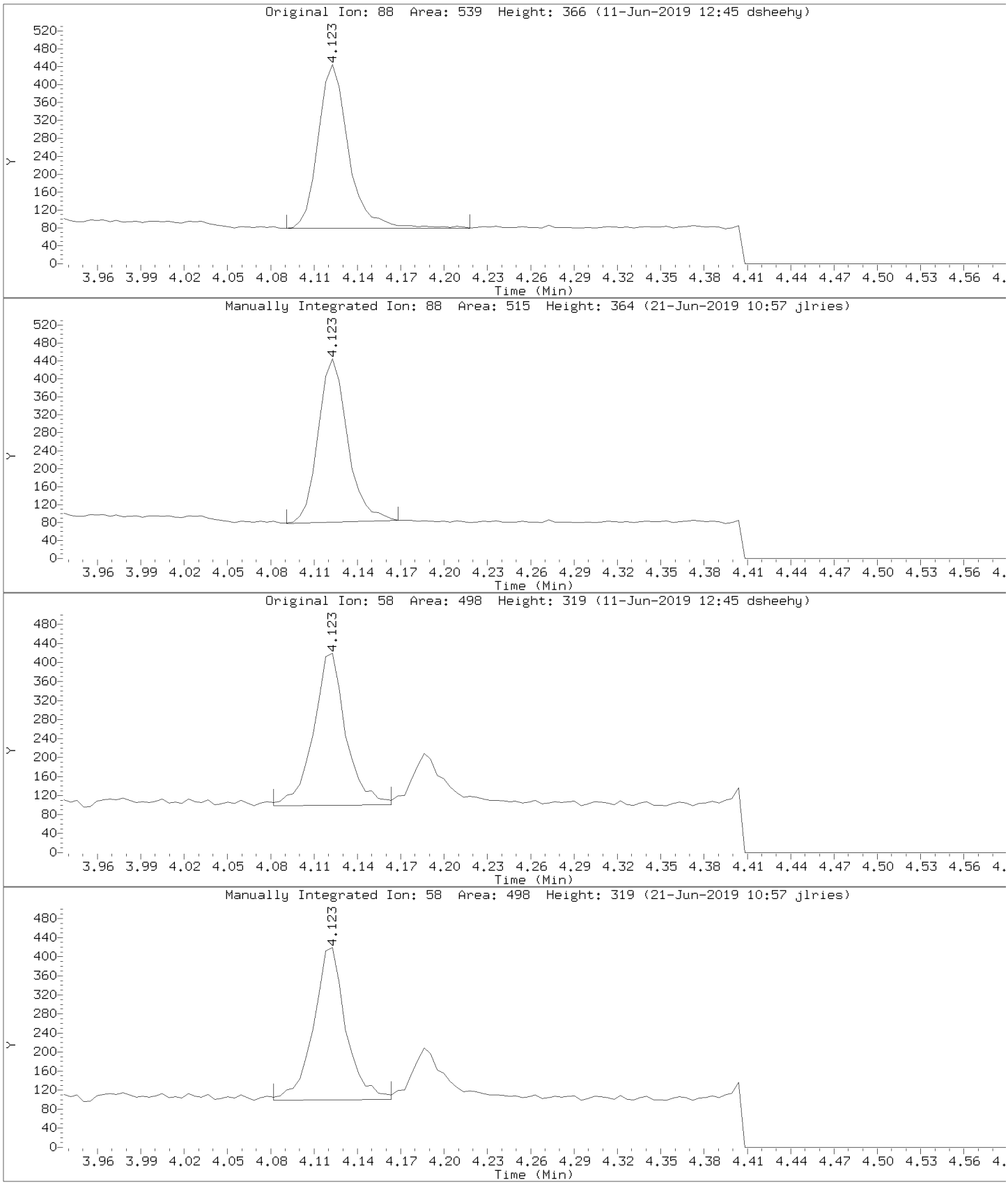
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162005.d
Date : 11-JUN-2019 09:28
Client ID:
Instrument: 10msv8.i
Sample Info: CAL1,212761:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162005.d
Injection Date: 11-JUN-2019 09:28
Instrument: 10msv8.i
Lab Sample ID: CAL1,212761:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1



Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162006.d
Lab Smp Id: CAL2,212752:1 Client Smp ID: CAL2
Inj Date : 11-JUN-2019 09:47 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal2,212752:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 09:47 Cal File: 162006.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

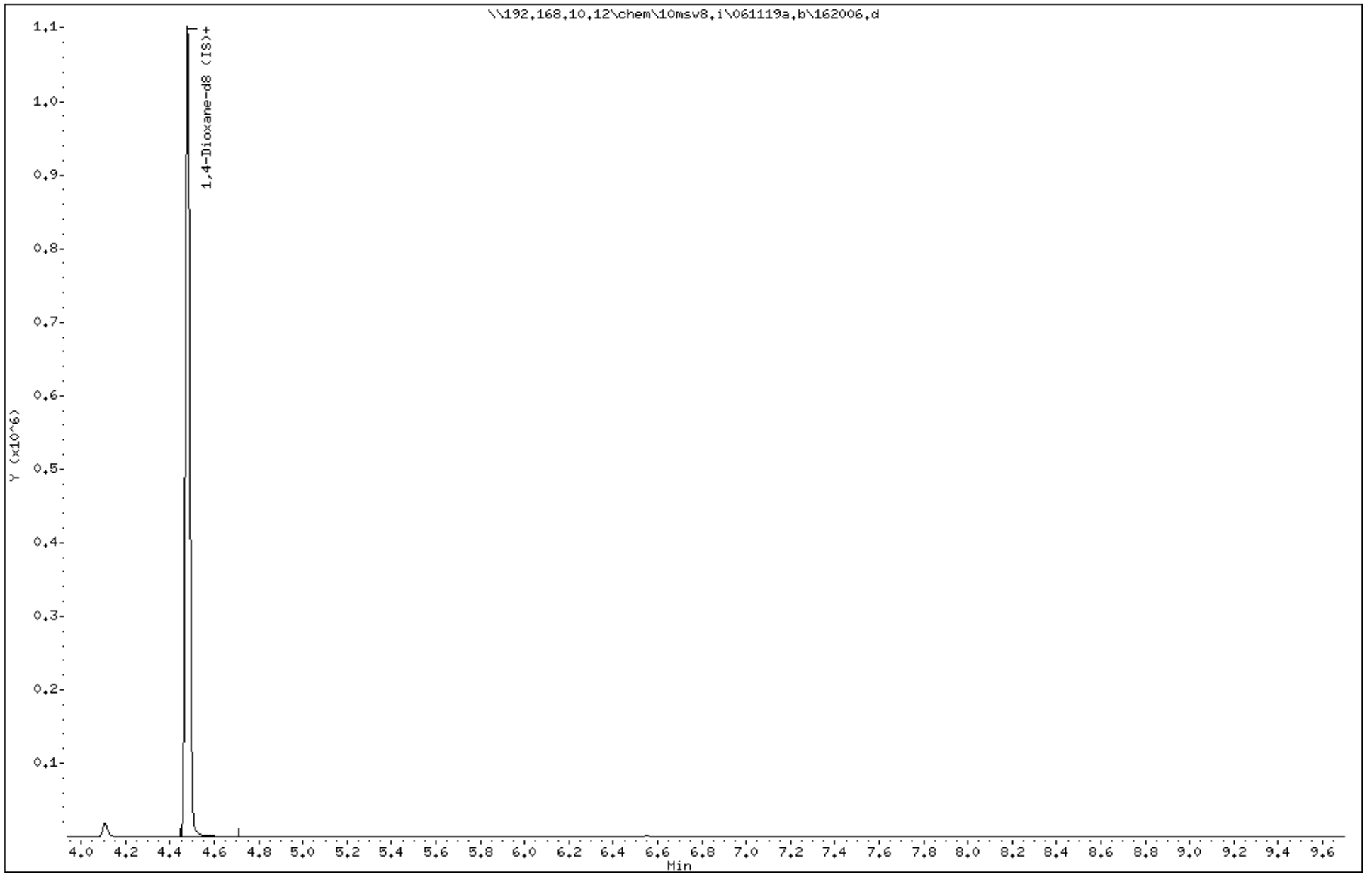
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	26321	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	535	1.00000	0.75(aM)
$	3 Toluene-d8 (S)	98	4.479	4.479	(1.091)	696806	50.0000	53

QC Flag Legend

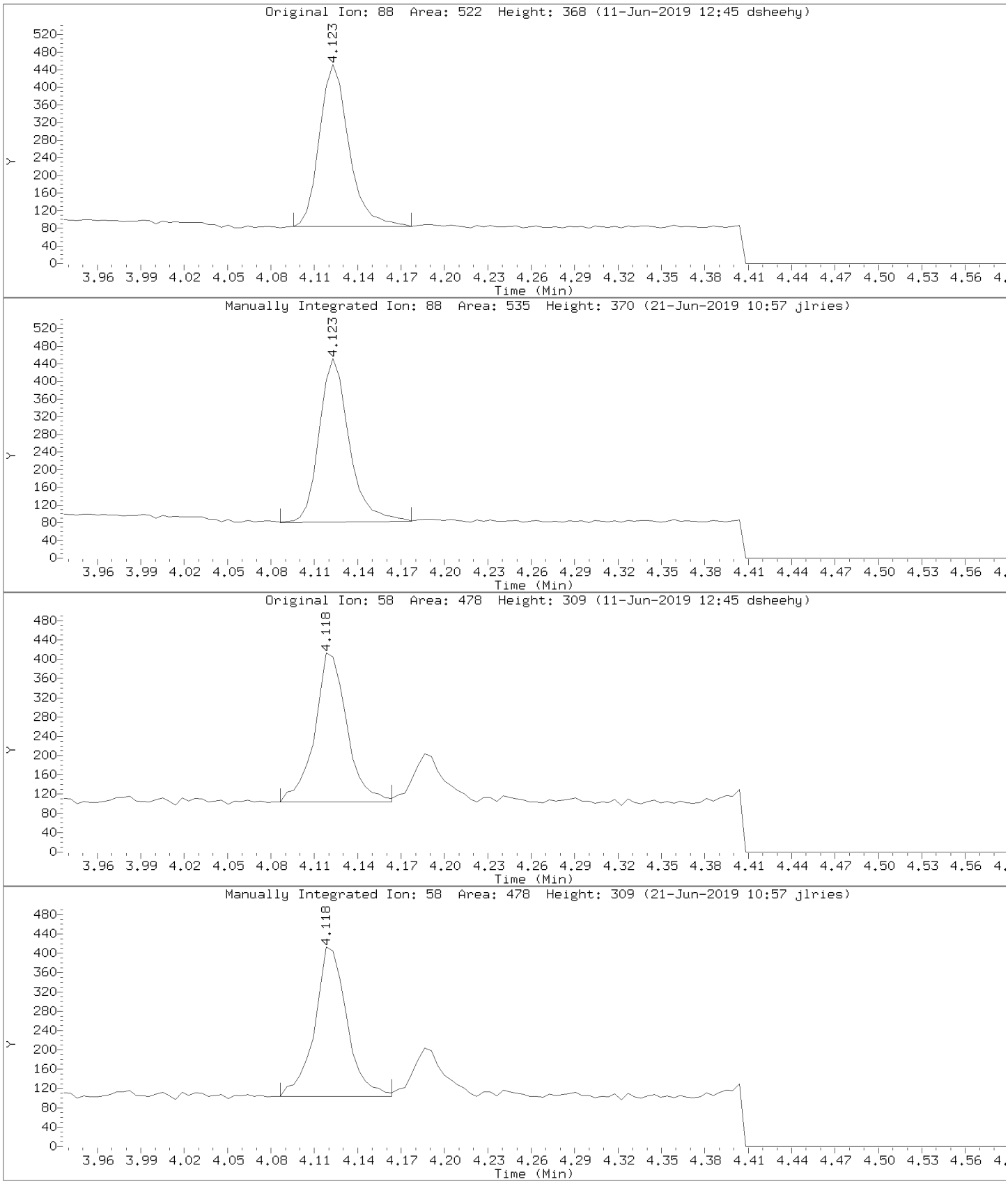
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162006.d
Date : 11-JUN-2019 09:47
Client ID: CAL2
Instrument: 10msv8.i
Sample Info: CAL2,212752:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162006.d
Injection Date: 11-JUN-2019 09:47
Instrument: 10msv8.i
Lab Sample ID: CAL2,212752:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1



Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162007.d
Lab Smp Id: CAL3,212753:1 Client Smp ID: CAL3
Inj Date : 11-JUN-2019 10:05 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal3,212753:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 10:05 Cal File: 162007.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

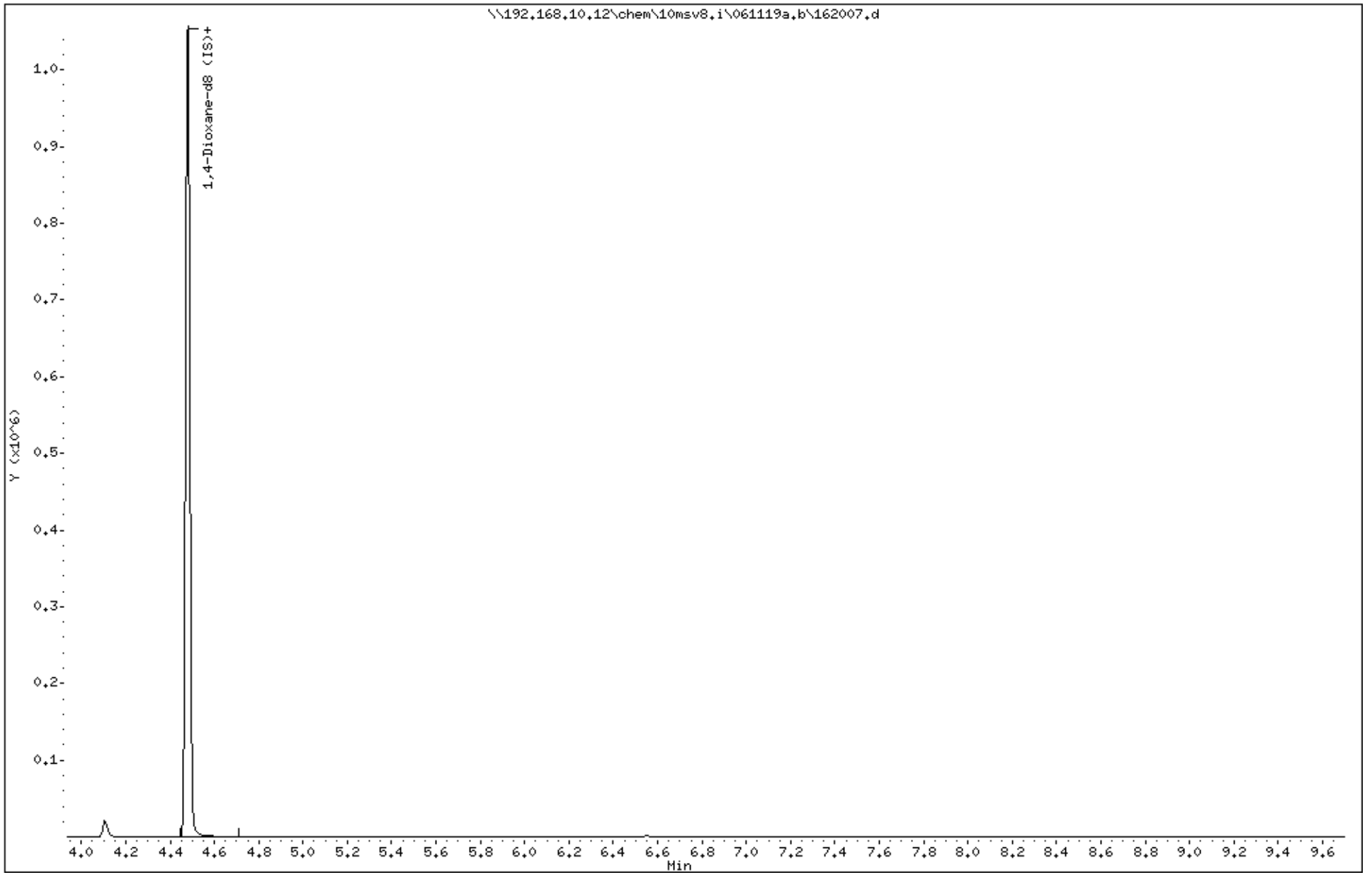
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	27513	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	676	3.00000	3.4(M)
$	3 Toluene-d8 (S)	98	4.480	4.479	(1.092)	674505	50.0000	49

QC Flag Legend

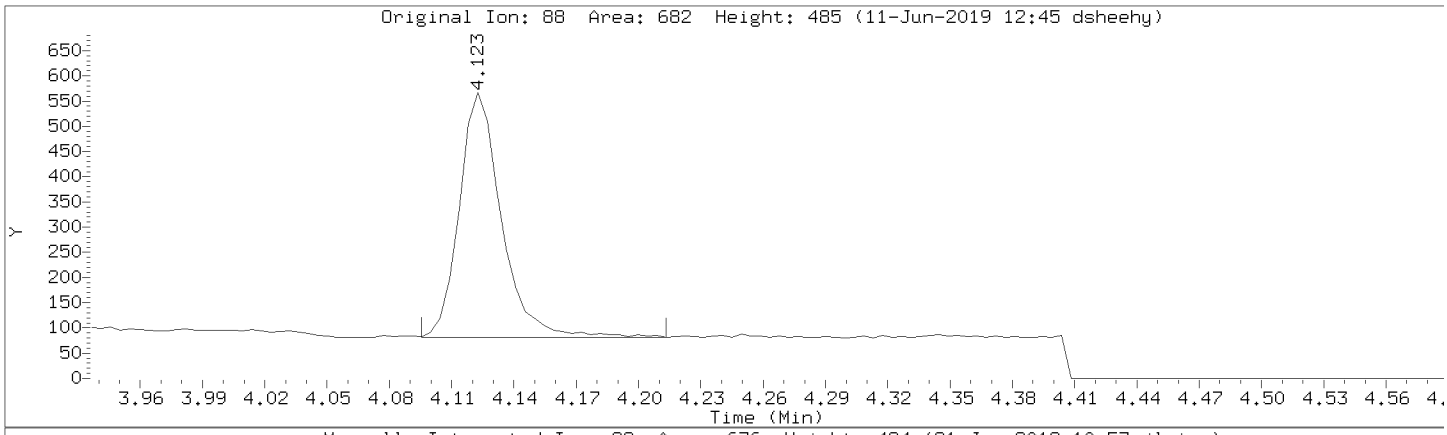
M - Compound response manually integrated.

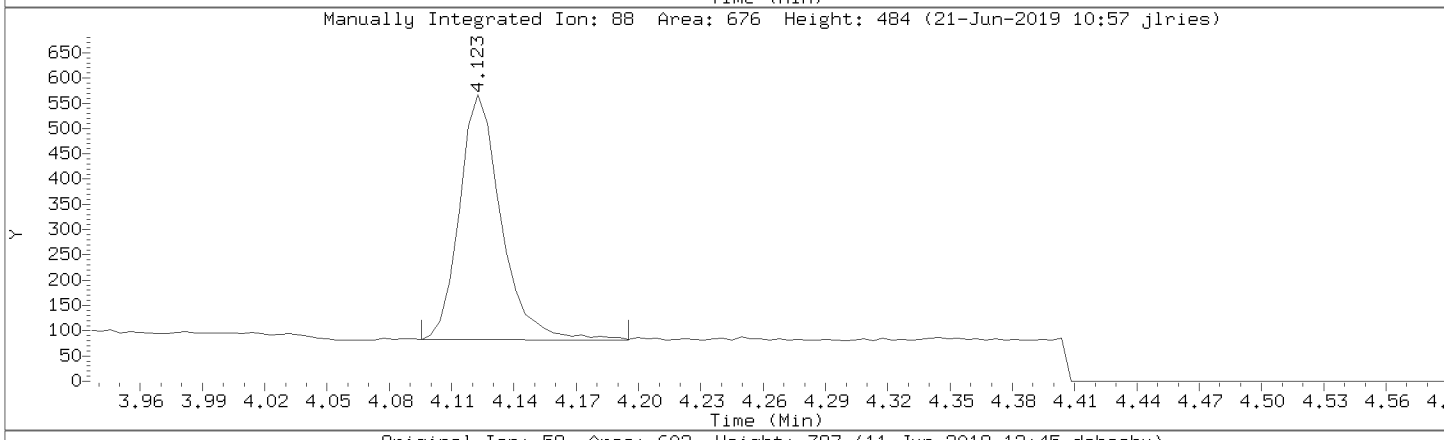
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162007.d
Date : 11-JUN-2019 10:05
Client ID: CAL3
Instrument: 10msv8.i
Sample Info: CAL3,212753:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

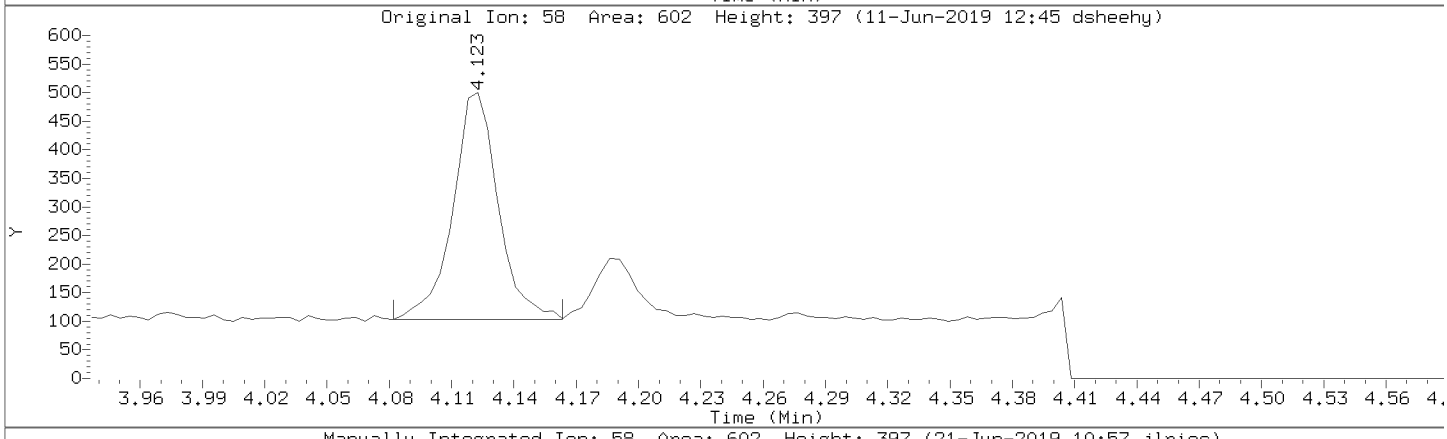


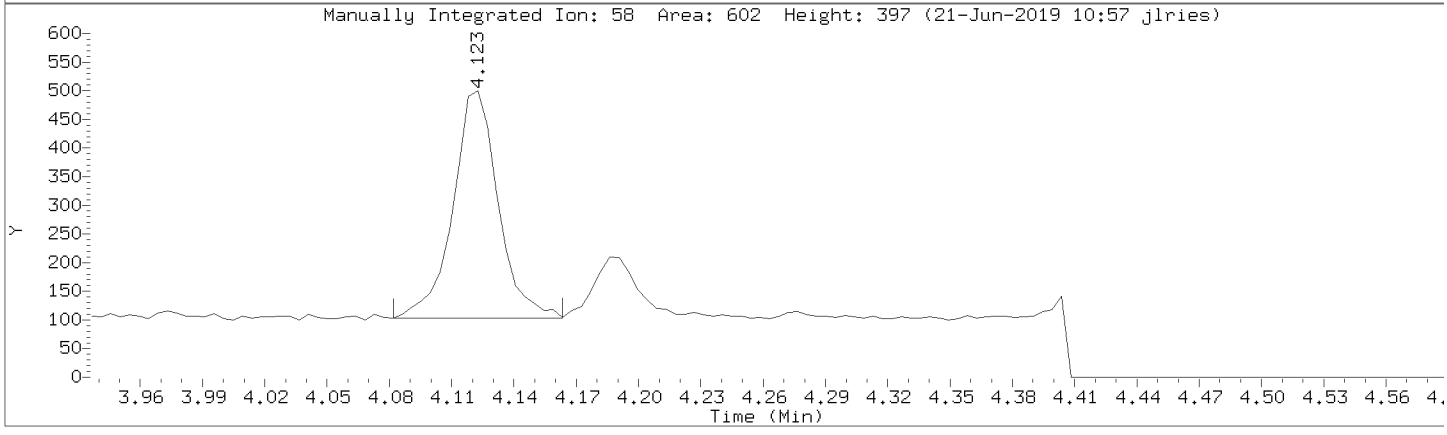
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162007.d
Injection Date: 11-JUN-2019 10:05
Instrument: 10msv8.i
Lab Sample ID: CAL3,212753:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162008.d
Lab Smp Id: CAL4,212754:1 Client Smp ID: CAL4
Inj Date : 11-JUN-2019 10:23 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal4,212754:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

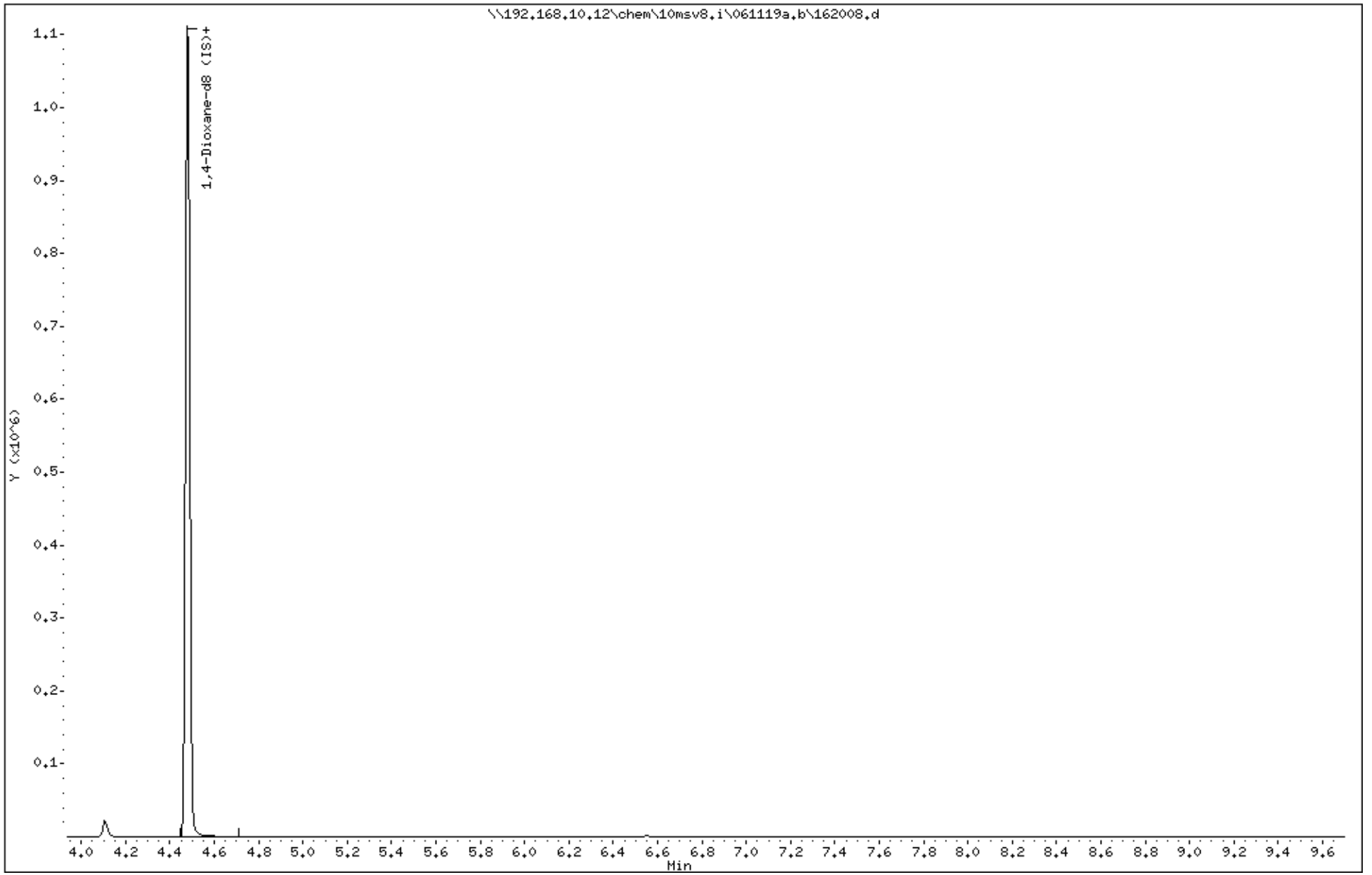
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	30233	2000.00	
2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	844	6.00000	5.3(M)
$ 3 Toluene-d8 (S)	98	4.479	4.479	(1.091)	711595	50.0000	47

QC Flag Legend

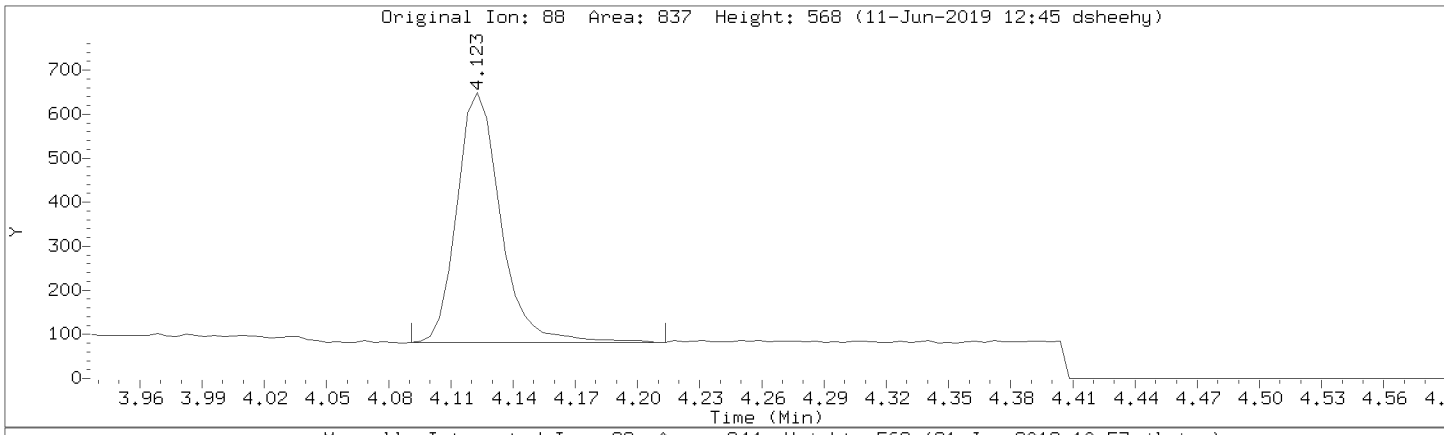
M - Compound response manually integrated.

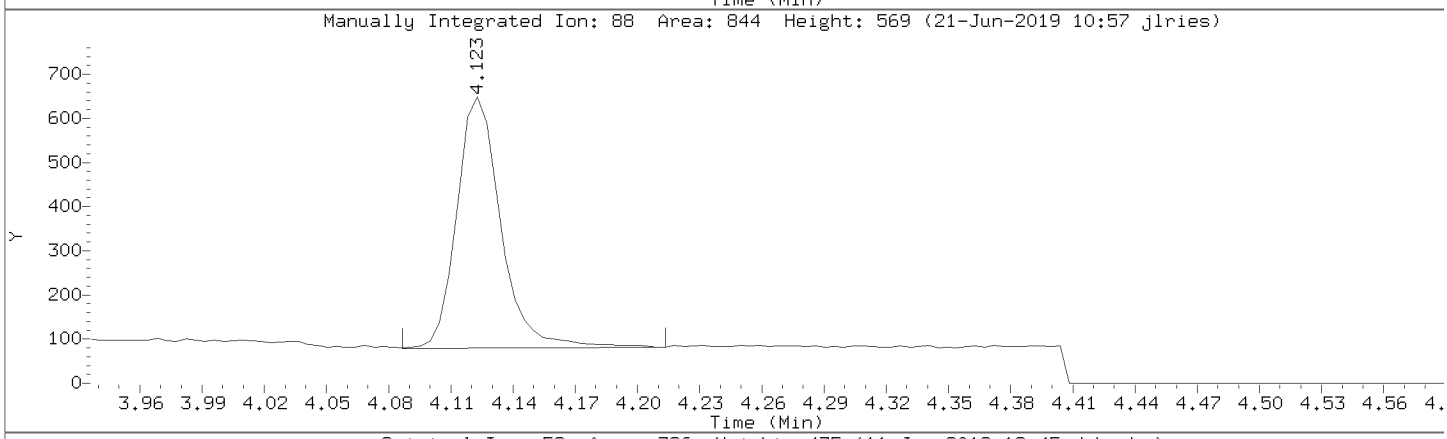
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162008.d
Date : 11-JUN-2019 10:23
Client ID: CAL4
Instrument: 10msv8.i
Sample Info: CAL4,212754:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

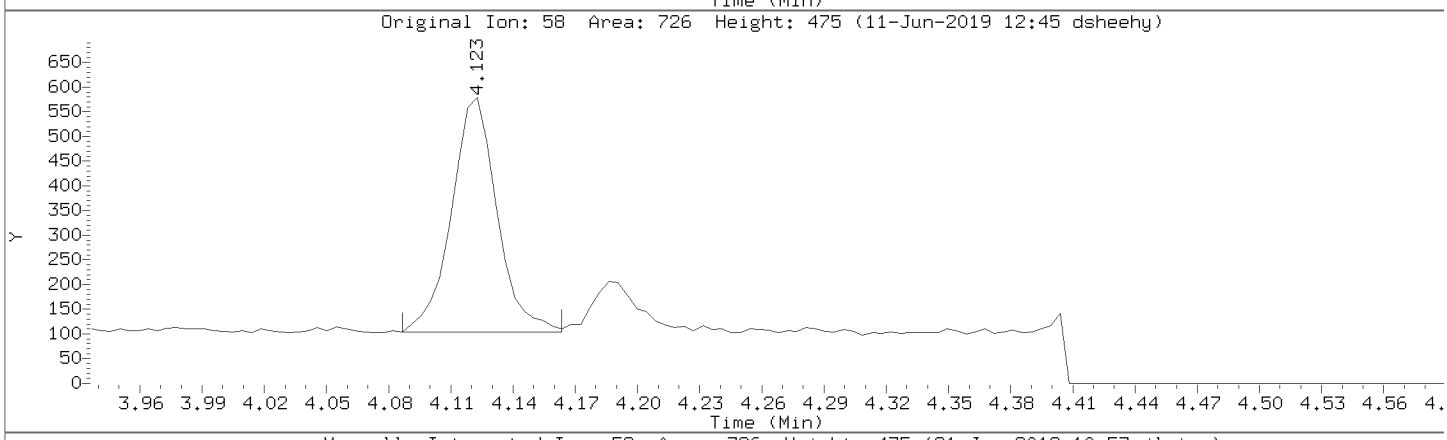


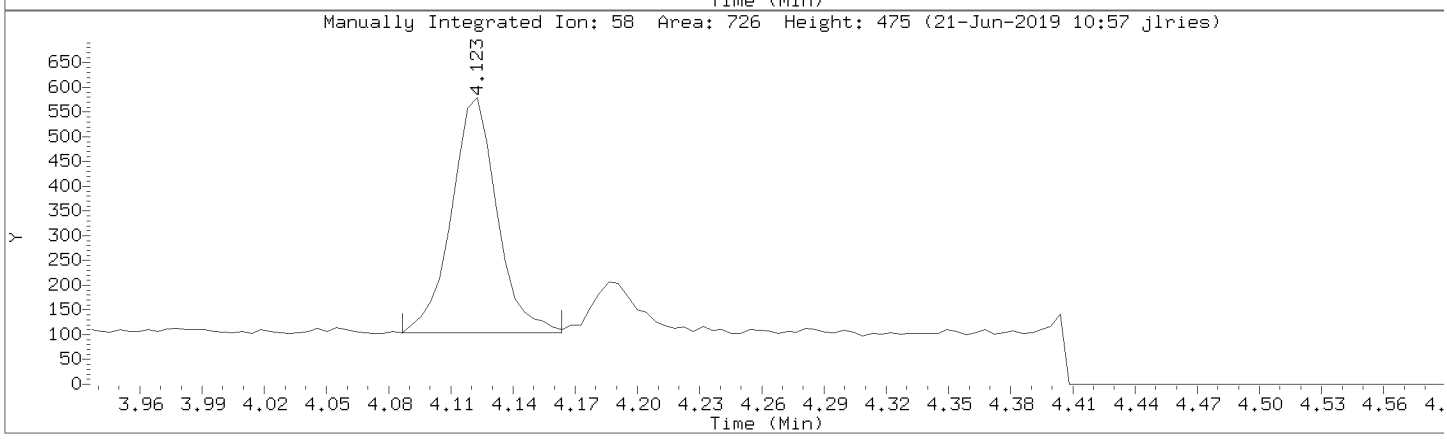
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162008.d
Injection Date: 11-JUN-2019 10:23
Instrument: 10msv8.i
Lab Sample ID: CAL4,212754:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162009.d
Lab Smp Id: CAL5,212755:1 Client Smp ID: CAL5
Inj Date : 11-JUN-2019 10:41 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal5,212755:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 10:41 Cal File: 162009.d
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

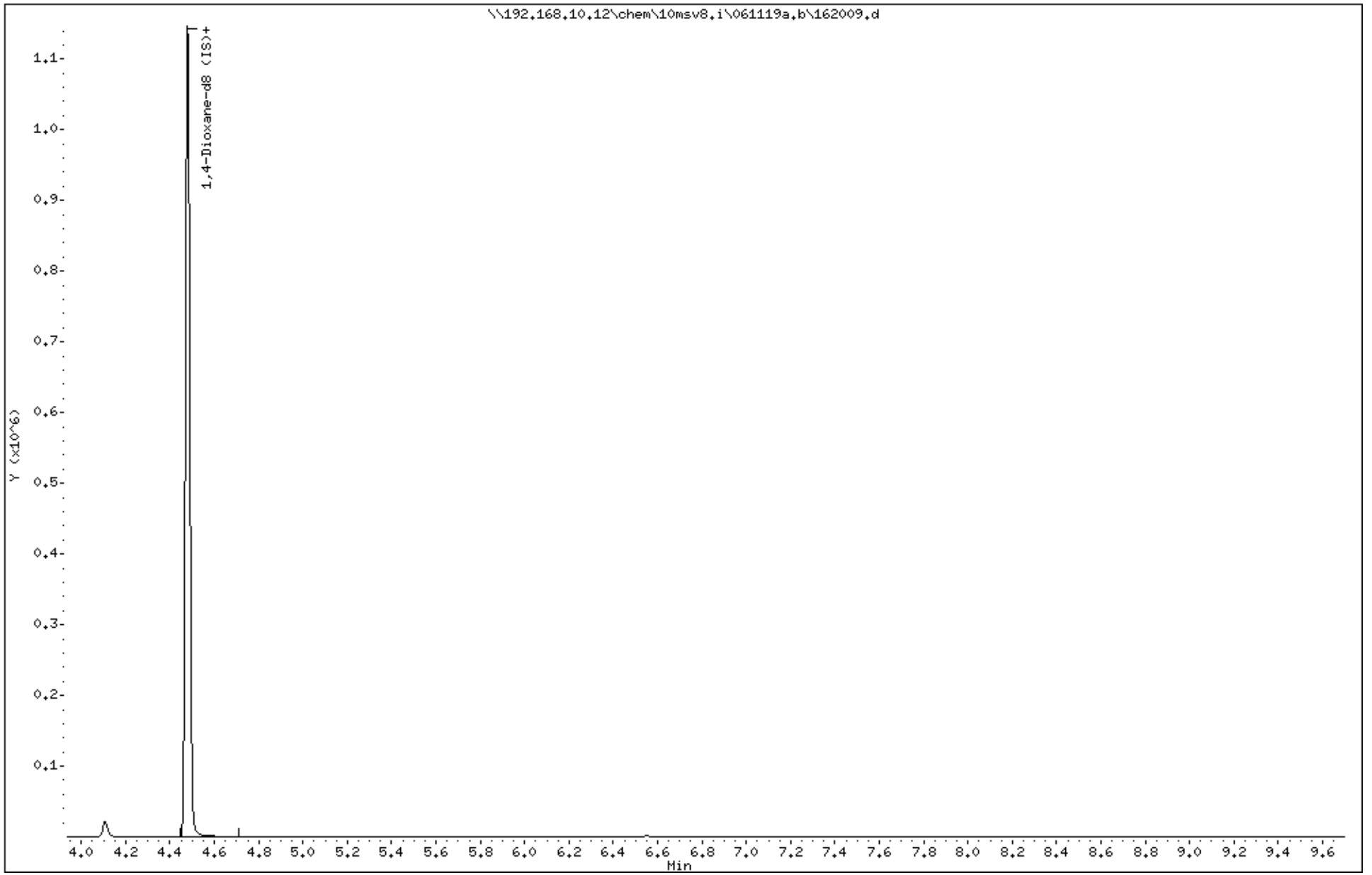
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	29174	2000.00	
2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1088	10.0000	10(M)
$ 3 Toluene-d8 (S)	98	4.478	4.479	(1.091)	731817	50.0000	50

QC Flag Legend

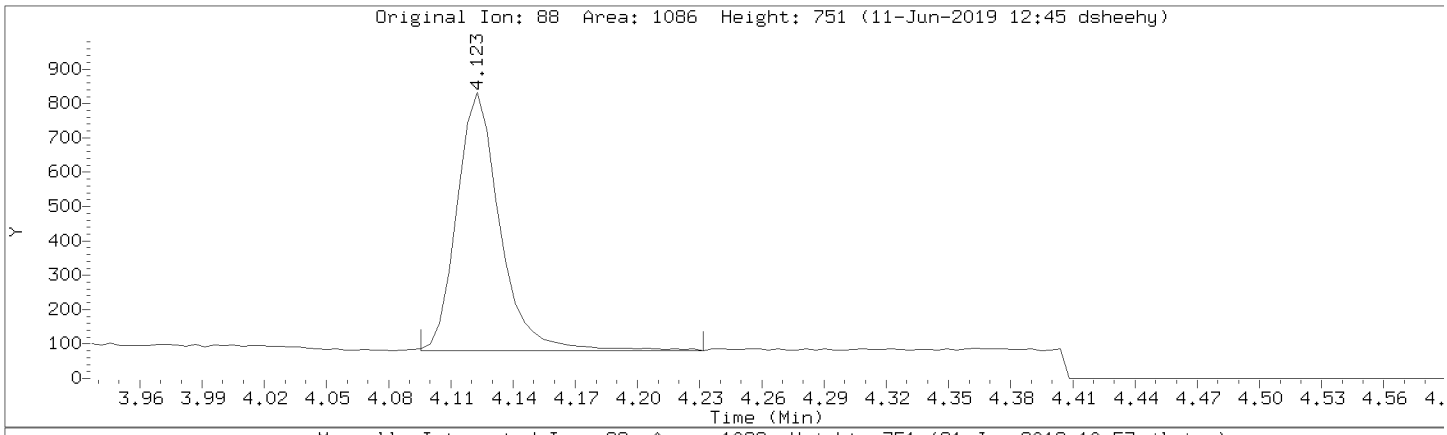
M - Compound response manually integrated.

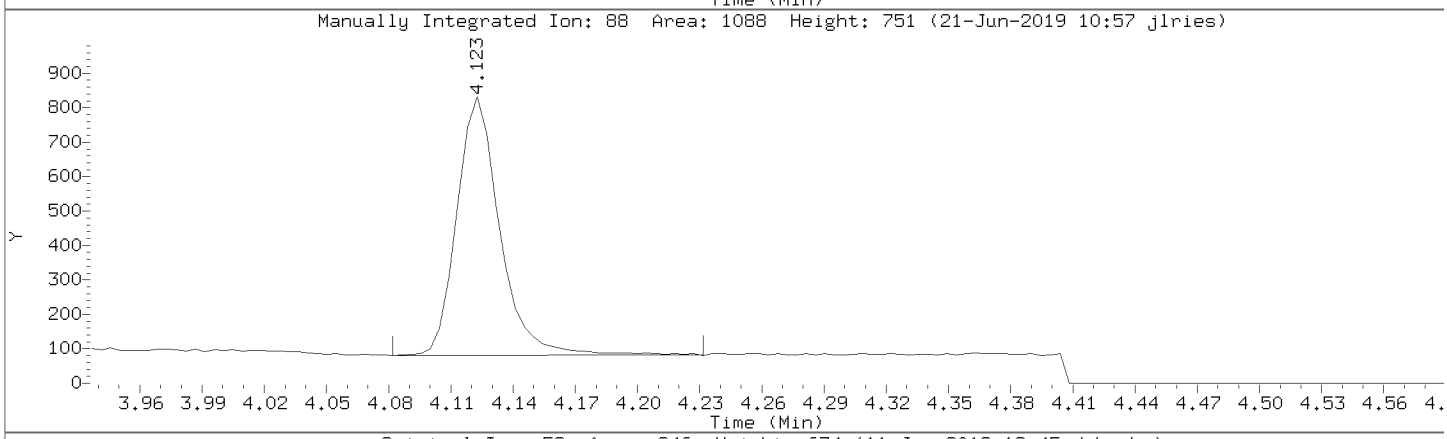
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162009.d
Date : 11-JUN-2019 10:41
Client ID: CAL5
Instrument: 10msv8.i
Sample Info: CAL5,212755:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

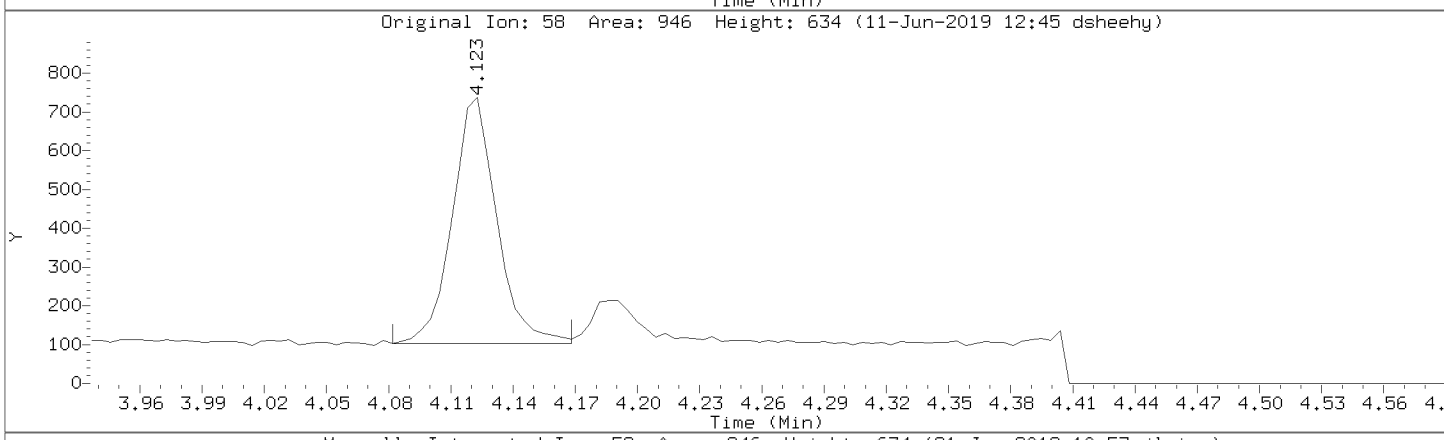


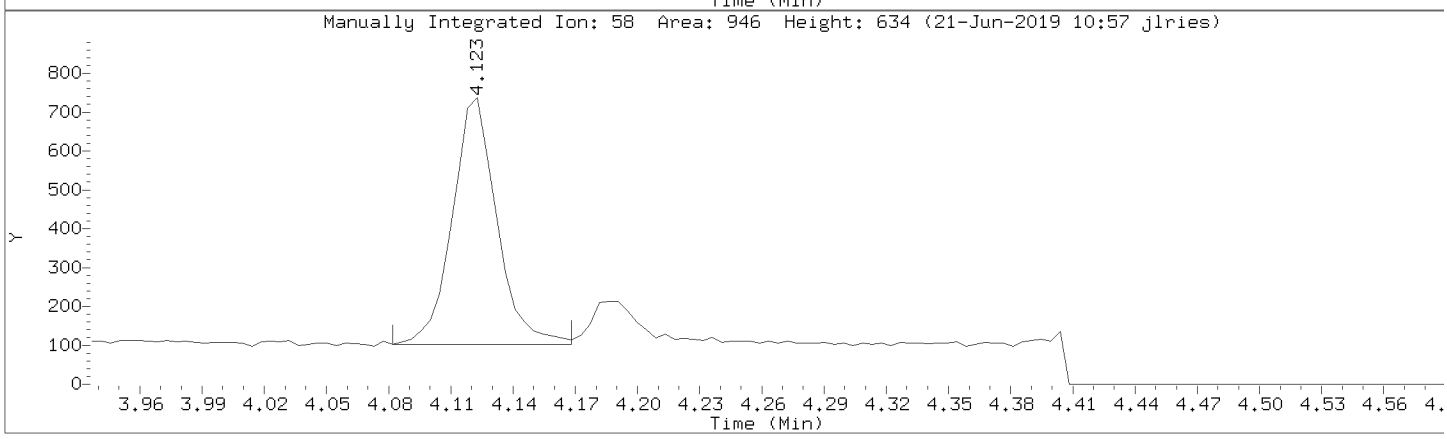
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162009.d
Injection Date: 11-JUN-2019 10:41
Instrument: 10msv8.i
Lab Sample ID: CAL5,212755:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162010.d
Lab Smp Id: CAL6,212756:1 Client Smp ID: CAL6
Inj Date : 11-JUN-2019 10:59 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal6,212756:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 10:59 Cal File: 162010.d
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

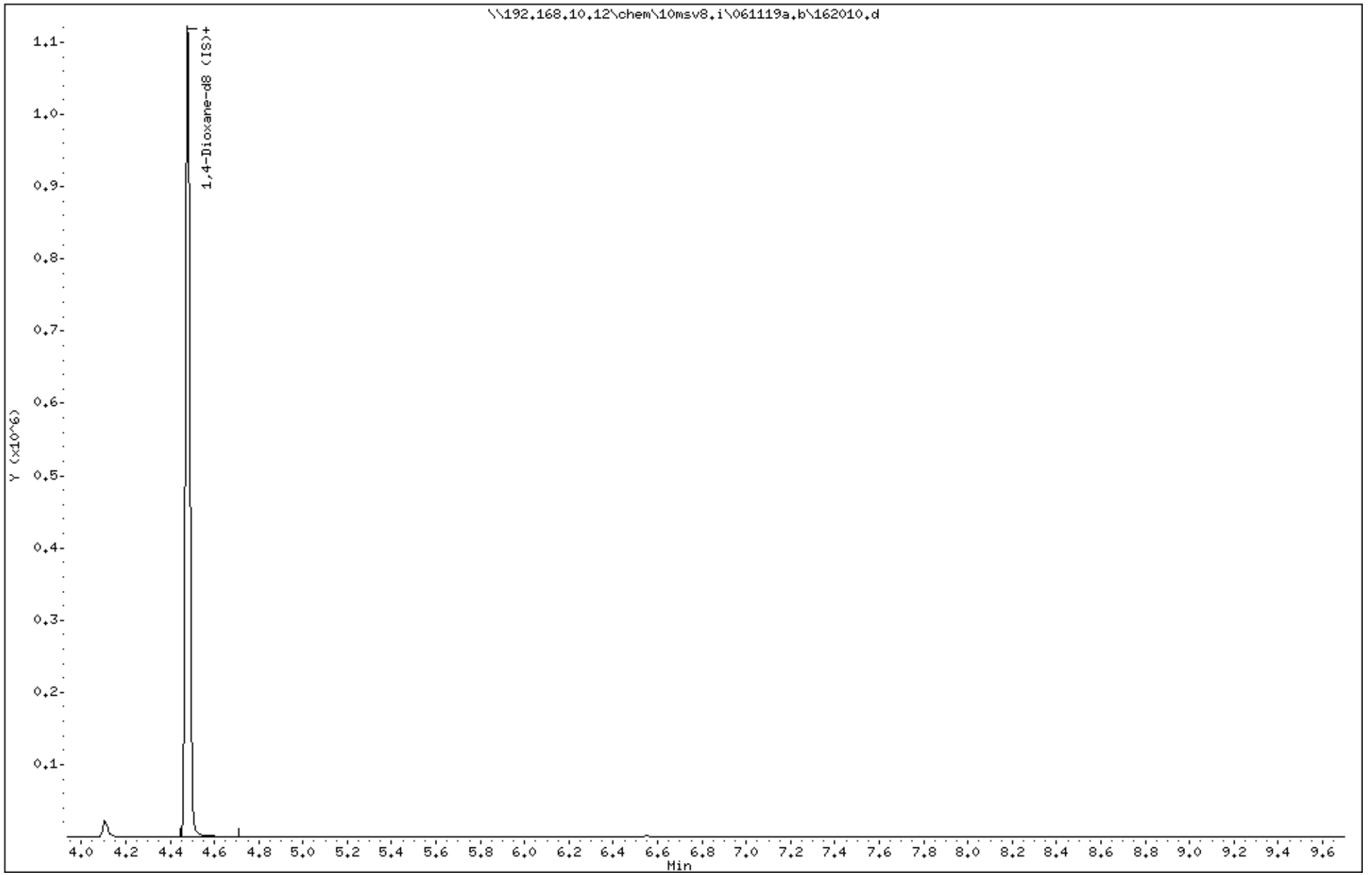
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	30110	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1759	20.0000	20(M)
$	3 Toluene-d8 (S)	98	4.479	4.479	(1.091)	728160	50.0000	48

QC Flag Legend

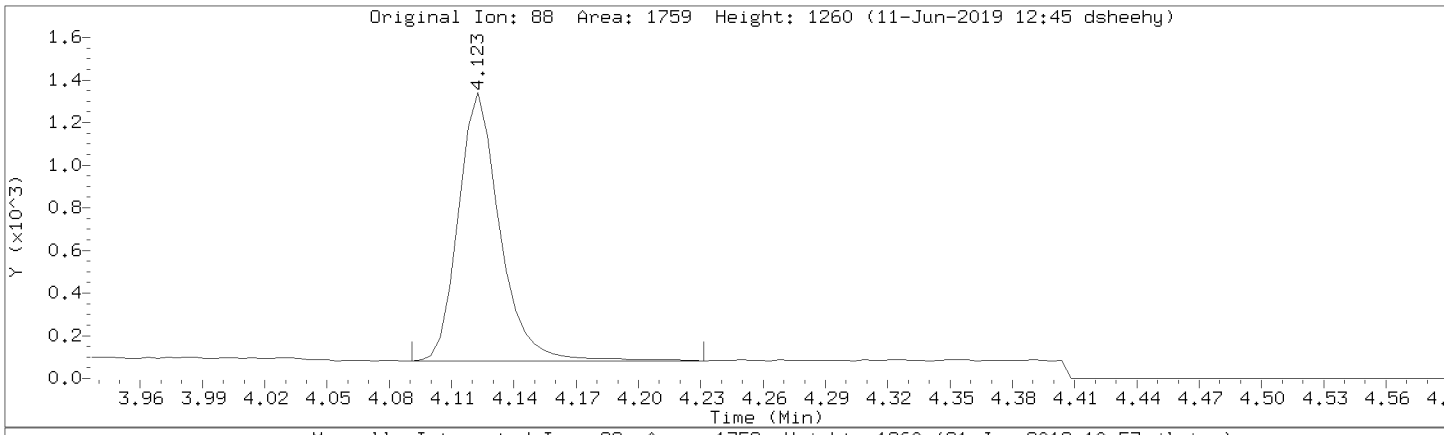
M - Compound response manually integrated.

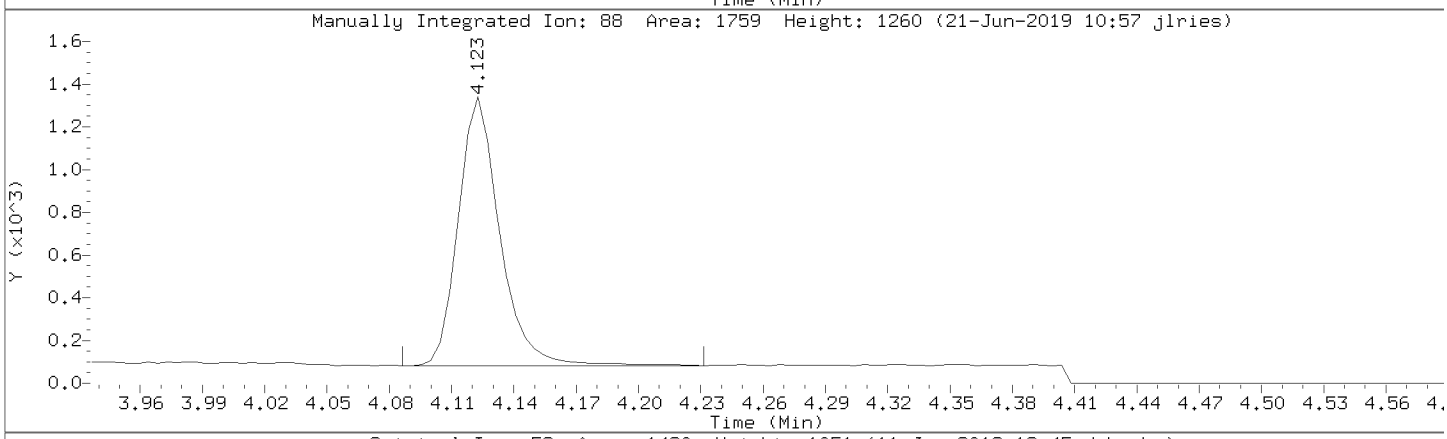
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162010.d
Date : 11-JUN-2019 10:59
Client ID: CAL6
Instrument: 10msv8.i
Sample Info: CAL6,212756:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

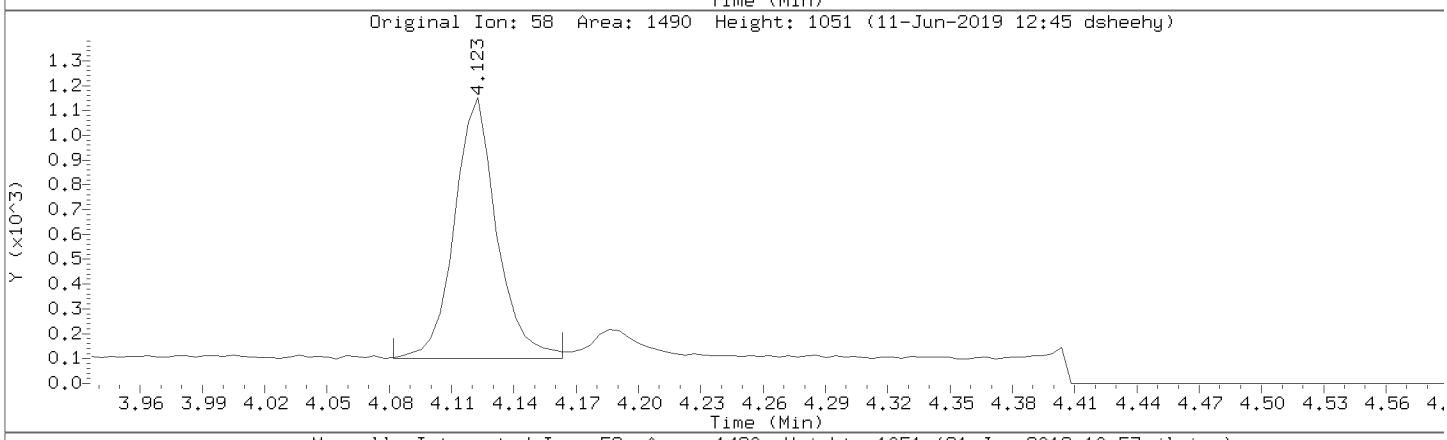


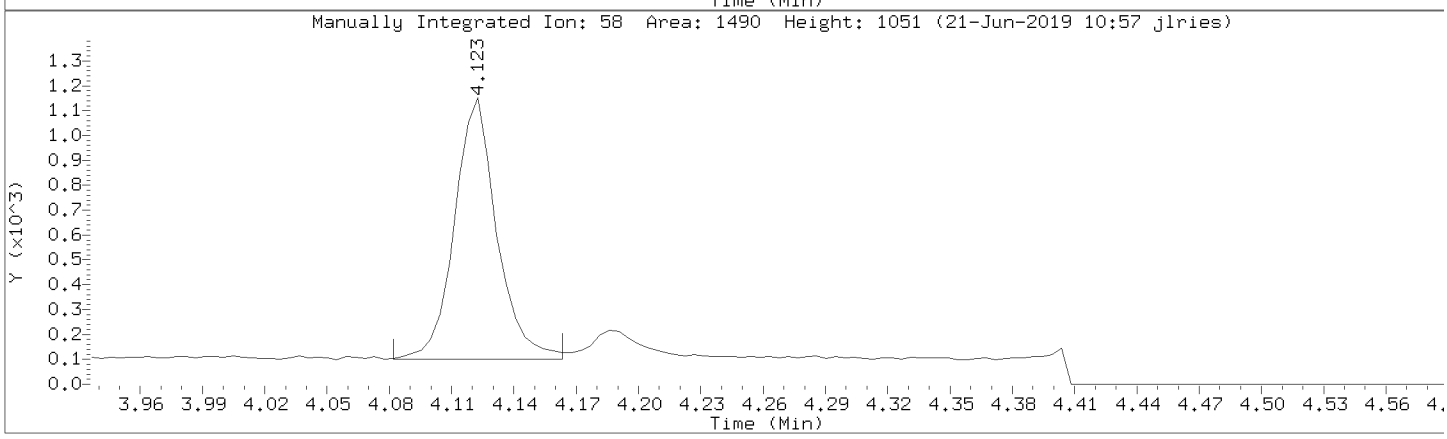
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162010.d
Injection Date: 11-JUN-2019 10:59
Instrument: 10msv8.i
Lab Sample ID: CAL6,212756:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162011.d
Lab Smp Id: CAL7,212757:1 Client Smp ID: CAL7
Inj Date : 11-JUN-2019 11:17 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal7,212757:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 11:17 Cal File: 162011.d
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

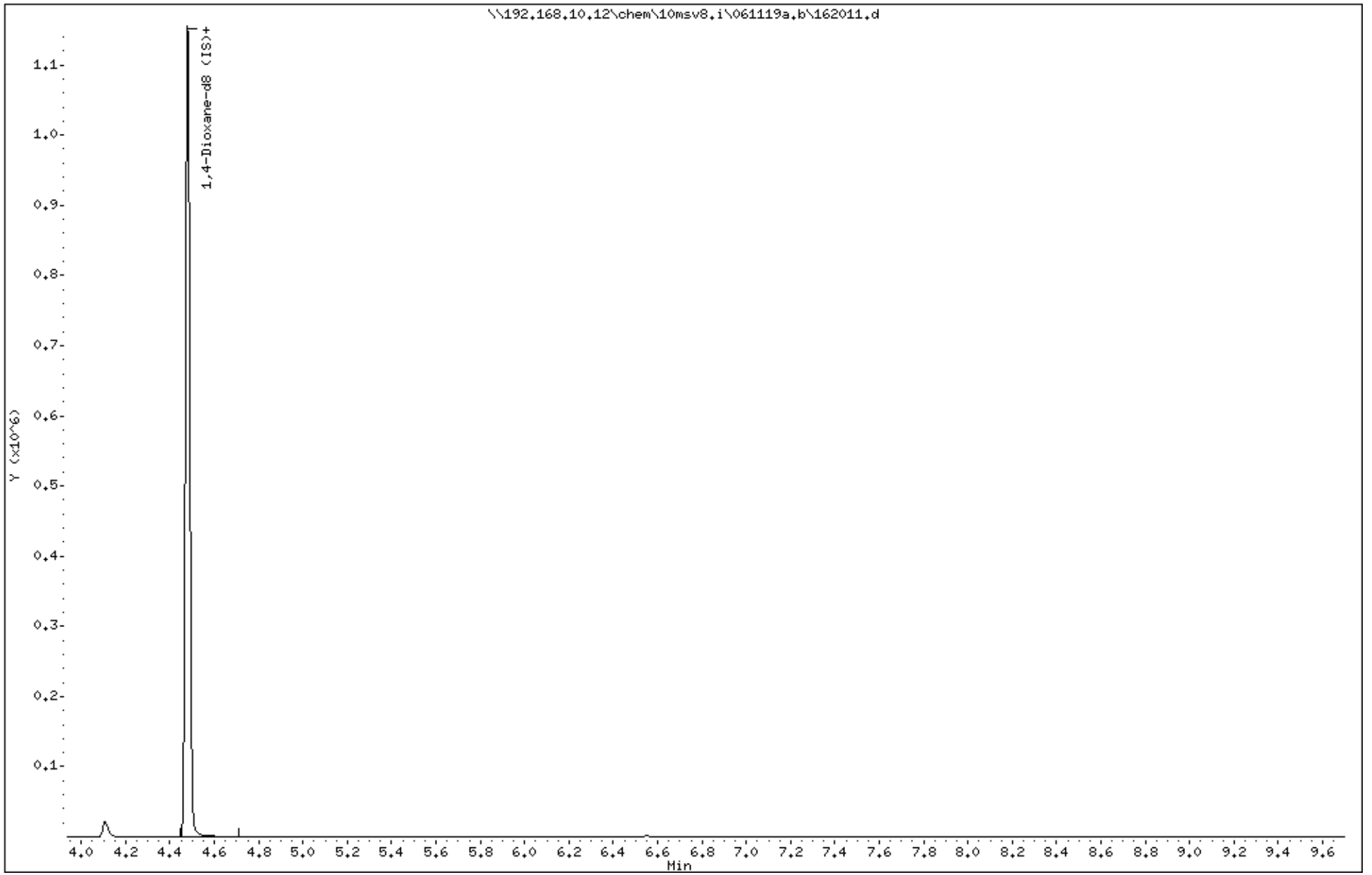
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	28734	2000.00	
2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	3549	50.0000	42(AM)
$ 3 Toluene-d8 (S)	98	4.479	4.479	(1.091)	732348	50.0000	51

QC Flag Legend

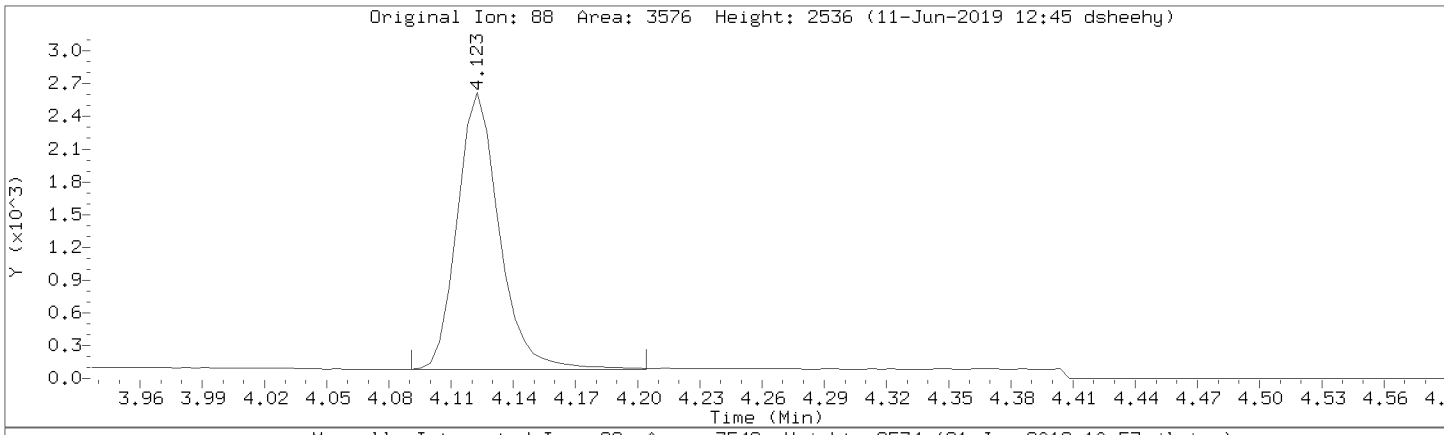
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

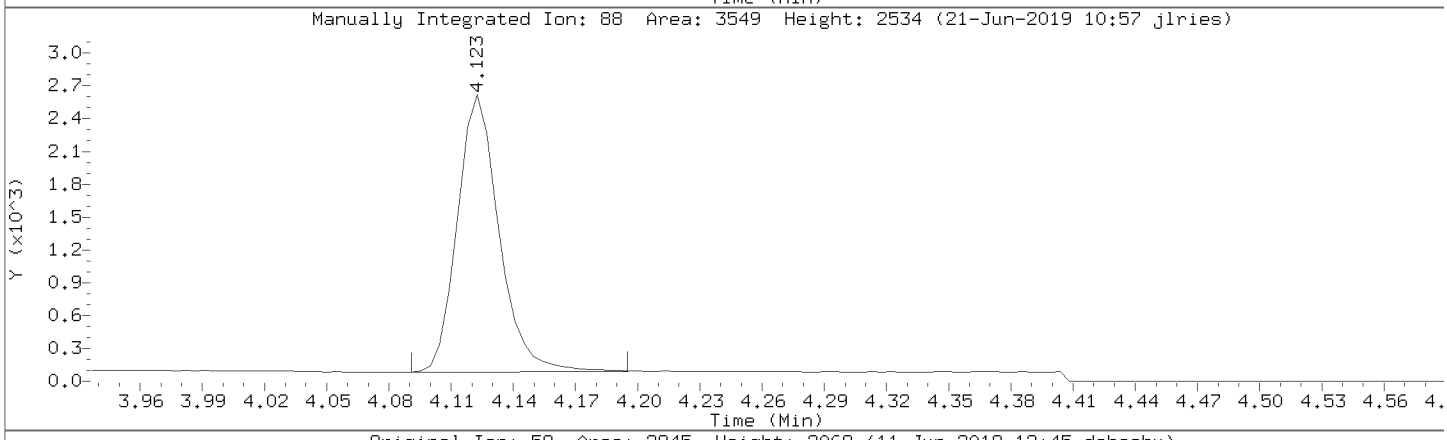
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162011.d
Date : 11-JUN-2019 11:17
Client ID: CAL7
Instrument: 10msv8.i
Sample Info: CAL7,212757:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

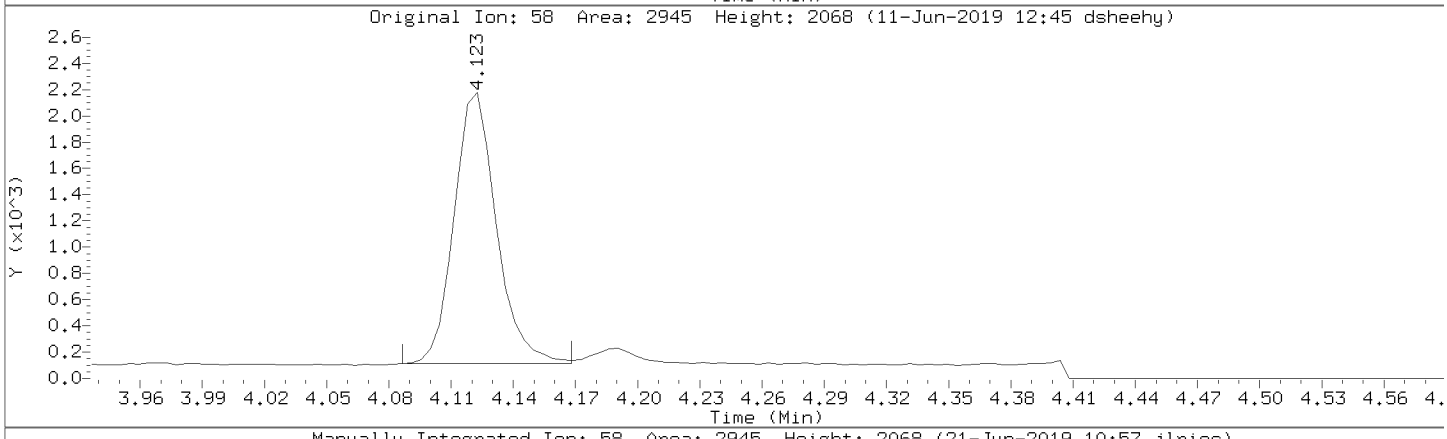


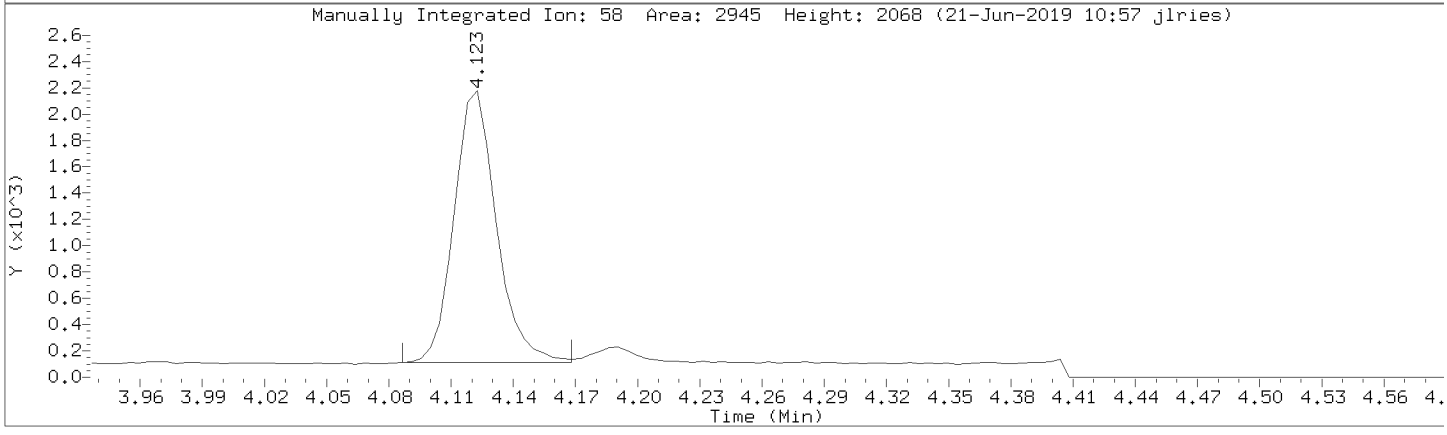
Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162011.d
Injection Date: 11-JUN-2019 11:17
Instrument: 10msv8.i
Lab Sample ID: CAL7,212757:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162012.d
Lab Smp Id: CAL8,212758:1 Client Smp ID: CAL8
Inj Date : 11-JUN-2019 11:36 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal8,212758:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 11:36 Cal File: 162012.d
Als bottle: 12 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

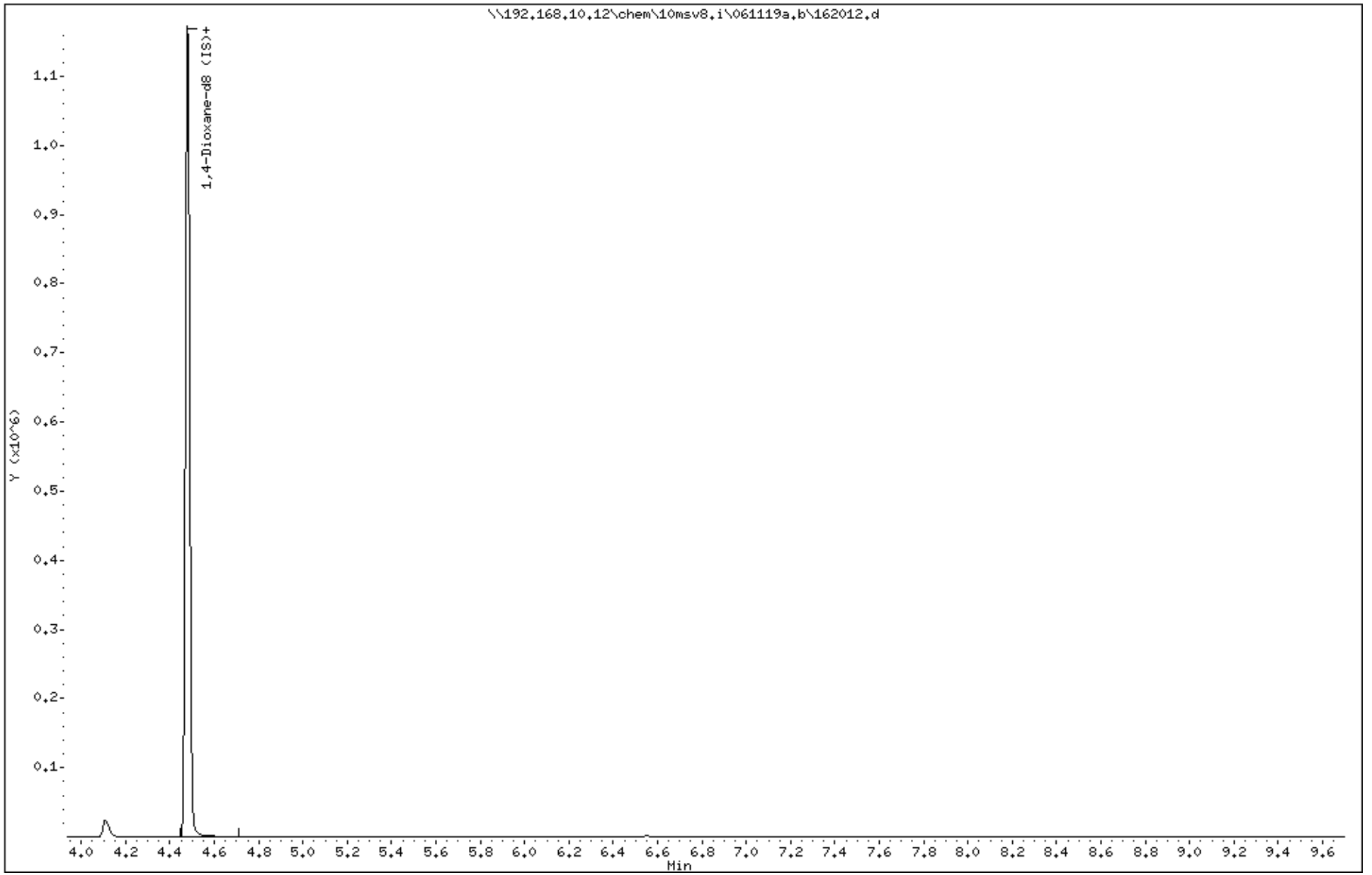
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	31071	2000.00	
2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	7090	100.000	68(AM)
$ 3 Toluene-d8 (S)	98	4.479	4.479	(1.091)	746354	50.0000	48

QC Flag Legend

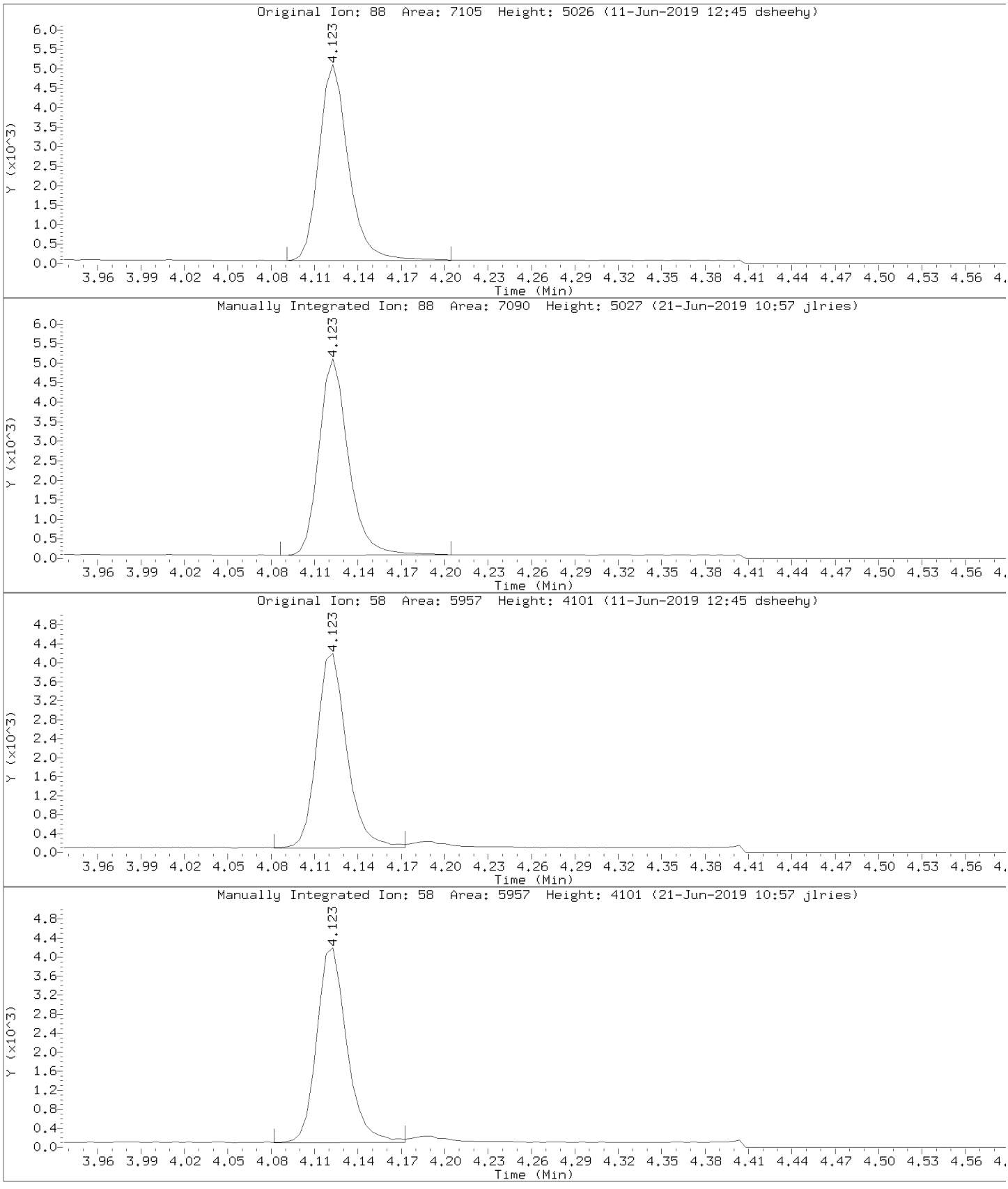
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162012.d
Date : 11-JUN-2019 11:36
Client ID: CAL8
Instrument: 10msv8.i
Sample Info: CAL8,212758:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162012.d
Injection Date: 11-JUN-2019 11:36
Instrument: 10msv8.i
Lab Sample ID: CAL8,212758:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1



Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162013.d
Lab Smp Id: CAL9,212759:1 Client Smp ID: CAL9
Inj Date : 11-JUN-2019 11:54 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : cal9,212759:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 11:54 Cal File: 162013.d
Als bottle: 13 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

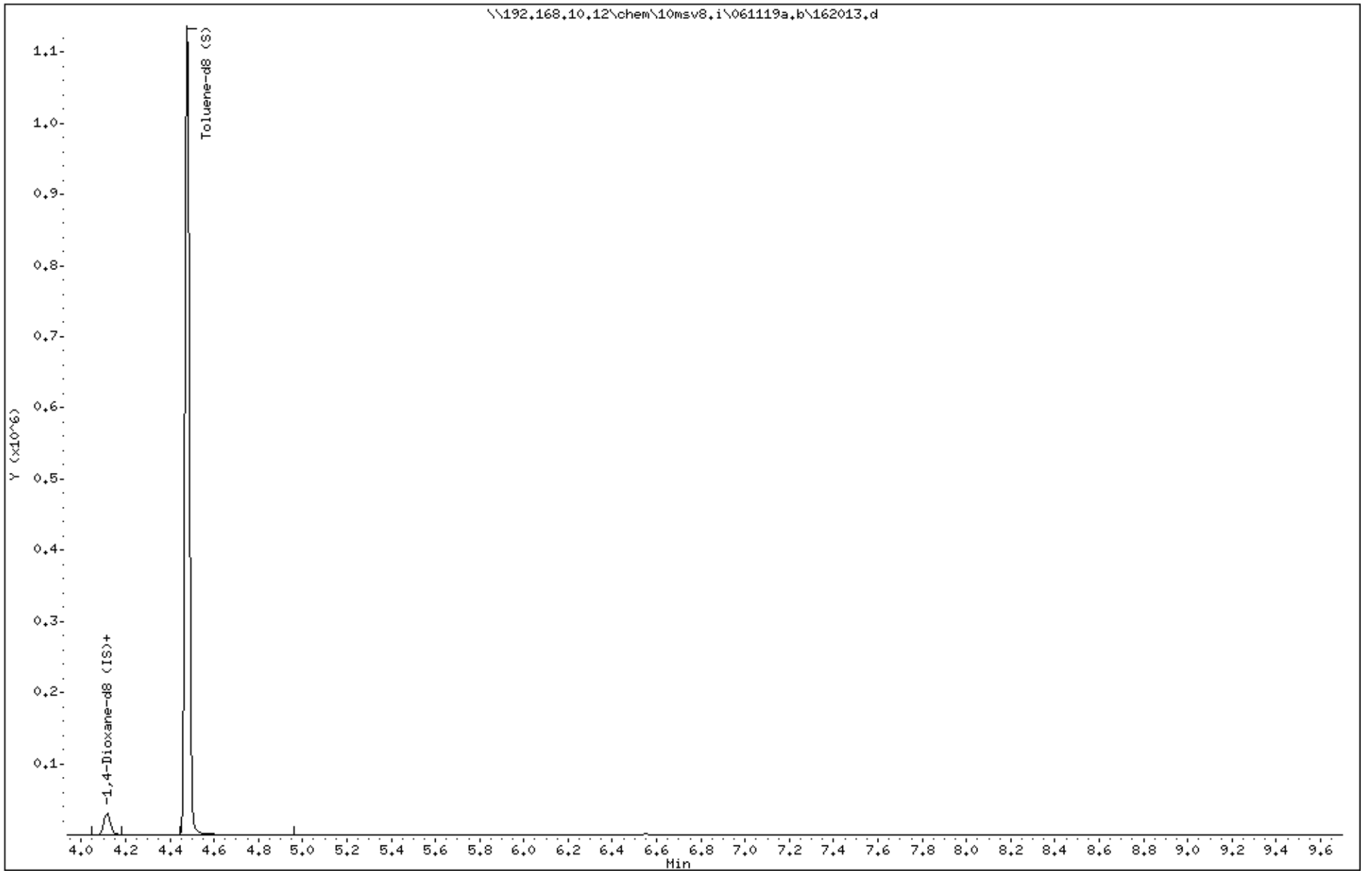
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
* 1 1,4-Dioxane-d8 (IS)	96	4.108	4.104	(1.000)	31579	2000.00	
2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.003)	16485	250.000	120(A)
$ 3 Toluene-d8 (S)	98	4.478	4.479	(1.090)	743680	50.0000	47

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162013.d
Date : 11-JUN-2019 11:54
Client ID: CAL9
Instrument: 10msv8.i
Sample Info: CAL9,212759:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162013.d
Injection Date: 11-JUN-2019 11:54
Instrument: 10msv8.i
Lab Sample ID: CAL9,212759:1
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

MSV SIM - FORM VII VOA-1
MSV SIM INITIAL CALIBRATION DATA

22496579ICV

Lab Name: Pace Analytical - Minnesota Calibration Date: 06/11/2019 Time: 13:06

Instrument ID: 10MSV8 GC Column: FULL Init. Calib. Date(s): 06/11/2019 06/11/2019

Lab File ID: 061119A.B\162017.D Init. Calib. Time(s): 09:28 11:54

SDG No.: 10478608

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,4-Dioxane (SIM)	Quadratic	10	10.74672	0.3000	7.4673	20.0000
Toluene-d8 (S)	Averaged	998.1761	919.7022	0.2000	-7.8617	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

MSV SIM - FORM VII VOA-1
MSV SIM CONTINUING CALIBRATION DATA

22496758CCV

Lab Name: Pace Analytical - Minnesota Calibration Date: 06/16/2019 Time: 13:59

Instrument ID: 10MSV8 GC Column: FULL Init. Calib. Date(s): 06/11/2019 06/11/2019

Lab File ID: 061619A.B\167008.D Init. Calib. Time(s): 09:28 11:54

SDG No.: 10478608

COMPOUND	CURVE	$\overline{RRF}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,4-Dioxane (SIM)	Quadratic	10	8.402201	0.3000	-15.9780	20.0000
Toluene-d8 (S)	Averaged	998.1761	940.8452	0.2000	-5.7436	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061119a.b\162017.d
Lab Smp Id: ICV, 212759:1 Client Smp ID: ICV
Inj Date : 11-JUN-2019 13:06 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : icv, 212759:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061119a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 10:58 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 11:54 Cal File: 162013.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

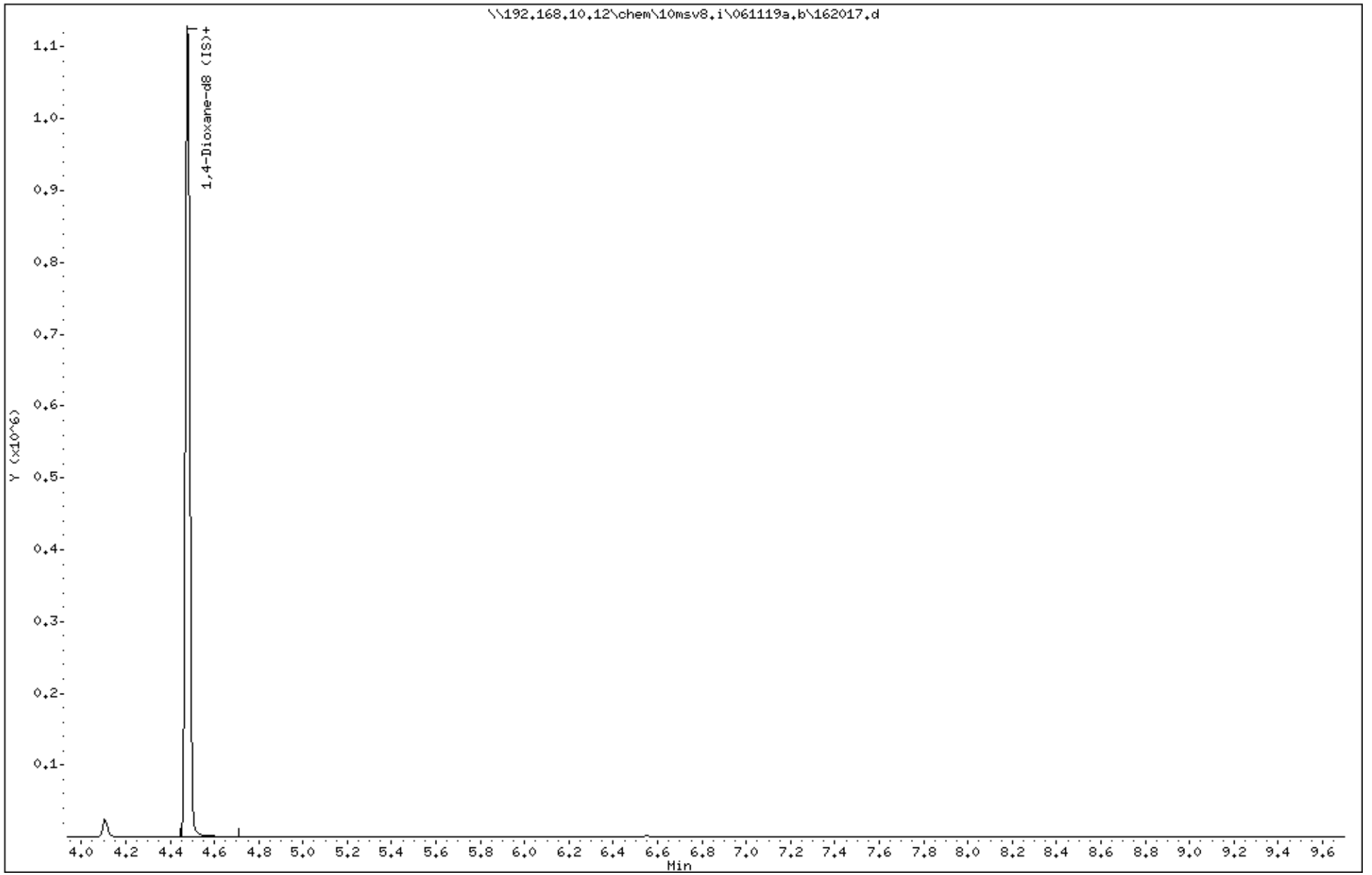
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	32514	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1238	10.0000	11(M)
$	3 Toluene-d8 (S)	98	4.479	4.479	(1.091)	747580	50.0000	46

QC Flag Legend

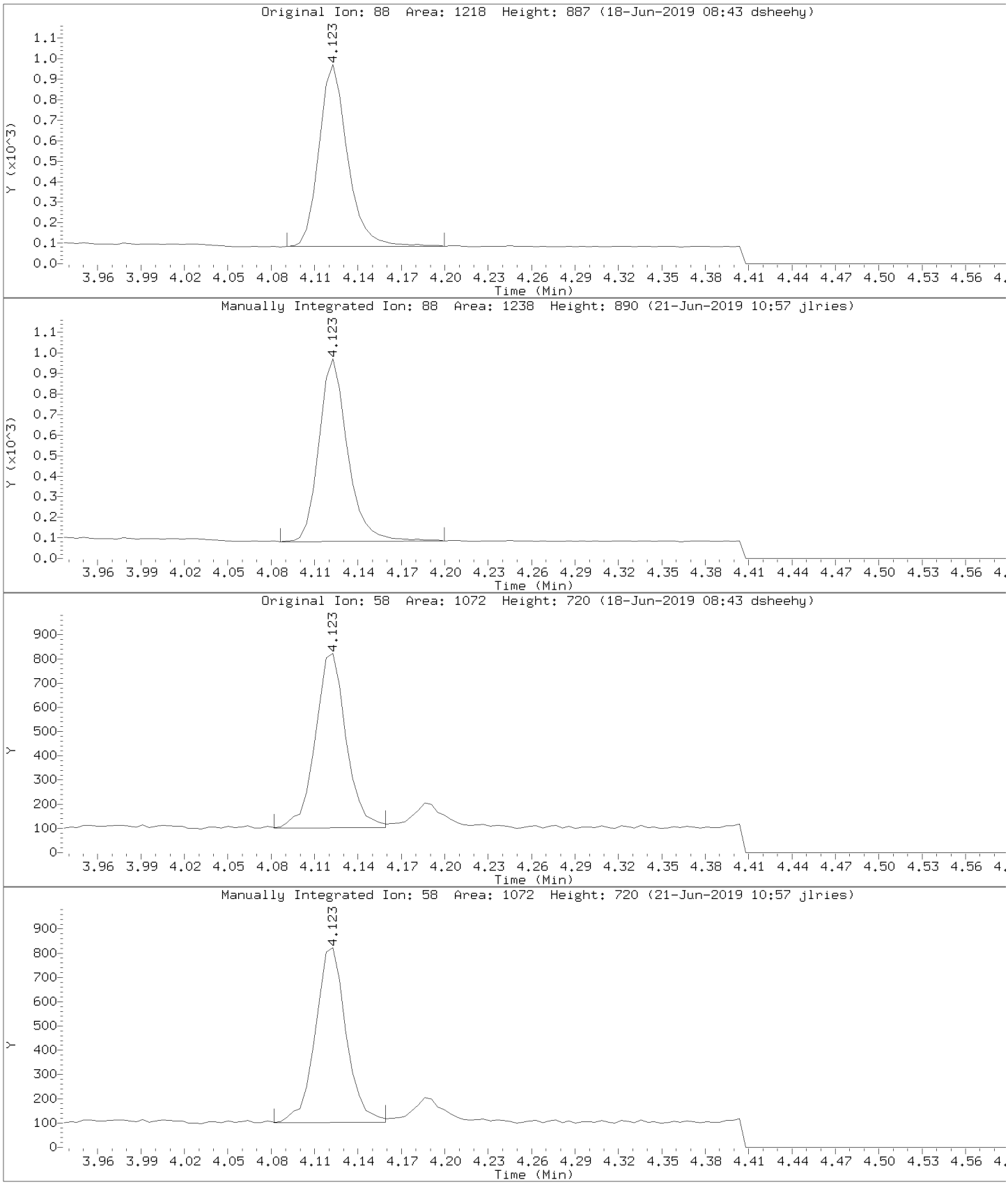
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162017.d
Date : 11-JUN-2019 13:06
Client ID: ICV
Instrument: 10msv8.i
Sample Info: ICV, 212759:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061119a.b/162017.d
Injection Date: 11-JUN-2019 13:06
Instrument: 10msv8.i
Lab Sample ID: ICV, 212759:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1



Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167008.d
Lab Smp Id: CCV,213818:1 Client Smp ID: CCV
Inj Date : 16-JUN-2019 13:59 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : ccv,213818:1
Misc Info : 49420
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 21-Jun-2019 11:02 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

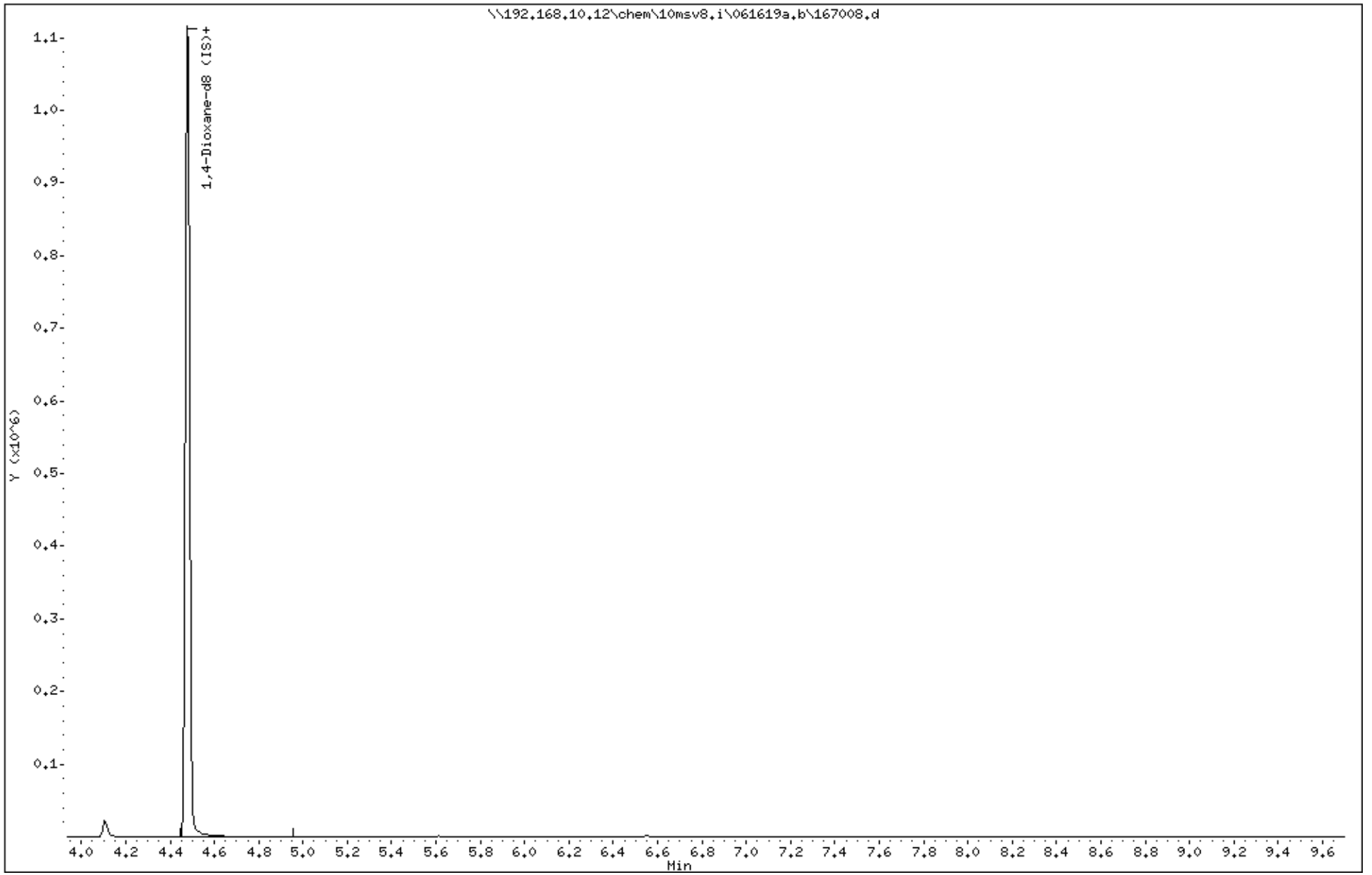
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	30618	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1026	10.0000	8.4(M)
$	3 Toluene-d8 (S)	98	4.478	4.478	(1.091)	720170	50.0000	47

QC Flag Legend

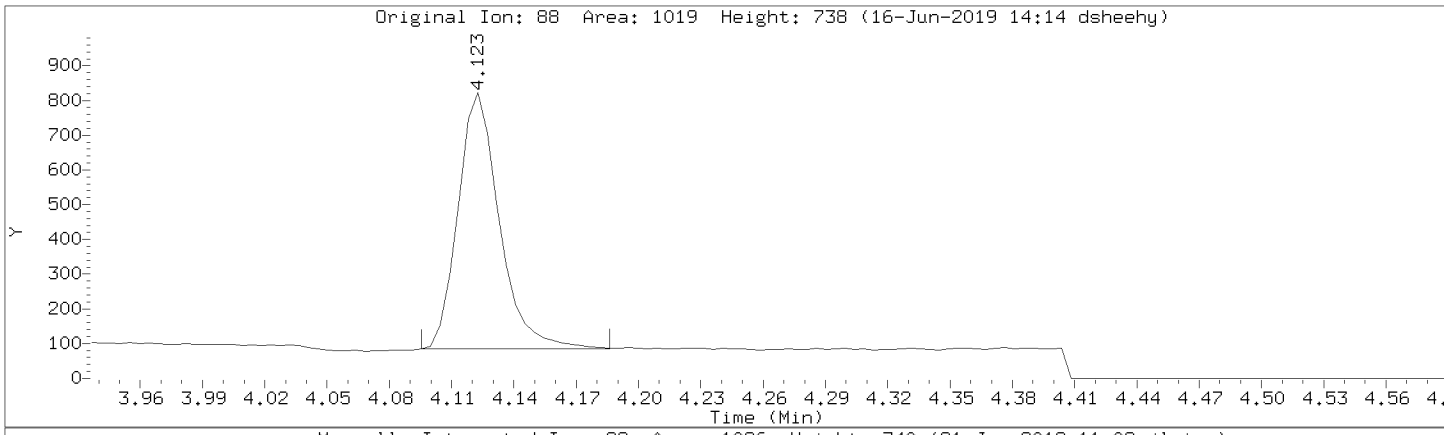
M - Compound response manually integrated.

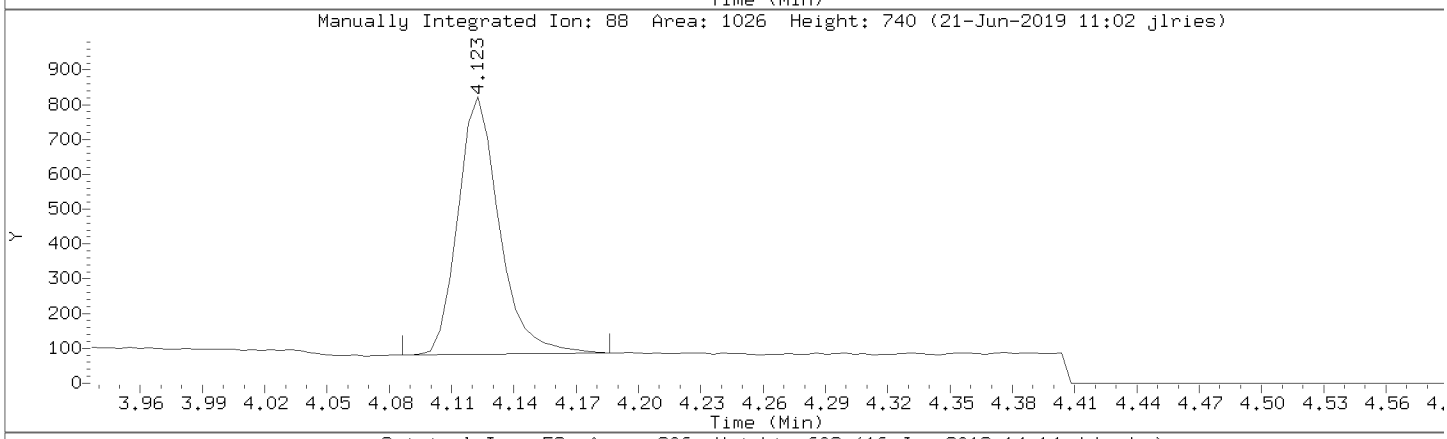
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167008.d
Date : 16-JUN-2019 13:59
Client ID: CCV
Instrument: 10msv8.i
Sample Info: CCV,213818:1
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

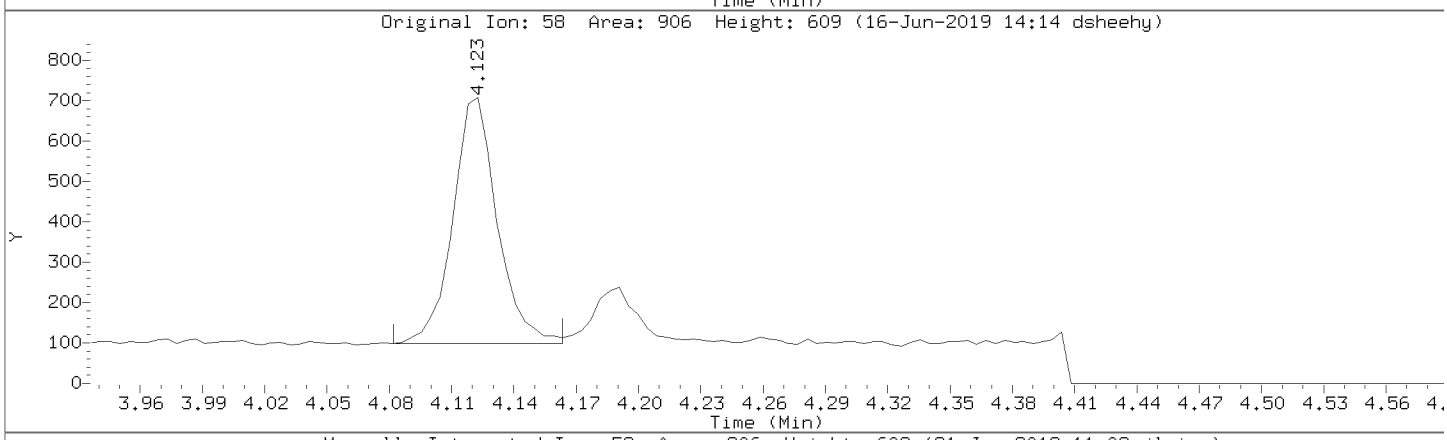


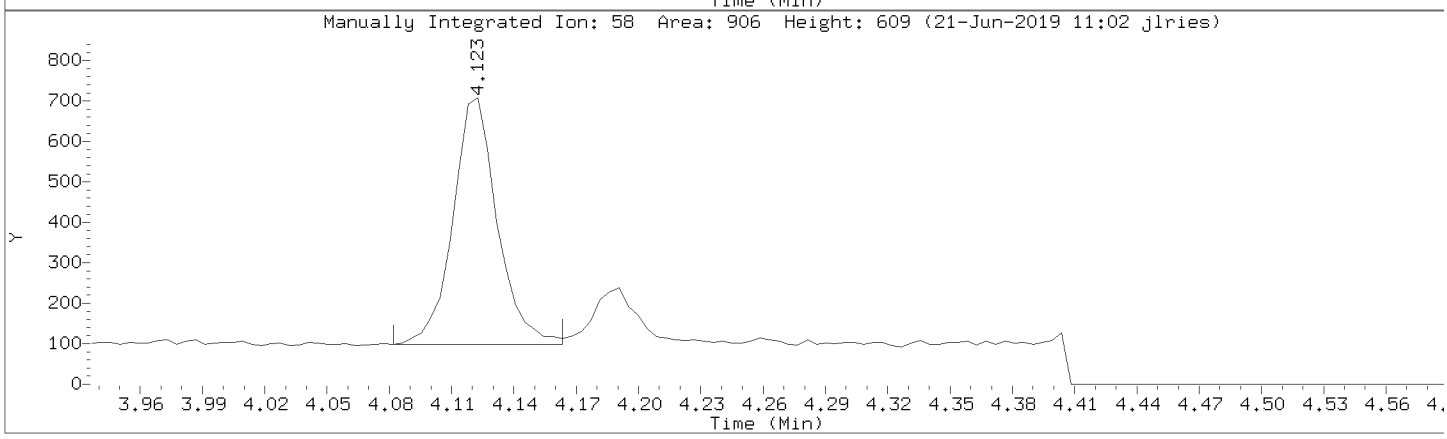
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167008.d
Injection Date: 16-JUN-2019 13:59
Instrument: 10msv8.i
Lab Sample ID: CCV,213818:1

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162003.d

Date : 11-JUN-2019 08:39

Client ID:

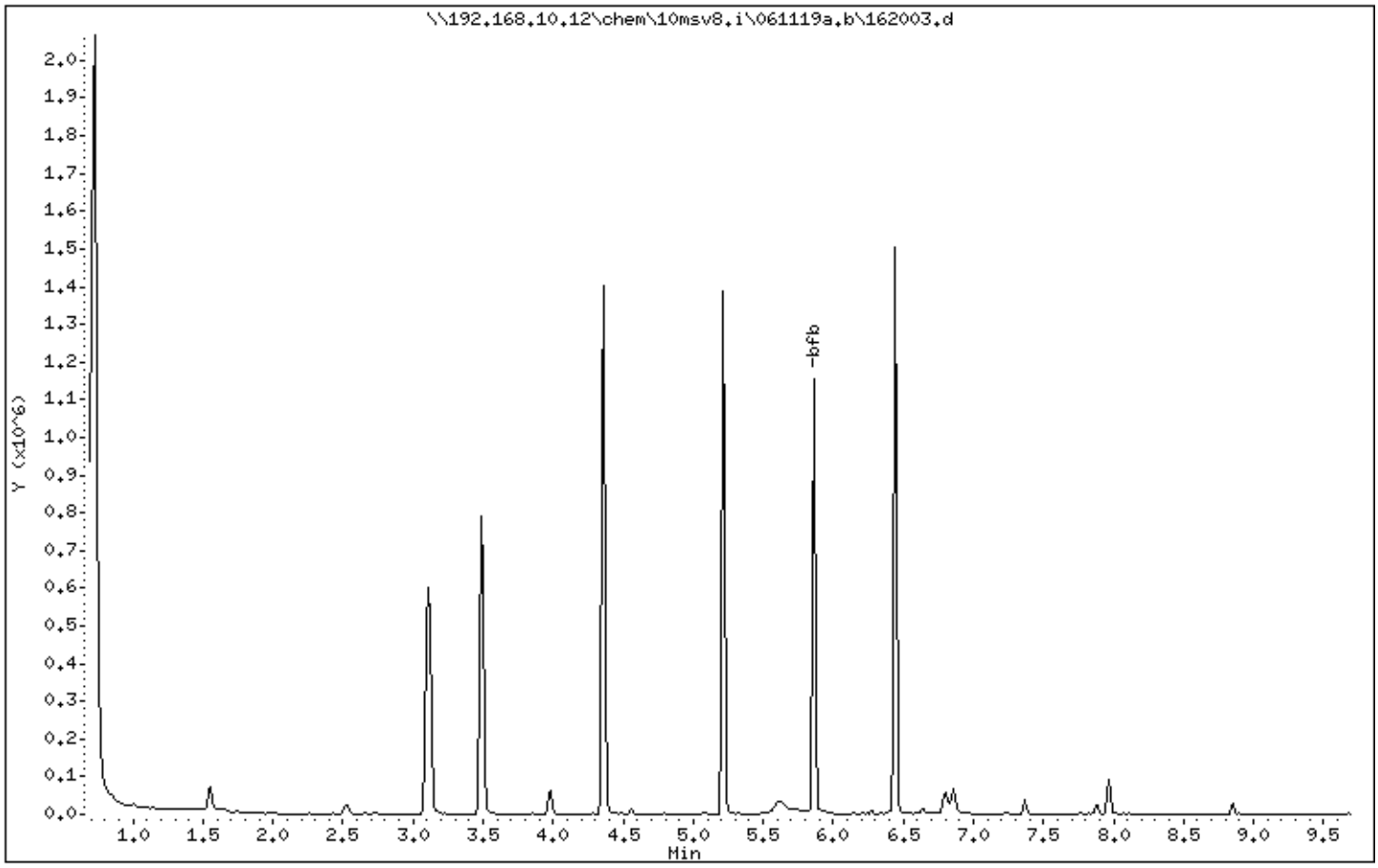
Instrument: 10msv8.i

Sample Info: TUNE,205668:1

Operator: DS2

Column phase: Restek Rtx-VMS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10msv8.i\061119a.b\162003.d

Date : 11-JUN-2019 08:39

Client ID:

Instrument: 10msv8.i

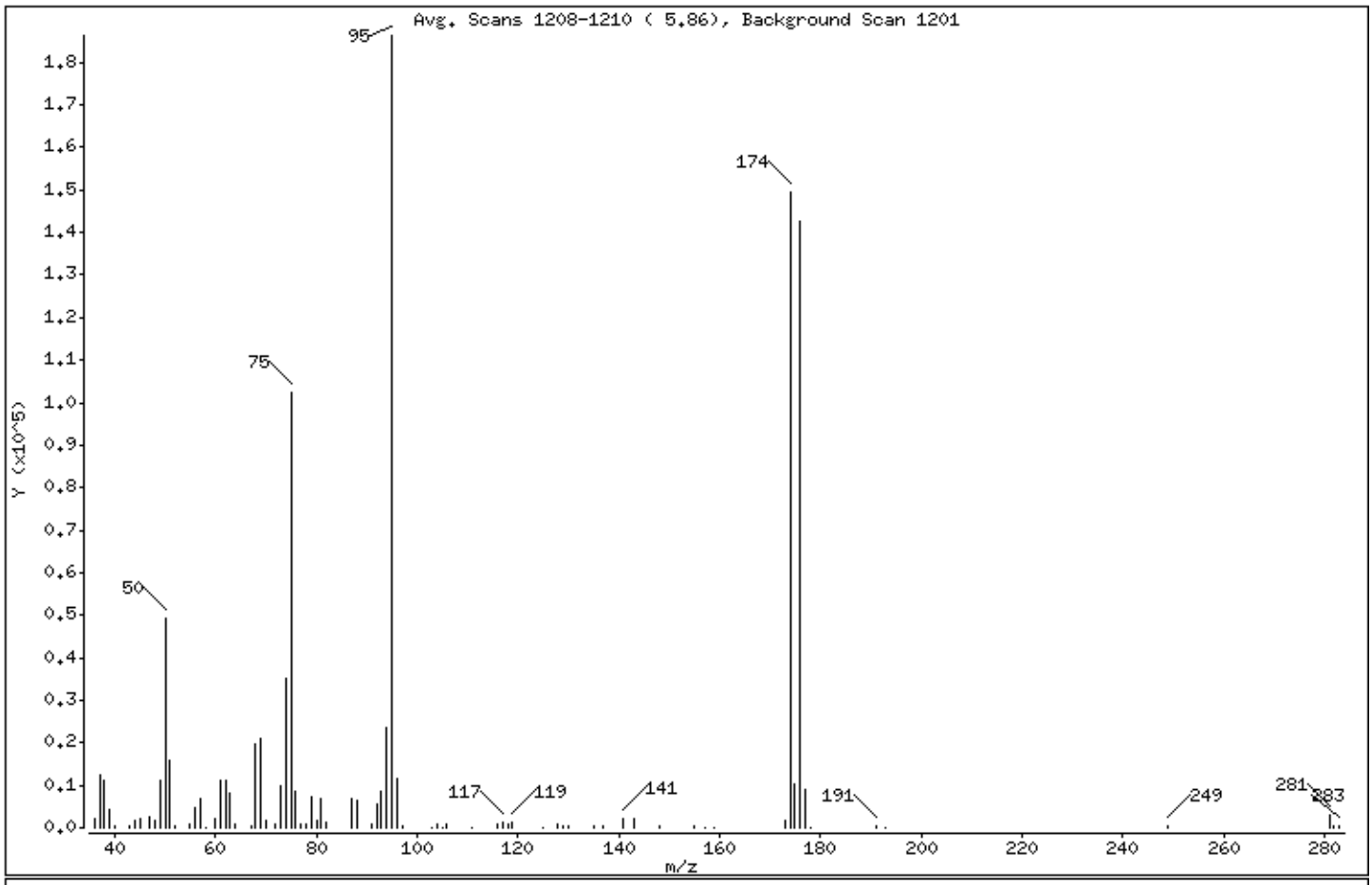
Sample Info: TUNE,205668:1

Operator: DS2

Column phase: Restek Rtx-VMS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	26.34
75	30.00 - 60.00% of mass 95	54.93
96	5.00 - 9.00% of mass 95	6.29
173	Less than 2.00% of mass 174	0.90 (1.12)
174	50.00 - 120.00% of mass 95	80.25
175	5.00 - 9.00% of mass 174	5.63 (7.01)
176	95.00 - 101.00% of mass 174	76.61 (95.46)
177	5.00 - 9.00% of mass 176	4.94 (6.44)

Date : 11-JUN-2019 08:39

Client ID: Instrument: 10msv8.i

Sample Info: TUNE,205668:1

Operator: DS2

Column phase: Restek Rtx-VMS Column diameter: 0.25

Data File: 162003.d
Spectrum: Avg. Scans 1208-1210 (5.86), Background Scan 1201
Location of Maximum: 95.00
Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2342	63.00	7987	93.00	8411	143.00	2044
37.00	12315	64.00	787	94.00	23488	148.00	393
38.00	11014	67.00	586	95.00	186304	155.00	421
39.00	4382	68.00	19848	96.00	11723	157.00	194
40.00	285	69.00	20864	97.00	366	159.00	141
43.00	284	70.00	1700	103.00	146	173.00	1675
44.00	1658	72.00	1001	104.00	985	174.00	149504
45.00	2297	73.00	9944	105.00	135	175.00	10480
47.00	2680	74.00	35152	106.00	950	176.00	142720
48.00	1633	75.00	102328	111.00	143	177.00	9195
49.00	11198	76.00	8533	116.00	975	178.00	181
50.00	49064	77.00	932	117.00	1384	191.00	440
51.00	15643	78.00	703	118.00	892	193.00	147
52.00	583	79.00	7161	119.00	1331	249.00	432
55.00	908	80.00	1903	125.00	140	281.00	2870
56.00	4636	81.00	7066	128.00	813	282.00	488
57.00	7038	82.00	1310	129.00	315	283.00	493
58.00	180	87.00	6657	130.00	633		
60.00	2089	88.00	6409	135.00	290		
61.00	11056	91.00	727	137.00	306		
62.00	10980	92.00	5630	141.00	2289		

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167007.d

Date : 16-JUN-2019 13:29

Client ID:

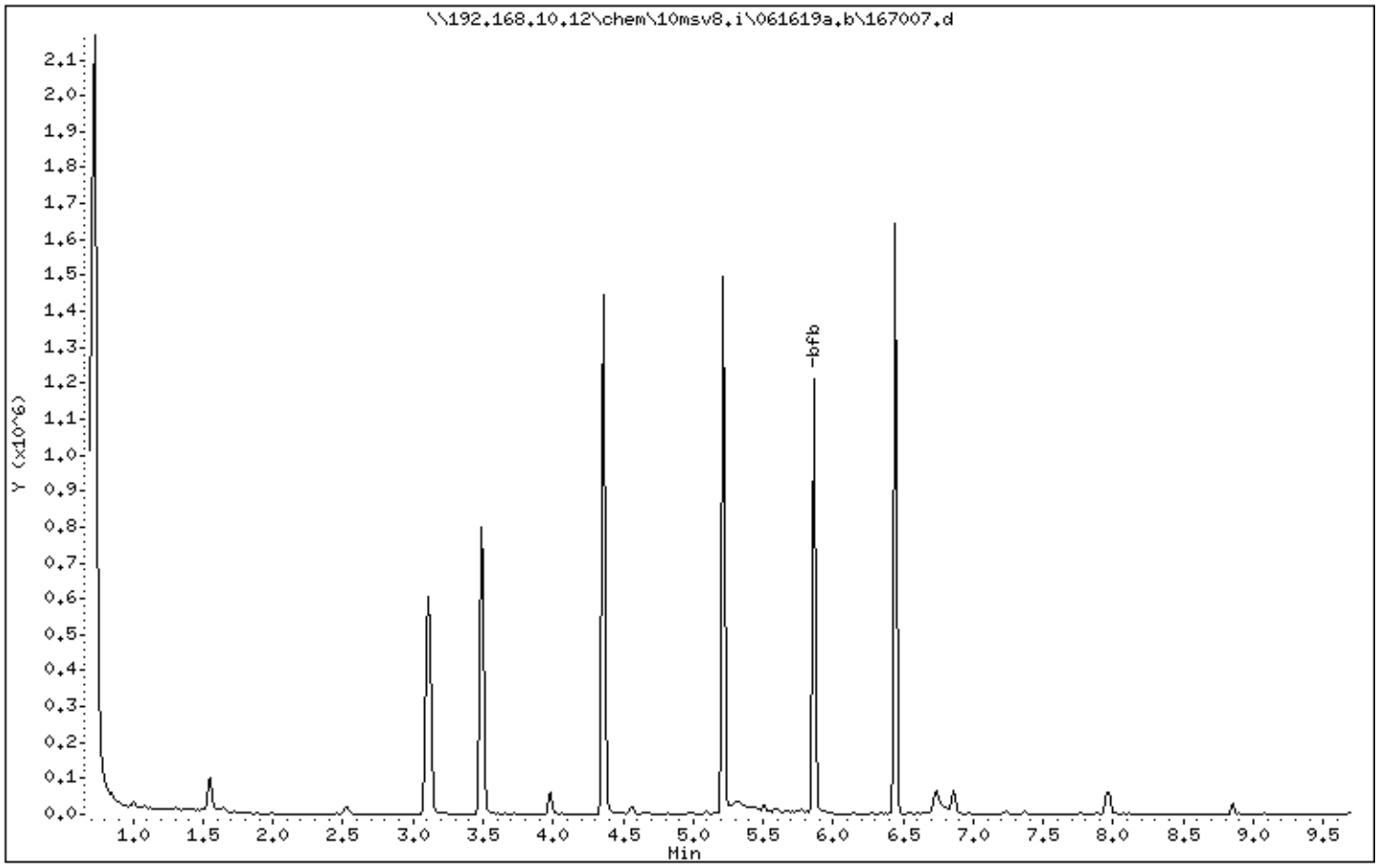
Instrument: 10msv8.i

Sample Info: TUNE,205668:1

Operator: DS2

Column phase: Restek Rtx-VMS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167007.d

Date : 16-JUN-2019 13:29

Client ID:

Instrument: 10msv8.i

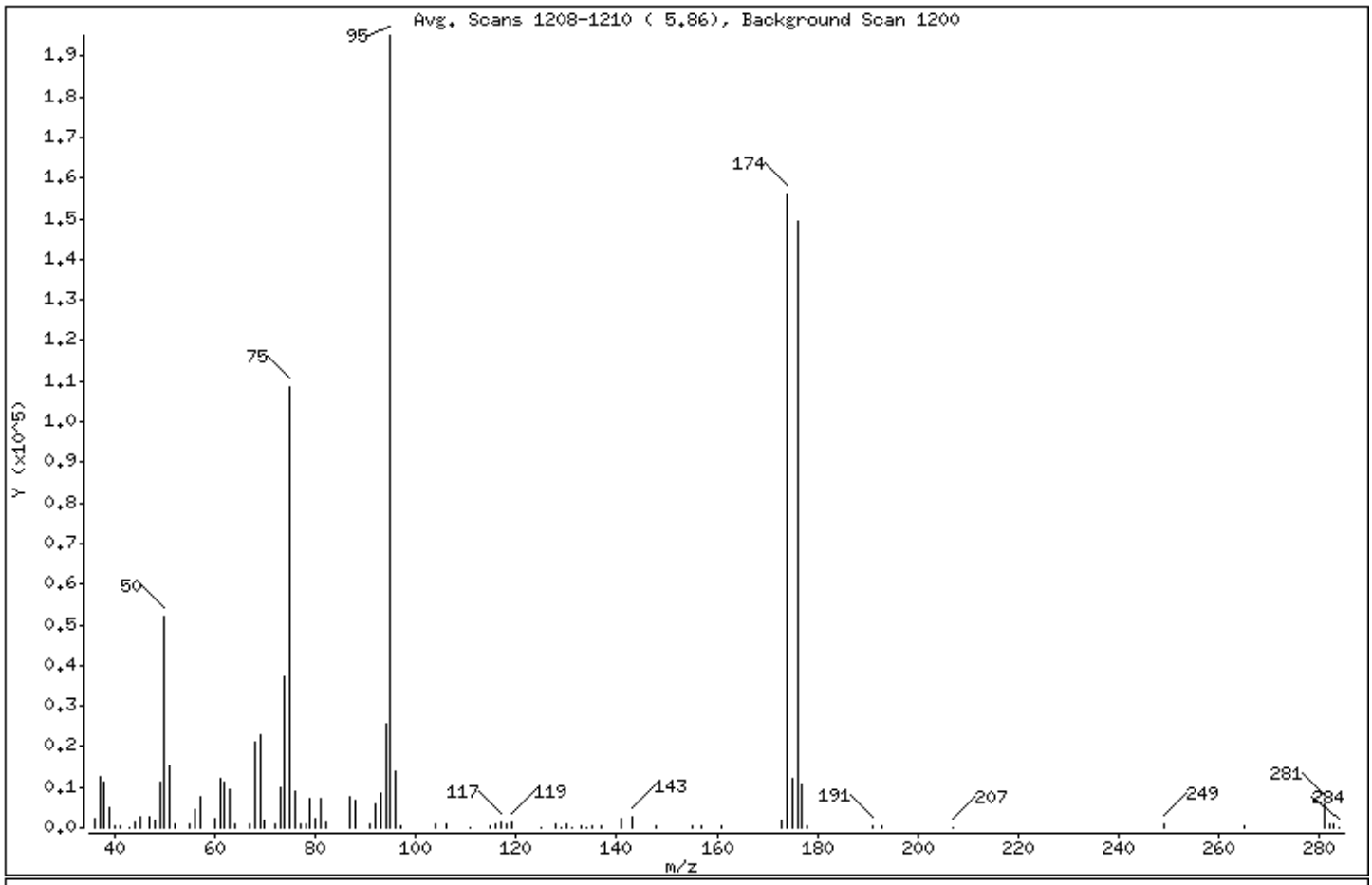
Sample Info: TUNE,205668:1

Operator: DS2

Column phase: Restek Rtx-VMS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	26.75
75	30.00 - 60.00% of mass 95	55.70
96	5.00 - 9.00% of mass 95	7.18
173	Less than 2.00% of mass 174	0.89 (1.12)
174	50.00 - 120.00% of mass 95	79.99
175	5.00 - 9.00% of mass 174	6.19 (7.74)
176	95.00 - 101.00% of mass 174	76.57 (95.73)
177	5.00 - 9.00% of mass 176	5.52 (7.20)

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167007.d

Date : 16-JUN-2019 13:29

Client ID:

Instrument: 10msv8.i

Sample Info: TUNE,205668:1

Operator: DS2

Column phase: Restek Rtx-VMS

Column diameter: 0.25

Data File: 167007.d
Spectrum: Avg. Scans 1208-1210 (5.86), Background Scan 1200
Location of Maximum: 95.00
Number of points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2112	64.00	970	95.00	195072	148.00	309
37.00	12548	67.00	689	96.00	14011	155.00	420
38.00	11024	68.00	21032	97.00	374	157.00	313
39.00	5007	69.00	22688	104.00	1056	161.00	318
40.00	274	70.00	1694	106.00	828	173.00	1742
41.00	287	72.00	1076	111.00	180	174.00	156032
43.00	200	73.00	9683	115.00	330	175.00	12070
44.00	1554	74.00	37440	116.00	788	176.00	149376
45.00	2760	75.00	108664	117.00	1270	177.00	10762
47.00	2812	76.00	9131	118.00	950	178.00	382
48.00	1635	77.00	1051	119.00	1255	191.00	460
49.00	11272	78.00	792	125.00	151	193.00	344
50.00	52176	79.00	6982	128.00	901	207.00	89
51.00	15349	80.00	2091	129.00	169	249.00	675
52.00	747	81.00	7312	130.00	743	265.00	610
55.00	1105	82.00	1438	131.00	192	281.00	5901
56.00	4335	87.00	7746	133.00	266	282.00	939
57.00	7740	88.00	6544	134.00	138	283.00	757
60.00	2300	91.00	813	135.00	421	284.00	207
61.00	12164	92.00	6014	137.00	346		
62.00	11195	93.00	8671	141.00	2333		
63.00	9406	94.00	25688	143.00	2508		

SAMPLE NO.

BLANK

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota
Contract: 104-0012 NY Superfund
Date Received:
Matrix: Water SDG No.: 10478608
Date Extracted: 06/16/2019 14:53
Lab Sample ID: 3314110
Date Analyzed: 06/16/2019 14:53
Lab File ID: 061619A.B\167011.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	ND	U

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167011.d
Lab Smp Id: 3314110 Client Smp ID: PBLK
Inj Date : 16-JUN-2019 14:53 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 3314110,,blank
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	29324	2000.00		
	2 1,4-Dioxane (SIM)	88	Compound Not Detected.						(D)
$	3 Toluene-d8 (S)	98	4.479	4.478	(1.091)	713905	48.7798	49	

QC Flag Legend

D - User disabled compound identification.

Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167011.d
Date : 16-JUN-2019 14:53
Client ID: PBLK
Instrument: 10msv8.i
Sample Info: 3314110,,BLANK
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167011.d
Injection Date: 16-JUN-2019 14:53
Instrument: 10msv8.i
Lab Sample ID: 3314110
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

SAMPLE NO.

LCS

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota
Contract: 104-0012 NY Superfund
Date Received:
Matrix: Water
SDG No.: 10478608
Date Extracted: 06/16/2019 13:59
Lab Sample ID: 3314111
Date Analyzed: 06/16/2019 13:59
Lab File ID: 061619A.B\167008L.D
Initial wt/vol: 5 mL
Final wt/vol: 5 mL
Dilution: 1
Instrument: 10MSV8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	8.4	

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167008L.d
Lab Smp Id: 3314111 Client Smp ID: CCV
Inj Date : 16-JUN-2019 13:59 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 3314111,,lcs
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

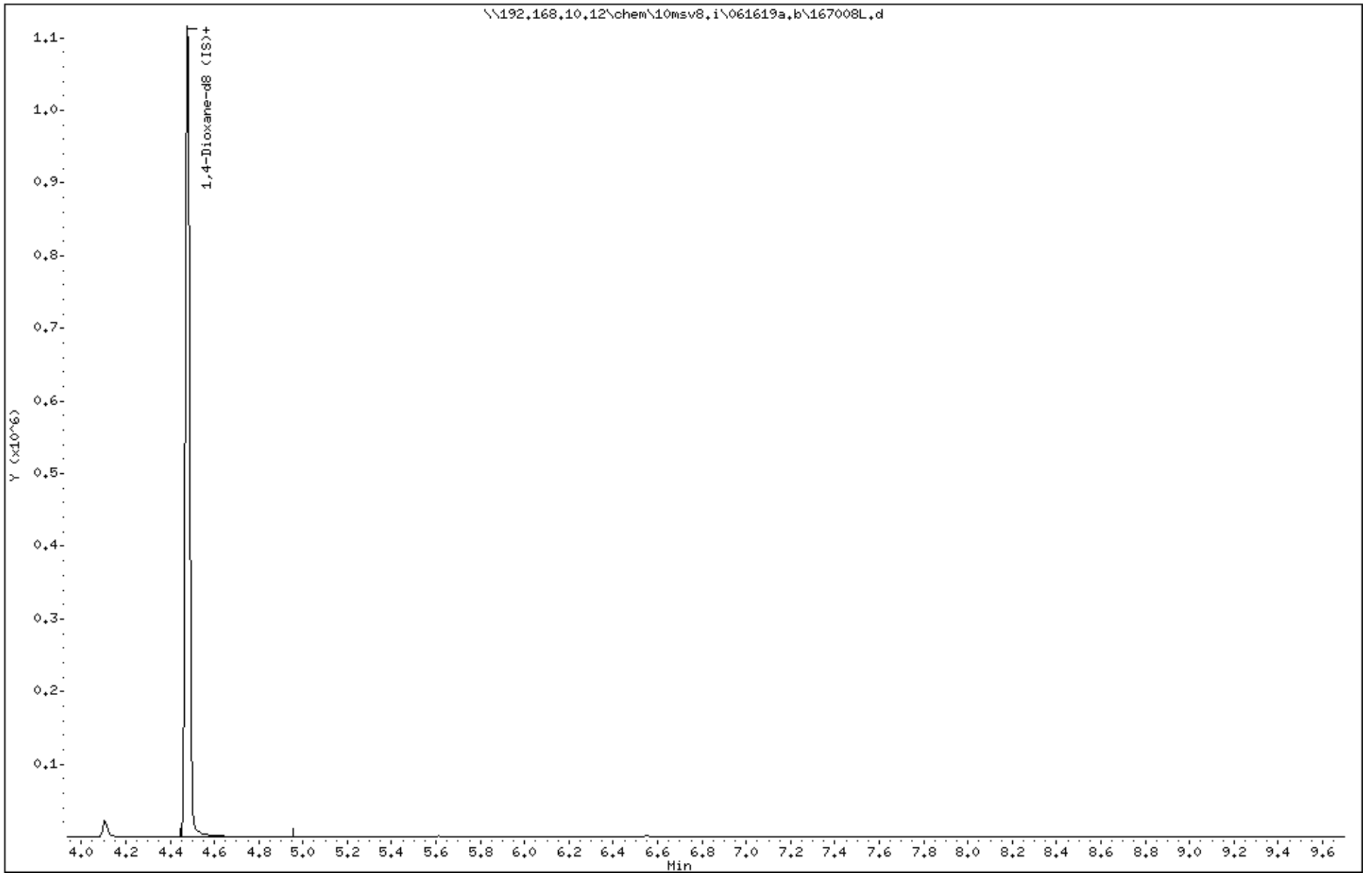
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	30618	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1026	8.40220	8.4(M)
$	3 Toluene-d8 (S)	98	4.478	4.478	(1.091)	720170	47.1282	47

QC Flag Legend

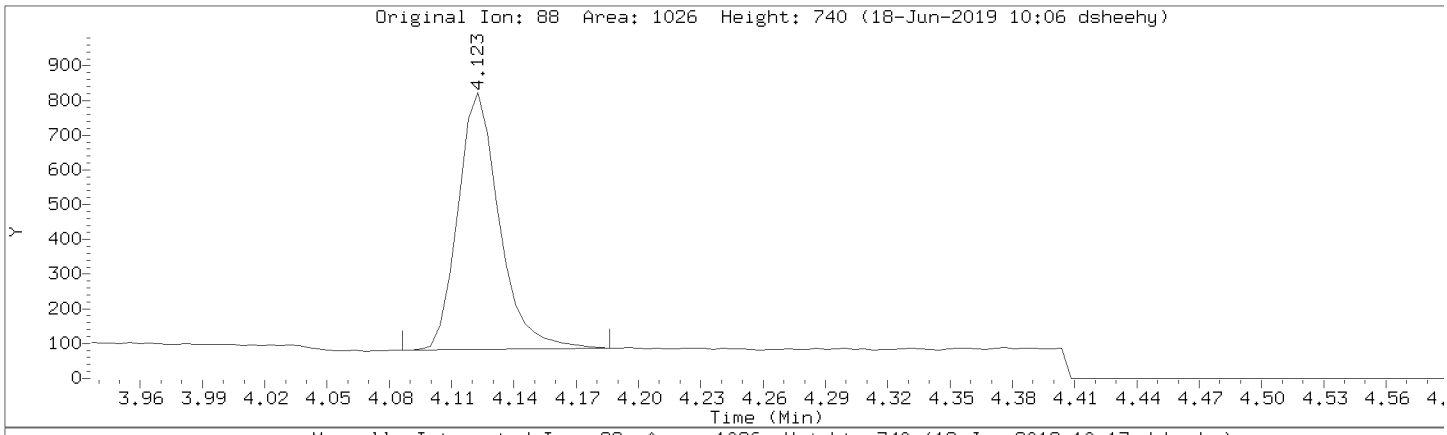
M - Compound response manually integrated.

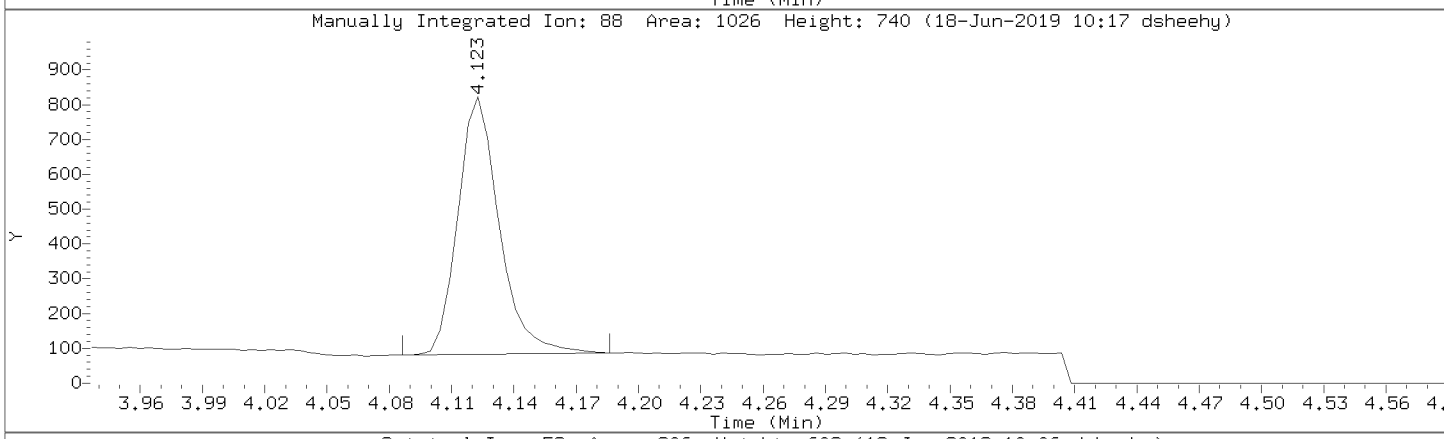
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167008L.d
Date : 16-JUN-2019 13:59
Client ID: CCV
Instrument: 10msv8.i
Sample Info: 3314111,,LCS
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

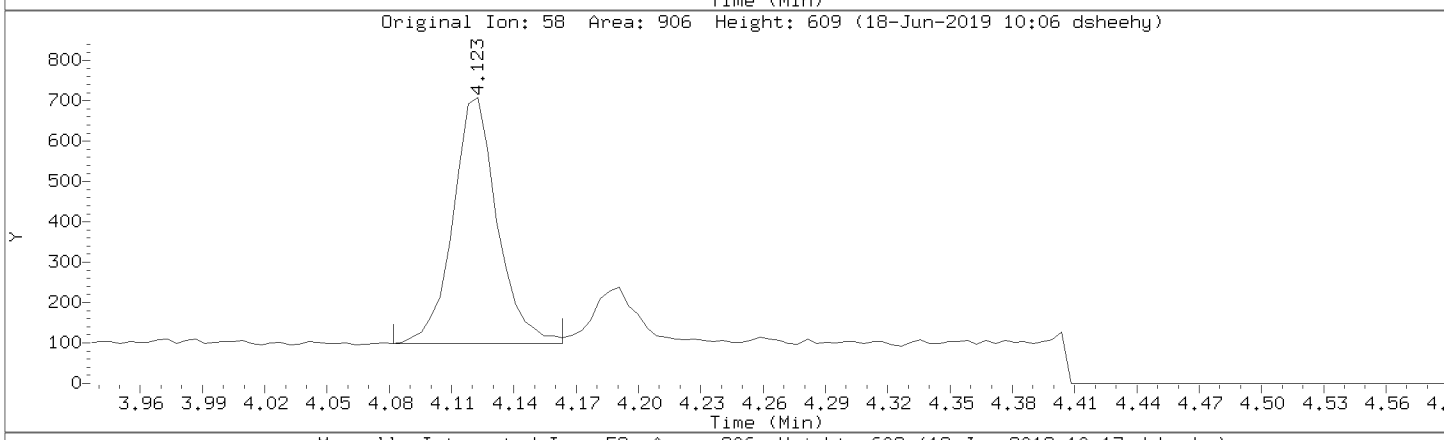


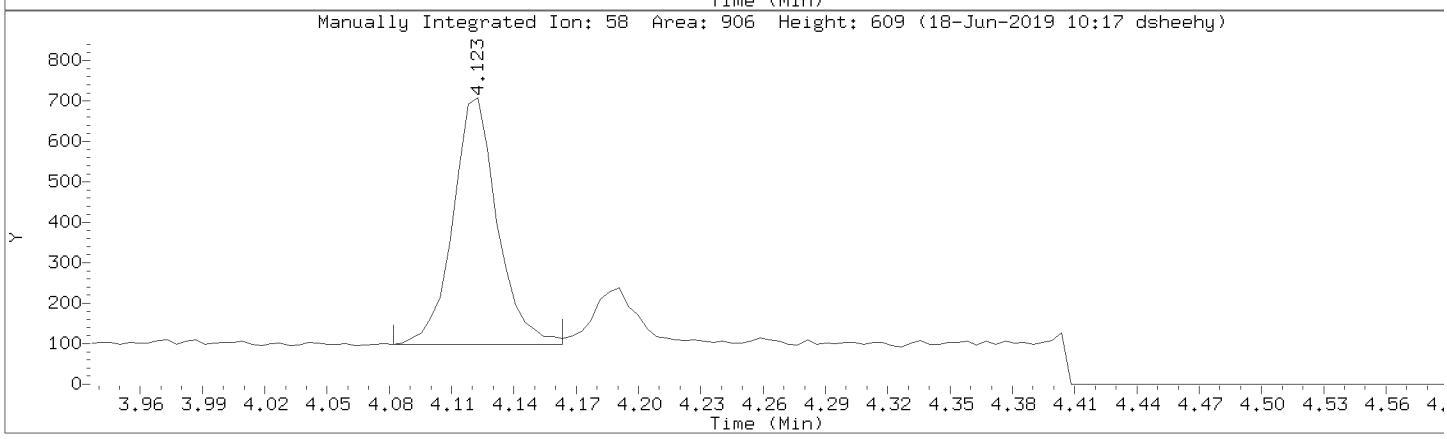
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167008L.d
Injection Date: 16-JUN-2019 13:59
Instrument: 10msv8.i
Lab Sample ID: 3314111

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









SAMPLE NO.

LCSD

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota
Contract: 104-0012 NY Superfund
Date Received:
Matrix: Water SDG No.: 10478608
Date Extracted: 06/16/2019 14:17
Lab Sample ID: 3314112
Date Analyzed: 06/16/2019 14:17
Lab File ID: 061619A.B\167009.D
Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1
Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	7.8	

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167009.d
Lab Smp Id: 3314112
Inj Date : 16-JUN-2019 14:17 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 3314112,,lcsd
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:07 10msv8.i Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 3 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

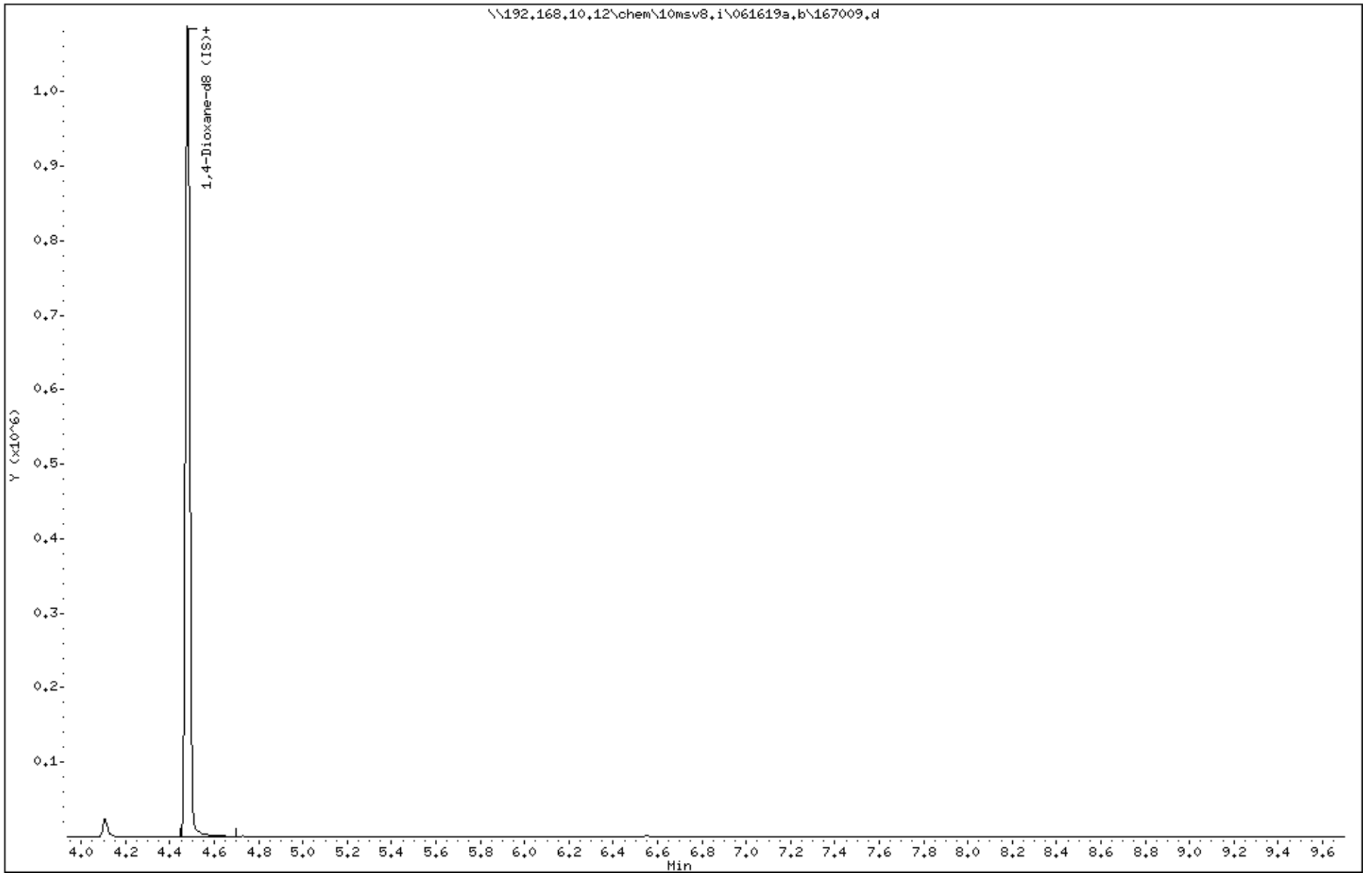
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	32651	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1055	7.76508	7.8(RM)
$	3 Toluene-d8 (S)	98	4.478	4.478	(1.091)	723939	44.4251	44

QC Flag Legend

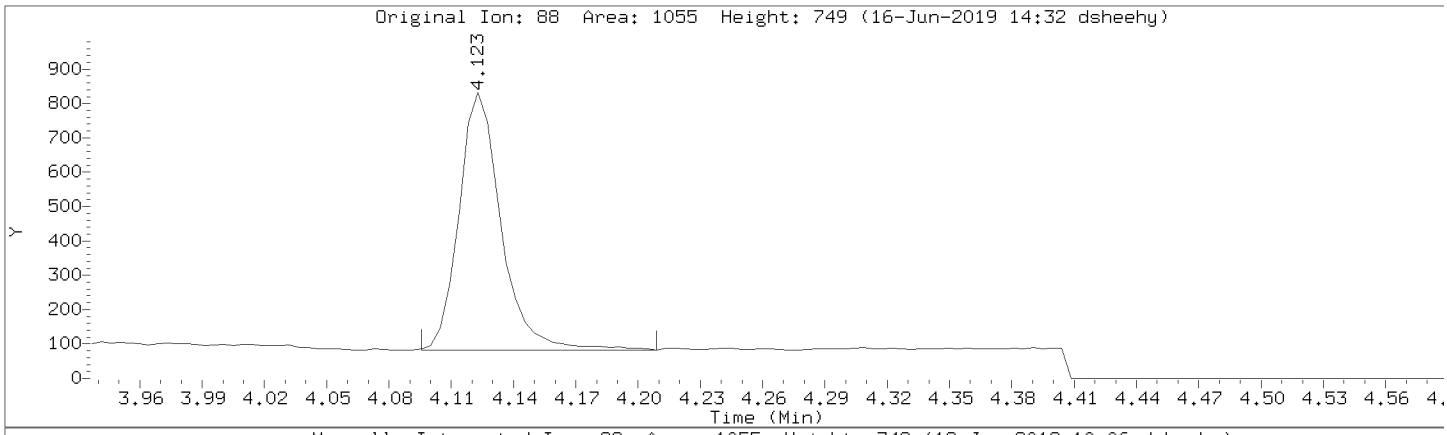
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

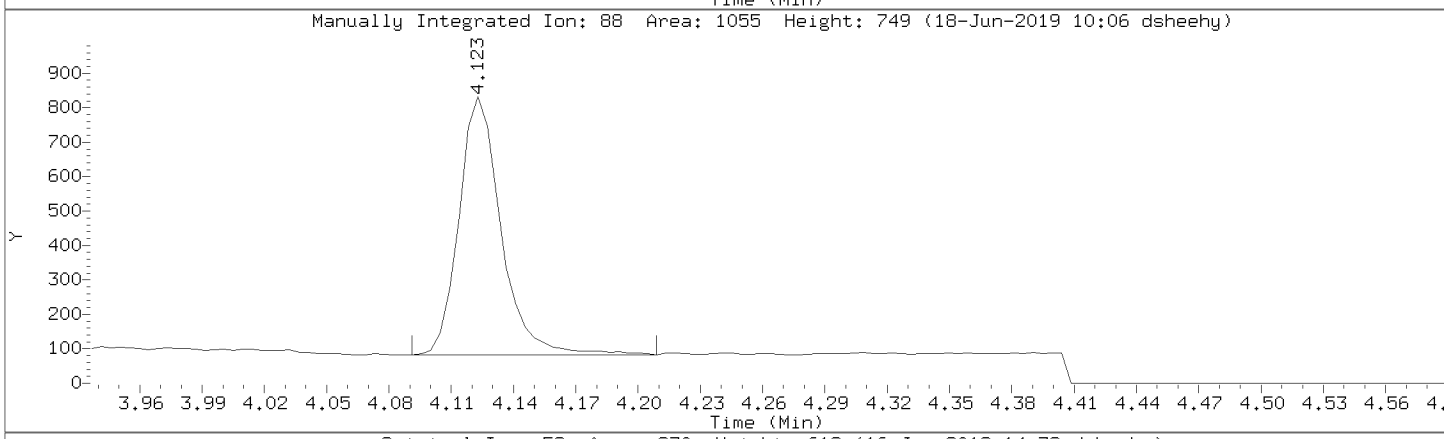
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167009.d
Date : 16-JUN-2019 14:17
Client ID:
Instrument: 10msv8.i
Sample Info: 3314112,,LCSD
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

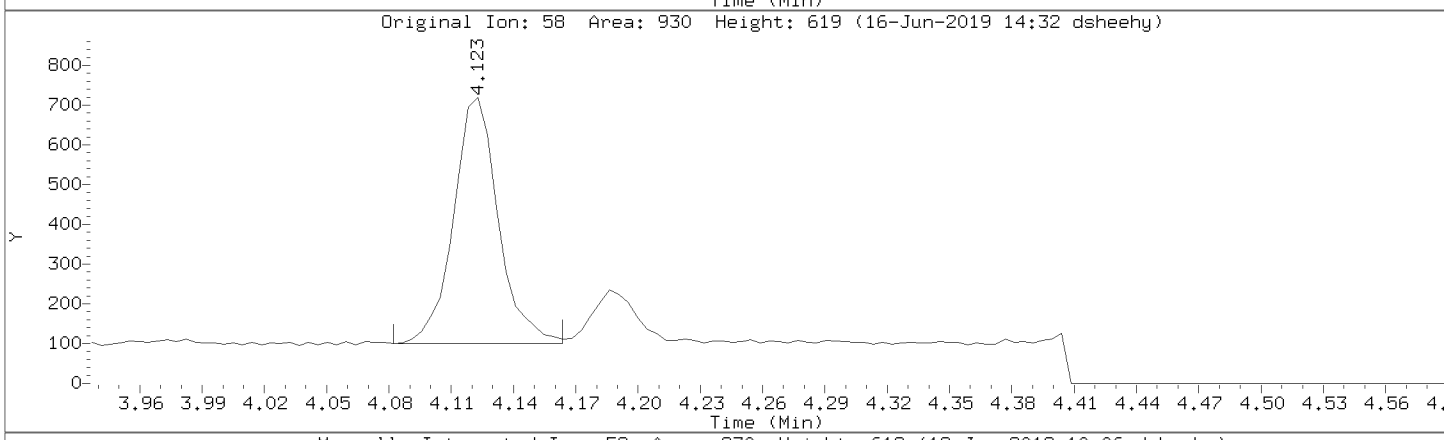


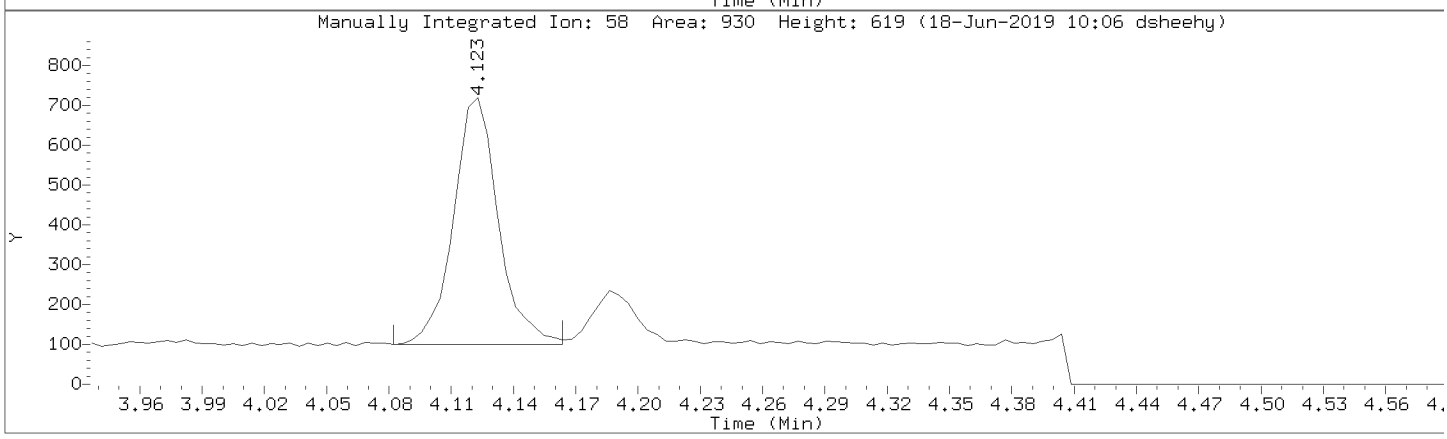
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167009.d
Injection Date: 16-JUN-2019 14:17
Instrument: 10msv8.i
Lab Sample ID: 3314112

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









SAMPLE NO.

MS

MSV SIM - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota
Contract: 104-0012 NY Superfund
Date Received: 06/07/2019 10:00
Matrix: Water
SDG No.: 10478608
Date Extracted: 06/16/2019 17:01
Lab Sample ID: 3314113
Date Analyzed: 06/16/2019 17:01
Lab File ID: 061619A.B\167018.D
Initial wt/vol: 5 mL
Final wt/vol: 5 mL
Dilution: 1
Instrument: 10MSV8
Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	13.0	

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167018.d
Lab Smp Id: 3314113 Client Smp ID: OW-13RMS
Inj Date : 16-JUN-2019 17:01 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 3314113,,ms
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

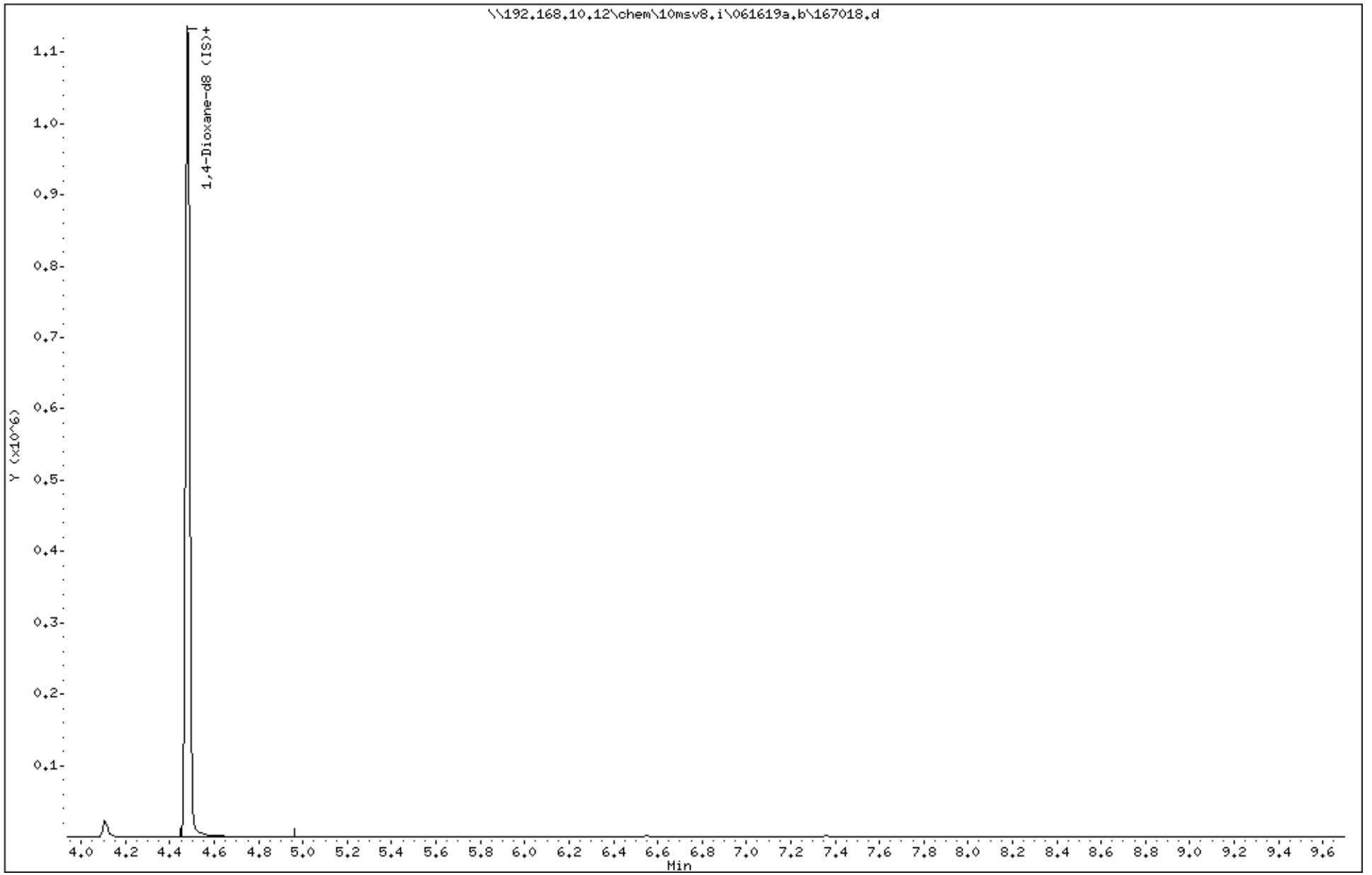
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	32105	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1368	12.9589	13(RM)
$	3 Toluene-d8 (S)	98	4.479	4.478	(1.091)	720360	44.9573	45

QC Flag Legend

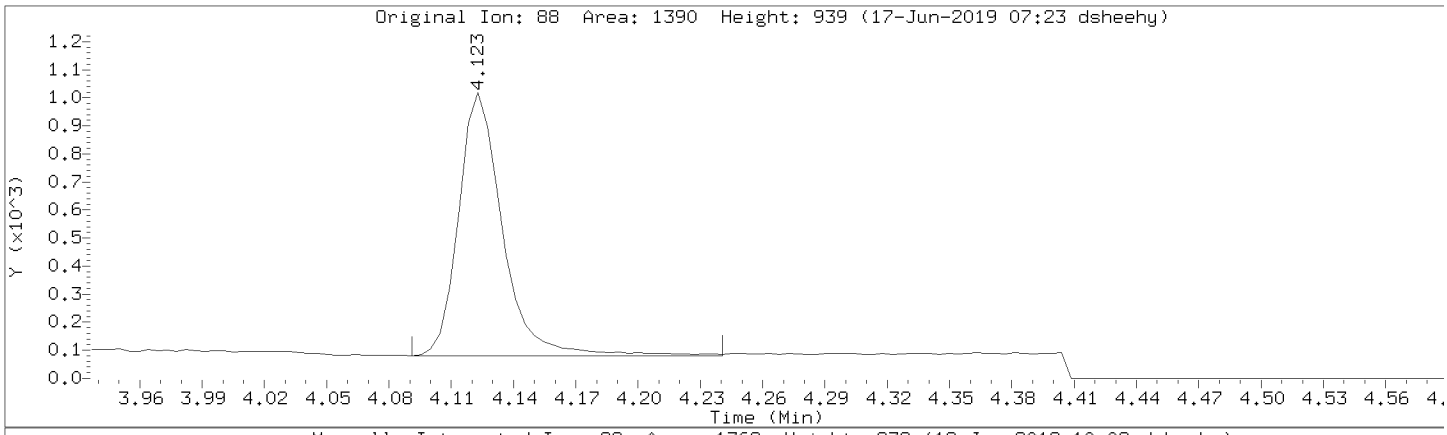
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

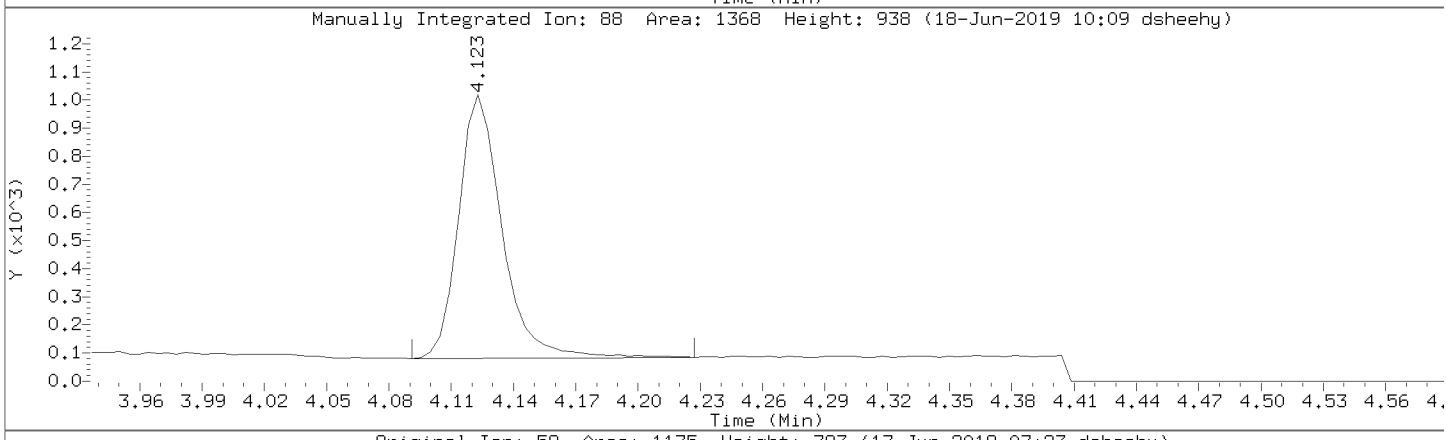
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167018.d
Date : 16-JUN-2019 17:01
Client ID: OW-13RMS
Instrument: 10msv8.i
Sample Info: 3314113,,MS
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

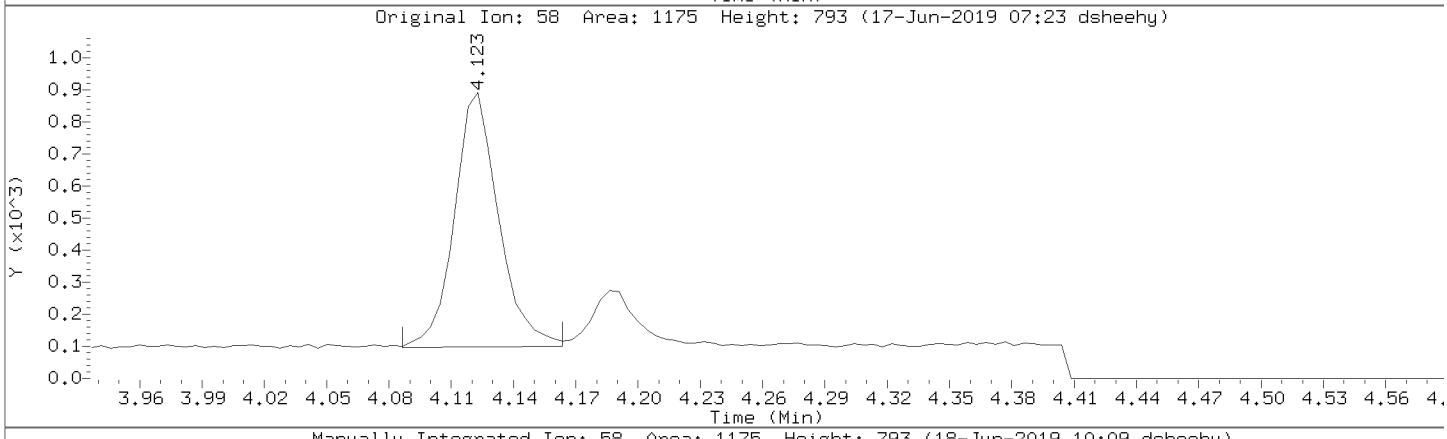


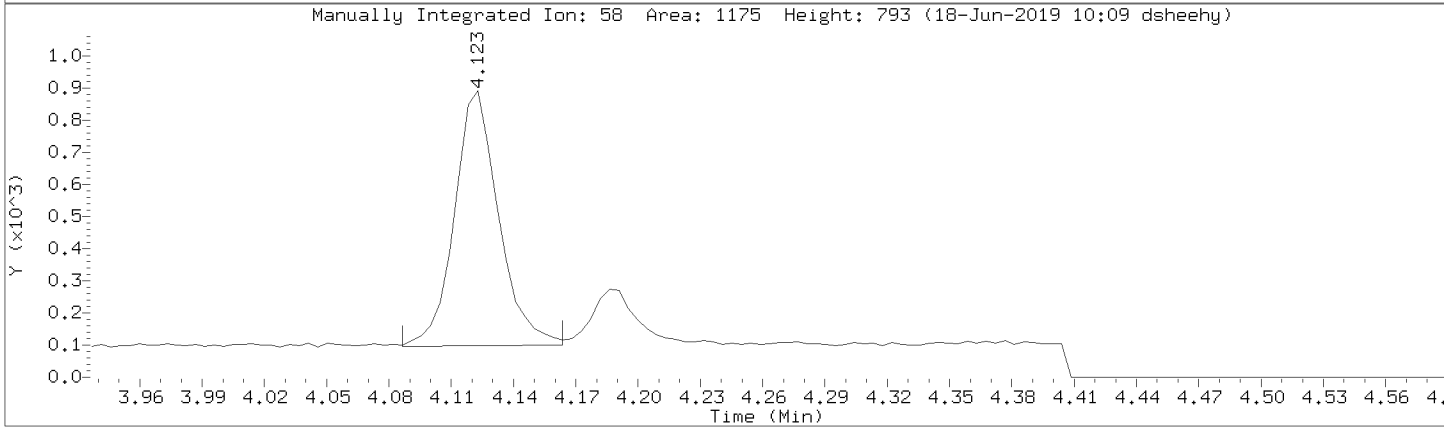
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167018.d
Injection Date: 16-JUN-2019 17:01
Instrument: 10msv8.i
Lab Sample ID: 3314113

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









SAMPLE NO.

MSD

MSV SIM - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota Contract: 104-0012 NY Superfund

Date Received: 06/07/2019 10:00 Matrix: Water SDG No.: 10478608

Date Extracted: 06/16/2019 17:19 Lab Sample ID: 3314114

Date Analyzed: 06/16/2019 17:19 Lab File ID: 061619A.B\167019.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 10MSV8 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
123-91-1	1,4-Dioxane (SIM)	13.6	

Pace Analytical Services, Inc.

8260B Modified SIM Volatiles

Data file : \\192.168.10.12\chem\10msv8.i\061619a.b\167019.d
Lab Smp Id: 3314114 Client Smp ID: OW-13RMSD
Inj Date : 16-JUN-2019 17:19 MS Autotune Date: 27-MAY-2010 02:0
Operator : DS2 Inst ID: 10msv8.i
Smp Info : 3314114,,msd
Misc Info : 49322
Comment : 8260B Modified SIM Volatiles
Method : \\192.168.10.12\chem\10msv8.i\061619a.b\V8-061119-SIM-49229.m
Meth Date : 18-Jun-2019 10:11 dsheehy Quant Type: ISTD
Cal Date : 11-JUN-2019 10:23 Cal File: 162008.d
Als bottle: 13 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

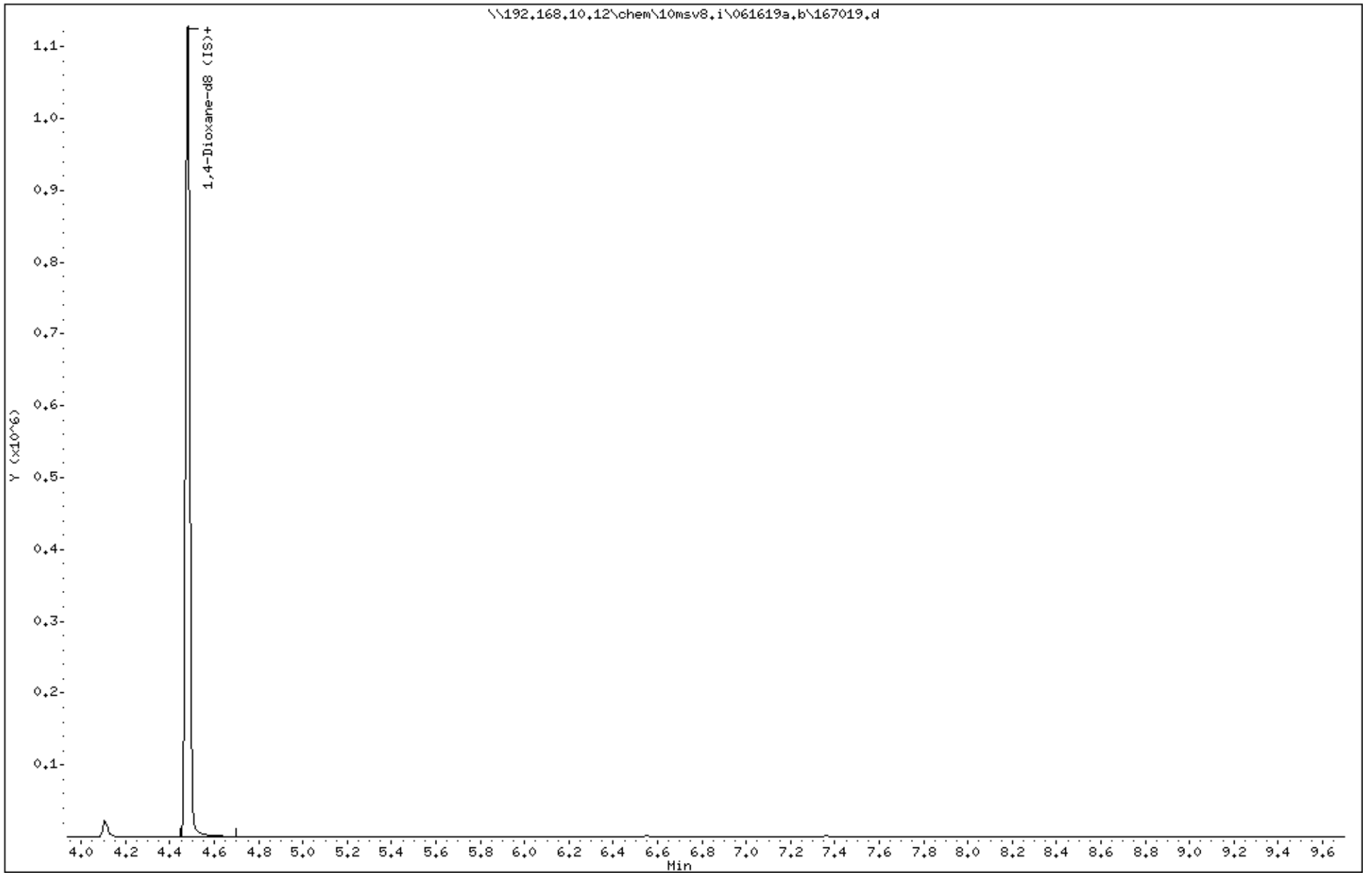
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	1 1,4-Dioxane-d8 (IS)	96	4.104	4.104	(1.000)	30493	2000.00	
	2 1,4-Dioxane (SIM)	88	4.122	4.122	(1.004)	1342	13.6211	14(RM)
$	3 Toluene-d8 (S)	98	4.480	4.478	(1.092)	729995	47.9670	48

QC Flag Legend

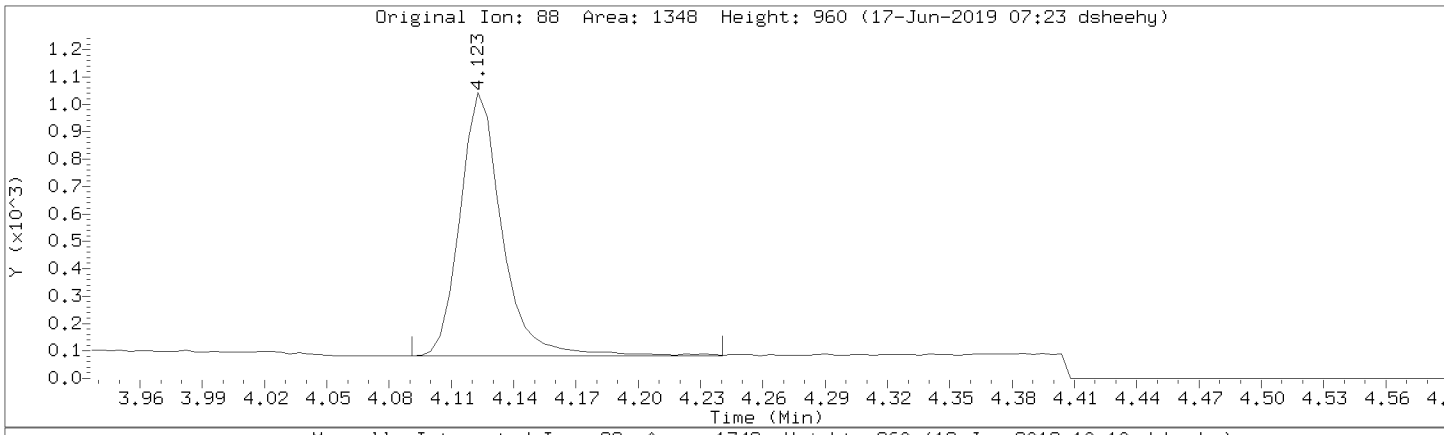
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

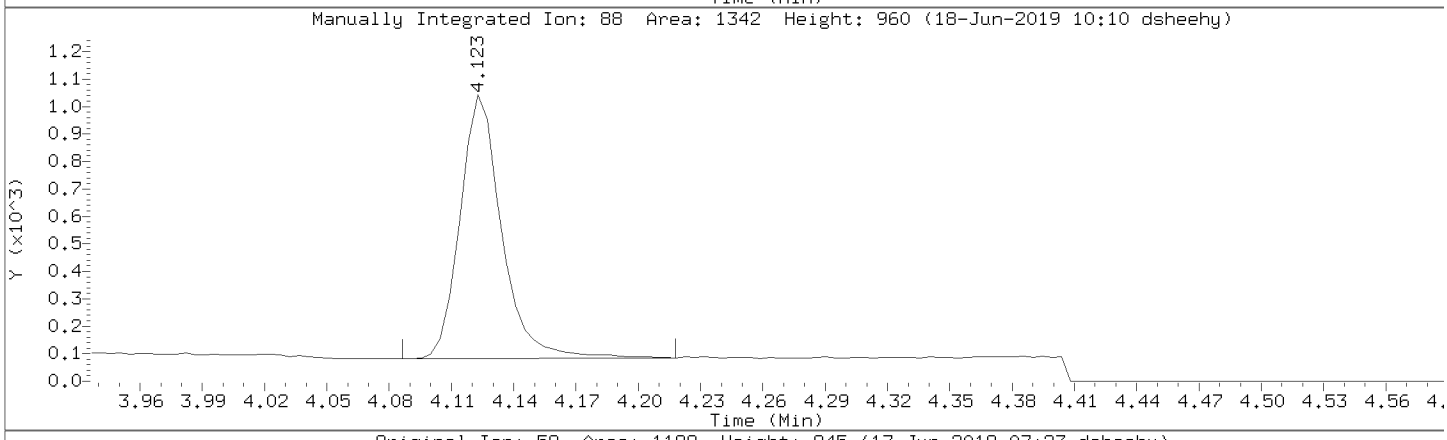
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b\167019.d
Date : 16-JUN-2019 17:19
Client ID: OW-13RMSD
Instrument: 10msv8.i
Sample Info: 3314114,,MSD
Purge Volume: 5.0
Operator: DS2
Column phase: Rtx-VMS SN1380750
Column diameter: 0.18

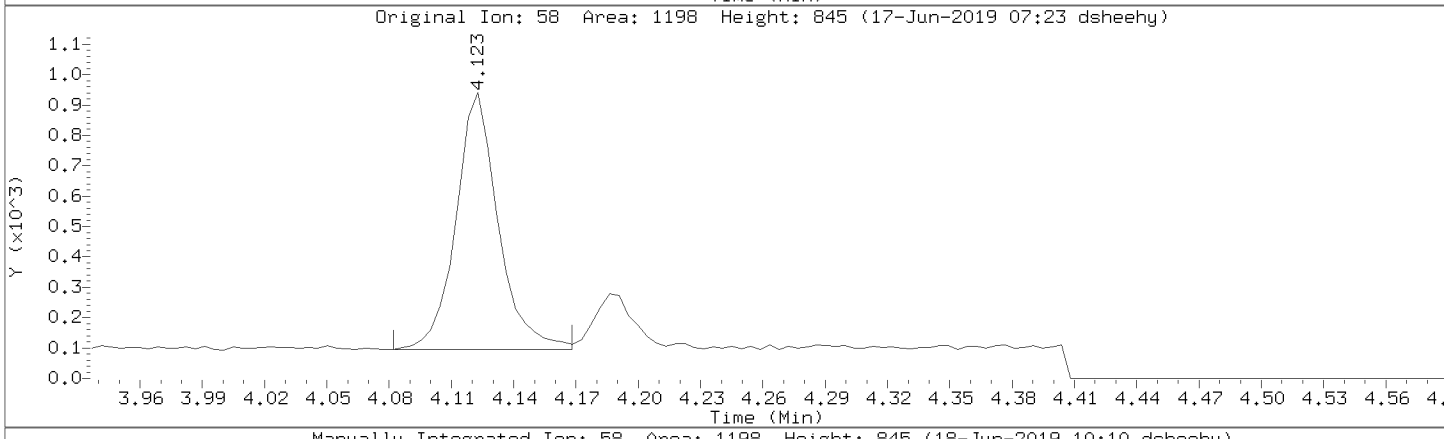


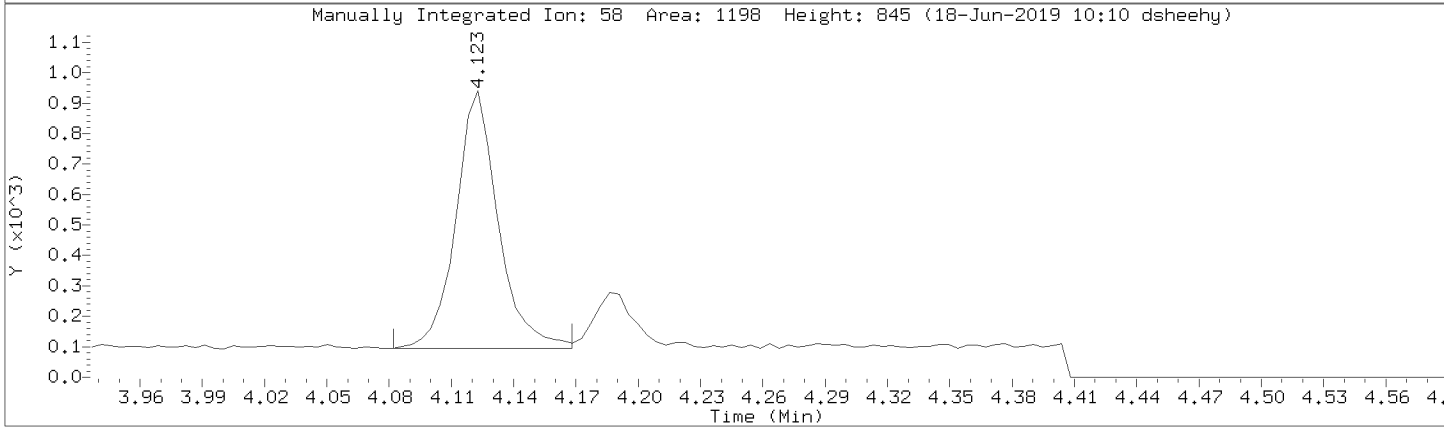
Data File: \\192.168.10.12\chem\10msv8.i\061619a.b/167019.d
Injection Date: 16-JUN-2019 17:19
Instrument: 10msv8.i
Lab Sample ID: 3314114

Compound: 1,4-Dioxane (SIM) Review Code: BA
CAS Number: 123-91-1









Pace Analytical™

Instrument Run Log

Instrument: 10MSV8 Method: 8260B M Surrogate Lot: 205668:1:1exp10.24.1
Column: Rtx-VMS SN1380750 0.18mm Tune Standard: 205668BFB ISTD Lot: 205668:1:1exp10.24.1 Cal. Standard: 212756

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
162001.D	TUNE,205668	L/49229	Tune	1	7	V8-061119-SIM-49229	6/11/19 07:43	DS2	tune fail
162002.D	TUNE,205668	L/	Tune	1	7	V8-061119-SIM-49229	6/11/19 08:01	DS2	tune fail, instrument re-tuned
162003.D	TUNE,205668	L/49229	Tune	1	7	VOA-BFBTUNE-REV05101	6/11/19 08:39	DS2	tune pass
162004.D	IS CHECK	L/	Sample	1	7	V8-061119-SIM-49229	6/11/19 09:02	DS2	dnr, IS check
162005.D	CAL1,212761	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 09:28	DS2	ok
162006.D	CAL2,212752	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 09:47	DS2	ok
162007.D	CAL3,212753	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 10:05	DS2	ok
162008.D	CAL4,212754	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 10:23	DS2	ok
162009.D	CAL5,212755	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 10:41	DS2	ok
162010.D	CAL6,212756	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 10:59	DS2	ok
162011.D	CAL7,212757	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 11:17	DS2	ok
162012.D	CAL8,212758	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 11:36	DS2	ok
162013.D	CAL9,212759	L/49229	Ical	1	7	V8-061119-SIM-49229	6/11/19 11:54	DS2	ok
162014.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 12:12	DS2	post Cal 9 c/o assessment
162015.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 12:30	DS2	post Cal 9 c/o assessment
162016.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 12:48	DS2	post Cal 9 c/o assessment
162017.D	ICV,212759	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 13:06	DS2	ok, ICV
162018.D	,,LCSD	L/	Sample	1	7	V8-061119-SIM-49229	6/11/19 13:25	DS2	dnr, LCSD, no samples run
162019.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 13:43	DS2	dnr, system blank, no samples run
162020.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 14:01	DS2	dnr, system blank, no samples run
162021.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 14:19	DS2	dnr, system blank, no samples run
162022.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 14:37	DS2	dnr, system blank, no samples run
162023.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 14:56	DS2	dnr, system blank, no samples run
162024.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/11/19 15:43	DS2	dnr, system blank, no samples run
162026ML4DOC.	CCV	L/49213	CCal	1	7	V8-060819-49213	6/11/19 16:17	ML4	ok, DOC

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments:

File Path 1: U:\10MSV8.I\061119A.B
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: DS2 6/12/19

Report Date: 06/17/2019 14:23
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSV8 Method: EPA 8260B M Surrogate Lot: 205668:1exp10.24.19
Column: Rtx-VMS SN1380750 0.18mm Tune Standard: 205668BFB ISTD Lot: 205668:1exp10.24.19 Cal. Standard: 213818

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date&Time	Oper.	Comments
167001.D	TEST	L/	Sample	1	7	V8-061119-SIM-49229	6/16/19 10:59	DS2	dne, system test
167002.D	TEST	L/	Sample	1	7	V8-061119-SIM-49229	6/16/19 11:26	DS2	dne, system test
167003.D	TEST	L/	Sample	1	7	V8-061119-SIM-49229	6/16/19 12:04	DS2	dne, system test
167004.D	TEST	L/	Sample	1	7	V8-061119-SIM-49229	6/16/19 12:22	DS2	dne, system test
167005.D	TEST	L/	Sample	1	7	V8-061119-SIM-49229	6/16/19 12:45	DS2	dne, system test
167006.D	TEST	L/	Sample	1	7	V8-061119-SIM-49229	6/16/19 13:04	DS2	dne, system test
167007.D	TUNE,205668	L/49229	Tune	1	7	VOA-BFBTUNE-REV05101	6/16/19 13:29	DS2	tune pass
167008.D	CCV,213818	L/49229	CCal	1	7	V8-061119-SIM-49229	6/16/19 13:59	DS2	ok, CCV
167008L.D	3314111	L/49322	LCS	1	7	V8-061119-SIM-49229	6/16/19 13:59	DS2	ok, LCS
167009.D	3314112	L/49322	LCSD	1	7	V8-061119-SIM-49229	6/16/19 14:17	DS2	ok, LCSD
167010.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/16/19 14:35	DS2	post spike c/o assessment
167011.D	3314110	L/49322	Blank	1	7	V8-061119-SIM-49229	6/16/19 14:53	DS2	ok, blank
167012.D	10476674001	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 15:12	DS2	ok
167013.D	10471210050	L/49322	Sample	1	7	V8-061119-SIM-49229	6/16/19 15:30	DS2	ok, MDL
167014.D	10478608007	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 15:48	DS2	ok
167015.D	10478608006	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 16:06	DS2	ok
167016.D	10478608005	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 16:24	DS2	ok
167017.D	10478608002	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 16:43	DS2	ok, MSP
167018.D	3314113	L/49322	MS	1	2	V8-061119-SIM-49229	6/16/19 17:01	DS2	ok, MS
167019.D	3314114	L/49322	MSD	1	2	V8-061119-SIM-49229	6/16/19 17:19	DS2	ok, MSD
167020.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/16/19 17:37	DS2	post spike c/o assessment
167021.D	10478608001	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 17:55	DS2	ok
167022.D	10478608003	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 18:14	DS2	ok
167023.D	10478608004	L/49322	Sample	1	2	V8-061119-SIM-49229	6/16/19 18:32	DS2	ok
167024.D	PBLK	L/49229	Sample	1	7	V8-061119-SIM-49229	6/16/19 18:50	DS2	post analytical run system flush

Check Maintenance Items Performed:

Changed septum	Clipped column		Changed column - Lot #
Cleaned liner	Changed trap - Lot #		Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSV8.I\061619A.B
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: DS2 6/17/19

Report Date: 06/18/2019 10:17
Reviewed By/Date:

Appendix B

Historic Sampling Results

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
MW-1	03/22/93	NR	0.9 J	NR	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NR	<0.1 B	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	09/26/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/20/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/18/99	<10	0.66 J	<1.0	<1.0	0.40 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	01/05/00	<10	0.65 J,B	<1.0	<1.0	0.37 J	<2.0	0.083 J	<2.0	<1.0	<1.0	0.22 J	<1.0	0.14 J	<10	0.35 J,B	<1.0	<1.0	-	0.097 J	<1.0	<2.0	<1.0
	06/06/00	<10	0.57 J	<1.0	<1.0	0.30 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	03/15/01	10 UJ	0.40 J	<1.0	<1.0	0.38 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	08/29/01	<10	<1.0	<1.0	<1.0	0.32 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/25/02	10 U	<1.0	<1.0	<1.0	0.17 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	09/18/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/09/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	0.24 J	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.0
	02/15/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	06/13/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/24/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/21/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
MW-4	03/24/93	NR	18 J	NR	<0.5	0.4 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.3 J	<0.5	NR	<4.1 B,J	<0.5	<0.5	-	0.1 J	<0.5	<0.5	<0.5
	09/26/94	<10	11	<10	<1.0	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/24/95	<10	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/18/99	<10	5.7	<1.0	<1.0	0.20 J	<2.0	<1.0	<2.0	<1.0	<0.1	<1.0	9.8	<1.0	<10	<1.0	<1.0	0.16 J	-	0.16 J	0.20 J	<2.0	<1.0
	01/05/00	<10	6.9 B	<1.0	<1.0	0.26 J	<2.0	<1.0	<2.0	0.13 J	<1.0	0.45 J	3.3	<1.0	<10	0.11 J,B	<1.0	<1.0	-	0.090 J	0.15 J	0.30 J	<1.0
	06/06/00	<10	4.8	<1.0	<1.0	0.20 J	<2.0	<1.0	<2.0	0.11 J	<1.0	<1.0	3.8	<1.0	<10	<1.0	<1.0	0.30 J	-	<1.0	<1.0	0.18 J	<1.0
	03/14/01	<10	3.6	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	3.2	<1.0	<10	<1.0	<1.0	0.66 J	-	<1.0	0.42 J	<2.0	<1.0
	08/29/01	<10	12	<1.0	<1.0	0.21 J	<2.0	<1.0	0.26 J	<1.0	<1.0	<1.0	1.5	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/25/02	<10	10	<1.0	<1.0	0.21 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.2	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	09/18/02	<10	7.8	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/09/03	<10	2.2	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.84 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/26/04	10 U	2.5	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.50 J	<1.0	<10	<1.0	<1.0	0.72 J	-	<1.0	<1.0	<2.0	<1.0
	02/15/06	10 U	3.8	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.53 J	1.0 U	10 U	1.0 U	1.0 U	0.33 J	-	1.0 U	1.0 U	2.0 U	1.0 U
	08/29/06	10 U	9.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	06/13/07	10 U	7.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	0.26 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/24/08	10 U	4.4	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.48 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.28 J	2.0 U	1.0 U
	07/16/09	10 U	1.2	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.34 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/20/10	10 U	2.0	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/08/13	10 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/11/14	25 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
OW-2	03/23/93	NR	<0.5	NR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	55	<0.5	NR	<1.3 B	<0.5	50	-	<0.5	22	<0.5	<0.5
	09/23/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	130	<10	NR	<10	<10	100	-	<10	24	<10	<10
	04/23/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	85	<10	<10	<10	<10	76	-	<10	22	<10	<10
	02/17/99	<50	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	130	<5.0	<50	3.6 J,B	<5.0	86	-	<5.0	22	<10	<5.0
	01/05/00	<10	0.46 J	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	150	<5.0	<50	<5.0	<5.0	80	-	<5.0	21	0.72 J	<5.0
	06/06/00	<33	<3.3	<3.3	<3.3	<3.3	<6.7	<3.3	<6.7	<3.3	<3.3	<3.3	99	<3.3	<33	<3.3	<3.3	80	-	<3.3	19	<6.7	<3.3
	03/15/01	<100	<10	<10	<10	<10	<20	<10	<20	<10	<10	<10	310	<10	<100	4.6 J	<10	160	-	<10	32	<20	<10
	08/29/01	<25	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	69	<2.5	<25	<2.5	<2.5	61	-	<2.5	15	<5.0	<2.5
	04/25/02	<25	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	81	<2.5	<25	1.2 U	<2.5	60	-	<2.5	18	0.95 J	<2.5
	09/18/02	<29	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9	<5.7	<2.9	<2.9	<2.9	85	<2.9	<29	<2.9	<2.9	68	-	<2.9	18	<5.7	<2.9
	04/09/03	<120	<12	<12	<12	<12	<25	<12	<25	<12	<12	<12	290	<12	<120	<12	<12	160	-	<12	29	<25	<12
	04/26/04	10 U	1.5 J	<6.7	<6.7	<6.7	<13	<6.7	<13	<6.7	<6.7	<6.7	170	<6.7	<67	<6.7	<6.7	110	-	1.3 J	22	<13	<6.7
	02/15/06	40 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	4.0 U	8.0 U	4.0 U	4.0 U	4.0 U	150	4.0 U	40 U	4.0 U	4.0 U	120	-	4.0 U	20	8.0 U	4.0 U
	05/23/06	80 U	8.0 U	8.0 U	8.0 U	8.0 U	16 U	8.0 U	16 U	8.0 U	8.0 U	8.0 U	250	8.0 U	80 U	8.0 U	8.0 U	130	8.0 U	8.0 U	22	16 U	8.0 U
	08/30/06	25 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	74	2.5 U	25 U	2.5 U	2.5 U	90	2.5 U	2.5 U	16	5.0 U	2.5 U
	11/29/06	120 U	12 U	12 U	12 U	12 U	25 U	12 U	25 U	12 U	12 U	12 U	280	12 U	120 U	12 U	12 U	140	12 U	12 U	24	25 U	12 U
	06/13/07	20 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	36	2.0 U	20 U	2.0 UJ	2.0 U	52	2.0 U	2.0 U	12	4.0 U	2.0 U
	07/24/08	20 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	30	0.96 J	20 U	2.0 U	2.0 U	59	2.0 U	2.0 U	11	4.0 U	1.1 J
	07/16/09	25 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	2.5 U	2.5 U	2.5 U	53	2.5 U	25 U	2.5 U	2.5 U	62	2.5 U	2.5 U	9.7	5.0 U	2.5 U
	07/21/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	39	1.0 U	10 U	1.0 U	1.0 U	77	1.0 U	1.0 U	12	2.0 U	1.0 U
	10/13/11	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	98	2.5 U	2.5 U	2.5 U	2.5 U	110	2.5 U	2.5 U	15	2.5 U	5.0 U
	02/06/13	100 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	330	10 U	10 U	10 U	10 U	180	10 U	10 U	26	10 U	20 U
	06/11/14	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	54	1.0 U	10 U	5.0 U	1.0 U	94	1.0 U	1.0 U	11	1.0 U	2.0 U
	09/24/15	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	54	2.5 U	25 U	2.5 U	2.5 U	74	2.5 U	2.5 U	10	2.5 U	5.0 U
	11/01/16	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	63	2.5 U	25 U	2.5 U	2.5 U	68	2.5 U	2.5 U	9.9	2.5 U	5.0 U
	03/28/18	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	48	2.5 U	25 U	2.5 U	2.5 U	89	2.5 U	2.5 U	11	2.5 U	5.0 U
	06/05/19	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	23	2.5 U	25 U	2.5 U	2.5 U	64	2.5 U	2.5 U	6.8	2.5 U	5.0 U
OW-5	03/23/93	NR	<3.0 J	NR	<0.5	0.1 J	<0.5	<0.5	<1.3	<0.5	<0.6	<0.5	8.0 R	<0.5	NR	<3.8	<0.6	1.0	-	<0.5	<1.3	1.8	<0.6
	09/29/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/25/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	7 J	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/18/99	<17	0.67 J	<1.7	<1.7	0.20 J	<3.3	<1.7	<3.3	<1.7	<1.0	<1.7	33	<1.7	<17	1.3 J,B	<1.0	7.8	-	<1.7	5.4	<3.3	<1.7
	01/06/00	1.3 J	0.66 J	<1.0	<1.0	0.29 J	<2.0	<1.0	<2.0	<1.0	<1.0	0.20 J	38	<1.0	<10	0.25 J,B	<1.0	18	-	0.041 J	9.0	0.26 J	<1.0
	06/07/00	<10	0.91 J	<1.0	<1.0	0.19 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.3	<1.0	<10	<1.0	<1.0	2.4	-	<1.0	1.7	<2.0	<1.0
	03/14/01	<10	0.46 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	14	<1.0	<10	<1.0	<1.0	6.2	-	<1.0	3.7	<2.0	<1.0
	08/29/01	<12	<1.2	<1.2	<1.2	0.21 J	<2.5	<1.2	<2.5	<1.2	<1.2	<1.2	29	<1.2	<12	<1.2	<1.2	7.0	-	<1.2	4.5	<2.5	<1.2
	04/24/02	14 U	0.35 J	<1.4	<1.4	0.20 J	<2.9	<1.4	<2.9	<1.4	<1.4	<1.4	37	<1.4	<14	1.4 U	<1.4	10	-	<1.4	5.3	<2.9	<1.4
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	31	<1.0	<10	<1.0	<1.0	9.5	-	<1.0	5.3	<2.0	<1.0
	04/10/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.8	<1.0	<10	<1.0	<1.0	5.5	-	<1.0	3	<2.0	<1.0
	04/25/04	<10	0.38 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	8.6	<1.0	<10	<1.0	<1.0	5.2	-	<1.0	2.5	<2.0	<1.0
	02/16/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	6.2	1.0 U	10 U	1.0 U	1.0 U	4.3	-	1.0 U	2.0	2.0 U	1.0 U
	05/23/06	10 U	0.69 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	20	1.0 U	10 U	1.0 U	1.0 U	5.7	1.0 U	1.0 U	2.6	0.27 J	1.0 U
	08/29/06	14 U	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	2.9 U	1.4 U	1.4 U	1.4 U	34	1.4 U	14 U	1.4 U	1.4 U	6.1	1.4 U	1.4 U	2.8 J	0.82 J	1.4 U
	11/29/06	10 U	0.26 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	30	1.0 U	10 U	1.0 U	1.0 U	7.1	1.0 U	1.0 U	3.5	2.0 U	1.0 U
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	8.7	1.0 U	10 U	1.0 UJ	1.0 U	4.0	1.0 U	1.0 U	1.9	2.0 U	1.0 U
	07/23/08	1.0 U	0.53 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	10	1.0 U	1.0 U	1.0 U	1.0 U	4.4	1.0 U	1.0 U	1.8	0.28 J	1.0 U
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	3.7	1.0 U	1.0 U	1.5	2.0 U	1.0 U
	07/21/10	10 U	0.37 J	1.0 U	1.0 U	1.0 U	2.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	4.8	1.0 U	10 U	1.0 U	1.0 U	4.2	1.0 U	1.0 U	1.6	2.0 U	1.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
OW-5	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/06/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/11/14	25 U	0.32 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10	1.0 U	10 U	5.0 U	1.0 U	4.0	1.0 U	1.0 U	1.5	1.0 U	2.0 U
	09/24/15	13 U/17 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	31/33	1.3 U/1.7 U	13 U/17 U	1.3 U/1.7 U	1.3 U/1.7 U	14/16	1.3 U/1.7 U	1.3 U/1.7 U	4.2/4.5	1.3 U/1.7 U	2.7 U/3.3 U
	11/01/16	13 U/13 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	34/33	1.3 U/1.3 U	13 U/13 U	1.3 U/1.3 U	1.3 U/1.3 U	22/21	1.3 U/1.3 U	1.3 U/1.3 U	5.1/5.0	1.3 U/1.3 U	2.5 U/2.5 U
	03/28/18	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	14/14	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	18/18	1.0 U/1.0 U	1.3 U/1.3 U	4.2/4.3	1.0 U/1.0 U	2.0 U/2.0 U
	06/04/19	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	4.5/4.4	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	6.5/6.2	1.0 U/1.0 U	1.3 U/1.3 U	1.6/1.8	1.0 U/1.0 U	2.0 U/2.0 U
OW-6	03/23/93	NR	<1.3 J	NR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.1 J	<1.3 J	<0.5	NR	<0.7 J,B	<0.5	13		<0.5	<2.9	1.1	<0.5
	09/27/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	4 J	<10	NR	<10	<10	17	-	<10	6.0 J	<10	<10
	04/23/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	-	<10	5.0 J	<10	<10
	02/18/99	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.8	<1.0	<10	3.7 B	<1.0	20	-	<1.0	4.6	<2.0	<1.0
	01/06/00	1.4 J	0.19 J,B	0.58 J	<1.0	<1.0	<2.0	<1.0	0.17 J	<1.0	<1.0	0.28 J	5.1	<1.0	<10	0.26 J,B	<1.0	21	-	<1.0	4.6	<2.0	<1.0
	06/07/00	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	2.2	<1.0	<10	<1.0	<1.0	14	-	<1.0	2.6	<2.0	<1.0
	03/15/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.9	<1.0	<10	<1.0	<1.0	19	-	<1.0	3.9	<2.0	<1.0
	08/29/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.7	<1.0	<10	<1.0	<1.0	12	-	<1.0	2.3	<2.0	<1.0
	04/24/02	10 U	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	4.7	<1.0	<10	1.1 U	<1.0	12	-	<1.0	2.9	<2.0	<1.0
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.8	<1.0	<10	<1.0	<1.0	15	-	<1.0	3.9	<2.0	<1.0
	04/09/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	21	<1.0	<10	0.34 J	<1.0	28	-	<1.0	6.8	<2.0	<1.0
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	21	<1.0	<10	<1.0	<1.0	32	-	<1.0	6.3	<2.0	<1.0
	02/16/06	17 U	1.7 U	1.7 U	1.7 U	1.7 U	3.3 U	1.7 U	3.3 U	1.7 U	1.7 U	1.7 U	19	1.7 U	17 U	1.7 U	1.7 U	39	-	1.7 U	7.9	3.3 U	1.7 U
	05/23/06	17 U	1.7 U	1.7 U	1.7 U	1.7 U	3.3 U	1.7 U	3.3 U	1.7 U	1.7 U	1.7 U	24	1.7 U	17 U	1.7 U	1.7 U	39	1.7 U	1.7 U	7.8	3.3 U	1.7 U
	08/31/06	14 U	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	2.9 U	1.4 U	1.4 U	1.4 U	20	1.4 U	14 U	1.4 U	1.4 U	40	1.4 U	1.4 U	7.7	2.9 U	1.4 U
	11/29/06	17 U	1.7 U	1.7 U	1.7 U	1.7 U	3.3 U	1.7 U	3.3 U	1.7 U	1.7 U	1.7 U	20	1.7 U	17 U	0.75 J	1.7 U	41	1.7 U	1.7 U	8.6	3.3 U	1.7 U
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	19	1.0 U	10 U	1.0 UJ	1.0 U	36	1.0 U	1.0 U	9.0	2.0 U	1.0 U
	07/23/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	16	1.0 U	10 U	1.0 U	1.0 U	31	1.0 U	1.0 U	6.3	2.0 U	1.0 U
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	16	1.0 U	10 U	1.0 U	1.0 U	30	1.0 U	1.0 U	5.5	2.0 U	1.0 U
	07/21/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 UJ	1.0 U	0.31 J	1.0 U	1.0 U	1.0 U	20	1.0 U	10 U	1.0 U	1.0 U	42	1.0 U	1.0 U	8.6	2.0 U	1.0 U
	10/13/11	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	40	1.7 U	1.7 U	1.7 U	1.7 U	52	1.7 U	1.7 U	11	1.7 U	3.3 U
	02/06/13	13 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	19	1.3 U	1.3 U	1.3 U	1.3 U	44	1.3 U	1.3 U	8.9	1.3 U	2.5 U
	06/11/14	25 U	1.0 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	17	1.0 U	10 U	5.0 U	1.0 U	62	1.0 U	1.0 U	10	1.0 U	2.0 U
	09/24/15	13 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 UJ	1.3 U	1.3 U	1.3 U	15	1.3 U	13 U	1.3 U	1.3 U	38	1.3 U	1.3 U	7.7	1.3 U	2.5 U
	11/01/16	20 UJ	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	14	2.0 U	20 U	2.4	2.0 U	42	2.0 U	2.0 U	7.7	2.0 U	4.0 U
	03/28/18	62 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	17	2.0 U	20 U	2.0 U	2.0 U	47	2.0 U	2.0 U	9.1	2.0 U	4.0 U
	06/05/19	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	14	2.0 U	20 U	2.0 U	2.0 U	50	2.0 U	2.0 U	7.6	2.0 U	4.0 U
OW-8	03/23/93	NR	<0.5	NR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NR	<0.8 B	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5
	09/26/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/20/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/18/99	<10	0.32 J	0.17 J	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<10	0.32 J	<1.0	0.17 J	-	<1.0	<1.0	<2.0	<1.0
	01/06/00	<10	0.49 J	<1.0	<1.0	0.37 J	<2.0	0.083 J	<2.0	<1.0	<1.0	0.22 J	<1.0	0.14 J	<10	0.35 J,B	<1.0	<1.0	-	0.097 J	<1.0	<2.0	<1.0
	06/07/00	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	03/15/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	08/29/01	<10	0.20 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/24/02	10 U	0.20 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/09/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
OW-8	02/16/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U
	08/31/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/23/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/20/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/06/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-10	10/29/93	NR	37	NR	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NR	2.9 B	<1.0	<1.0	-	0.5 J	<1.0	<1.0	<1.0
	09/25/94	68	1,100	<10	<10	4 J	<10	<10	<10	<10	<10	<10	<10	9 J	NR	<10	<10	<10	-	8 J	<10	<10	53
	04/27/95	<50	2,600	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	30 J
	02/16/99	<2,000	1,900	<200	<200	23 J	<400	<200	<400	<200	<200	<200	<200	<200	<2,000	100 J,B	<200	<200	-	25 J	<200	<400	<200
OW-10R	01/07/00	610	400	<17	<17	3.6 J,B	<33	<17	<33	<17	<17	<17	<17	4.3 J	<170	<17	<17	<17	-	8.5 J	<17	10 J	6.2 J
	06/06/00	<50	130 J	<5.0	<5.0	3.0 J	<10	<5.0	<10	<5.0	<5.0	<5.0	<5.0	2.2 J	<50	<5.0	<5.0	<5.0	-	0.52 J	<5.0	2.2 J	<5.0
	03/14/01	<10	35	<1.0	<1.0	3.6	0.80 J	<1.0	<2.0	<1.0	<1.0	<1.0	1.0	0.89 J	<10	<1.0	<1.0	<1.0	-	0.44 J	<1.0	2.4	<1.0
	08/29/01	<20	55	<2.0	<2.0	1.4 J	1.1 J	<2.0	<4.0	<2.0	<2.0	<1.0	3.5	<1.0	<20	<1.0	<2.0	<2.0	-	<1.0	<2.0	9.5	<2.0
	04/25/02	<10	30	<1.0	<1.0	4.0	2.8	<1.0	<2.0	<1.0	<1.0	<1.0	2.7	2.0 U	<10	1.2 U	<1.0	<1.0	-	1.0 U	<1.0	4.5	1.0 U
	09/19/02	<10	17	<1.0	<1.0	2.9	1.3 J	<1.0	<2.0	<1.0	<1.0	<1.0	1.5	0.91 J	<10	<1.0	<1.0	<1.0	-	0.39 J	<1.0	6.3	<1.0
	04/09/03	<10	6.8	<1.0	<1.0	3.1	0.54 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	0.43 J	<1.0	<1.0	-	<1.0	<1.0	0.72 J	<1.0
	04/26/04	<10	8.1	<1.0	<1.0	2.2	0.80 J	<1.0	<2.0	<1.0	<1.0	<1.0	0.57 J	0.22 J	<10	1.0 U	<1.0	<1.0	-	0.27 J	<1.0	0.99 J	<1.0
	02/15/06	10 U	3.2	1.0 U	1.0 U	1.4	0.52 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.47 J	1.3 U
	08/29/06	10 U	9.9	1.0 U	1.0 U	1.4	0.92 J	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	0.59 J	0.25 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 J	1.0 U
	06/13/07	10 U	4.7	1.0 U	1.0 U	1.4	0.94 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.47 J	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.89 J	1.0 U
	07/22/08	10 U	5.7	1.0 U	1.0 U	0.71 J	0.48 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.46 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.80 J	1.0 U
	07/15/09	10 U	2.7	1.0 U	1.0 U	2.3	0.62 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.33 J	1.0 U
	07/20/10	10 U	4.6	1.0 U	1.0 U	0.88 J	0.87 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.66 J	1.0 U
	10/13/11	10 U	2.4	1.0 U	1.0 U	5.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/08/13	10 U	2.8	1.0 U	1.0 U	6.0	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	09/24/15	10 U	3.8	1.0 U	1.0 U	1.3	2.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/01/16	10 U	2.4	1.0 U	1.0 U	1.0 U	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	03/27/18	10 U	1.2	1.0 U	1.0 U	2.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/05/19	10 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-13	10/28/93	NR	230	NR	<1.0	<1.0	<1.0	<1.0	<1.0	0.4 J	<1.0	<1.0	12	0.2 J	NR	1.2 J,B	<1.0	<1.0	-	4.8	0.9 J	<1.0	0.8 J
	09/29/94	<10	40	<10	<10	<10	<10	<10	<10	<10	<10	<10	6 J	<10	NR	<10	<10	<10	-	<10	<10	9 J	<10
	04/25/95	<10	350	<10	<10	<10	<10	<10	<10	<10	<10	<10	20	<10	<10	<10	<10	<10	-	<10	<10	34	<10
	02/16/99	<330	490	<33	<33	<33	<67	<33	<67	<33	<33	<33	52	<33	<330	18 J,B	<33	<33	-	7.6 J	<33	48 J	<33
	01/06/00	<200	620	<20	<20	<20	<40	3.5 J,B	<40	<20	<20	<20	56	2.3 J	<200	<20	<20	<20	-	2.7 J,B	1.3 J	58	<20
	06/07/00	<83	200	<8.3	<8.3	0.84 J	<17	<8.3	<17	<8.3	<8.3	<8.3	15	5.5 J	<83	<8.3	<8.3	<8.3	-	<8.3	<8.3	17	<8.3
	03/14/01	<50	130	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	15	4.0 J	<50	3.0 J	<5.0	<5.0	-	<5.0	<5.0	12	<5.0
	08/29/01	<62	120	<6.2	<6.2	<6.2	<12	<6.2	<12	<6.2	<6.2	<6.2	12	<6.2	<62	<6.2	<6.2	<6.2	-	<6.2	1.1 J	9.9 J	<6.2
	04/24/02	<56	160	<5.6	<5.6	<5.6	<11	<5.6	<11	<5.6	<5.6	<5.6	11	<5.6	<56	<5.6	<5.6	<5.6	-	5.6 U	1.2 J	9.9 J	<5.6
	09/19/02	<33	81	<3.3	<3.3	<3.3	<6.7	<3.3	<6.7	<3.3	<3.3	<3.3	8.5	1.8 J	24 J	<3.3	<3.3	<3.3	-	<3.3	<3.3	5.9 J	<3.3
	04/10/03	<25	53	<2.5	<2.5	<2.5	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	5.9	1.6 J	<25	<2.5	<2.5	<2.5	-	<2.5	<2.5	4.9 J	<2.5
	04/25/04	<17	45	<1.7	<1.7	0.38 J	<3.3	<1.7	<3.3	<1.7	<1.7	<1.7	4.9	1.0 J	<17	<1.7	<1.7	<1.7	-	0.31 J	0.67 J	3.2 J	<1.7

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
OW-13R	02/20/06	10 U	15	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.60 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	0.29 J	1.0 U	1.1 J	1.0 U
	08/29/06	10 U	15	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.40 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3 J	1.0 U
	06/12/07	10 U	11	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.42 J	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.86 J	1.0 U
	07/22/08	10 U/10 U	6.5 J/6.8 J	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.70 J/0.70 J	1.0 U/1.0 U
	07/14/09	10 U/10 U	13/12	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.4/2.3	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.64 J/0.63 J	1.6 J/1.6 J	1.0 U/1.0 U
	07/21/10	10 UJ/10 UJ	17/17	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	2.0 UJ/2.0 UJ	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.70J/0.78J	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.35 J/0.35 J	1.2 J/1.2 J	1.0 U/1.0 U
	10/13/11	10 U/10 U	1.0 U/1.3 J	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U
	02/08/13	10 U/10 U	5.4/5.0	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.9/1.8	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U
	06/11/14	25 U/25 U	9.8/10	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.47J/0.47J	1.0 U/1.0 U	10 U/10 U	5.0 U/5.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.22J/0.24J	0.80J/0.97J	2.0 U/2.0 U
	09/23/15	10 U	5.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	2.0 U
	11/02/16	10 UJ	4.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	03/28/18	10 U	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/05/19	10 U	2.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-15	09/24/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/26/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/16/99	<10	1.1	<1.0	<1.0	0.52 J	<2.0	<1.0	<2.0	0.25 J	<1.0	<1.0	0.38 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.5 J	<1.0
	01/07/00	1.3 J	1.0 B	0.92 J	<1.0	0.64 J	<2.0	<1.0	<2.0	0.31 J	<1.0	0.57 J	<1.0	<1.0	<10	0.35 J,B	0.15 J,B	<1.0	-	0.074 J	<1.0	1.4 J	<1.0
	06/06/00	<10	0.91 J	<1.0	<1.0	0.60 J	<2.0	<1.0	<2.0	0.28 J	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.0 J	<1.0
	03/14/01	<10	1.2	<1.0	<1.0	0.67 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.37 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.1 J	<1.0
	08/28/01	2.2 J,B	0.61 J	<1.0	<1.0	0.35 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.52 J	<1.0
	04/25/02	<10	0.99 J	<1.0	<1.0	0.47 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	0.91 J	<1.0
	09/18/02	<10	0.69 J	<1.0	<1.0	0.43 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/08/03	<10	1.2	<1.0	<1.0	0.67 J	<2.0	<1.0	<2.0	0.33 J	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0 J	<1.0
	04/23/04	<10	1.2	<1.0	<1.0	0.67 J	<2.0	<1.0	<2.0	0.29 J	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.90 J	<1.0
	02/15/06	10 U	0.88 J	1.0 U	1.0 U	0.53 J	2.0 U	1.0 U	2.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.73 J	1.3 U
	08/29/06	10 U	0.78 J	1.0 U	1.0 U	0.51 J	2.0 U	1.0 U	0.37 J	0.22 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 J	1.0 U
OW-16	09/24/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/26/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/17/99	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	01/06/00	1.4 J	0.082 J,B	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	0.61 J	<1.0	<1.0	<10	0.30 J,B	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	06/07/00	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	03/14/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	08/28/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	0.36 J	<1.0	<1.0	<10	0.80 J	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/24/02	10 U	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	1.9 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/10/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	02/17/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.37 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U
	08/31/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.35 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
OW-17	02/20/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U
	05/24/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	11/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
OW-18	09/23/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/29/95	<10	12	<10	<10	10 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	1 J	<10	<10	29
	02/17/99	<17	4.7	<1.7	<1.7	3.4	1.0 J	<1.7	<3.3	<1.7	<1.7	<1.7	0.54 J	<1.7	<17	1.0 J,B	<1.7	<1.7	-	<1.7	<1.7	<3.3	1.1 J
	01/07/00	2.7 J	5.6 B	1.0	<1.0	4.5	3.0	<1.0	<2.0	0.66 J	<1.0	0.29 J	<1.0	<1.0	<10	0.40 J,B	<1.0	<1.0	-	0.22 J	0.14 J	0.29 J	1.8
	06/08/00	<10	4.8	<1.0	<1.0	4.6	1.3 J	<1.0	<2.0	0.24 J	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	03/16/01	10 UJ	3.1	<1.0	<1.0	3.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.38 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.4
	08/28/01	2.3 J,B	2.4 J	<1.0	<1.0	3.6 J	<2.0	<1.0	<2.0	0.18 J	<1.0	<1.0	0.38 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.3 J
	04/24/02	10 U	1.5	<1.0	<1.0	4.3	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.28 J	<1.0	<10	1.6 U	<1.0	<1.0	-	1.0 U	<1.0	<2.0	1.7
	09/17/02	<10	2.9	<1.0	<1.0	5.5	1.3 J	<1.0	<2.0	0.36 J	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	2.0
	04/08/03	2.6 J	2.9	<1.0	<1.0	5.6	1.2 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.2
	04/23/04	10 U	3.3	<1.0	<1.0	7.3	0.74 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.2
	02/17/06	10 U	5.1	1.0 U	1.0 U	10	3.2	1.0 U	2.0 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	0.49 J	1.0 U	2.0 U	10
	08/30/06	10 U	3.7	1.0 U	1.0 U	7.8	0.91 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	06/14/07	10 U	1.2	1.0 U	1.0 U	6.5	0.46 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/22/08	10 U	1.5	1.0 U	1.0 U	6.9	0.40 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/16/09	10 U	2.3	1.0 U	1.0 U	9.6	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.34 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/22/10	1.6 J	2.8	1.0 U	1.0 U	11	0.41 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	0.63 J
	10/13/11	10 U	3.7	1.0 U	1.0 U	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	2.0 U
	02/07/13	10 U	5.1	1.0 U	1.0 U	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	2.0 U
	06/11/14	25 U	3.2	1.0 U	1.0 U	16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32 J	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U	2.0 U
	09/23/15	10 U	3.5	1.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/02/16	10 UJ	5.0	1.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	03/27/18	10 UJ	4.5	1.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/06/19	10 U	1.8	1.0 U	1.0 U	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-19	09/27/94	<10	10 J	<10	<10	5 J	15	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/28/95	<10	8 J	<10	<10	6 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/17/99	<10	5.8	<1.0	<1.0	7.1	6.1	<1.0	<2.0	0.27 J	<1.0	<1.0	3.3	<1.0	<10	0.16 J,B	<1.0	<1.0	-	0.16 J	0.14 J	10	<1.0
	01/05/00	0.94 J	3.7 B	<1.0	<1.0	10	2.7	<1.0	<2.0	0.16 J	0.27 J	<1.0	1.5	<1.0	<10	0.25 J,B	<1.0	<1.0	-	0.15 J	0.15 J	2.1	<1.0
	06/08/00	<10	2.3	<1.0	<1.0	5.2	1.9 J	<1.0	<2.0	<1.0	<1.0	<1.0	1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	03/16/01	10 UJ	1.7	<1.0	<1.0	3.8	1.4 J	<1.0	<2.0	<1.0	<1.0	<1.0	0.96 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.3 J	<1.0
	08/28/01	2.7 J,B	1.9 J	<1.0	<1.0	7.2 J	0.92 J	<1.0	<2.0	<1.0	<1.0	0.35 J	0.46 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/23/02	10 U	1.3	<1.0	<1.0	6.5	0.71 J	<1.0	<2.0	<1.0	<1.0	<1.0	0.43 J	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	09/17/02	<10	0.64 J	<1.0	<1.0	4.9	0.73 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/08/03	2.5 J	3	<1.0	<1.0	4.9	1.7 J	<1.0	<2.0	<1.0	<1.0	<1.0	0.81 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.68 J	<1.0
	04/24/04	10 U	2.1	<1.0	<1.0	6	1.3 J	<1.0	<2.0	<1.0	<1.0	<1.0	0.58 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.56 J	<1.0
	02/17/06	10 U	3.4	1.0 U	1.0 U	5.6	1.9 J	1.0 U	<2.0	1.0 U	1.0 U	1.0 U	1.3	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.9	1.0 U
	08/31/06	3.1 J	3.3	1.0 U	1.0 U	13	1.8 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.85 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	1.0 U
	06/14/07	10 U	2.1	1.0 U	1.0 U	8.8 J	1.3 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.73 J	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.87 J	1.0 U
	07/22/08	10 U	1.4	1.0 U	1.0 U	11	0.91 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.49 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.62 J	1.0 U
	07/15/09	10 U	1.9	1.0 U	1.0 U	7.9	1.0 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.94 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	1.0 U
	07/22/10	1.3 J	1.2	1.0 U	1.0 U	11	0.85 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.65 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.63 J	1.0 U
	10/13/11	10 U	3	1.0 U	1.0 U	8.4	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3	2.0 U
	02/07/13	10 U	2.5	1.0 U	1.0 U	14	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.1	2.0 U
	06/11/14	25 U	1.4	1.0 U	1.0 U	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	2.0 U
	09/23/15	10 U	1.0 U	1.0 U	1.0 U	6.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/02/16	10 UJ	1.0 U	1.0 U	1.0 U	5.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	03/27/18	10 U	1.6	1.0 U	1.0 U	9.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/06/19	10 U	1.6	1.0 U	1.0 U	16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
OW-21	09/22/94	6 J	5 J	<10	<10	<10	<10	10 J	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/29/95	<10	8 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/16/99	<10	5.8	<1.0	<1.0	0.11 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.26 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.89 J	<1.0
	01/04/00	<10	3.8 B	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	0.11 J	<1.0	<1.0	<1.0	<1.0	<10	0.10 J,B	<1.0	<1.0	-	0.055 J	<1.0	0.46 J	<1.0
	06/07/00	<10	5.4	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.54 J	<1.0
	03/13/01	10 UJ	4.5	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.70 J	<1.0
	08/30/01	10 U	3.2	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	0.38 J	<1.0	<1.0	-	<1.0	<1.0	0.25 J	<1.0
	04/25/02	<10	2.4	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	0.33 J	<1.0
	09/18/02	<10	2.5	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.39 J	<1.0
	04/09/03	<10	3.7	<1.0	<1.0	<1.0	<2.0	<1.0	5.5	<1.0	<1.0	<1.0	<1.0	<1.0	<10	0.51 J	<1.0	<1.0	-	<1.0	<1.0	0.88 J	<1.0
	04/24/04	<10	2.9	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.56 J	<1.0
	02/16/06	10 U	3.0	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.52 J	1.0 U
	08/29/06	10 U	2.4	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	0.27 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.83 J	1.0 U
	06/13/07	10 U	2.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.67 J	1.0 U
	07/23/08	10 U	5.6	1.0 U	1.0 U	1.0 U	<2.0	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 J	1.0 U
	07/15/09	10 U	2.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.80 J	1.0 U
	07/20/10	10 U	1.9	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.71 J	1.0 U
	10/13/11	10 U	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/08/13	10 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/10/14	25 U	1.8	0.98 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.27 J	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.78 J	2.0 U
	09/24/15	10 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/01/16	10 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	03/27/18	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/06/19	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-22	09/24/94	<10	100	<10	<10	9 J	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	5 J
	04/28/95	<10	48	<10	<10	10 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	1 J	<10	<10	<10
	02/17/99	<25	46	<2.5	<2.5	8.0	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	2.4 J	<2.5	<25	1.1 J,B	<2.5	<2.5	-	0.87 J	<2.5	4.2 J	3.5
	01/04/00	1.5 J	37 B	0.41 J	<1.2	5.8	<2.5	<1.2	<2.5	0.21 J	<1.2	<1.2	<1.2	0.098 J	<12	0.23 J,B	<1.2	<1.2	-	0.58 J	0.073 J	1.5 J	1.7
	06/07/00	<10	11	<1.0	<1.0	5.8	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	1.4
	03/13/01	10 UJ	12	<1.0	<1.0	8.2	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.70 J	<1.0	<10	<1.0	<1.0	<1.0	-	0.56 J	<1.0	0.76 J	1.9
	08/30/01	10 U	3.4	<1.0	<1.0	4.6	<2.0	0.34 J	<2.0	<1.0	<1.0	<1.0	0.36 J	<1.0	<10	0.36 J	<1.0	<1.0	-	0.45 J	<1.0	<2.0	1.7
	04/25/02	<10	4.2	<1.0	<1.0	3.7	<2.0	<1.0	<2.0	<1.0	0.29 J	<1.0	<1.0	<1.0	<10	1.2 U	<1.0	<1.0	-	1.0 U	<1.0	0.39 J	2.7 U
	09/18/02	<10	2.9	<1.0	<1.0	4.2	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.8
	04/09/03	<10	8.7	<1.0	<1.0	8.5	0.66 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	0.40 J,B	<1.0	<1.0	-	<1.0	<1.0	0.56 J	1.6
	04/24/04	10 U	4.2	<1.0	<1.0	5.9	0.24 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	0.23 J	<1.0	0.32 J	1.1
	02/16/06	10 U	7.5	1.0 U	1.0 U	11	0.31 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.59 J	1.0 U	<10	0.59 J	1.0 U	1.0 U	-	0.26 J	1.0 U	0.29 J	1.0
	08/31/06	10 U	2.8	1.0 U	1.0 U	5.3	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.37 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.24 J	1.0 U	0.41 J	1.1
	06/14/07	10 U	3.5	1.0 U	1.0 U	4.8	0.26 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.50 J	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	0.21 J	1.0 U	0.37 J	0.76 J
	07/23/08	10 U	1.9	1.0 U	1.0 U	4.6	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.17 J	1.0 U	0.32 J	0.66 J
	07/15/09	10 U	5.1	1.0 U	1.0 U	7.8	0.34 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.53 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.19 J	1.0 U	0.35 J	1.0 U
	07/20/10	10 U	2.5	1.0 U	1.0 U	4.5	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.26 J	0.64 J
	10/13/11	10 U	5.3	1.0 U	1.0 U	18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/08/13	10 U	6.2	1.0 U	1.0 U	9.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/10/14	25 U	3.5	1.0 U	1.0 U	5.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.41 J	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37 J	0.39 J
	09/24/15	10 U	2.0	1.0 U	1.0 U	4.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/01/16	10 U	1.8	1.0 U	1.0 U	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	03/28/18	10 U	5.6	1.0 U	1.0 U	7.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/06/19	10 U	2.4	1.0 U	1.0 U	9.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte		Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV		50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL		NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																						
OW-23	02/17/06	10 U	0.38 J	1.0 U	1.0 U	1.0 U	0.31 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.66 J	1.0 U
	05/23/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.31 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	0.44 J	1.0 U	1.0 U	0.39 J	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42 J	1.0 U
	11/30/06	10 U	0.23 J	1.0 U	1.0 U	1.0 U	0.27 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U	0.51 J	1.0 U
OW-24	02/20/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	0.22 J	1.0 U	2.0 U	<1.0
	05/24/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	0.45 J	1.0 U	1.0 U	2.0 U	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	11/29/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	3.6 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	2.0 U	1.0 U
	07/22/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	0.47 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	3.6 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/07/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	09/23/15	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/02/16	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	03/27/18	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/06/19	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-25	02/20/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	05/23/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		2.0 U	1.0 U
	08/31/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	11/29/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/23/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/16/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/22/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/07/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U

Notes:
TCL = Target Compound List
NYSDEC SGV = New York State Department of Environmental Conservation Standards (S) and Guidance (G) Values for groundwater
U.S. EPA MCL= United States Environmental Protection Agency Maximum Contaminant Level for drinking/groundwater
* = The principal organic contaminant (POC) standard for groundwater of 5 ug/L applies to this substance.
U (DATA VALIDATION QUALIFIER) = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
< = Analyte not detected at reporting limit
B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.
Red = **Concentrations detected above regulatory limit**
Blue = **Analyte detected at or below the regulatory limit, or analyte detected but no regulatory criteria specified**
UJ = (DATA VALIDATION QUALIFIER) = Analyte not detected above the reporting limit; however, the reporting limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Pre-1999 data from RETEC 1995
Pre-1999 analysis performed by Method 8240
1999 and later analyses performed by Method 8260B
NA = Not applicable; no criteria specified
NR = Analyte not reported
R = Data rejected during validation
J = Estimated result; result is less than reporting limit.

Appendix C

Data Quality Review - Checklist

Tier II
VOA Organic Data Review Summary

Job No./Matrix: 240-113949-10478608/ groundwater	**Completion Date**: 7/8/2019
Project No.: 104-0012	**Reviewer**: Barbara Jones
Laboratory: Eurofins TestAmerica, Canton (formerly TestAmerica, North Canton, OH)	

Review Criteria	Data Qualified Yes / No	Samples Qualified
1. Data completeness	No	A complete 593-page data package was provided with reagent traceability documentation, standards data, QC sample results and association, and all other information needed for review.
2. Preservation/holding time	No	The lab reported that all samples arrived in good condition, properly preserved, and on ice. All analyses were preformed within the 14-day analytical window.
3. GC/MS tuning/instrument performance check – **Form V**	No	Form Vs for three instruments were provided and covered all standards, regular samples, and QC samples. BFB mass spectrum met ion abundance criteria in all cases.
4. Calibration:		
4A – Initial – **Form VI**	No	Form VIs and backup (quantitation sheets, chromatograms, etc.) provided for three instruments, A3UX10, A3UX11, and A3UX17.
4B – Continuing – **Form VII**	No	Form VIIs and backup (quantitation sheets, chromatograms, etc.) provided for three instruments, A3UX10, A3UX11, and A3UX17.
5. Blanks:		
5A - Laboratory (method) blanks – **Form IV**	No	Form IVs for three method blanks for three instruments covering all samples and QC samples were provided. The MB Form Is indicate no VOC detections.
5B – Field blanks	No	One field blank was collected by pouring laboratory-provided ultrapure water into a sample container. Acetone was reported at 10 ug/L, which is the quantitation (reporting) limit. No qualifications are made because acetone is a common laboratory contaminant and would only require qualification if reported at 10x the quantitation limit. Acetone was not detected in any field sample.
5C - Equipment rinsates	No	A rinsate blank (PUMP BLANK) was collected from the bladder pump used to collect groundwater samples by rinsing it with ultrapure water provided by the laboratory. The PUMP BLANK

		was nondetectable for all reported VOCs; there are no qualifications.
5D – Trip Blanks	No	A trip blank made up of ultrapure water in a sample container was sent with the sample cooler. No VOCs were detected in the trip blank.
6. Surrogate recovery – **Form II**	No	Recoveries for DBFM, DCA, TOL, and BFB(four surrogates) were within upper and lower limits for all samples and QC samples.
7. Lab-control sample – **Form III**	No	There were three LCS samples, and recoveries were all within the specified QC limits.
8. Matrix spike/matrix spike duplicates – **Form III**	Yes	Relative percent differences (RPD) for OW-6 MSD were not met for 1,1,2-trichloro-1,2,2-trifluoroethane and chloroethane (recoveries were within limits). RPDs for OW-18 MSD exceeded the RPD limit for bromomethane. Results for these constituents and these samples are qualified as UJ (nondetectable but estimated).
9. Field duplicates	No	OW-5 and OW-5 DUP were field duplicates. RPDs for the three detected VOCs were low (maximum of 11.9%), well below the 30% QC limit.
10. Internal standards performance - **Form VIII**	No	Internal standard areas and retention time summary sheets were provided for three instruments, covering standards, samples, and QC samples. All results fell between upper and lower limits.
11. Compound quantitation and reporting	No	Two samples required dilutions, OW-2 (2.5X), and OW-6 (2X). Spot checked OW-19, OW-2, and OW-6 quantitation sheets; no errors detected.
12. Tentatively identified compounds	Not applicable	TIC reporting is not required for this project.