



engineering and constructing a better tomorrow

June 26, 2020

Mr. Charles Gregory
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

**Subject: 2019 Long Term Monitoring Event – Mohonk Road Industrial Plant Site
(NYSDEC Site 356023)
MACTEC Engineering and Geology, P.C., Project No. 3611191234**

Dear Mr. Gregory:

MACTEC Engineering and Geology, P.C., (MACTEC), under contract to the New York State (NYS) Department of Environmental Conservation (NYSDEC) has prepared this data report for the Mohonk Road Industrial Plant (MRIP) Site (Site No. 356023) (Figure 1). This report provides results for the 2019 Long Term Monitoring (LTM) conducted at the Site. The site description and background information are provided in the Second MRIP 5-Year Review Report (United States Environmental Protection Agency [USEPA], 2019) and the Record of Decision (ROD) Amendment (USEPA, 2008).

The LTM was conducted for the Site in accordance with the Scope of Work, the Field Activities Plan and Work Assignment D007619-48 and this LTM report includes the following evaluations:

- Evaluation of near field and far field sampling results.
- Evaluation of LTM well condition and recommended maintenance or abandonment including:
 - Evaluation of the five FLUTE wells for possible well modification, and
 - Assessment of existing well network and recommendations on well abandonment or repair.
- Evaluation of existing LTM analyte list for optimization including:
 - Evaluation of 1,4-dioxane and PFAS parameters,
 - Evaluation of sampling frequency reduction from annual to 15-month duration, and

- Recommendations for the use of passive diffusion bags for groundwater sampling.

SCOPE OF WORK

The LTM and sampling event at the Site was conducted by MACTEC from July 8 through July 12, 2019 and consisted of:

- Well Assessment,
- Groundwater Elevation Monitoring, and
- Groundwater Sampling and Analysis.

This section of the report details the activities which were planned and occurred during the July 2019 groundwater monitoring event at the Site. Supplemental material is contained in the following attachments:

- Attachment A - Field Data Records (FDRs) and trip report related to the groundwater sampling;
- Attachment B - Assessment of the FLUTE wells as conducted by FLUTE;
- Attachment C - Laboratory Results and historical results;
- Attachment D - Contaminant concentration trends for the wells sampled in 2019.

WELL ASSESSMENT

The field crew located the monitoring wells on July 8, 2019 and completed the well assessment checklist (Attachment A). The list of wells, including their construction information and coordinate location, is provided on Table 1. Monitoring wells MW-9B and MW-10B could not be located. The current conditions of the monitoring wells are summarized in Table 2. The locations of the wells and site layout are shown on Figure 2 and Figure 3, respectively.

GROUNDWATER LEVEL MEASUREMENTS

A round of synoptic water level measurements was made on July 8, 2019 from each of the standard monitoring wells that could be located and accessed. Monitoring wells MW-9B and MW-10B could not be located. Monitoring well MW-13B was located but could

not be accessed. Water level measurements were collected from the FLUTE wells with the exception of MW-19. MW-19 could not be measured because the water level meter probe was too large to enter the measuring port. Water level measurements were also recorded for the five soil vapor extraction (SVE) wells (SVE-19, 20, 21, 22, 23).

The groundwater extraction system was not operational at the time of the synoptic water level round due to damages from a recent lightning strike. All but one of the extraction wells (ERT-1) had been switched on by July 10, 2019. The groundwater elevations from this event are summarized in Table 3, and historical groundwater elevations are presented in Table 4.

An interpreted bedrock potentiometric surface map for the July 2019 water level measurement is provided on Figure 4. Wells ERT-4, MW-4, and MW-5B are shallow wells located within the perched water table and the water level elevations are not included in the potentiometric surface contours shown in Figure 4.

GROUNDWATER SAMPLING

The ROD divided the plume into two categories based on volatile organic compound (VOC) concentrations: the “near field” plume is defined as the area where total groundwater VOC concentrations are greater than 1,000 parts per billion (micrograms per liter [$\mu\text{g/L}$]); the “far field” plume is defined at the area where total groundwater VOC concentrations are between 10 $\mu\text{g/L}$ and 1,000 $\mu\text{g/L}$. Annual monitoring includes sampling of the background, on-site, mid-plume, and perimeter wells in accordance with the 2019 Field Activities Plan (MACTEC, 2019) which was based on the 2013 LTM monitoring plan (AECOM, 2013), as presented in Table 5. The following wells were sampled during the LTM event:

- 14 conventional monitoring wells: MW-1B, MW-4, MW-5B, MW-6B, MW-8B, MW-11B, MW-11C, MW-12B, MW-14B, MW-15B, MW-16, ERT-2, ERT-3, and ERT-4,
- one multilevel monitoring wells installed by Flexible Liner Underground Tech. Ltd (FLUTE™ well): MW-18 (Ports 1-3),
- three extraction wells: ERT-1, MW-5R and MW-7R, and
- Four FLUTE™ wells were not sampled because of uncertainty surrounding their integrity. The wells not sampled included: MW-17 (Ports 1 - 3), MW-19 (Ports 1-3), MW-20 (Ports 1-3), and MW-21 (Ports 1, 2, 3, 4, 5, and 6). The wells were

assessed by a FLUTE™ representative and a summary of that assessment is provided in Attachment B and discussed below.

Three wells, MW-9B, MW-10B and MW-13B, were intended to be gauged and sampled; however, MW-9B and MW-10B could not be located and MW-13B was located but could not be accessed. Additional effort will be made to located and access these wells during the next sampling event.

The wells were sampled and analyzed for VOCs by USEPA Method 8260 and included analysis for 1,4-dioxane by USEPA Method 8270D-SIM and per- and poly-fluoroalkyl substances (PFAS) by modified Method 537. All samples were submitted to Eurofins TestAmerica for analysis.

MACTEC personnel sampled the wells from July 9 through July 12, 2019. All sampling procedures followed the approved methods; either low-flow, or grab samples. The one FLUTE™ well (MW-18) that was sampled was artesian and flowing. Samples were collected from three ports at MW-18 during this assessment. Approximately 1.3 gallons of water was purged through each of the three ports simply by opening the valves as they were under artesian flow prior to recording field parameters and collecting samples.

The FLUTE™ wells were examined, purged and assessed by FLUTE™ personnel on July 10, 2019. No other FLUTE™ wells were sampled during the assessment due to the time constraints of the FLUTE personnel and the decision to wait for a report on the viability of the FLUTE™ wells before committing to collecting samples. The FLUTE™ personnel did repair Port 3 of MW-21 which had been blocked for several years. FLUTE™'s well assessment report is included in Attachment B.

The Synoptic Water Level data sheet and the Low Flow Groundwater FDRs for each well are provided in Attachment A. Samples (including duplicate, matrix spike, matrix spike duplicate, trip blanks, and equipment rinse blank samples) were collected and sent to Eurofins TestAmerica in Amherst, New York for analysis of Contract Laboratory Program Target Compound List of Trace VOCs. Samples for 1,4-dioxane and PFAS analysis were sent to Eurofins TestAmerica Burlington, Vermont for analysis.

FINDINGS

The results for the 2019 LTM field effort are discussed below.

FLUTE™ Well Assessment.

Technicians from FLUTE™ assessed the wells and provided a summary which is provided in Attachment B. The assessment of the FLUTE™ wells are provided below.

- MW-17: All ports are functioning.
- MW-18: All ports are functioning. Water flowing around annulus, possibly due to a hole in the liner. The flowing water suggests that the liner is no longer sealing off the borehole and any samples from the well would not likely represent a given fracture or sample zone.
- MW-19: The well head has major corrosion and is in poor condition. The well appears to be artesian at times (perhaps seasonally). At the time of inspection, there appeared to be approximately 4 feet of liner head (water inside the liner used to seal the liner to the borehole wall) compared to that in the formation. There should be 5 to 10 feet of excess head in the liner (compared to formation) to assure an adequate seal. If the differential in water levels is less than 5 feet, the liner may not create a proper seal and the target sampling zones may be compromised.
- MW-20: Well is in good condition a fully functioning.
- MW-21: Well is artesian. Port 3 does not work. There is visible mud in the liner with water coming up around it. The well liner appeared to be pressure grouted at the time of construction (due to artesian conditions) but is still leaking. Additional grout needs to be added to liner to prevent continued leaking. The flowing water suggests that the liner is no longer sealing off the borehole and samples from the well may not represent a given fracture or sample zone.

Conventional Well Assessment. The results of the inspection of the conventional wells are provided in Table 2. Four wells (MW-4, MW-8, MW-12B and MW-14B) need new replacement locks. MW-13B could not be opened because its steel cap was rusted to the steel riser. Wells MW-9B and MW-10B could not be located.

Groundwater Elevations.

The bedrock potentiometric surface map constructed using the July 8, 2019 water level measurements indicates that flow direction varies from north to northeast across the site (Figure 4). Because the recovery wells were not pumping at the time of gauging, there was no capture zone. The lack of hydraulic capture is apparent in the potentiometric surface. The significantly lower hydraulic gradient between the 250-foot elevation contour and the 240-foot elevation contour compared to the elevation contours from 230

feet down, suggest that the hydraulic conductivity of the aquifer beneath the Site in the near field is higher than to the north in the far field.

Although there are no co-located nested wells within the near field of the Site, MW-7R/7B and ERT-4/MW-4 are relatively close to each other. Comparing groundwater elevations in these wells indicates that the vertical hydraulic gradient is downward from overburden/shallow bedrock to deeper bedrock, which is consistent with the conceptual site model presented in the Conceptual Site Model Data Gap Review (MACTEC, 2015).

Groundwater elevations measured in July 2019 are higher than those reported in October 2014, 2016 and 2017 (Table 4). However, water levels recorded in July 2019 are similar to those recorded in November 2015 suggesting that the recovery wells were off at that time too.

Groundwater Sampling Results – July 2019.

Table 6 presents the groundwater sampling results for the 2019 LTM. Table 7 presents the field parameters for the 2019 LTM event. These results have been compared to 2016/2017 groundwater sampling results presented in the Second Five-Year Review Report (USEPA, 2019). The 2016/2017 groundwater sampling results are included in Attachment C-1. Laboratory results for the 2019 LTM sampling round are provided in Attachment C-2. The chemist's data review report is provided in Attachment C-3.

VOCs. An isoconcentration map of the summed values of 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), trichloroethene (TCE) and 1,1-dichloroethene (1,1-DCE) detected in each well is shown on Figure 5. The 1,000 and 100 µg/L isoconcentration lines are similar to those drawn on Figure 7 of the Second Five-Year Review Report (USEPA, 2019). For the wells that were not sampled in 2019 (MW-17, MW-19, MW-20, MW-21, MW-9B, MW-10B and MW-13B), results from 2017 were used to construct the map. For FLUTe™ wells, data collected from the upper zone was used because concentrations were generally the highest for the well.

The concentration of VOCs in wells within the near field plume in 2019 are basically the same as those in 2016/2017. MW-4, MW-5B and ERT-4 all had total VOCs exceeding 1,000 µg/L with 1,1,1-TCA comprising the majority of that exceedance. The concentrations were similar between 2019 and 2016/2017; however, the concentration in MW-5B has dropped by nearly half for 1,1,1-TCA.

In far field wells, concentrations are similar between the historical and current sampling events; however, there is a decrease in concentration (nearly half) for the four target VOCs (1,1,1-TCA, 1,1,-DCA, TCE, 1,1-DCE) in MW-16 (Table 6 and Attachment C-1). In contrast, the concentration of total target VOCs in MW-12B is three times higher in 2019 than it was in 2017 (11 vs 34 $\mu\text{g/L}$).

Concentration trend plots for wells sampled in 2019 are provided in Attachment D. The following is a summary of the results for 1,1,1-TCA, 1,1-DCA, TCE and 1,1-DCE (target VOCs) for wells sampled in 2019:

- ERT-4 - concentration of target VOCs is virtually unchanged over the past three rounds of samples (since 2016),
- MW-11B - concentration of VOCs appears unchanged,
- MW-11C - concentration of VOCs appears unchanged,
- MW-12B - concentration of VOCs are higher than they were in 2017 and 2015,
- MW-14B – concentration of VOCs dropped by approximately half compared to the past two years,
- MW-15B – concentrations of VOCs are nearly the same as they were in 2017,
- MW-16 – concentrations of VOCs have shown a steady decline since 2016,
- MW-18 – Zone 1 was higher this year than the past two years, however it was lower than was recorded three years ago. Zones 2 and 3 this year were higher than the past 10 years in either zone, and
- MW-1B – concentrations have not changed from previous years, it is still non-detect for target VOCs.

1,4-DIOXANE RESULTS. The NYS proposed maximum contaminant level for 1,4-dioxane of 1 $\mu\text{g/L}$ in groundwater was met or exceeded in all but two wells sampled (MW-1B and MW-6B). The highest concentration was detected in ERT-4 at 12 $\mu\text{g/L}$. Although FLUTE™ well MW-18 had no target VOC exceedances, 1,4-dioxane concentrations in the three zones sampled exceeded the NYS proposed level for 1,4-dioxane. An isoconcentration map of the values of 1,4-dioxane detected in each well is shown on Figure 6. As the map illustrates, the likely extent of the 1 $\mu\text{g/L}$ isoconcentration line (the NYS proposed maximum contaminant level) continues to Roundout Creek.

PFAS. The concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) in groundwater were below the NYS proposed maximum contaminant level of 10 nanograms (ng/L) for each compound in groundwater for all wells that were sampled. The highest concentration of PFOS and PFOA were detected in ERT-4 at 4.5 ng/L and 6.8 ng/L, respectively.

RECOMMENDATIONS

FLUTE™ Wells.

- The integrity of zones monitored in three of the five multi-port FLUTE™ wells may be compromised. The wells could possibly be repaired; however, given the technical complexity associated with sampling these wells, and the LTM stage of the project (as opposed to an investigation stage), it is recommended that all five of the FLUTE™ liners be removed and two conventional 2-inch polyvinyl chloride nested wells be constructed within each borehole. The nested wells would monitor a shallow and deep zone of the bedrock aquifer and would provide vertical hydraulic gradient data as well as a simplified and cost-effective method for gauging and sampling.

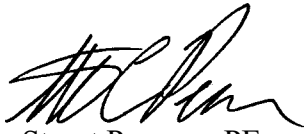
Groundwater Sampling.

- PFAS compounds were detected, but none were detected at concentrations above the NYS proposed maximum contaminant level of 10 µg/L in groundwater. Therefore, additional sampling for PFAS compounds is not recommended.
- Sufficient data has been collected on an annual basis to be able to assess the overall concentration trends in groundwater. It is recommended that annual LTM groundwater sampling be changed to a 15-month event to incorporate seasonality in the data.
- 1,4-Dioxane exceeded the NYS proposed maximum contaminant level of 1 µg/L in groundwater in all but two wells samples (MW-1B and MW-6B). It is recommended that sampling for 1,4-dioxane by 8270D-SIM continue to be part of the LTM analyte list.
- Once the 5 FLUTE™ wells are converted in to conventional wells, it is recommended that sampling for 1,4-dioxane and target VOCs at all LTM monitoring locations be conducted using passive diffusion bag samplers.

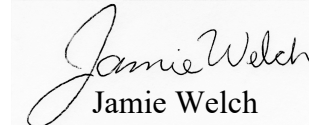
If you have any questions or need any additional information, please feel free to call us at 207-775-5401.

Sincerely,

MACTEC Engineering and Geology, P.C.



Stuart Pearson, PE
Project Manager



Jamie Welch
Project Lead

Enclosures:

Figures

Tables

Attachment A: Field Data Records

Attachment B: FLUTE™ Assessment

Attachment C: Historical and Current Sampling Results

Attachment D: Concentration Trend Plots

REFERENCES

AECOM, 2013. Annual Monitoring Well Sampling Report, Mohonk Road Industrial Plant Superfund Site, Hamlet of High Falls, New York. November 2013.

MACTEC Engineering and Consulting, P.C. (MACTEC), 2015. Conceptual Site Model (CMS) and Data Gap Review, Mohonk Road Industrial Plant, NYSDEC, Site Number 356023. July 2015.

MACTEC, 2019. Field Activities Plan – Mohonk Road Industrial Plant Site, Site Number 356023. August 2019.

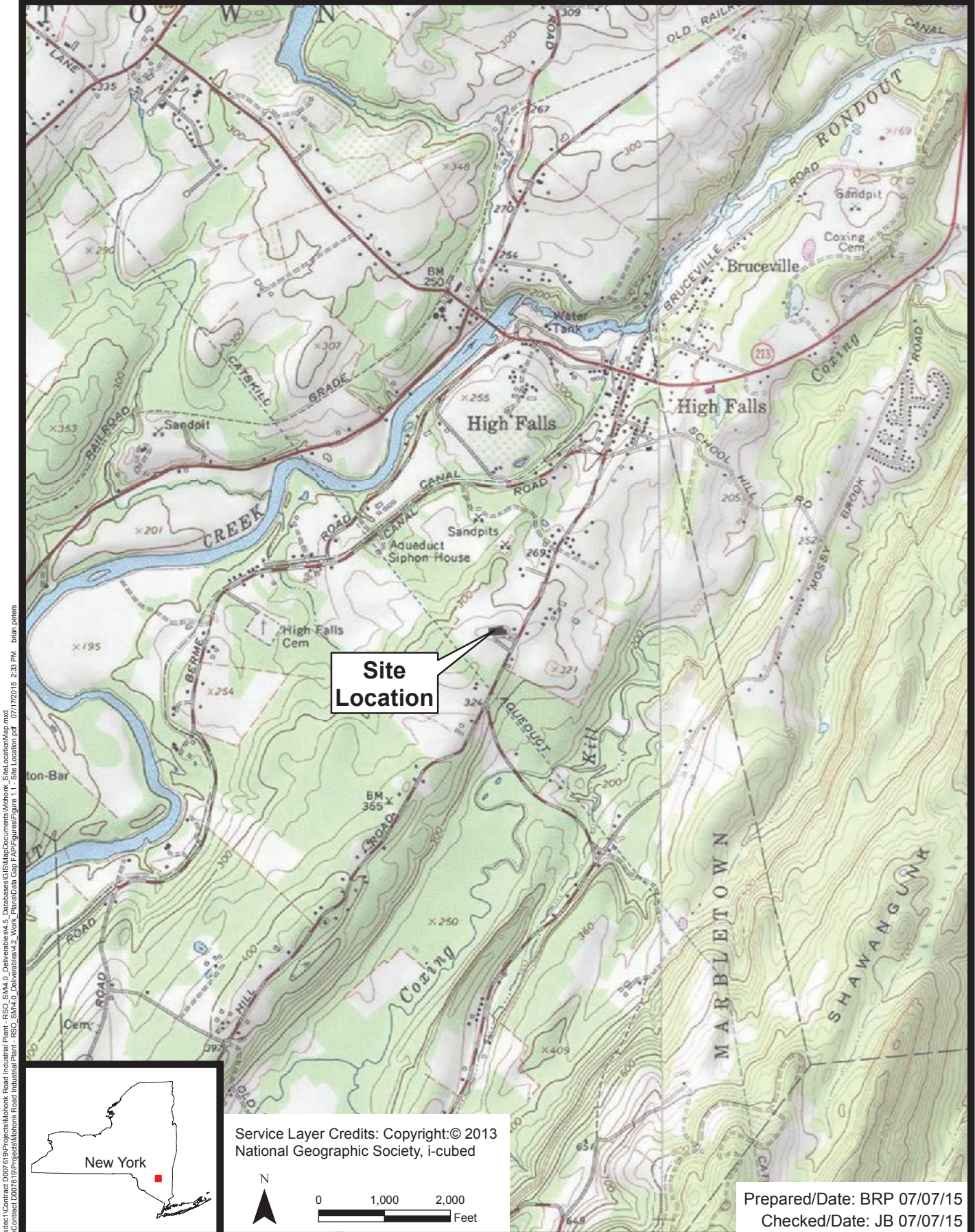
United States Environmental Protection Agency (USEPA) Region 2, 2008. Record of Decision Amendment, Mohonk Road Industrial Plant Superfund Site, Hamlet of High Falls, Ulster County, New York. September 2008.

USEPA, 2019. Second Five-Year Review Report, Mohonk Road Industrial Plant Superfund Site, Hamlet of High Falls, Ulster County, New York. May 2019

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

1,1,1-TCA	1,1,1-trichloroethane
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1,-dichloroethene
FDR	Field Data Record
FLUTE™	Flexible Liner Underground Tech. Ltd
LTM	Long Term Monitoring
MACTEC	MACTEC Engineering and Consulting, P.C.
µg/L	micrograms per liter
MRIP	Mohonk Road Industrial Plant
ng/L	nanograms per liter
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
PFAS	per- and poly-fluoroalkyl substances
PFOS	perfluorooctane sulfonate
PFOA	perfluorooctanoic acid
ROD	Record of Decision
Site	Mohonk Road Industrial Plant Site
SVE	soil vapor extraction
TCE	trichloroethene
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

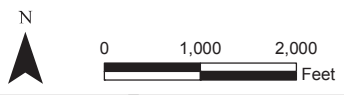
FIGURES



Document: P:\Projects\Projects\Mohawk Road Industrial Plant - RSO_SMA4.0\Drawings\4.5_Plan\Drawings\Map\Documents\Map\SiteLocationMap.mxd
PDF: P:\Projects\Projects\Mohawk Road Industrial Plant - RSO_SMA4.0\Drawings\4.5_Plan\Drawings\Map\Documents\Map\SiteLocationMap.pdf 07/12/2015 2:33 PM brian.peterson



Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed



Prepared/Date: BRP 07/07/15
Checked/Date: JB 07/07/15

NYSDEC
Mohawk Road Industrial Plant
Marbletown, New York



Site Location Map
Project 3611191234 Figure 1



Legend

- Standard Monitoring Well
- FLUTe Monitoring Well

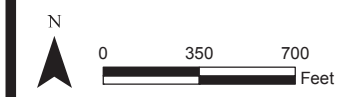
Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

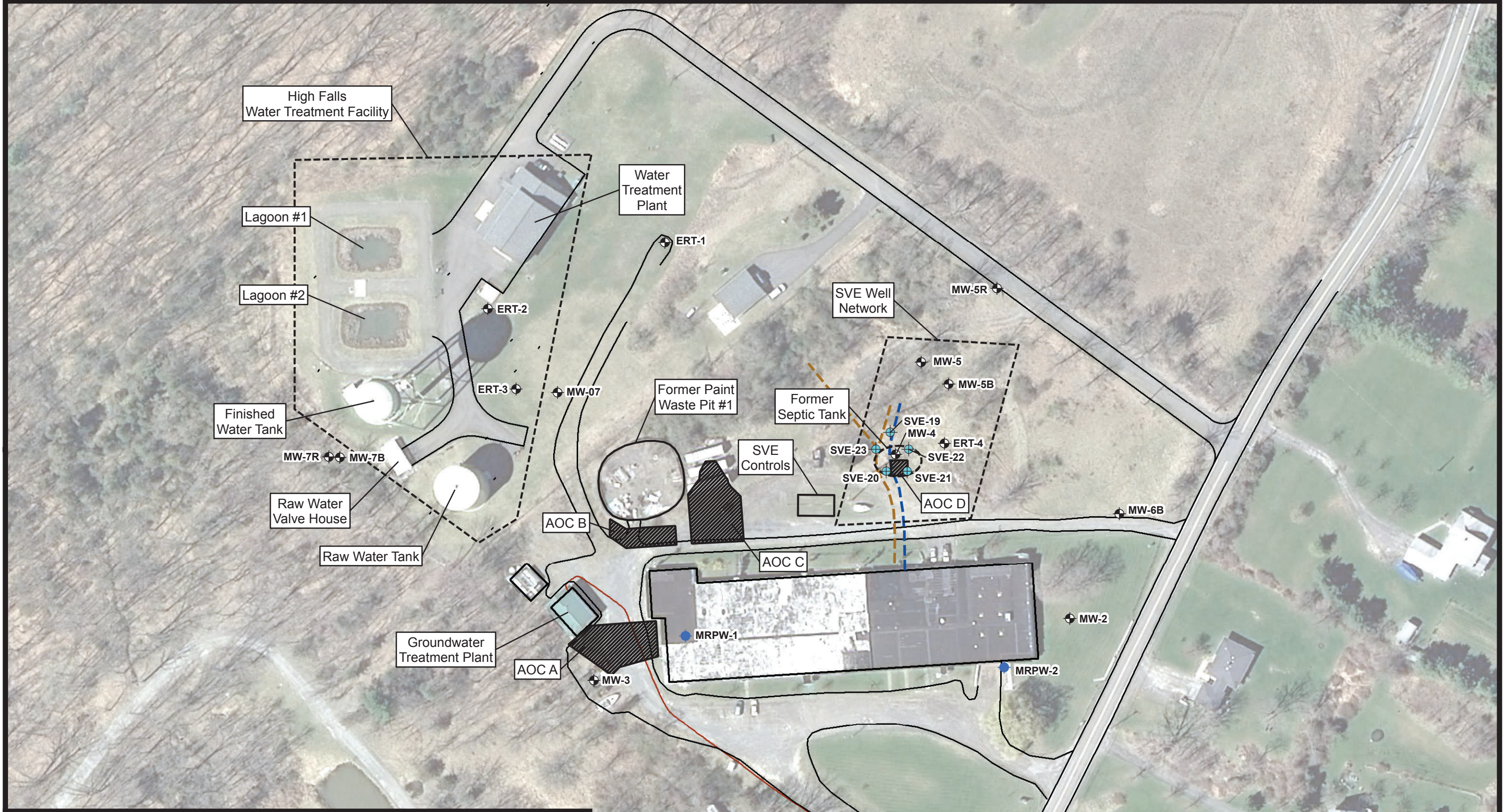
NYSDEC
Mohok Road Industrial Plant
Marbletown, New York



Well Location Map
Project 3611191234
Figure 2

Prepared/Date: BRP 10/07/19
Checked/Date: JKR 10/07/19





Legend

◆ (with crosshair)	Approximate Monitoring Well Location	— (dashed orange)	Approximate Sanitary Line
● (blue)	Approximate Location of Existing Production Well	— (dashed blue)	Approximate Drain Line
◆ (with crosshair and blue dot)	SVE Well Location	— (solid black)	Building
		— (solid grey)	Road/Driveway/Parking
		— (solid red)	Treatment System Discharge

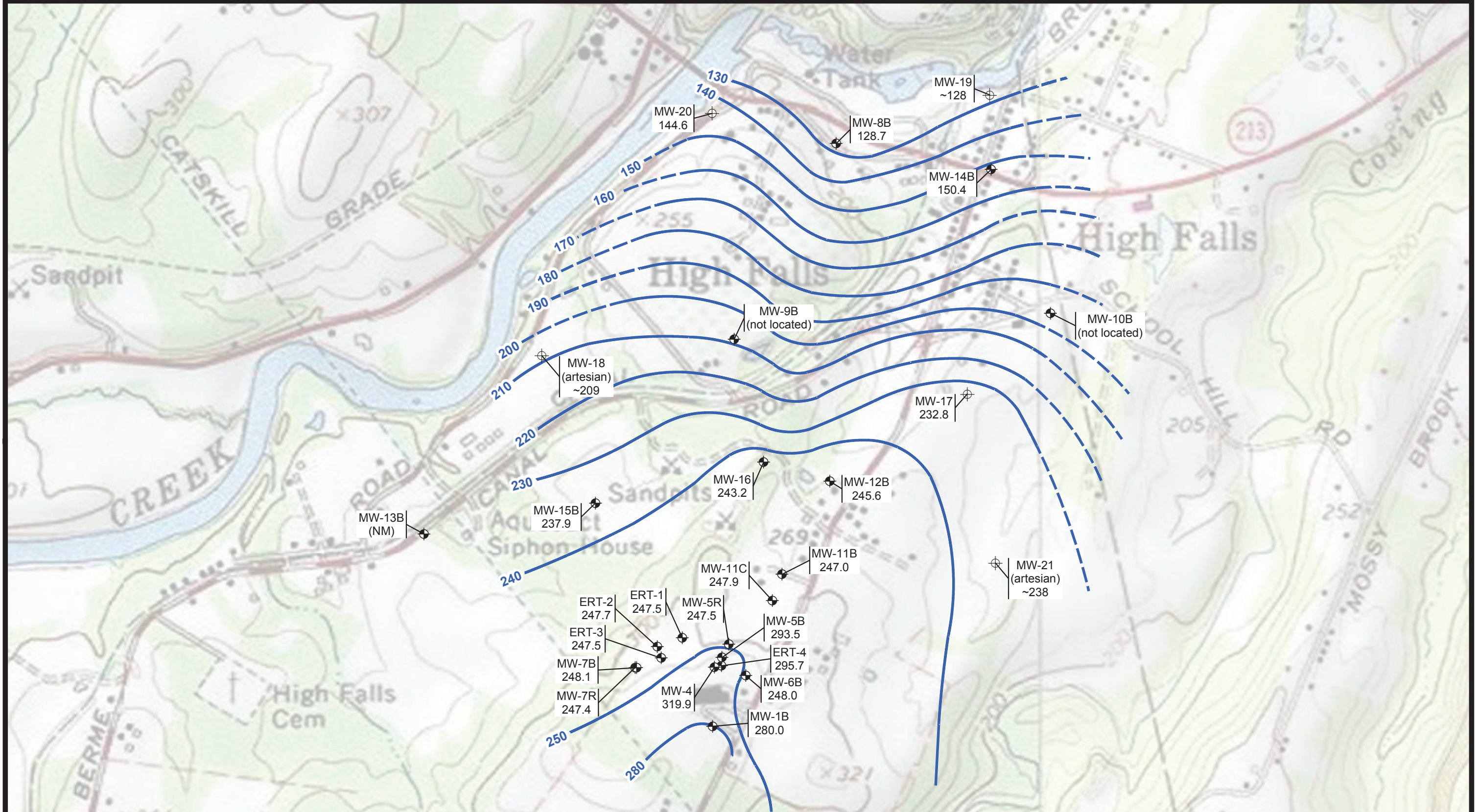
0 50 100 Feet

Ulster County color digital orthoimagery (2013) obtained from New York State GIS Clearinghouse at: <http://www.nysgis.state.ny.us>

Prepared/Date: BRP 10/07/19
Checked/Date: JKR 10/07/19

NYSDEC
Mohonk Road Industrial Plant
Marbletown, New York

Site Layout
Project 3617157346
Figure 3



Legend

- Standard Monitoring Well
- FLUTE Monitoring Well
- Overburden Groundwater Elevation Contour (feet above msl)
- Dashed where Inferred
- ~ 209 = Estimated Water Elevation
- NM = Not Measured

Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

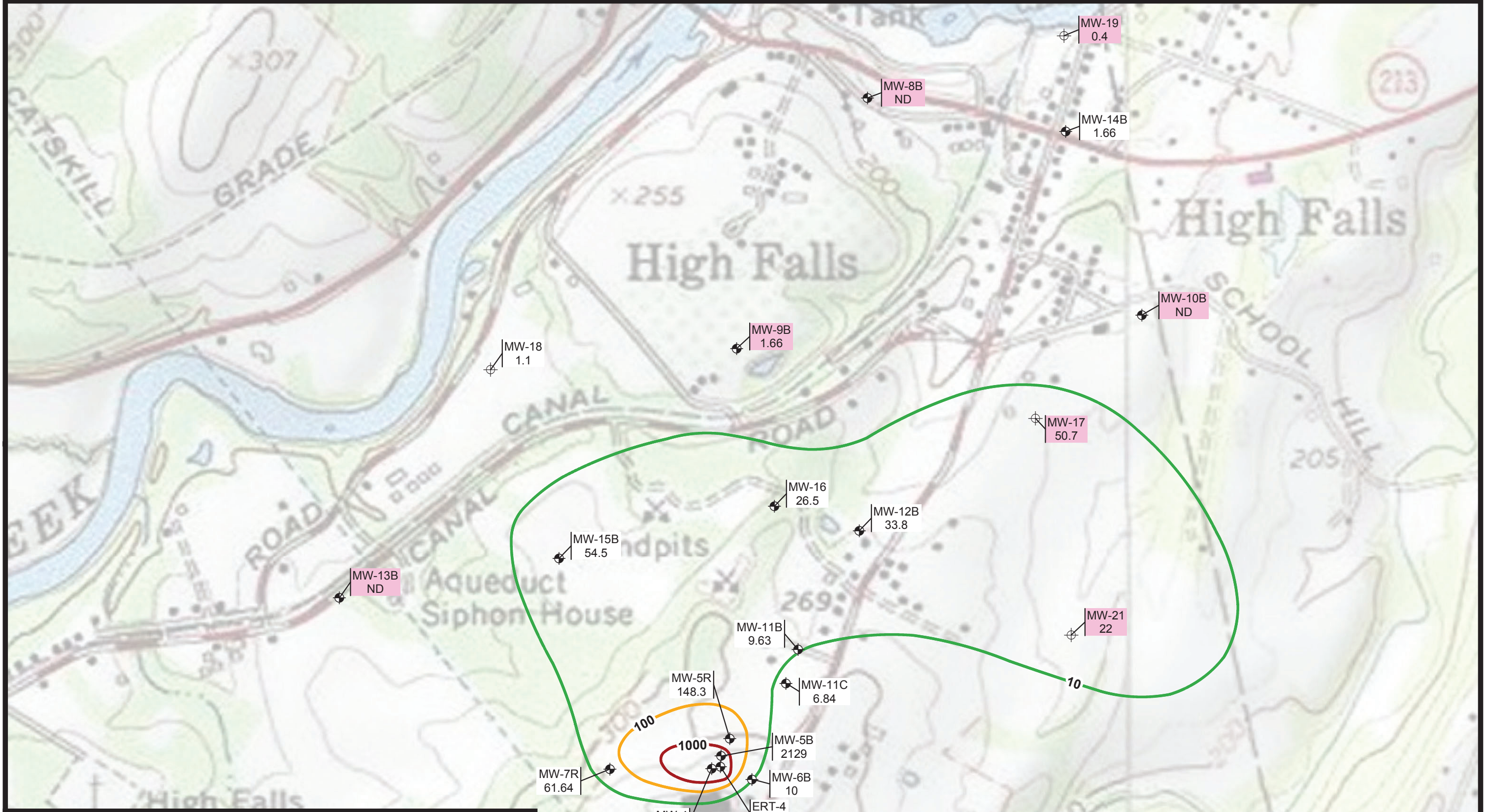
NYSDEC
Mohok Road Industrial Plant
Marbletown, New York



Water Elevation Contours
July 2019
Project 3611191234

Prepared/Date: BRP 10/07/19
Checked/Date: JKR 10/07/19

Figure 4



Legend

- Total VOCs (µg/L):
 - 10 (Green line)
 - 100 (Yellow line)
 - 1000 (Red line)
- Standard Monitoring Well (Black circle with crosshair)
- FLUTe Monitoring Well (Black circle with crosshair and dot)
- ND - Not Detected
- 2017 Sampling Results (Pink box)

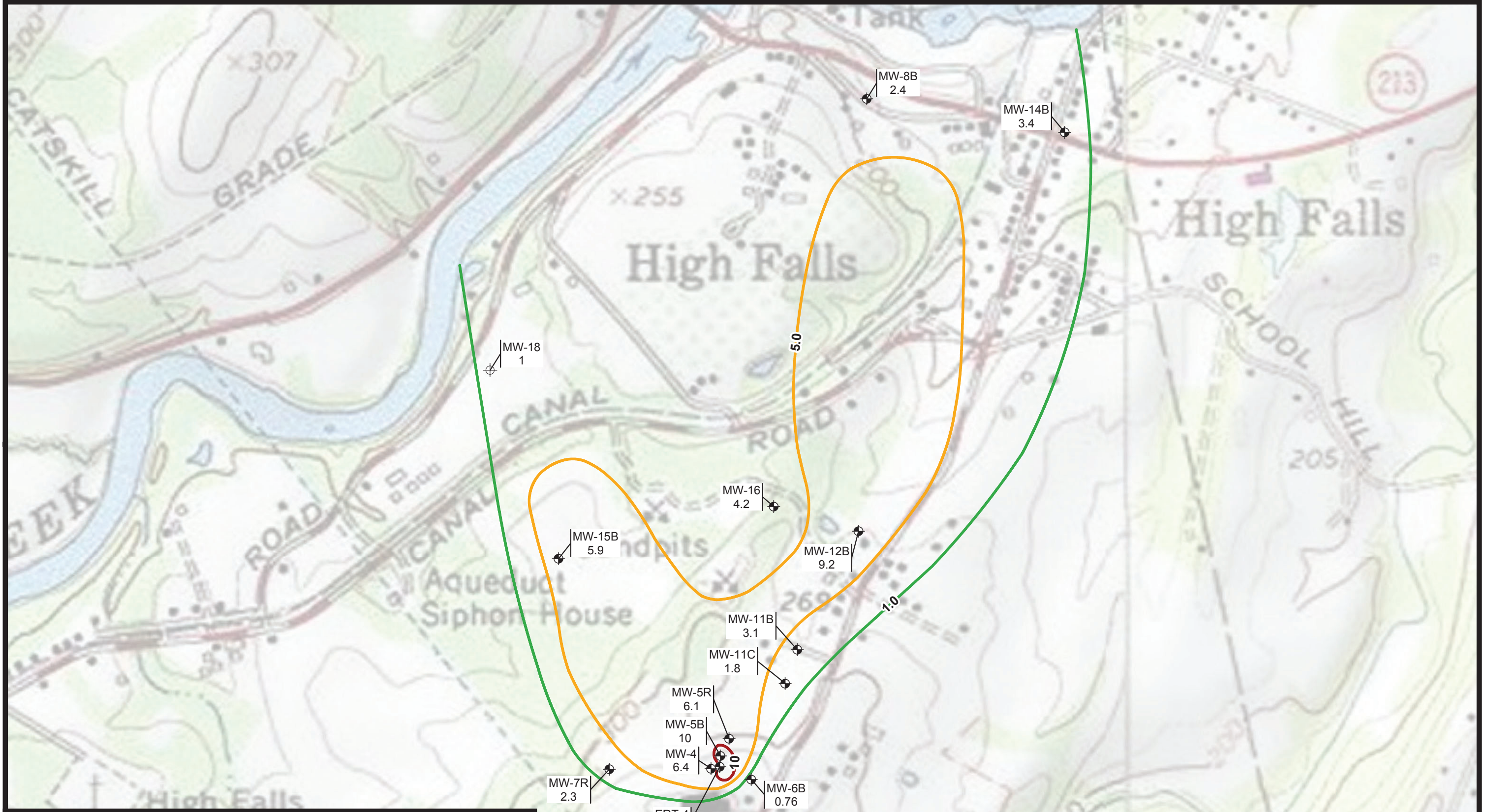
Scale: 0, 275, 550 Feet
 Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

NYSDEC Site # 356023
 Mohonk Road Industrial Plant
 Marletown, New York



Prepared/Date: BRP 11/22/19
 Checked/Date: RHA 11/22/19

Total VOCs (1,1,1-TCA, 1,1-DCA, TCE, 1,1-DCE)
 Isoconcentrations in Groundwater (July 2019)
 Project 3611191234
 Figure 5



Legend

1,4-Dioxane (µg/L):

- 1 (Green line)
- 5 (Orange line)
- 10 (Red line)

Standard Monitoring Well
 FLUTe Monitoring Well
 ND - Not Detected

N
 0 275 550 Feet
 Topographic map: Copyright:© 2013 National Geographic Society, i-cubed

NYSDEC Site # 356023
 Mohonk Road Industrial Plant
 Marletown, New York

1,4-Dioxane
 Isoconcentrations in Groundwater (July 2019)
 Project 3611191234

Prepared/Date: BRP 11/22/19
 Checked/Date: RHA 11/22/19

Figure 6

TABLES

Table 1 - Monitoring Well Construction Summary

Monitoring Well	X Coordinate	Y Coordinate	Sampling Interval		Construction Information		
			Depth (ft bgs)	Elevation (ft amsl)	Total Depth (ft bgs)	Bottom Elevation (ft amsl)	Top of Casing (ft amsl)
ERT-1 ²	571897.25	4629866	intake	intake	195	108.94	303.94
ERT-2	571843.56	4629843	190	119.81	200	109.81	309.81
ERT-3	571850.19	4629819	210	105.89	220	95.89	315.89
ERT-4	571979.5	4629806.5	45	281.67	50	276.67	326.67
MW-1B	571967.38	4629665	90	243.53	100	233.53	333.53
MW-4	571971.06	4629799	16	313.21	21.5	307.71	329.21
MW-5B	571981.81	4629825.5	33	292.3	36.2	289.1	325.3
MW-5R ²	572003.06	4629852	intake	intake	125	188.63	313.63
MW-6B	572042.38	4629780.5	90	233.95	100	223.95	323.95
MW-7B	571794.25	4629797	90	223.93	100	213.93	313.93
MW-7R ²	571790.75	4629797	intake	intake	180	134.3	314.3
MW-8B	572249.41	4630989.19	90	69.68	100	59.68	159.68
MW-9B	572016.88	4630545	135	113.21	145	103.21	248.21
MW-10B	572734.6	4630604	90	135.64	100	125.64	225.64
MW-11B	572126.19	4630011	171	110.72	181	100.72	281.72
MW-11C	572125	4630007	210	74.58	220	64.58	284.58
MW-12B	572234.19	4630222.41	190	68.2	200	58.2	258.2
MW-13B ³	571312.94	4630103	NA	NA	200	21.93	221.93
MW-14B	572600.32	4630930.34	145	11.67	155	1.67	156.67
MW-15B	571701.56	4630172.5	140	104.89	150	94.89	244.89
MW-16	572083.65	4630265.75	80	194.11	93	181.11	274.11
MW-17-1	572545.72	4630421.63	47	194.92	57	184.92	241.92
MW-17-2			102.5	139.42	110	131.92	241.92
MW-17-3			124	117.92	129	112.92	241.92
MW-18-1 ³	571579.98	4630508.22	96	108.45	101	103.45	204.45
MW-18-2 ³			123	81.45	128	76.45	204.45
MW-18-3 ³			140	64.45	145	59.45	204.45
MW-19-1 ³	572596.93	4631100.5	41.5	88.38	49	80.88	129.88
MW-19-2 ³			87.5	42.38	95	34.88	129.88
MW-19-3 ³			187.5	-57.62	195	-65.12	129.88
MW-20-1	571966.96	4631057.64	67	135.84	77	125.84	202.84
MW-20-2			97.5	105.34	111.5	91.34	202.84
MW-20-3			144	58.84	149	53.84	202.84
MW-21-1 ³	572596	4630042	42.75	190.84	48	185.59	233.59
MW-21-2 ³			67	166.59	69.5	164.09	233.59
MW-21-3 ³			75.5	158.09	78	155.59	233.59
MW-21-4 ³			121.5	112.09	124	109.59	233.59
MW-21-5 ³			142.5	91.09	145	88.59	233.59
MW-21-6 ³			160.5	73.09	163	70.59	233.59

Notes:

1. Data compiled in this table was captured from historic annual groundwater monitoring reports prepared by EPA.
2. Well is currently part of the groundwater extractions and treatment system (GWETS). Sampling locations are inside the GWETS building.
3. MW-17 through MW-21 are FLUTE wells. MW-18, 19 and 21 are artesian wells.

Table 2 - Monitoring Well Assessment July 8, 2019

Monitoring Well	X Coordinate	Y Coordinate	Comments
ERT-1	571897.25	4629866	Protective Casing Stickup = 2.5. Extraction well. 6" open hole.
ERT-2	571843.56	4629843	Protective Casing Stickup = 1.0. Open hole bedrock well, 6 inch ID.
ERT-3	571850.19	4629819	Protective Casing Stickup = 0.8. Open hole bedrock well, 6 inch ID.
ERT-4	571979.5	4629806.5	Prot. Casing Stickup = 2.4. Open hole bedrock well, 6 inch ID. Has an odd well cover with a rubber sleeve connecting 6" casing to 2" PVC well access with PVC cap.
MW-1B	571967.38	4629665	Protective Casing Stickup = 1.75. TOC to TOR =0.09'. In bushes, 2 inch PVC bedrock well.
MW-4	571971.06	4629799	Protective Casing Stickup =2.3. TOC to TOR =UNK. In bushes, 2 inch PVC well. No lock.
MW-5B	571981.81	4629825.5	Protective Casing Stickup =2.5. TOC to TOR =0.09'. Deep in bushes, 2 inch PVC well.
MW-5R	572003.06	4629852	Protective Casing Stickup = 1.25. Extraction well. 6" open hole BR.
MW-6B	572042.38	4629780.5	Protective Casing Stickup =2.35. TOC to TOR =0.41. In field beside rear driveway to MRIP building, 2 inch PVC bedrock well.
MW-7B	571794.25	4629797	Stickup est. 2 feet AGS. TOR to TOC = 0.29' in trees near water tower.
MW-7R	571790.75	4629797	Protective Casing Stickup = 2.7. Extraction well. 6" open hole BR.
MW-8B	572249.41	4630989.19	TOC to Top Of Flush Mount = 0.41'. 6" open hole BR well. Well key broke, had to force off aluminum well cover.
MW-9B	572016.88	4630545	Can't Locate
MW-10B	572734.6	4630604	Can't Locate
MW-11B	572126.19	4630011	Protective Casing Stickup = 1.6. Open hole bedrock well, 6 inch ID. In field just off driveway access to house.
MW-11C	572125	4630007	Protective Casing Stickup = 1.9. Open hole bedrock well, 6 inch ID. In middle of field 200 feet SW of MW-11B.
MW-12B	572234.19	4630222.41	Casing Stickup = 0. Open hole bedrock well, 6 inch ID with aluminum well cover just off driveway pavement in flowers next to house. No lock.
MW-13B	571312.94	4630103	Flush mount set in large section of concrete eroded loose. Well is a capped 1" pipe rusted shut. Cannot access with tools because it is recessed into the ground. Not sampled.
MW-14B	572600.32	4630930.34	TOC to Top Of Flush Mount = est. 0.3'. Key broke had to force access into 6 " open hole BR well with aluminum cap within flush mount in lawn of business.
MW-15B	571701.56	4630172.5	Casing Stickup = 2.2'. Open hole bedrock well, 6 inch ID with aluminum well cover deep in woods 1000 feet from road. Very difficult to find.
MW-16	572083.65	4630265.75	Protective Casing Stickup =2.5. TOC to TOR =0.27. In open woods behind pond, 2 inch PVC bedrock well.
MW-17	572545.72	4630421.63	FLUTE well in field north of house and garden shed. Well in good condition.
MW-18	571579.98	4630508.22	FLUTE well in swamp 200 feet SE of road. Accessed behind mailboxes and cut a path in. Artesian well in very wet area. Well in poor condition.
MW-19	572596.93	4631100.5	FLUTE well in lawn overlooking river. Located in corroded vault that appears to be sometimes filled with water due to occasional artesian flow. Well is in poor condition with rust stained and corroded fittings..
MW-20	571966.96	4631057.64	FLUTE well lawn next to stone wall just off Berm Road. Well in good condition.
MW-21	572596	4630042	FLUTE well lawn behind shed. Well is artesian but in fairly good condition. Port 3 repaired by FLUTE personnel.

Notes:

BGS: below ground surface TOC: Top of casing
 AGS: above ground surface TOR: Top of riser
 AMSL: Above mean sea level

Table 3 - Groundwater Elevations July 8, 2019

Monitoring Well	X Coordinate	Y Coordinate	Construction Information		Water Level Information				Comments
			Total Depth (ft BGS)	Top of Casing (ft AMSL)	Time	Depth to Water (ft bTOC)	Water Elevation (ft TOC)	Casing Stickup (ft AGS)	
SVE-19	UNK	UNK	55	1.4 ft AGS	1310	38.14	No Elevation Data	1.4	
SVE-20	UNK	UNK	55	1.2 ft AGS	1326	39.47	No Elevation Data	1.2	
SVE-21	UNK	UNK	55	1.35 ft AGS	1318	44.45	No Elevation Data	1.35	
SVE-22	UNK	UNK	55	1.15 ft AGS	1313	38.32	No Elevation Data	1.15	
SVE-23	UNK	UNK	55	1.25 ft AGS	1334	26.98	No Elevation Data	1.25	
ERT-1	571897.25	4629866	195	303.94	1432	56.49	247.5	2.5	
ERT-2	571843.56	4629843	200	309.81	1422	62.09	247.7	1	
ERT-3	571850.19	4629819	220	315.89	1428	68.34	247.6	0.8	
ERT-4	571979.5	4629806.5	50	326.67	1322	30.96	295.7	2.4	
MW-1B	571967.38	4629665	100	333.53	1510 7/11/2019	53.54	280.0	1.75	TOR to TOC = 0.09'
MW-4	571971.06	4629799	21.5	329.21	1309	9.36	319.9	2.3	
MW-5B	571981.81	4629825.5	36.2	325.3	1405	31.8	293.5	2.5	TOR to TOC = 0.09'
MW-5R	572003.06	4629852	125	313.63	1352	66.11	247.5	1.25	
MW-6B	572042.38	4629780.5	100	323.95	1344	75.91	248.0	2.35	TOR to TOC = 0.41'
MW-7B	571794.25	4629797	100	313.93	1452	65.79	248.1	1.75	TOR to TOC = 0.29'
MW-7R	571790.75	4629797	180	314.3	1450	66.95	247.4	2.7	
MW-8B	572249.41	4630989.19	100	159.68	1045 7/9/2019	30.94	128.7	0	TOC to Top Of Flush Mount = 0.41'
MW-9B	572016.88	4630545	145	248.21	Can't Locate	NM	NM	NM	Can't Locate
MW-10B	572734.6	4630604	100	225.64	Can't Locate	NM	NM	NM	Can't Locate
MW-11B	572126.19	4630011	181	281.72	1504	34.71	247.0	1.6	
MW-11C	572125	4630007	220	284.58	1509	36.68	247.9	1.9	
MW-12B	572234.19	4630222.41	200	258.2	1537	12.58	245.6	0.1	
MW-13B	571312.94	4630103	200	221.93	Can't Open	NM	NM	NM	Capped 1" pipe rusted shut.
MW-14B	572600.32	4630930.34	155	156.67	0930 7/9/2019	6.26	150.4	0	TOC to Top Of Flush Mount = est. 0.3'
MW-15B	571701.56	4630172.5	150	244.89	1843	6.98	237.9	2.2	
MW-16	572083.65	4630265.75	93	274.11	1547	30.89	243.2	2.5	TOR to TOC = 0.27'
MW-17-1			57	241.92	1642	9.08	232.8	NM	
MW-17-2	572545.72	4630421.63	110	241.92	1643	13.15	228.8	NM	
MW-17-3			129	241.92	1644	13.15	228.8	NM	
MW-18-13			101	204.45	Artesian	NM	NM	NM	
MW-18-23	571579.98	4630508.22	128	204.45	Artesian	NM	NM	NM	
MW-18-33			145	204.45	Artesian	NM	NM	NM	
MW-19-13			49	129.88	Too tight for WL	NM	NM	NM	Skinny Dipper would not fit in WL port.
MW-19-23	572596.93	4631100.5	95	129.88	Too tight for WL	NM	NM	NM	Skinny Dipper would not fit in WL port.
MW-19-33			195	129.88	Too tight for WL	NM	NM	NM	Skinny Dipper would not fit in WL port.
MW-20-1			77	202.84	1730	58.29	144.6	NM	
MW-20-2	571966.96	4631057.64	111.5	202.84	1730	55.46	147.4	NM	
MW-20-3			149	202.84	1733	74.92	127.9	NM	
MW-21-13			48	233.59	Artesian	NM	NM	NM	
MW-21-23			69.5	233.59	Artesian	NM	NM	NM	
MW-21-33			78	233.59	Artesian	NM	NM	NM	
MW-21-43	572596	4630042	124	233.59	Artesian	NM	NM	NM	
MW-21-53			145	233.59	Artesian	NM	NM	NM	
MW-21-63			163	233.59	Artesian	NM	NM	NM	

Notes:

- BGS: below ground surface
- AGS: above ground surface
- AMSL: Above mean sea level
- bTOC: Below top of casing
- NM: Not Measured

Table 4 - Comparison of GW Elevations 2014 to 2019

Monitoring Well	October 2014	November 2015	October 2016	October 2017	July 2019
ERT-1 ²	NM	248.99	219.79	220.59	247.5
ERT-2	199.6	251.92	221.56	221.75	247.7
ERT-3	199.43	251.8	221.26	221.73	247.6
ERT-4	286.52	301.37	284.57	286.42	295.7
MW-1B	251.22	278.72	251.61	255.51	280.0
MW-4	310.01	325.79	310.22	308.12	319.9
MW-5B	289.86	301.03	289.85	288.8	293.5
MW-5R ²	NM	250.98	220.92	225.47	247.5
MW-6B	222.6	253.36	223.03	231.89	248.0
MW-7B	218.73	252.73	223.51	219.85	248.1
MW-7R ²	NM	252.02	NM	215.38	247.4
MW-8B	128.22	130.78	128.07	129.7	128.7
MW-9B	222	228.89	227.01	228.77	NM
MW-10B	191.97	199.58	190.42	193.07	NM
MW-11B	209.61	251.51	223.52	226.95	247.0
MW-11C	218.51	252.48	224.06	227.57	247.9
MW-12B	217.79	247.85	231	233.25	245.6
MW-13B ³	221.93	221.93	221.93	221.93	NM
MW-14B	149.12	151.14	149.15	149.61	150.4
MW-15B	227.58	229.43	231.49	234.4	237.9
MW-16	228.46	245.5	227.79	229.48	243.2
MW-17-1	220.22	234.79	223.01	225.03	232.8
MW-18-1 ³	204.45	204.45	204.45	204.45	NM
MW-19-1 ³	127.83	129.88	NM	128.66	NM
MW-20-1	144.35	144.84	144.88	144.61	144.6
MW-21-1 ³	233.59	233.59	225.83	232.61	NM

Notes:

1. Data prior to 2019 was captured from historic annual groundwater monitoring reports prepared by EPA.
2. Well is currently part of the groundwater extractions and treatment system (GWETS).
 Sampling locations are inside the GWETS building.
3. MW-17 through MW-21 are FLUTE wells. MW-18, 19 and 21 are artesian wells.

Table 5 - Monitoring Well Sampling Frequency

Monitoring Well	Long-Term Monitoring Frequency ¹			Well Location	Comments	
	VOCs	MNA Parameters (Every 4 Years) ⁴	Other parameters 2019			
ERT-1 ²	Annual	No	PFAS & 1,4-Dioxane	On-site		
ERT-2	Annual	No	PFAS & 1,4-Dioxane	On-site		
ERT-3	Annual	Yes	PFAS & 1,4-Dioxane	On-site		
ERT-4	Annual	Yes	PFAS & 1,4-Dioxane	On-site		
MW-1B	Annual	Yes	PFAS & 1,4-Dioxane	Background/Upgradient		
MW-4	Annual	Yes	PFAS & 1,4-Dioxane	On-site		
MW-5B	Annual	No	PFAS & 1,4-Dioxane	On-site		
MW-5R ²	Annual	No	PFAS & 1,4-Dioxane	On-site		
MW-6B	Annual	No	PFAS & 1,4-Dioxane	On-site		
MW-7B	Water Level Only	No	PFAS & 1,4-Dioxane	On-site		
MW-7R ²	Annual	No	PFAS & 1,4-Dioxane	On-site		
MW-8B	Annual	No	PFAS & 1,4-Dioxane	Perimeter		
MW-9B	Annual	No	PFAS & 1,4-Dioxane	Perimeter	Lost or destroyed	
MW-10B	Annual	Yes	PFAS & 1,4-Dioxane	Perimeter	Lost or destroyed	
MW-11B	Annual	Yes	PFAS & 1,4-Dioxane	Mid-Plume		
MW-11C	Annual	Yes	PFAS & 1,4-Dioxane	Mid-Plume		
MW-12B	Annual	Yes	PFAS & 1,4-Dioxane	Mid-Plume		
MW-13B ³	Annual	No	PFAS & 1,4-Dioxane	Perimeter	Flush mount damaged and well cap rusted shut	
MW-14B	Annual	No	PFAS & 1,4-Dioxane	Perimeter		
MW-15B	Annual	Yes	PFAS & 1,4-Dioxane	Mid-Plume		
MW-16	Annual	Yes	PFAS & 1,4-Dioxane	Mid-Plume		
Multi-Port FLUTE Wells						
Well	Port					
MW-17	1	Annual	Yes	1,4-Dioxane	Mid-Plume	
	2	Annual	Yes	1,4-Dioxane	Mid-Plume	
	3	Annual	Yes	1,4-Dioxane	Mid-Plume	
MW-18	1 ³	Annual	No	1,4-Dioxane	Perimeter	Well compromised liner not sealed to borehole. Recommend no further sampling at this location.
	2 ³	Annual	No	1,4-Dioxane	Perimeter	
	3 ³	Annual	No	1,4-Dioxane	Perimeter	
MW-19	1 ³	Annual	Yes	1,4-Dioxane	Perimeter	Well is possibly compromised
	2 ³	Annual	Yes	1,4-Dioxane	Perimeter	
	3 ³	Annual	Yes	1,4-Dioxane	Perimeter	
MW-20	1	Annual	No	1,4-Dioxane	Perimeter	
	2	Annual	No	1,4-Dioxane	Perimeter	
	3	Annual	No	1,4-Dioxane	Perimeter	
MW-21	1 ³	Annual	Yes	1,4-Dioxane	Perimeter	
	2 ³	Annual	Yes	1,4-Dioxane	Perimeter	
	3 ³	Annual	Yes	1,4-Dioxane	Perimeter	Obstructed sampling port repaired by FLUTE
	4 ³	Annual	Yes	1,4-Dioxane	Perimeter	
	5 ³	Annual	Yes	1,4-Dioxane	Perimeter	
	6 ³	Annual	Yes	1,4-Dioxane	Perimeter	

Notes:

1. The location and frequency of collection of environmental samples may be altered based results at the direction of the NYSDEC.
2. Well is currently part of the groundwater extractions and treatment system (GWETS). Sampling locations are inside the GWETS building.
3. MW-17 through MW-21 are FLUTE wells. MW-13B and FLUTE wells MW-18, 19 and 21 are artesian wells.
4. MNA parameters are: alkalinity, chloride, ethane, ethene, methane, nitrate/nitrite, sulfate, sulfide, and total organic carbon. Scheduled for 2021.

Table 6 - Summary of 2019 Analytical Data

Location	Sample Date	Field Sample ID	Parameter	PFOS	PFOA	1,1,1-TCA	1,1-DCA	1,1-DCE	TCE	1,4-Dioxane
			ROD Cleanup Goal	NA	NA	5	5	5	5	NA
			Proposed MCL	10	10	NA	NA	NA	NA	1
			(ng/L)	(ng/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1B	7/12/2019	356023-MW1B	0.6 J	2	1 U	1 U	1 U	1 U	1 U	0.2 U
MW-4	7/11/2019	356023-MW4	2.1 J	6.4	1,100	23	130	390	6.4	
MW-5B	7/11/2019	356023-MW5B	2	2.4	1,800	42	200	87	10	
MW-5R	7/12/2019	356023-MW5R	0.74 J	1.2 J	110	6.7	24	7.6	6.1	
MW-6B	7/11/2019	356023-MW6B	1.8 U	0.92 J	8.2	1 U	1.8	1 U	0.76	
MW-7R	7/12/2019	356023-MW7R	0.97 J	1.5 J	41	14	5.7	0.94 J	2.3	
MW-8B	7/9/2019	356023-MW8B	0.53 J / 1.7 U (dup)	0.56 J / 0.65 J (dup)	1 U / 1 U (dup)	1 U / 1 U (dup)	1 U / 1 U (dup)	1 U / 1 U (dup)	2.4 J / 2.4 J (dup)	
MW-11B	7/10/2019	356023-MW11B	1.6 U	0.53 J	1.4	2.4	4.9	0.93 J	3.1	
MW-11C	7/10/2019	356023-MW11C	1.6 U	0.56 J	2.2	0.8 J	3.2	0.64 J	1.8	
MW-12B	7/9/2019	356023-MW12B 190	2.8	3.1	5.3	10	15	3.5	9.2 J	
MW-14B	7/9/2019	356023-MW14B 150	2.5	4.4	1 U	1	0.66 J	1 U	3.4 J	
MW-15B	7/12/2019	356023-MW15B	1.8 U	0.89 J	26	8.3	19	1.2	5.9	
MW-16	7/9/2019	356023-MW16	1.6 U	0.52 J	13	2.2	10	1.3	4.2 J	
MW-18-1	7/11/2019	356023-MW1801	NT	NT	1 U	1.1	1 U	1 U	1	
MW-18-2	7/11/2019	356023-MW1802	NT	NT	1 U	1.4	0.46 J	1 U	1.3	
MW-18-3	7/11/2019	356023-MW1803	NT	NT	1 U	1.4	0.43 J	1 U	1.4	
ERT-4	7/11/2019	356023-ERT4	4.5	6.8	3,100	78	280	140	12	

Notes:

Blue shading = exceeds Record of Decision (ROD) cleanup goal.

Gray shading = exceeds proposed NYS MCL

NA = not applicable

NT = not tested

PFOS = Perfluorooctanesulfonic acid

PFOA = Perfluorooctanoic acid

1,1,1-TCA = 1,1,1-Trichloroethane

1,1-DCA = 1,1-Dichloroethane

1,1-DCE = 1,1-Dichloroethene

TCE = Trichloroethene

(dup) = duplicate sample result

(ng/L) = nanograms per liter

(µg/L) = micrograms per liter

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted

Contract Required Quantitation Limit (CRQL) for sample and method.

J = result is estimated

Table 7 - Groundwater Field Parameters

Monitoring Well	Location	Conductivity (umhos/cm)	DO (mg/L)	ORP (mV)	pH	Turbidity (NTU)	Temperature (°C)	Comments	
ERT-1	On-Site	Not sampled	Due to lightning stike damage to system					GWETS extraction well	
ERT-2	On-Site	Not sampled	Due to equipment failure					Not sampled	
ERT-3	On-Site	Not sampled	Due to equipment failure					Not sampled	
ERT-4	On-Site	746	5.7	94	6.7	192	18	Low Flow	
MW-1B	Background	866	4.3	170	6.8	5.5	15	Low Flow	
MW-4	On-Site	1210	0.9	81	6.6	10.5	16	Low Flow	
MW-5B	On-Site	627	6.9	180	7	0.8	14	Low Flow	
MW-5R	On-Site	730	5.3	75	6.7	2	12	GWETS extraction well	
MW-6B	On-Site	777	5.2	-17	6.9	1.4	14	Low Flow	
MW-7B	On-Site	Not sampled	Water level only not sampled as part of LTM.						Not sampled
MW-7R	On-Site	617	5.7	-28	6.8	2	12	GWETS extraction well	
MW-8B	Perimeter	467	0.4	-200	7.7	28	14	Low Flow	
MW-9B	Lost	Not sampled	Unable to locate well					Not sampled	
MW-10B	Lost	Not sampled	Unable to locate well					Not sampled	
MW-11B	Mid-Plume	630	1.9	110	7.2	81	13	Low Flow	
MW-11C	Mid-Plume	712	1.4	31	6.9	9.9	15	Low Flow	
MW-12B	Mid-Plume	509	1.9	34	6.6	37	17	Low Flow	
MW-13B	Perimeter	Not sampled	One inch steel well riser with cap rusted shut could not open.						Not sampled
MW-14B	Perimeter	565	0.3	-99	6.9	38	18	Low Flow	
MW-15B	Mid-Plume	515	2	-22	6.9	3.5	12	Low Flow	
MW-16	Mid-Plume	206	3.7	-23	6.1	5.1	13	Low Flow	
MW-17-1	Mid-Plume	FLUTE not sampled						Not sampled*	
MW-17-2	Mid-Plume							Not sampled*	
MW-17-3	Mid-Plume							Not sampled*	
MW-18-1	Perimeter	491	1.2	-165	6.7	6.7	13	Artesian grab samples, well likely compromised.	
MW-18-2	Perimeter	488	0.6	-187	6.8	10.9	11		
MW-18-3	Perimeter	491	0.6	-181	7.2	6.6	12		
MW-19-1	Perimeter	FLUTE not sampled						Not sampled*	
MW-19-2	Perimeter							Not sampled*	
MW-19-3	Perimeter							Not sampled*	
MW-20-1	Perimeter	FLUTE not sampled						Not sampled*	
MW-20-2	Perimeter							Not sampled*	
MW-20-3	Perimeter							Not sampled*	
MW-21-1	Perimeter	FLUTE not sampled						Not sampled*	
MW-21-2	Perimeter							Not sampled*	
MW-21-3	Perimeter		Port repaired by FLUTE personnel.					Not sampled*	
MW-21-4	Perimeter							Not sampled*	
MW-21-5	Perimeter							Not sampled*	
MW-21-6	Perimeter							Not sampled*	

Notes:

mg/L = milligrams per Liter
 umhos/cm = micro mhos/centimeter
 mg/L = milligrams per Liter
 NTU = Nephelometric turbidity units
 °C = degrees centigrade

*FLUTE wells other than MW-18 not sampled pending assessment of wells and recommendations from FLUTE.

ATTACHMENT A

FIELD DATA RECORDS

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohokn Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 PROJECT LOCATION: Hamlet of High Falls, Marbletown, New York
 WEATHER CONDITIONS (AM): Sunny, 65 humid calm
 WEATHER CONDITIONS (PM): Sunny 85, humid calm

TASK NO: 04 DATE: 7/9/19
 MACTEC CREW: LELOW ETM
 SAMPLER NAME: Jerry Rauschle
 SAMPLER SIGNATURE: Jerry Rauschle
 CHECKED BY: [Signature] DATE: 7/10/19

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
 MODEL NO.: 556MP3
 UNIT ID NO.: M015-02

		AM CALIBRATION		
		Start Time	/End Time	
	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
	pH (4)	4.0	<u>4.00</u>	+/- 0.1 pH Units
	pH (7)	7.0	<u>7.00</u>	+/- 0.1 pH Units
	pH (10)	10.0	—	+/- 0.1 pH Units
	Redox	+/- mV	240	<u>235.5</u> +/- 10 mV
	Conductivity	mS/cm	1.413	<u>1.413</u> +/- 0.5 % of standard
	DO (saturated)	%	100	<u>99.4</u> +/- 2% of standard
	DO (saturated) mg/L	(see Chart 1)	≈ 9.0	<u>9.01</u> +/- 0.2 mg/L
	DO (<0.1)	mg/L	<0.1	— < 0.5 mg/L
	Temperature	°C	<u>20.12</u>	
	Baro. Press.	mmHg	<u>755.4</u>	

POST CALIBRATION CHECK

Start Time: 1945 / End Time: 1905

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	<u>7.03</u>	+/- 0.3 pH Units
240	<u>231.2</u>	+/- 10 mV
1,413	<u>1,410</u>	+/- 5% of standard
<u>≈ 9.3</u>	<u>8.79</u>	+/- 0.5 mg/L of standard
<u>24.4</u>	<u>24.4</u>	
<u>753.5</u>	<u>753.5</u>	

TURBIDITY METER

METER TYPE: HACH
 MODEL NO.: 2100 Q
 UNIT ID NO.: _____

Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<u>10</u>	<u>10.0</u>
20 Standard	NTU	20	<u>19.9</u>
100 Standard	NTU	100	<u>99.5</u>
800 Standard	NTU	800	<u>785</u>

Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1	<u>10.2</u>	+/- 0.3 NTU of stan.
20	<u>20.1</u>	+/- 5% of standard
100	<u>103</u>	+/- 5% of standard
800	<u>792</u>	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE: _____
 MODEL NO.: _____
 UNIT ID NO.: _____

Background	ppmv	<0.1	_____	_____	_____
Span Gas	ppmv	100	_____	_____	_____

<0.1	_____	within 5 ppmv of BG
100	_____	+/- 10% of standard

O₂-LEL 4 GAS METER

METER TYPE: _____
 MODEL NO.: _____
 UNIT ID NO.: _____

Methane	%	50	_____	_____	_____
O ₂	%	20.9	_____	_____	_____
H ₂ S	ppmv	25	_____	_____	_____
CO	ppmv	50	_____	_____	_____

50	_____	+/- 10% of standard
20.9	_____	+/- 10% of standard
25	_____	+/- 10% of standard
50	_____	+/- 10% of standard

OTHER METER

METER TYPE: _____
 MODEL NO.: _____
 UNIT ID NO.: _____

See Notes Below for Additional Information

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
 Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Portland FOS
 Lot#/Date Produced: _____
 Trip Blank Source: _____
 Sample Preservatives Source: _____
 Disposable Filter Type: 0.45µm cellulose
 Calibration Fluids / Standard Source:
 - DO Calibration Fluid (<0.1 mg/L) Portland FOS
 - Other _____
 - Other _____
 - Other _____

Cal. Standard Lot Number	Exp. Date
pH (4) <u>86A 602</u>	<u>1/21</u>
pH (7) <u>86K 107</u>	<u>1/21</u>
pH (10) _____	_____
ORP <u>3086</u>	<u>6/23</u>
Conductivity <u>86K 308</u>	<u>11/19</u>
10 0.1 Turb. Stan. <u>A 8232</u>	<u>11/19</u>
20 Turb. Stan. <u>A 8239</u>	<u>12/19</u>
100 Turb. Stan. <u>A 8236</u>	<u>11/19</u>
800 Turb. Stan. <u>A 8236</u>	<u>11/19</u>
PID Span Gas _____	_____
O ₂ -LEL Span Gas _____	_____
Other _____	_____

NOTES:

* - Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** - If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 † - DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP) TASK NO: 04 DATE: 07/09/19
 PROJECT NUMBER: 3611191234 MACTEC CREW: _____
 PROJECT LOCATION: Hamlet of High Falls, Marletown, New York SAMPLER NAME: LANDESJARNA
 WEATHER CONDITIONS (AM): CLEAR, 80'S SUNNY, NO BRREEZ SAMPLER SIGNATURE: [Signature]
 WEATHER CONDITIONS (PM): CLEAR, 80'S SUNNY, NO BRREEZ CHECKED BY: JR DATE: 7/17/19

MULTI-PARAMETER WATER QUALITY METER

AM CALIBRATION					POST CALIBRATION CHECK		
METER TYPE	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
MODEL NO. 556MPS							
UNIT ID NO. M015-10							
		Start Time 0720	End Time 0749		Start Time 1845	End Time 1900	
pH (4)	SU	4.0	3.99	+/- 0.1 pH Units	7.0	6.91	+/- 0.3 pH Units
pH (7)	SU	7.0	7.0	+/- 0.1 pH Units			
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	240	241	+/- 10 mV	240	238.0	+/- 10 mV
Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.401	+/- 5% of standard
DO (saturated)	%	100	99.3	+/- 2% of standard			
DO (saturated) mg/L	¹ (see Chart 1)	9.0	8.91	+/- 0.2 mg/L	8.33	9.62	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		< 0.5 mg/L			
Temperature	°C		20.58			24.19	
Baro. Press.	mmHg		754.6			754.2	

METER TYPE	Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
MODEL NO. 2102R				
UNIT ID NO. M024-38				
<0.1 Standard	NTU	10	10.2	+/- 0.3 NTU of stan.
20 Standard	NTU	20	20.1	+/- 5% of standard
100 Standard	NTU	100	99.3	+/- 5% of standard
800 Standard	NTU	800	799	+/- 5% of standard

METER TYPE	Background	ppmv	<0.1	within 5 ppmv of BG
MODEL NO.				
UNIT ID NO.	Span Gas	ppmv	100	+/- 10% of standard

METER TYPE	Methane	%	50	+/- 10% of standard
MODEL NO.	O ₂	% <td>20.9</td> <td>+/- 10% of standard</td>	20.9	+/- 10% of standard
UNIT ID NO.	H ₂ S	ppmv	25	+/- 10% of standard
	CO	ppmv	50	+/- 10% of standard

METER TYPE	See Notes Below for Additional Information
MODEL NO.	
UNIT ID NO.	

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
 Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**

MATERIALS RECORD		Cal. Standard Lot Number	Exp. Date
Deionized Water Source: Portland FOS		pH (4) 8GAG02	1/21
Lot#/Date Produced:		pH (7) 8GK167	1/21
Trip Blank Source: PFAS FREE CERTIFIED TEST AMERICA		pH (10) _____	
Sample Preservatives Source:		ORP 3086	6/23
Disposable Filter Type: 0.45µm cellulose		Conductivity 8GK308	11/19
Calibration Fluids / Standard Source:		20 Turb. Stan. A8232	11/19
- DO Calibration Fluid (<0.1 mg/L) Portland FOS		100 Turb. Stan. A8239	12/19
- Other _____		800 Turb. Stan. A8236	11/19
- Other _____		800 Turb. Stan. A8236	11/19
- Other _____		PID Span Gas _____	
		O ₂ -LEL Span Gas _____	
		Other _____	

NOTES: DU @ END OF DAY OUTSIDE CRITERIA FOR mg/L

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.



FIGURE 6.1
 FIELD INSTRUMENT CALIBRATION RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 PROJECT LOCATION: Hamlet of High Falls, Marletown, New York
 WEATHER CONDITIONS (AM): Sunny, 65°F, calm
 WEATHER CONDITIONS (PM): Sunny 85, calm, humid

TASK NO: 04 DATE: 7/10/19
 MACTEC CREW: LP GW
 SAMPLER NAME: Jerry Rawchick
 SAMPLER SIGNATURE: *[Signature]*
 CHECKED BY: *[Signature]* DATE: 7/10/19

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
 MODEL NO.: MPS 556
 UNIT ID NO.: M015-02

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
AM CALIBRATION				
			Start Time <u>0715</u> / End Time <u>0740</u>	
pH (4)	SU	4.0	<u>4.00</u>	+/- 0.1 pH Units
pH (7)	SU	7.0	<u>7.00</u>	+/- 0.1 pH Units
pH (10)	SU	10.0	<u>-</u>	+/- 0.1 pH Units
Redox	+/- mV	240	<u>236.4</u>	+/- 10 mV
Conductivity	mS/cm	1.413	<u>1.410</u>	+/- 0.5 % of standard
DO (saturated)	%	100	<u>99.4</u>	+/- 2% of standard
DO (saturated) mg/L	¹ (see Chart 1)	<u>8.9</u>	<u>8.92</u>	+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1	<u>-</u>	< 0.5 mg/L
Temperature	°C		<u>20.6</u>	
Baro. Press.	mmHg		<u>755.5</u>	

POST CALIBRATION CHECK

Start Time 1730 / End Time 1800

	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH	7.0	<u>6.90</u>	+/- 0.3 pH Units
Redox	240	<u>226.8</u>	+/- 10 mV
Conductivity	1.413	<u>1.410</u>	+/- 5% of standard
DO (saturated)		<u>99.0</u>	
DO (saturated) mg/L	<u>27.8</u>	<u>7.80</u>	+/- 0.5 mg/L of standard
Temperature		<u>27.19</u>	
Baro. Press.		<u>752.6</u>	

TURBIDITY METER

METER TYPE: HACH
 MODEL NO.: 2100Q
 UNIT ID NO.: M024-33

Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<u>10.1</u>	+/- 0.3 NTU of stan.
20 Standard	NTU	<u>20.0</u>	+/- 5% of standard
100 Standard	NTU	<u>99.6</u>	+/- 5% of standard
800 Standard	NTU	<u>785</u>	+/- 5% of standard

Standard Value	Meter Value	*Acceptance Criteria (PM)
10	<u>10.2</u>	+/- 0.3 NTU of stan.
20	<u>20.1</u>	+/- 5% of standard
100	<u>101</u>	+/- 5% of standard
800	<u>802</u>	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE: _____ Background ppmv <0.1
 MODEL NO.: _____
 UNIT ID NO.: _____ Span Gas ppmv 100

<0.1 within 5 ppmv of BG
 100 +/- 10% of standard

O₂-LEL 4 GAS METER

METER TYPE: _____ Methane % 50
 MODEL NO.: _____ O₂ % 20.9
 UNIT ID NO.: _____ H₂S ppmv 25
 _____ CO ppmv 50

50 +/- 10% of standard
 20.9 +/- 10% of standard
 25 +/- 10% of standard
 50 +/- 10% of standard

OTHER METER

METER TYPE: _____
 MODEL NO.: _____
 UNIT ID NO.: _____

See Notes Below for Additional Information

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
- Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: _____ Portland FOS
 Lot#/Date Produced: _____
 Trip Blank Source: _____
 Sample Preservatives Source: _____
 Disposable Filter Type: _____ 0.45µm cellulose
 Calibration Fluids / Standard Source:
 - DO Calibration Fluid (<0.1 mg/L) _____ Portland FOS
 - Other _____
 - Other _____
 - Other _____

	Cal. Standard Lot Number	Exp. Date
pH (4)	<u>86A 602</u>	<u>1/21</u>
pH (7)	<u>86C 167</u>	<u>1/21</u>
pH (10)	<u>-</u>	<u>-</u>
ORP	<u>3084</u>	<u>6/23</u>
Conductivity	<u>86C 305</u>	<u>11/19</u>
10-0.1 Turb. Stan.	<u>A 8232</u>	<u>11/19</u>
20 Turb. Stan.	<u>A 8239</u>	<u>12/19</u>
100 Turb. Stan.	<u>A 8230</u>	<u>11/19</u>
800 Turb. Stan.	<u>A 8236</u>	<u>11/19</u>
PID Span Gas	_____	_____
O ₂ -LEL Span Gas	_____	_____
Other	_____	_____

NOTES: no ORP slightly low at end of day cal check.

* - Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** - If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 † - DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP) TASK NO: 04 DATE: 07/10/2019
 PROJECT NUMBER: 3611191234 MACTEC CREW: J.R.J. ICD
 PROJECT LOCATION: Hamlet of High Falls, Marblatown, New York SAMPLER NAME: LANDESHARU
 WEATHER CONDITIONS (AM): CLEAR, 80's SAMPLER SIGNATURE: [Signature]
 WEATHER CONDITIONS (PM): PTLY (CLOUDY - 90S - HUMID) CHECKED BY: [Signature] DATE: 7/17/19

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
 MODEL NO.: 556 MPS
 UNIT ID NO.: M015-10

Units	AM CALIBRATION		*Acceptance Criteria (AM)
	Standard Value	Meter Value	
pH (4)	SU	4.0	+/- 0.1 pH Units
pH (7)	SU	7.0	+/- 0.1 pH Units
pH (10)	SU	10.0	+/- 0.1 pH Units
Redox	+/- mV	240	+/- 10 mV
Conductivity	mS/cm	1.413	+/- 0.5 % of standard
DO (saturated)	%	99.3	+/- 2% of standard
DO (saturated) mg/L ¹ (see Chart 1)	mg/L	8.95	+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1	< 0.5 mg/L
Temperature	°C	20.4	
Baro. Press.	mmHg	754.8	

POST CALIBRATION CHECK

Start Time: 1740 / End Time: 1820

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	6.94	+/- 0.3 pH Units
240	238.9	+/- 10 mV
1.413	1.412	+/- 5% of standard
8.03	8.17	+/- 0.5 mg/L of standard
	26.65	
	753.6	

TURBIDITY METER

METER TYPE: HACH
 MODEL NO.: 2100A
 UNIT ID NO.: M024-38

Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	10.1	+/- 0.3 NTU of stan.
20 Standard	NTU	19.8	+/- 5% of standard
100 Standard	NTU	98.8	+/- 5% of standard
800 Standard	NTU	791	+/- 5% of standard

Standard Value	Meter Value	*Acceptance Criteria (PM)
10	10.1	+/- 0.3 NTU of stan.
20	19.8	+/- 5% of standard
100	98.8	+/- 5% of standard
800	791	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE: / Background ppmv <0.1 /
 MODEL NO.: /
 UNIT ID NO.: / Span Gas ppmv 100 /

<0.1 / within 5 ppmv of BG
 100 / +/- 10% of standard

O₂-LEL 4 GAS METER

METER TYPE: / Methane % 50 /
 MODEL NO.: / O₂ % 20.9 /
 UNIT ID NO.: / H₂S ppmv 25 /
 / CO ppmv 50 /

50 +/- 10% of standard
 20.9 +/- 10% of standard
 25 +/- 10% of standard
 50 +/- 10% of standard

OTHER METER

METER TYPE: /
 MODEL NO.: /
 UNIT ID NO.: /

See Notes Below for Additional Information

Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above
 Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**

MATERIALS RECORD

	Cal. Standard Lot Number	Exp. Date
Deionized Water Source: Portland FOS	pH (4) 8GAG02	1/21
Lot#/Date Produced: /	pH (7) 8GK167	1/21
Trip Blank Source: /	pH (10) /	/
Sample Preservatives Source: /	ORP 3036	6/23
Disposable Filter Type: 0.45µm cellulose	Conductivity 8GK308	11/19
Calibration Fluids / Standard Source: Portland FOS	10 201 Turb. Stan. A8232	11/19
- DO Calibration Fluid (<0.1 mg/L)	20 Turb. Stan. A8239	12/19
- Other LAB CERT/LAB PROVIDED PFAS FREE (TESTAMERLA)	100 Turb. Stan. A8236	11/19
- Other /	800 Turb. Stan. A8236	11/19
- Other /	PID Span Gas /	/
	O ₂ -LEL Span Gas /	/
	Other /	/

NOTES: HIGH HUMIDITY AND CONDENSATION IS NEGATIVELY AFFECTING EOD CAL CHECK FOR THE HACH TURBIDITY METER

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations
 ** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries
 1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 PROJECT LOCATION: Hamlet of High Falls, Marbletown, New York
 WEATHER CONDITIONS (AM): Partly cloudy, 75°F, humid calm
 WEATHER CONDITIONS (PM): Cloudy 80 to 50°F, humid calm

TASK NO: 04 DATE: 7/11/19
 MACTEC CREW: LP GW
 SAMPLER NAME: Jerry Rausch
 SAMPLER SIGNATURE: *Jerry Rausch*
 CHECKED BY: *PHL* DATE: 7/17/19

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: VSI
 MODEL NO.: 5560MPS
 UNIT ID NO.: M015-02

		AM CALIBRATION		
		Start Time	/End Time	
	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.03	+/- 0.1 pH Units
pH (7)	SU	7.0	6.98	+/- 0.1 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units
Redox	+/- mV	240	233.7	+/- 10 mV
Conductivity	mS/cm	1.413	1.410	+/- 0.5 % of standard
DO (saturated)	%	100	97.5	+/- 2% of standard
DO (saturated)	mg/L ^{1 Use Chart 1}	8.4	8.29	+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1	—	< 0.5 mg/L
Temperature	°C		23.47	
Baro. Press.	mmHg		752.5	

POST CALIBRATION CHECK

Start Time 1630 /End Time 1655

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	6.98	+/- 0.3 pH Units and slowly rising
240	222.5	+/- 10 mV
1.413	1.411	+/- 5% of standard
	96.3	
8.1	7.70	+/- 0.5 mg/L of standard
	25.0	
	749.2	

TURBIDITY METER

METER TYPE: HACH
 MODEL NO.: 2100 Q
 UNIT ID NO.: M024-33

Units	Standard Value	Meter Value
<0.1 Standard	NTU	<0.1
20 Standard	NTU	10.2
100 Standard	NTU	20.0
100 Standard	NTU	10.0
800 Standard	NTU	79.1

Standard Value	Meter Value	*Acceptance Criteria (PM)
10	10.1	+/- 5% NTU of stan.
20	20.9	+/- 5% of standard
100	10.2	+/- 5% of standard
800	80.1	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE: _____ Background ppmv <0.1
 MODEL NO.: _____
 UNIT ID NO.: _____ Span Gas ppmv 100

<0.1 within 5 ppmv of BG
 100 +/- 10% of standard

O₂-LEL 4 GAS METER

METER TYPE: _____ Methane % 50
 MODEL NO.: _____ O₂ % 20.9
 UNIT ID NO.: _____ H₂S ppmv 25
 _____ CO ppmv 50

50 +/- 10% of standard
 20.9 +/- 10% of standard
 25 +/- 10% of standard
 50 +/- 10% of standard

OTHER METER

METER TYPE: _____
 MODEL NO.: _____
 UNIT ID NO.: _____

See Notes Below for Additional Information

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
 Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Portland FOS
 Lot#/Date Produced: _____
 Trip Blank Source: _____
 Sample Preservatives Source: _____
 Disposable Filter Type: 0.45µm cellulose
 Calibration Fluids / Standard Source:
 - DO Calibration Fluid (<0.1 mg/L) Portland FOS
 - Other _____
 - Other _____
 - Other _____

	Cal. Standard Lot Number	Exp. Date
pH (4)	861602	1/21
pH (7)	86167	1/21
pH (10)	—	—
ORP	3080	6/23
Conductivity	8616308	11/19
<0.1 Turb. Stan.	1A 8232	11/19
20 Turb. Stan.	1A 8239	12/19
100 Turb. Stan.	1A 8236	11/19
800 Turb. Stan.	1A 8236	11/19
PID Span Gas	—	—
O ₂ -LEL Span Gas	—	—
Other	—	—

NOTES: RR ORP slightly low at end of day although it is rising slowly and likely will come into range in 30 minutes or so. I don't want to wait,

* - Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** - If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 1 - DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.



FIGURE 6.1
 FIELD INSTRUMENT CALIBRATION RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP) TASK NO: _____ DATE: 7/11/2019
 PROJECT NUMBER: 3611191234 MACTEC CREW: JR. 100
 PROJECT LOCATION: Hamlet of High Falls, Marbletown, New York SAMPLER NAME: IAN DESJARDIN
 WEATHER CONDITIONS (AM): PTW 9:00-8:05 RAIN FORECAST SAMPLER SIGNATURE: [Signature]
 WEATHER CONDITIONS (PM): Cloudy 60-85% humid, calm CHECKED BY: [Signature] DATE: 7/17/19

MULTI-PARAMETER WATER QUALITY METER				
METER TYPE: <u>YSI</u>				
MODEL NO.: <u>556MPS</u>				
UNIT ID NO.: <u>MOJ5-10</u>				
AM CALIBRATION				
Start Time: <u>0715</u> / End Time: <u>074</u>				
POST CALIBRATION CHECK				
Start Time: <u>1638</u> / End Time: <u>1710</u>				
Parameter	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	<u>4.0</u>	+/- 0.1 pH Units
pH (7)	SU	7.0	<u>7.0</u>	+/- 0.1 pH Units
pH (10)	SU	10.0	_____	+/- 0.1 pH Units
Redox	+/- mV	240	<u>240</u>	+/- 10 mV
Conductivity	mS/cm	1.413	<u>1.413</u>	+/- 0.5 % of standard
DO (saturated)	%	100	<u>99.0</u>	+/- 2% of standard
DO (saturated)	mg/L ¹ (see Chan 1)	<u>8.45</u>	<u>8.49</u>	+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1	_____	< 0.5 mg/L
Temperature	°C	_____	<u>22.98</u>	_____
Baro. Press.	mmHg	_____	<u>752.2</u>	_____

TURBIDITY METER				
METER TYPE: <u>HACH</u>				
MODEL NO.: <u>2100G</u>				
UNIT ID NO.: <u>MO24-34</u>				
Standard	Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1	Standard	NTU	<0.1	X
20	Standard	NTU	20	X
100	Standard	NTU	100	X
800	Standard	NTU	800	Y

PHOTOIONIZATION DETECTOR				
METER TYPE: _____				
MODEL NO.: _____				
UNIT ID NO.: _____				
Standard	Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1	Background	ppmv	<0.1	/
100	Span Gas	ppmv	100	/

O ₂ -LEL 4 GAS METER				
METER TYPE: _____				
MODEL NO.: _____				
UNIT ID NO.: _____				
Standard	Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
50	Methane	%	50	/
20.9	O ₂	%	20.9	/
25	H ₂ S	ppmv	25	/
50	CO	ppmv	50	/

OTHER METER				
METER TYPE: _____				
MODEL NO.: _____				
UNIT ID NO.: _____				
_____	_____	_____	_____	_____

See Notes Below for Additional Information

Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above. —ONLY YSI, NOT HACH
 Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD			Cal. Standard Lot Number	Exp. Date
Deionized Water Source: _____	Portland FOS	pH (4)	<u>86A602</u>	<u>1/21</u>
Lot#/Date Produced: _____	_____	pH (7)	<u>86E167</u>	<u>1/21</u>
Trip Blank Source: _____	_____	pH (10)	_____	_____
Sample Preservatives Source: _____	_____	ORP	<u>3036</u>	<u>6/23</u>
Disposable Filter Type: _____	0.45µm cellulose	Conductivity	<u>86L303</u>	<u>11/19</u>
Calibration Fluids / Standard Source:	_____	20 Turb. Stan.	<u>A8232</u>	<u>11/19</u>
- DO Calibration Fluid (<0.1 mg/L)	Portland FOS	100 Turb. Stan.	<u>A8239</u>	<u>12/19</u>
- Other	<u>PFAS FREE WATER-TEST AMERICA</u>	800 Turb. Stan.	<u>A8236</u>	<u>11/19</u>
- Other	_____	Other	_____	_____
- Other	_____	Other	_____	_____

NOTES: RUN FACTORY RESET ON HACH DUE TO CONTINUED DRIPT ERRORS ON LOWER NTU RANGE → USE J.R.'S UNIT AND LET 24-38 SIT WITH LID OPEN TO DRY. (Turbidity)
No end of day calibration check for ORP.

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP) TASK NO: _____ DATE: 7/16/19
 PROJECT NUMBER: 3611191234 MACTEC CREW: M. Lounsbury
 PROJECT LOCATION: Hamlet of High Falls, Marbletown, New York SAMPLER NAME: M. Lounsbury
 WEATHER CONDITIONS (AM): 7/16/19, Humid, 80° SAMPLER SIGNATURE: [Signature]
 WEATHER CONDITIONS (PM): 7/17/19, Humid, 80° CHECKED BY: AR DATE: 7/17/19

MULTI-PARAMETER WATER QUALITY METER

METER TYPE		AM CALIBRATION			POST CALIBRATION CHECK		
MODEL NO.		Start Time	/End Time		Start Time	/End Time	
UNIT ID NO.	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
	pH (4)	SU	4.0	4.00	+/- 0.1 pH Units		
	pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	6.99 +/- 0.3 pH Units
	pH (10)	SU	10.0	—	+/- 0.1 pH Units		
	Redox	+/- mV	240	240	+/- 10 mV	240	233 +/- 10 mV
	Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.420 +/- 5% of standard
	DO (saturated)	%	100	98.8	+/- 2% of standard		
	DO (saturated)	mg/L ¹ (see Chart 1)	8.71	8.69	+/- 0.2 mg/L	7.87	7.33 +/- 0.5 mg/L of standard
	DO (<0.1)	mg/L	<0.1	—	< 0.5 mg/L		
	Temperature	°C		21.67		27.8	
	Baro. Press.	mmHg		761.6		748	

METER TYPE	Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
TURBIDITY METER				
MODEL NO.				
UNIT ID NO.				
	<0.1 Standard	NTU	10	10.1 +/- 0.3 NTU of stan.
	20 Standard	NTU	20	19.9 +/- 5% of standard
	100 Standard	NTU	100	100 +/- 5% of standard
	800 Standard	NTU	800	786 +/- 5% of standard

METER TYPE	Background	ppmv	<0.1	within 5 ppmv of BG
PHOTOIONIZATION DETECTOR				
MODEL NO.				
UNIT ID NO.	Span Gas	ppmv	100	+/- 10% of standard

METER TYPE	Methane	%	50	+/- 10% of standard
O ₂ -LEL 4 GAS METER				
MODEL NO.	O ₂	%	20.9	+/- 10% of standard
UNIT ID NO.	H ₂ S	ppmv	25	+/- 10% of standard
	CO	ppmv	50	+/- 10% of standard

METER TYPE	See Notes Below for Additional Information
OTHER METER	
MODEL NO.	
UNIT ID NO.	

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
 Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD	Cal. Standard Lot Number	Exp. Date
Deionized Water Source: Portland FOS	pH (4) 86A602	1/21
Lot#/Date Produced: _____	pH (7) 86K167	1/21
Trip Blank Source: _____	pH (10) —	
Sample Preservatives Source: _____	ORP 3086	6/10
Disposable Filter Type: 0.45µm cellulose	Conductivity 86L308	1/18
Calibration Fluids / Standard Source:	<0.1 Turb. Stan. A 232	11/18
- DO Calibration Fluid (<0.1 mg/L) Portland FOS	20 Turb. Stan. A 8 259	1/19
- Other _____	100 Turb. Stan. A 8 386	1/19
- Other _____	800 Turb. Stan. A 8 336	1/18
- Other _____	PID Span Gas —	
	O ₂ -LEL Span Gas —	
	Other —	

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.



FIGURE 6.1
 FIELD INSTRUMENT CALIBRATION RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP) TASK NO: 04 DATE: 7/12/19
 PROJECT NUMBER: 3611191234 MACTEC CREW: LECG
 PROJECT LOCATION: Hamlet of High Falls, Marletown, New York SAMPLER NAME: Jerry Hamblitt
 WEATHER CONDITIONS (AM): Sunny, 70°F, humid, cooler SAMPLER SIGNATURE: [Signature]
 WEATHER CONDITIONS (PM): Sunny, 85°F, humid, showers CHECKED BY: [Signature] DATE: 7/12/19

MULTI-PARAMETER WATER QUALITY METER					POST CALIBRATION CHECK		
METER TYPE	AM CALIBRATION				Standard Value	Meter Value	*Acceptance Criteria (PM)
MODEL NO.	Start Time	End Time	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
YSI	0705	0725	4.0	4.04	7.0	6.97	+/- 0.3 pH Units
550MP3			7.0	7.03	240	234.0	+/- 10 mV
UNIT ID NO. MD15-02			10.0		1.413	1.414	+/- 5% of standard
			240	240.0		95.240	+/- 0.5 mg/L of standard
			1.413	1.409		7.6	
DO (saturated) %			100	98.0		26.7	
DO (saturated) mg/L ¹ (see Chart 1)			28.4	8.39		746.9	
DO (<0.1) mg/L			<0.1				
Temperature °C				23.09			
Baro. Press. mmHg				746.5			

METER TYPE	Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
HACH	NTU	10	10.2	+/- 0.3 NTU of stan.
MODEL NO. 2100Q	20 Standard	20	19.9	+/- 5% of standard
UNIT ID NO. M024-33	100 Standard	100	101	+/- 5% of standard
	800 Standard	800	783	+/- 5% of standard

METER TYPE	Background	ppmv	<0.1	within 5 ppmv of BG
PHOTOIONIZATION DETECTOR				
MODEL NO.				
UNIT ID NO.	Span Gas	ppmv	100	+/- 10% of standard

METER TYPE	Methane %	50	+/- 10% of standard
O ₂ -LEL 4 GAS METER			
MODEL NO.	O ₂ %	20.9	+/- 10% of standard
UNIT ID NO.	H ₂ S ppmv	25	+/- 10% of standard
	CO ppmv	50	+/- 10% of standard

METER TYPE	See Notes Below for Additional Information			
OTHER METER				
MODEL NO.				
UNIT ID NO.				

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
- Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	Portland FOS	pH (4) BGA602	1/21
Lot#/Date Produced:		pH (7) 8GK167	1/21
Trip Blank Source:		pH (10)	
Sample Preservatives Source:		ORP 3086	4/23
Disposable Filter Type:	0.45µm cellulose	Conductivity 8GK308	11/19
Calibration Fluids / Standard Source:		10 Turb. Stan. A8232	11/21/19
- DO Calibration Fluid (<0.1 mg/L)	Portland FOS	20 Turb. Stan. A8239	12/19
- Other		100 Turb. Stan. A8236	11/19
- Other		800 Turb. Stan. A8236	11/19
- Other		PID Span Gas	
		O ₂ -LEL Span Gas	
		Other	

NOTES:

* Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.



FIGURE 6.1
 FIELD INSTRUMENT CALIBRATION RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohok Road Industrial Plant (MRIP) TASK NO: 04 DATE: 07/12/2019
 PROJECT NUMBER: 3611191234 MACTEC CREW: ICD, JR, ML
 PROJECT LOCATION: Hamlet of High Falls, Marbltown, New York SAMPLER NAME: LANDFILL
 WEATHER CONDITIONS (AM): Sunny 80's SAMPLER SIGNATURE: [Signature]
 WEATHER CONDITIONS (PM): Cloudy 80's-90's RIGT PRECIP CHECKED BY: JR DATE: 7/17/19

MULTI-PARAMETER WATER QUALITY METER

METER TYPE <u>YSI</u>				AM CALIBRATION			POST CALIBRATION CHECK		
MODEL NO. <u>556 MPS</u>				Start Time <u>0705</u>	/End Time <u>0745</u>		Start Time <u>1205</u>	/End Time <u>1223</u>	
UNIT ID NO. <u>M015-10</u>				Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
	pH (4)	SU	4.0	<u>4.0</u>	+/- 0.1 pH Units				
	pH (7)	SU	7.0	<u>7.0</u>	+/- 0.1 pH Units	7.0	<u>7.0</u>	+/- 0.3 pH Units	
	pH (10)	SU	10.0	<u>10.0</u>	+/- 0.1 pH Units				
	Redox	+/- mV	240	<u>240</u>	+/- 10 mV	240	<u>239.5</u>	+/- 10 mV	
	Conductivity	mS/cm	1.413	<u>1.415</u>	+/- 0.5 % of standard	1.413	<u>1.425</u>	+/- 5% of standard	
	DO (saturated)	%	100	<u>99.8</u>	+/- 2% of standard				
	DO (saturated)	mg/L ¹ (see Chart 1)	<u>8.46</u>	<u>8.44</u>	+/- 0.2 mg/L	<u>8.40</u>	<u>8.36</u>	+/- 0.5 mg/L of standard	
	DO (<0.1)	mg/L	<0.1	<u>0.1</u>	< 0.5 mg/L				
	Temperature	°C		<u>22.90</u>			<u>22.86</u>		
	Baro. Press	mmHg		<u>746.3</u>			<u>747.4</u>		

TURBIDITY METER				Standard Value	Meter Value	*Acceptance Criteria (PM)
METER TYPE	<u>HACH</u>	Units				
MODEL NO.	<u>2100 Q</u>					
UNIT ID NO.	<u>M024-38</u>	<0.1 Standard	NTU	<u>10</u>	<u>9.41x</u>	+/- 0.3 NTU of stan.
		20 Standard	NTU	20	<u>19.9</u>	+/- 5% of standard
		100 Standard	NTU	100	<u>99.6</u>	+/- 5% of standard
		800 Standard	NTU	800	<u>795</u>	+/- 5% of standard

PHOTOIONIZATION DETECTOR				Standard Value	Meter Value	*Acceptance Criteria (PM)
METER TYPE	<u>Background</u>	ppmv	<0.1			within 5 ppmv of BG
MODEL NO.	<u>Span Gas</u>	ppmv	100			+/- 10% of standard
UNIT ID NO.						

O ₂ -LEL 4 GAS METER				Standard Value	Meter Value	*Acceptance Criteria (PM)
METER TYPE	<u>Methane</u>	%	50			+/- 10% of standard
MODEL NO.	<u>O₂</u>	%	20.9			+/- 10% of standard
UNIT ID NO.	<u>H₂S</u>	ppmv	25			+/- 10% of standard
	<u>CO</u>	ppmv	50			+/- 10% of standard

OTHER METER				Standard Value	Meter Value	*Acceptance Criteria (PM)
METER TYPE	<u> </u>					See Notes Below for Additional Information
MODEL NO.	<u> </u>					
UNIT ID NO.	<u> </u>					

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
 Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	<u>Portland FOS</u>	pH (4) <u>8G A602</u>	<u>1/21</u>
Lot#/Date Produced:	<u> </u>	pH (7) <u>8G K167</u>	<u>1/21</u>
Trip Blank Source:	<u> </u>	pH (10) <u> </u>	<u> </u>
Sample Preservatives Source:	<u> </u>	ORP <u>3086</u>	<u>0/23</u>
Disposable Filter Type:	<u>0.45µm cellulose</u>	Conductivity <u>8G K308</u>	<u>11/19</u>
Calibration Fluids / Standard Source:		10 Turb. Stan. <u>A8232</u>	<u>11/19</u>
- DO Calibration Fluid (<0.1 mg/L)	<u>Portland FOS</u>	20 Turb. Stan. <u>A8239</u>	<u>12/19</u>
- Other	<u>PFAS FREE CERTIFIED WATER-TESTABLE</u>	100 Turb. Stan. <u>A8236</u>	<u>11/19</u>
- Other	<u> </u>	800 Turb. Stan. <u>A8236</u>	<u>11/19</u>
- Other	<u> </u>	PID Span Gas <u> </u>	<u> </u>
		O ₂ -LEL Span Gas <u> </u>	<u> </u>
		Other <u> </u>	<u> </u>

NOTES: RUN stable cal on TURBIDITY METER AFTER LEAKAGE PART OPEN TO DRY OVERNIGHT
NOTE - EOD CALCHECK FOR NTU'S @ 10+20 YIELDED VALUES OF "0.0" - UNIT NEEDS SERVICE. Turbidity slightly low (10 NTU) in AM - PM heavy humidity problems.

* - Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** - If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 1 - DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.



FIGURE 6.1
 FIELD INSTRUMENT CALIBRATION RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP) TASK NO: _____ DATE: 7/12/19
 PROJECT NUMBER: 3611191234 MACTEC CREW: M. Lounsbury
 PROJECT LOCATION: Hamlet of High Falls, Marbletown, New York SAMPLER NAME: M. Lounsbury
 WEATHER CONDITIONS (AM): Sunny, Breezy, 80° SAMPLER SIGNATURE: [Signature]
 WEATHER CONDITIONS (PM): Sunny, 80-85°F Humid, calm CHECKED BY: [Signature] DATE: 7/17/19

MULTI-PARAMETER WATER QUALITY METER

METER TYPE	AM CALIBRATION			POST CALIBRATION CHECK			
MODEL NO.	Start Time	End Time	Start Time	End Time			
<u>YSB</u>	<u>641</u>	<u>0715</u>	<u>1220</u>	<u>1240</u>			
<u>550</u>							
<u>M015-14</u>							
	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	<u>4.00</u>	+/- 0.1 pH Units			
pH (7)	SU	7.0	<u>7.00</u>	+/- 0.1 pH Units	7.0	<u>7.02</u>	+/- 0.3 pH Units
pH (10)	SU	10.0	<u>—</u>	+/- 0.1 pH Units			
Redox	+/- mV	240	<u>240</u>	+/- 10 mV	240	<u>2343</u>	+/- 10 mV
Conductivity	mS/cm	1.413	<u>1.413</u>	+/- 0.5 % of standard	1.413	<u>1.421</u>	+/- 5% of standard
DO (saturated)	%	100	<u>98.0</u>	+/- 2% of standard			
DO (saturated)	mg/L ¹ (see Chart 1)	<u>8.43</u>	<u>8.39</u>	+/- 0.2 mg/L	<u>7.79</u>	<u>7.46</u>	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	<u>—</u>	< 0.5 mg/L			
Temperature	°C		<u>22.77</u>			<u>25.77</u>	
Baro. Press.	mmHg		<u>746.5</u>			<u>747.2</u>	

TURBIDITY METER

METER TYPE	Units	Standard Value	Meter Value	*Acceptance Criteria (PM)
<u>HACH</u>				
<u>H100T</u>				
<u>M029-301</u>				
<0.1 Standard	NTU	100	<u>16.0</u>	+/- 0.3 NTU of stan.
20 Standard	NTU	20	<u>19.5</u>	+/- 5% of standard
100 Standard	NTU	100	<u>99.9</u>	+/- 5% of standard
800 Standard	NTU	800	<u>800</u>	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE	Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
	Span Gas	ppmv	100		100	+/- 10% of standard

O₂-LEL 4 GAS METER

METER TYPE	Methane	%	50		50	+/- 10% of standard
	O ₂	% <td>20.9</td> <td></td> <td>20.9</td> <td>+/- 10% of standard</td>	20.9		20.9	+/- 10% of standard
	H ₂ S	ppmv	25		25	+/- 10% of standard
	CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE						See Notes Below for Additional Information

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
- Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	<u>Portland FOS</u>	pH (4) <u>816A 602</u>	<u>1/21</u>
Lot#/Date Produced:		pH (7) <u>86K 167</u>	<u>1/22</u>
Trip Blank Source:		pH (10) <u>5080</u>	<u>6/23</u>
Sample Preservatives Source:		ORP <u>86K 308</u>	<u>11/19</u>
Disposable Filter Type:	<u>0.45µm cellulose</u>	Conductivity <u>A 8236</u>	<u>1/17</u>
Calibration Fluids / Standard Source:		<0.1 Turb. Stan. <u>A 8236</u>	<u>12/17</u>
- DO Calibration Fluid (<0.1 mg/L)	<u>Portland FOS</u>	20 Turb. Stan. <u>A 8236</u>	<u>11/19</u>
- Other		100 Turb. Stan. <u>A 8236</u>	<u>11/19</u>
- Other		800 Turb. Stan. <u>A 8236</u>	<u>11/19</u>
- Other		PID Span Gas <u>—</u>	<u>—</u>
		O ₂ -LEL Span Gas <u>—</u>	<u>—</u>
		Other <u>—</u>	<u>—</u>

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
 ** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
 1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.



FIGURE 6.1
FIELD INSTRUMENT CALIBRATION RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____

DATE: 7/3/19 TIME: _____

PROJECT NUMBER: 3611191234.04.xxxx

CALIBRATED BY: FE

MULTI-PARAMETER WATER QUALITY METER METER TYPE _____ YSI MODEL NO. 556 UNIT ID NO. _____

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0	_____	+/- 0.2 pH Units	_____	_____
pH (7)	SU	7.0	_____	+/- 0.2 pH Units	_____	_____
pH (10)	SU	10.0	_____	+/- 0.2 pH Units	_____	_____
Redox	+/- mV	240	_____	+/- 10 mV	_____	_____
Conductivity	mS/cm	1.413	_____	+/- 0.5% of standard	_____	_____
DO (saturated)	%	100	_____	+/- 2% of standard	DO Cal. Solution Source	Prep. Date
DO (saturated)	mg/L ¹	_____	_____	+/- 0.2 mg/L	Portland FOS	_____
DO (<0.1)	mg/L	<0.1	_____	≤ 0.5 mg/L	_____	_____
Baro. Press.	mmHg	_____	_____	_____	NIST Serial #	Certificate #
Temperature	°C	_____	_____	+/- 0.2 °C	4F2160	2448.01

TURBIDITY METER mg/L¹ METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. M024-38

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1	<u>10.1</u>	w/in 0.3 NTU	<u>A8232</u>	<u>11/19</u>
20 Standard	NTU	20	<u>20.0</u>	+/- 5% of standard	<u>A8239</u>	<u>12/19</u>
100 Standard	NTU	100	<u>101</u>	+/- 5% of standard	<u>A8236</u>	<u>11/19</u>
800 Standard	NTU	800	<u>804</u>	+/- 5% of standard	<u>A8236</u>	<u>11/19</u>

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

Background (BG)	ppmv	<0.1	_____	within 5 ppmv of BG	Cal. Standard Lot #	Exp. Date
Span Gas	ppmv	100	_____	+/- 10% of standard	_____	_____

Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street.
Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____

DATE: 7/3/19 TIME: _____

PROJECT NUMBER: 301191234.04-XXXX

CALIBRATED BY: BC

MULTI-PARAMETER WATER QUALITY METER METER TYPE YSI MODEL NO. 556 UNIT ID NO. Mo15-10

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH(4)	SU	4.0	<u>4.00</u>	- - 0.2 pH Units	<u>8GAG02</u>	<u>1/21</u>
pH(7)	SU	7.0	<u>7.00</u>	- - 0.2 pH Units	<u>8GK167</u>	<u>1/21</u>
pH(10)	SU	10.0	_____	- - 0.2 pH Units	_____	_____
Redox	- - mV	240	<u>240</u>	- - 10 mV	<u>3086</u>	<u>6/23</u>
Conductivity	mS/cm	1.413	<u>1.413</u>	- - 0.5% of standard	<u>8GK308</u>	<u>11/19</u>
DO (saturated)	%	100	<u>99.5</u>	- - 2% of standard	DO Cal. Solution Source	Prep. Date
DO (saturated)	mg L ⁻¹	_____	_____	- - 0.2 mg L	Portland FOS	_____
DO (<0.1)	mg L	<0.1	_____	≤ 0.5 mg L	_____	_____
Baro. Press.	mmHg	_____	_____	_____	NIST Serial #	Certificate #
Temperature	°C	<u>21.7</u>	<u>21.7</u>	- - 0.2 °C	<u>4F2160</u>	<u>2448.01</u>

TURBIDITY METER mg L⁻¹ METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. _____

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1	_____	w in 0.3 NTU	_____	_____
20 Standard	NTU	20	_____	- - 5% of standard	_____	_____
100 Standard	NTU	100	_____	- - 5% of standard	_____	_____
800 Standard	NTU	800	_____	- - 5% of standard	_____	_____

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

Background (BG)	ppmv	<0.1	_____	within 5 ppmv. of BG	Cal. Standard Lot #	Exp. Date
Span Gas	ppmv	100	_____	+ - 10% of standard	_____	_____

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
- Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street, Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean, replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____

DATE: 7/10/19 TIME: _____

PROJECT NUMBER: 3611191234.04.XXXX

CALIBRATED BY: BE

MULTI-PARAMETER WATER QUALITY METER METER TYPE YSI MODEL NO. 556 UNIT ID NO. M015-14

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH(4)	SU	4.0	<u>4.00</u>	- - 0.2 pH Units	<u>8GA602</u>	<u>1/21</u>
pH(7)	SU	7.0	<u>7.00</u>	- - 0.2 pH Units	<u>8GK167</u>	<u>1/21</u>
pH(10)	SU	10.0		- - 0.2 pH Units		
Redox	- - mV	240	<u>240</u>	- - 10 mV	<u>308C</u>	<u>6/23</u>
Conductivity	mS/cm	1,413	<u>1.413</u>	- - 0.5% of standard	<u>8GK308</u>	<u>11/19</u>
DO (saturated)	%	100	<u>100.1</u>	- - 2% of standard	DO Cal. Solution Source	Prep. Date
DO (saturated)	mg L ⁻¹			- - 0.2 mg L	Portland FOS	
DO (<0.1)	mg L	<0.1		≤ 0.5 mg L		
Baro. Press.	mmHg				MIST Serial #	Certificate #
Temperature	°C	<u>22.5</u>	<u>22.4</u>	- - 0.2 °C	<u>4F2160</u>	<u>2448.01</u>

TURBIDITY METER mg L⁻¹ METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. _____

	Units	Standard Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1	w in 0.3 NTU		
20 Standard	NTU	20	- - 5% of standard		
100 Standard	NTU	100	- - 5% of standard		
800 Standard	NTU	800	- - 5% of standard		

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

Background (BG)	ppmv	<0.1	within 5 ppmv. of BG	Cal. Standard Lot #	Exp. Date
Span Gas	ppmv	100	+ - 10% of standard		

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
- Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

wood. 511 Congress Street.
Portland, Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean, replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

† = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____ DATE: 7/10/19 TIME: _____

PROJECT NUMBER: 3611912341: 04-XXXX CALIBRATED BY: BC

MULTI-PARAMETER WATER QUALITY METER METER TYPE _____ YSI MODEL NO. 556 UNIT ID NO. _____

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0	_____	+/- 0.2 pH Units	_____	_____
pH (7)	SU	7.0	_____	+/- 0.2 pH Units	_____	_____
pH (10)	SU	10.0	_____	+/- 0.2 pH Units	_____	_____
Redox	+/- mV	240	_____	+/- 10 mV	_____	_____
Conductivity	mS/cm	1.413	_____	+/- 0.5% of standard	_____	_____
DO (saturated)	%	100	_____	+/- 2% of standard	DO Cal. Solution Source	Prep. Date
DO (saturated)	mg/L ¹	_____	_____	+/- 0.2 mg/L	Portland FOS	_____
DO (<0.1)	mg/L	<0.1	_____	≤ 0.5 mg/L	_____	_____
Baro. Press.	mmHg	_____	_____	_____	NIST Serial #	Certificate #
Temperature	°C	_____	_____	+/- 0.2 °C	4F2160	2448.01

TURBIDITY METER mg/L¹ METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. M024-34

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1	<u>9.96</u>	w/in 0.3 NTU	<u>A8232</u>	<u>11/19</u>
20 Standard	NTU	20	<u>20.0</u>	+/- 5% of standard	<u>A8239</u>	<u>12/19</u>
100 Standard	NTU	100	<u>99.5</u>	+/- 5% of standard	<u>A8236</u>	<u>11/19</u>
800 Standard	NTU	800	<u>786</u>	+/- 5% of standard	<u>A8236</u>	<u>11/19</u>

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

Background (BG)	ppmv	<0.1	_____	within 5 ppmv of BG	Cal. Standard Lot #	Exp. Date
Span Gas	ppmv	100	_____	+/- 10% of standard	_____	_____

- Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
- Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street.
Portland, Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____

DATE: 7/3/19 TIME: _____

PROJECT NUMBER: 361191234.04. & CXX

CALIBRATED BY: BC

MULTI-PARAMETER WATER QUALITY METER METER TYPE YSI MODEL NO. 556 UNIT ID NO. M015-02

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0	<u>4.00</u>	- - 0.2 pH Units	<u>8GA602</u>	<u>1/21</u>
pH (7)	SU	7.0	<u>7.00</u>	- - 0.2 pH Units	<u>8GK167</u>	<u>1/21</u>
pH (10)	SU	10.0		- - 0.2 pH Units		
Redox	- - mV	240	<u>240</u>	- - 10 mV	<u>3086</u>	<u>6/23</u>
Conductivity	mS/cm	1,413	<u>1.413</u>	- - 0.5% of standard	<u>8GK308</u>	<u>11/19</u>
DO (saturated)	%	100	<u>99.5</u>	- - 2% of standard	DO Cal. Solution Source	Prep. Date
DO (saturated)	mg/L			- - 0.2 mg/L	Portland FOS	
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L		
Baro. Press.	mmHg				NIST Serial #	Certificate #
Temperature	°C	<u>22.0</u>	<u>22.0</u>	- - 0.2 °C	<u>4F2160</u>	<u>2443.01</u>

TURBIDITY METER mg/L METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. _____

					Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1		w in 0.3 NTU		
20 Standard	NTU	20		- - 5% of standard		
100 Standard	NTU	100		- - 5% of standard		
800 Standard	NTU	800		- - 5% of standard		

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

Background (BG)	ppmv	<0.1		within 5 ppmv of BG	Cal. Standard Lot #	Exp. Date
Span Gas	ppmv	100		- - 10% of standard		

Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street.
Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____

DATE: 7/3/19 TIME: _____

PROJECT NUMBER: 3611191234 04. XXXX

CALIBRATED BY: FB

MULTI-PARAMETER WATER QUALITY METER METER TYPE _____ YSI MODEL NO. 556 UNIT ID NO. _____

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0	_____	+/- 0.2 pH Units	_____	_____
pH (7)	SU	7.0	_____	+/- 0.2 pH Units	_____	_____
pH (10)	SU	10.0	_____	+/- 0.2 pH Units	_____	_____
Redox	+/- mV	240	_____	+/- 10 mV	_____	_____
Conductivity	mS/cm	1.413	_____	+/- 0.5% of standard	_____	_____
DO (saturated)	%	100	_____	+/- 2% of standard	DO Cal. Solution Source	Prep. Date
DO (saturated)	mg/L ¹	_____	_____	+/- 0.2 mg/L	Portland FOS	_____
DO (<0.1)	mg/L	<0.1	_____	≤ 0.5 mg/L	_____	_____
Baro. Press.	mmHg	_____	_____	_____	NIST Serial #	Certificate #
Temperature	°C	_____	_____	+/- 0.2 °C	4F2160	2448.01

TURBIDITY METER mg/L¹ METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. 1024-33

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1	<u>9.99</u>	w/in 0.3 NTU	<u>A8232</u>	<u>11/19</u>
20 Standard	NTU	20	<u>19.6</u>	+/- 5% of standard	<u>A8239</u>	<u>12/19</u>
100 Standard	NTU	100	<u>96.1</u>	+/- 5% of standard	<u>A8236</u>	<u>11/19</u>
800 Standard	NTU	800	<u>813</u>	+/- 5% of standard	<u>A8236</u>	<u>11/19</u>

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
Background (BG)	ppmv	<0.1	_____	within 5 ppmv of BG	_____	_____
Span Gas	ppmv	100	_____	+/- 10% of standard	_____	_____

Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street.
Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Molok Road Industrial Plant (MRIP)	
PROJECT NUMBER 361191234	
SAMPLE ID 356023 - MW1B	SAMPLE TIME 1115

LOCATION ID MW-1B	DATE 7/12/19
START TIME 0950	END TIME 1130
SITE NAME/NUMBER 356023	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 3 4 6 8 OTHER 3" PVC

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER

WELL INTEGRITY

YES	NO	N/A
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INITIAL DTW (BMP) 53.41 FT	FINAL DTW (BMP) 55.61 FT	PROT. CASING STICKUP (AGS) 6.75 FT	TOC/TOR DIFFERENCE -0.09 FT
WELL DEPTH (BMP) 2100 BGS FT	SCREEN LENGTH unk FT	PID AMBIENT AIR NA PPM	REFILL TIMER SETTING NA SEC
WATER COLUMN 48.59 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041) 6.08 GAL	PID WELL MOUTH NA PPM	DISCHARGE TIMER SETTING NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041) 18 GAL	TOTAL VOL. PURGED 1.5 GAL	DRAWDOWN/TOTAL PURGED 0.05	PRESSURE TO PUMP NA PSI

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (-/+ 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1000	BEGIN PURGING									
1007	57.58	2000	14.40	0.889	6.69	6.42	13.0	222	~95' BGS	
1012	56.90	200	13.94	0.868	6.75	4.57	17.5	227.9		
1017	55.11	150	14.27	0.865	6.76	4.23	11.9	222.5		
1022	55.36	150	14.70	0.865	6.79	4.30	8.95	218.1		
1027	55.43	125	15.28	0.861	6.80	4.28	8.11	202.2		
1032	55.54	125	15.30	0.865	6.80	4.80	6.92	196.8		
1037	55.61	125	16.19	0.862	6.81	4.58	6.92	191.1		
1042	55.61	125	15.80	0.863	6.81	4.15	2.85	183.1		
1047	55.61	125	16.53	0.862	6.82	4.09	6.94	179.9		
1052	55.61	125	16.00	0.872	6.81	4.14	5.29	174.9		
1057	55.61	125	15.00	0.866	6.80	4.34	5.45	171.1		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])										TEMP: nearest degree (ex. 10.1 = 10) COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696) pH: nearest tenth (ex. 5.51 = 5.5) DO: nearest tenth (ex. 3.51 = 3.5) TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101) ORP: 2 SF (44.1 = 44, 191 = 190)
15	0.866	6.8	4.3	5.5	170					

EQUIPMENT DOCUMENTATION		EQUIPMENT USED	
TYPE OF PUMP <input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input type="checkbox"/> WATER <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	DECON FLUIDS USED <input checked="" type="checkbox"/> LIQUINON <input checked="" type="checkbox"/> DIIONED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input checked="" type="checkbox"/> OTHER	TUBING/PUMP/BLADDER MATERIALS <input checked="" type="checkbox"/> SILICON TUBING <input checked="" type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	STEEL PUMP MATERIAL <input checked="" type="checkbox"/> PVC PUMP MATERIAL <input type="checkbox"/> GEOPROBE SCREEN <input type="checkbox"/> TEFLON BLADDER <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER
		WL METER: <u>Heron</u> PID: _____ WQ METER: <u>max out yst</u> TURB. METER: <u>max out yst</u> PUMP: _____ OTHER: _____ FILTERS: NO. _____ TYPE _____	

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> VOC'S	8260B	NO	4C/HCL	3400 ml	405	NO	
<input checked="" type="checkbox"/> 1,4-Dioxane	8220-Sm	NO	4C	200 ml	405	NO	
<input checked="" type="checkbox"/> PCE'S	537	NO	4C	200 ml	405	NO	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED: 1.5

Sampler Signature: [Signature] Print Name: Michael H. Lounsbury

Checked By: [Signature] Date: 7/17/19



LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohok Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 SAMPLE ID: 356023-MW4
 SAMPLE TIME: 1447

LOCATION ID: MW-4
 DATE: 07/11/2019
 START TIME: 1245
 END TIME: 1550
 SITE NAME/NUMBER: 356023
 PAGE: 1 OF 1

WELL DIAMETER (INCHES): 1 2 4 6 8 OTHER _____
 TUBING ID (INCHES): 1/8 1/4 3/8 1/2 5/8 OTHER _____
 MEASUREMENT POINT (MP): TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY
 YES NO N/A
 CAP
 CASING
 LOCKED
 COLLAR

INITIAL DTW (BMP): 10.02 FT
 FINAL DTW (BMP): 14.78 FT
 PROT. CASING STICKUP (AGS): 2.3 FT
 TOC/TOR DIFFERENCE: Not Measured FT
 WELL DEPTH (BMP): 21.5 FT
 SCREEN LENGTH: UMC FT
 PID AMBIENT AIR: _____ PPM
 REFILL TIMER SETTING: _____ SEC
 WATER COLUMN: 11.48 FT
 DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041): 0.76 GAL
 PID WELL MOUTH: _____ PPM
 DISCHARGE TIMER SETTING: _____ SEC
 CALCULATED GAL/VOL (column X well diameter squared X 0.041): 1.88 GAL
 TOTAL VOL. PURGED: 4.0 GAL
 DRAWDOWN/TOTAL PURGED: 0.19 PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1315	BEGIN PURGING									
1312	10.48	150	14.92	1.189	6.53	1.35	36.9	105.5	18	
1325	10.85	150	15.08	1.182	6.62	5.50	25.9	99.3	18	
1340	11.29	150	15.29	1.181	6.64	2.67	9.18	93.3		
1400	11.96	150	14.89	1.192	6.62	1.49	9.09	82.9		
1415	13.04	150	14.61	1.188	6.62	1.14	7.46	74.0		NOTE 1' DROP WL?
1420	13.39	75	14.85	1.191	6.63	1.10	5.33	71.5		DROPPUMP RATE
1436	14.02	75	15.44	1.206	6.63	0.99	10.02	73.1		
1435	14.41	75	15.45	1.210	6.62	0.96	11.3	76.4		
1440	14.64	60	15.44	1.211	6.62	0.91	10.9	78.3		LOWER RATE
1445	14.78	60	15.60	1.210	6.63	0.87	10.5	80.8		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

16 1.21 6.6 0.9 10.5 81

TEMP nearest degree (ex: 10.1 = 10)
 COND. 3 SF max (ex: 3333 = 3330, 0.606 = 0.606)
 pH nearest tenth (ex: 5.33 = 5.3)
 DO nearest tenth (ex: 5.51 = 5.5)
 TURB 3 SF max nearest tenth (6.19 = 6.2, 101 = 101)
 ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER WATERA OTHER MEGA MOWSER OTHER _____

DEION FLUIDS USED: DEIONOX AICOWX DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL OTHER PFAS FREE

TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING TEFLON TUBING TEFLON LINED TUBING HDPE TUBING LDPE TUBING OTHER SILASTE OTHER _____

EQUIPMENT USED: WL METER M200-69 PID WQ METER MO15-16 TURB METER MO24-33 PUMP 83166 OTHER _____ FILTERS NO TYPE

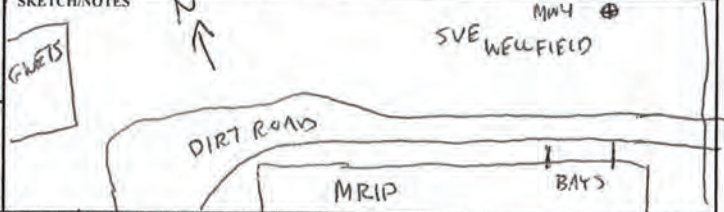
ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> 1,4 DIOXANE	8270D	NO	NOVA 4°C	2xL	✓	NO	
<input checked="" type="checkbox"/> PFAS COMPOUNDS	MO1537	NO	NOVA 4°C	2x250ml	✓	NO	
<input checked="" type="checkbox"/> VOCs	8260C	NO	HCL 4°C	3x40ml	✓	NO	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 4.0
 If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location

SKETCH/NOTES



Sampler Signature: [Signature] Print Name: IAN DESJARDIS
 Checked By: [Signature] Date: 7/17/19

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 SAMPLE ID: 356023-ERT4
 SAMPLE TIME: 1120

LOCATION ID: ERT-4
 DATE: 07/11/2019
 START TIME: 0830
 END TIME: 1155
 SITE NAME/NUMBER: 356023
 PAGE: 1 OF 1

WELL DIAMETER (INCHES): 1 2 4 6 8 OTHER _____
 TUBING ID (INCHES): 1/8 1/4 3/8 1/2 5/8 OTHER _____
 MEASUREMENT POINT (MP): TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY
 YES NO N/A
 CAP
 CASING
 LOCKED
 COLLAR
 TOC/TOR DIFFERENCE: 3.7 FT
 REFILL TIMER SETTING: _____ SEC
 DISCHARGE TIMER SETTING: _____ SEC
 PRESSURE TO PUMP: _____ PSI

INITIAL DTW (BMP): 31.39 FT
 FINAL DTW (BMP): 35.71 FT
 PROT. CASING STICKUP (AGS): 2.4 FT
 WELL DEPTH (BMP): 46.9 FT
 SCREEN LENGTH: UPPER - OPEN
 LOWER - BL FT
 PID AMBIENT AIR: _____ PPM
 WATER COLUMN: 15.51 FT
 DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041): 6.37 GAL
 PID WELL MOUTH: _____ PPM
 CALCULATED GAL/VOL (column X well diameter squared X 0.041): 22.89 GAL
 TOTAL VOL. PURGED: 3.5 GAL
 DRAWDOWN/TOTAL PURGED: 1.82

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 2%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0905	BEGIN PURGING									
0910	32.04	140	14.17	0.738	6.73	8.63	72.5	165.8	~39'	
0920	32.43	140	14.44	0.733	6.80	7.24	109	148.5		
0930	33.06	140	14.66	0.735	6.84	7.21	219	105.1		TUBST SWITCH TO 20 MW
0950	33.96	140	14.73	0.734	6.84	7.03	265	91.6		
1010	34.63	100	16.42	0.736	6.85	6.49	249	89.1		DROP PUMP RATE
1030	35.05	50	18.16	0.742	6.78	6.11	222	94.4		NOTE TO DETW AMBIEN
1050	35.05	50	20.81	0.750	6.79	6.80	224	94.5		EVEN WITH CELL IN SHADE
1100	35.29	50	18.70	0.749	6.75	6.67	218	90.2		
1105	35.43	50	17.98	0.746	6.72	6.27	196	91.8		
1110	35.55	50	17.98	0.746	6.71	6.08	195	92.9		
1115	35.71	50	18.16	0.746	6.72	5.86	192	93.5		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

18 0.746 6.7 5.7 192 94

TEMP nearest degree (ex. 10.1 - 10)
 COND 3 SF max. (ex. 3353 - 3330, 0.095 - 0.096)
 pH nearest tenth (ex. 5.53 - 5.5)
 DO nearest tenth (ex. 3.51 - 3.5)
 TURB 3 SF max. nearest tenth (6.19 - 6.2, 10.1 - 10.1)
 ORP 2 SF (44.1 - 44, 191 - 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER
 WATER/A: _____
 OTHER: MEGA MANSION
 OTHER: _____
 DECON FLUIDS USED: DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL OTHER: PFAS FREE
 TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING TEFLON TUBING TEFLON LINED TUBING HDPE TUBING LDPE TUBING OTHER: SILASTIC
 OTHER: _____
 EQUIPMENT USED: WELL METER: M200-69 Heron
 PID
 WELL METER: M015-10 YSE
 TURB METER: M024-33 HATCH
 PUMP: 83166
 OTHER: _____
 FILTERS: NO TYPE _____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> 1,4 DIOXANE	82700	NO	NONE	2x 1L	✓	NO	
<input checked="" type="checkbox"/> PFAS COMPOUNDS	M00537	NO	NONE	2x 250mL	✓	NO	
<input checked="" type="checkbox"/> VOCs	82602	NO	HEC	3x 40mL	✓	NO	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 3.5
 If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES



Sampler Signature: [Signature] Print Name: IANDEJARA

Checked By: [Signature] Date: 7/17/19



High turbidity - relatively stable at ~190 NTU. Mud on pump and tubing when removed from well.

Not a very good sample - high turbidity with significant drawdown even after > 2 hours of purging at low rate.

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 361191234
 SAMPLE ID: 356023-mw-SB
 SAMPLE TIME: 1310

LOCATION ID: MW-SB
 DATE: 7/11/19
 START TIME: 1115
 END TIME: 1345
 SITE NAME/NUMBER: 356023
 PAGE: 1 OF 2

WELL DIAMETER (INCHES): 1 2 4 6 8 OTHER _____
 TUBING ID (INCHES): 1/8 1/4 3/8 1/2 5/8 OTHER _____
 MEASUREMENT POINT (MP): TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____
 INITIAL DTW (BMP): 32.20 FT
 FINAL DTW (BMP): 32.52 FT
 PROT. CASING STICKUP (AGS): 2.5 FT
 WELL DEPTH (BMP): 35.5 FT
 SCREEN LENGTH: units 0.05 FT
 PID AMBIENT AIR: NA PPM
 WATER COLUMN: 3.3 FT
 DRAWDOWN VOLUME: 0.05 GAL
 PID WELL MOUTH: NA PPM
 CALCULATED GAL-VOL: 0.54 GAL
 TOTAL VOL. PURGED: 6.2 GAL
 DRAWDOWN/TOTAL PURGED: 0.008

WELL INTEGRITY
 YES NO N/A
 CAP:
 CASING:
 LOCKED:
 COLLAR: Cracked

TOCTOR DIFFERENCE: -0.09 FT
 REFILL TIMER SETTING: NA SEC
 DISCHARGE TIMER SETTING: NA SEC
 PRESSURE TO PUMP: NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1140	BEGIN PURGING									
1143	32.52	800	12.98	0.672	6.90	8.65	30.3	219.4	34	
1148	32.57	400	12.13	0.615	6.88	7.46	26.9	230.4	34	
1153	32.52	300	13.31	0.618	6.93	6.93	23.6	229.6	34	
1156	32.52	300	13.33	0.620	6.95	6.68	8.86	218.1	34	
1203	32.52	300	13.70	0.623	6.95	7.11	6.09	209.8	34	
1208	32.52	300	13.18	0.629	6.96	7.07	3.36	204.2	34	
1213	32.52	300	14.01	0.632	7.01	7.03	2.20	195.5	34	
1218	32.52	300	13.84	0.627	7.05	7.01	4.94	192.4	34	PH: 6.91
1223	32.52	300	14.86	0.630	6.97	6.75	1.26	188.9	34	
1228	32.52	300	15.24	0.628	6.98	6.38	1.36	186.2	34	
1235	32.52	300	17.25	0.631	6.98	6.51	1.28	181.6	34	

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

14 0.627 7.0 6.9 0.8 180

TEMP: nearest degree (ex. 10.1 = 10)
 COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
 pH: nearest tenth (ex. 5.33 = 5.3)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER

DECON FLUIDS USED: LIQUINOX, DEIONIZED WATER, POTABLE WATER, NITRIC ACID, HEXANE, METHANOL, OTHER: PFC Free

TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING, PTFE TUBING, TEFLON LINED TUBING, HDPE TUBING, LDPE TUBING, OTHER

S. STEEL PUMP MATERIAL: S. STEEL PUMP MATERIAL, PVC PUMP MATERIAL, GEOPROBE SCREEN, TEFLON BLADDER, OTHER

EQUIPMENT USED: WL METER, PID, WQ METER, TURB. METER, PUMP, OTHER, FILTERS

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOC's	8260B	WU	40C/ACEL	2740ml	Yes	WU	
1,4 D, VANE	8270 SIM	WU	40C	2x10AG	Yes	WU	
PFC's	537	WU	40C	2x250ml July	Yes	WU	

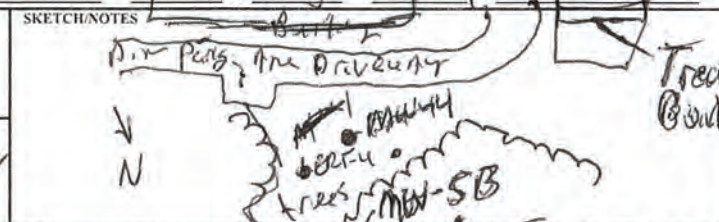
PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO

NUMBER OF GALLONS GENERATED: 6.2

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Sampler Signature: [Signature] Print Name: M'Clain, H. Lounsbey
 Checked By: [Signature] Date: 7/17/19



LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 361191234
 SAMPLE ID: 356023-MW5B
 SAMPLE TIME: 1310

LOCATION ID: MW-5B
 DATE: 7/11/19
 START TIME: 1115
 END TIME: 1345
 SITE NAME/NUMBER: 356023
 PAGE: 2 OF 2

WELL DIAMETER (INCHES): 1 2 4 6 8 OTHER _____
 TUBING ID (INCHES): 1/8 1/4 3/8 1/2 5/8 OTHER _____
 MEASUREMENT POINT (MP): TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY
 YES NO N/A
 CAP _____
 CASING _____
 LOCKED _____
 COLLAR _____

INITIAL DTW (BMP): 32.20 FT
 FINAL DTW (BMP): 32.52 FT
 WELL DEPTH (BMP): 35.5 FT
 SCREEN LENGTH: 4.32 FT
 WATER COLUMN: 3.3 FT
 DRAWDOWN VOLUME: 0.057 GAL
 TOTAL VOL. PURGED: 6.2 GAL
 CALCULATED GAL/VOL: 0.57 GAL
 (column X well diameter squared X 0.041)
 (mL per minute X total minutes X 0.00026 gal/mL)

PROT. CASING STICKUP (AGS): _____ FT
 PID AMBIENT AIR: WA PPM
 PID WELL MOUTH: WA PPM
 DRAWDOWN/TOTAL PURGED: 0.008

TOC/TOR DIFFERENCE: NA FT
 REFILL TIMER SETTING: WA SEC
 DISCHARGE TIMER SETTING: NA SEC
 PRESSURE TO PUMP: NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1140	BEGIN PURGING									
1239	32.52	300	13.38	0.628	6.97	7.27	1.72	182.4	34	
1244	32.52	300	13.78	0.624	6.97	6.42	0.85	180.9	34	
1249	32.52	300	14.06	0.626	6.98	7.07	0.88	179.4	34	
1254	32.52	300	14.05	0.626	6.98	6.60	0.81	178.6	34	
1259	32.52	300	13.82	0.627	6.98	6.88	0.77	179.2	34	De-Biotoc But stable
/										

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

14 0.627 7.0 6.9 0.8 180

TEMP: nearest degree (ex. 10.1 = 10)
 COND: 3 SF max. (ex. 3333 = 3330, 0.696 = 0.696)
 pH: nearest tenth (ex. 3.51 = 3.5)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER WATERA OTHER _____

DECON FLUIDS USED: LIQUINOX DOLAN DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL OTHER: PFC Free

TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING TEFLON TUBING TEFLON LINED TUBING HDPE TUBING LDPE TUBING OTHER _____

EQUIPMENT USED: WL METER: M200-78 PID: WQ METER: maff-14 TURB. METER: mady-34 PUMP: McH2000 OTHER: FILTERS: NO. TYPE _____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
Volts	8260B	WU	1fcl	247ml	Yes	WU	
Hy-Dioxne	8270 SIM	WU	YOC	247ml	Yes	WU	
PFCs	537	WU	YOC	247ml	YOC	WU	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 6.2
 If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES: See Page 1

Sampler Signature: *[Signature]* Print Name: Mitchell L. Lounsbury
 Checked By: *[Signature]* Date: 7/17/19



FIGURE 4.17
 LOW FLOW GROUNDWATER SAMPLING RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohonk Road Industrial Plant (MRIP)	
PROJECT NUMBER 3611191234	
SAMPLE ID 356023-MWR	SAMPLE TIME 1100

LOCATION ID MW-5R	DATE 7/12/19
START TIME 1100	END TIME 1115
SITE NAME/NUMBER 356023	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER Plumbed extraction well

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER FBGS

INITIAL DTW (BMP) _____ FT FINAL DTW (BMP) _____ FT PROT. CASING STICKUP (AGS) 1.25 FT TOC/TOR DIFFERENCE _____ FT

WELL DEPTH (BMP) 125' (1115) FT SCREEN LENGTH _____ FT PID AMBIENT AIR _____ PPM REFILL TIMER SETTING _____ SEC

WATER COLUMN _____ FT DRAWDOWN VOLUME _____ GAL PID WELL MOUTH _____ PPM DISCHARGE TIMER SETTING _____ SEC

CALCULATED GAL/VOL _____ GAL TOTAL VOL. PURGED 3 GAL DRAWDOWN/TOTAL PURGED _____ PSI

(column X well diameter squared X 0.041) (mL per minute X total minutes X 0.00026 gal/mL)

WELL INTEGRITY
 YES NO N/A
 CAP _____ ✓
 CASING _____ ✓
 LOCKED _____ ✓
 COLLAR _____ ✓

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (-/+ 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURGING									
1105	—	—	12.3	0.730	6.7	5.3	2.0	75		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

TEMP: nearest degree (ex. 10.1 = 10)
 COND: 3 SF max (ex. 1333 = 1330, 0.696 = 0.696)
 pH: nearest tenth (ex. 5.53 = 5.5)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

12 0.730 6.7 5.3 2.0 75

EQUIPMENT DOCUMENTATION

TYPE OF PUMP <input type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input checked="" type="checkbox"/> WATER <input checked="" type="checkbox"/> OTHER <u>Treatment System Extraction Well</u>	DECON FLUIDS USED <input type="checkbox"/> LIQUINOX <input type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input checked="" type="checkbox"/> OTHER <u>NA</u>	TUBING/PUMP/BLADDER MATERIALS <input type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input checked="" type="checkbox"/> OTHER <u>WATER/NA</u>	EQUIPMENT USED <input type="checkbox"/> WL METER <input type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <u>YSI 556 MPS</u> <input checked="" type="checkbox"/> TURB. METER <u>17464 JAWOOL</u> <input type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO. TYPE
---	--	--	--

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> VOCs	8260C	✓	4°C/HCl	3x10ml	4	—	
<input checked="" type="checkbox"/> 1-4 Dioxane	8270 SWM	✓	4°C	2x1 LALC	4	—	
<input checked="" type="checkbox"/> PPCs	537	✓	4°C	2x250ml poly	4	—	

PURGE OBSERVATIONS PURGE WATER CONTAINERIZED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NO-PURGE METHOD UTILIZED <input type="checkbox"/> YES <input type="checkbox"/> NO NUMBER OF GALLONS GENERATED <u>3</u> If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.	SKETCH/NOTES Parts for sampling Extraction wells. GWETS Treatment Building Sample collected from discharge port inside GWETS Building.
Sampler Signature: <u>Jerry Rawcliffe</u> Print Name: <u>Jerry Rawcliffe</u> Checked By: <u>Mohonk</u> Date: <u>7/12/19</u>	

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 SAMPLE ID: 356023-MW6B
 SAMPLE TIME: 1315

LOCATION ID: MW-6B
 DATE: 7/11/19
 START TIME: 1115
 END TIME: 1355
 SITE NAME/NUMBER: 356023
 PAGE: 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER 3"
 TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER
 MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER

WELL INTEGRITY
 YES NO N/A
 CAP
 CASING
 LOCKED
 COLLAR

INITIAL DTW (BMP): 69.67 FT
 FINAL DTW (BMP): 71.76 FT
 PROT. CASING STICKUP (AGS): 2.35 FT
 TOCTOR DIFFERENCE: 0.11 FT
 WELL DEPTH (BMP): 7100 FT
 SCREEN LENGTH: UNCL FT
 PID AMBIENT AIR: — PPM
 REFILL TIMER SETTING: — SEC
 WATER COLUMN: 730 FT
 DRAWDOWN VOLUME: 0.77 GAL
 PID WELL MOUTH: — PPM
 DISCHARGE TIMER SETTING: — SEC
 CALCULATED GAL/VOL: 711.2 GAL
 TOTAL VOL. PURGED: 3.0 GAL
 DRAWDOWN/TOTAL PURGED: 1.26
 PRESSURE TO PUMP: — PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (µS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (-/+ 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1149	BEGIN PURGING									
1200	71.58	230	13.9	0.775	6.7	6.3	—	-4	90	Pickup turb meter from I.D.
1210	71.72	215	14.6	0.780	6.8	5.4	4.3	-17		
1230	71.73	205	14.5	0.780	6.8	5.3	2.6	-15		
1235	71.73	215	14.5	0.780	6.8	5.4	1.5	-14		
1240	71.71	220	14.3	0.779	6.9	5.3	1.2	-14		
1245	71.71	245	14.4	0.778	6.9	5.2	1.5	-17		
1250	71.76	240	14.3	0.777	6.9	5.2	1.4	-17		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

14 0.777 6.9 5.2 1.4 -17

TEMP: nearest degree (ex. 10.1 = 10)
 COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
 pH: nearest tenth (ex. 5.53 = 5.5)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 5 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER WATERA OTHER

DECON FLUIDS USED: LIQUINOX POTABLE WATER NITRIC ACID HEXANE METHANOL OTHER: P-dabp

TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING TEFLON TUBING TEFLON LINED TUBING HDPE TUBING LDPE TUBING OTHER

S. STEEL PUMP MATERIAL PVC PUMP MATERIAL GEOPROBE SCREEN TEFLON BLADDER OTHER

EQUIPMENT USED: WL METER: Heaver PID WQ METER: YSI 5500 MPS TURB. METER: AMCL 2102 G PUMP OTHER FILTERS: NO. TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
A VOCs	8260	N	4°C WEL	3x40ml	✓	ms/msv	
A 1-4 Volatiles	8270-SIM	N	7°C	2x1 LAB	✓	ms/msv	
A DPCs	537	N	4°C	2x250 poly	✓	ms/msv	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 3.0
 If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES



Sampler Signature: *Jerry Raudette*
 Checked By: _____
 Print Name: Jerry Raudette
 Date: _____

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
PROJECT NUMBER: 361191234
SAMPLE ID: 356023-UW7R
SAMPLE TIME: 4:30 11:30

LOCATION ID: UW-7R
DATE: 7/12/19
START TIME: 11:15
END TIME: 11:35
SITE NAME/NUMBER: 356023
PAGE: 1 OF 1

WELL DIAMETER (INCHES) [] 1 [] 2 [] 4 [x] 6 [] 8 [] OTHER
TUBING ID (INCHES) [] 1/8 [] 1/4 [] 3/8 [] 1/2 [] 5/8
MEASUREMENT POINT (MP) [] TOP OF RISER (TOR) [] TOP OF CASING (TOC) [] OTHER

WELL INTEGRITY YES NO N/A
CAP CASING [] [] [x]
LOCKED [] [] [x]
COLLAR [] [] [x]
OTHER: Plumbed extraction well

INITIAL DTW (BMP) [] FT FINAL DTW (BMP) [] FT
WELL DEPTH (BMP) 150 (HST) FT SCREEN LENGTH UNR FT
WATER COLUMN [] FT DRAWDOWN VOLUME UNR GAL
CALCULATED GAL/VOL [] GAL TOTAL VOL. PURGED 3 GAL

PROT. CASING STICKUP (AGS) 2.7 FT
PID AMBIENT AIR [] PPM
PID WELL MOUTH [] PPM
DRAWDOWN/TOTAL PURGED [] PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

Table with columns: TIME, DTW (FT), PURGE RATE (mL/min), TEMP. (C), SP. CONDUCTANCE (mS/cm), pH (units), DISS. O2 (mg/L), TURBIDITY (ntu), REDOX (mv), PUMP INTAKE DEPTH (ft), COMMENTS. Includes data for 11:20 and a diagonal line indicating stabilization.

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

Final stabilized parameters: DTW 12, Sp. Conductance 0.617, pH 6.8, Diss. O2 5.7, Turbidity 2.0, Redox -28.

TEMP: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

Form with sections: TYPE OF PUMP, DECON FLUIDS USED, TUBING/PUMP/BLADDER MATERIALS, EQUIPMENT USED. Includes handwritten notes like 'Treatment System' and 'Estimation Well'.

ANALYTICAL PARAMETERS

Table with columns: PARAMETER, METHOD NUMBER, FIELD FILTERED, PRESERVATION METHOD, VOLUME REQUIRED, SAMPLE COLLECTED, QC COLLECTED, SAMPLE BOTTLE ID NUMBERS. Lists parameters like VOCs, 1,4 Dioxane, and PFCs.

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO
NO-PURGE METHOD UTILIZED YES NO
NUMBER OF GALLONS GENERATED 3

SKETCH/NOTES

Sketch of GW BTA Treatment Building. Notes: 'Parts for sampling extraction wells. Sample collected from discharge port inside GWETS Building.'

Sampler Signature: [Signature]
Checked By: [Signature]
Date: 7/12/19

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohawk Road Industrial Plant (MRIP)	
PROJECT NUMBER 3611191234	
SAMPLE ID 356023-MW8B	SAMPLE TIME 1320

LOCATION ID mw-8B	DATE 7/9/19
START TIME 0940	END TIME 1345
SITE NAME/NUMBER 356023	PAGE 1 OF 2

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

YES	NO	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INITIAL DTW (BMP) 30.94 FT	FINAL DTW (BMP) 31.16 FT	PROT. CASING STICKUP (AGS) 0 FT	TOC/TOR DIFFERENCE 0.22 FT
WELL DEPTH (BMP) 2100' FT	SCREEN LENGTH UNK FT OPEN W/LOG FOR	PID AMBIENT AIR PPM	REFILL TIMER SETTING SEC
WATER COLUMN 69.06 FT	DRAWDOWN VOLUME 0.3 GAL	PID WELL MOUTH PPM	DISCHARGE TIMER SETTING SEC
CALCULATED GAL/VOL 102 GAL	TOTAL VOL. PURGED 8.3 GAL	DRAWDOWN/TOTAL PURGED 1036	PRESSURE TO PUMP PSI

(column X well diameter squared X 0.041) (mL per minute X total minutes X 0.00026 gal/mL)

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1104	BEGIN PURGING									
1140	31.04	260	15.4	0.455	7.1	1.2	160	-97	95'	
1120	31.02	250	15.2	0.478	7.3	0.6	94	-157		
1130	31.05	280	15.3	0.479	7.5	0.5	80	-163		
1140	31.07	300	15.2	0.479	7.6	0.5	63	-163		
1150	31.09	260	15.6	0.475	7.6	0.5	53	-167		
1200	31.10	270	14.9	0.473	7.7	0.4	58	-175		
1210	31.11	250	14.7	0.471	7.7	0.5	42	-176		
1220	31.12	260	14.9	0.480	7.7	0.4	37	-181		
1230	31.13	225	15.1	0.466	7.7	0.4	37	-183		
1240	31.14	260	15.4	0.465	7.7	0.4	33	-193		
1245	31.14	250	14.7	0.466	7.7	0.4	30	-195		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

14	0.467	7.7	0.4	28	-200
----	-------	-----	-----	----	------

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.096 = 0.096)
pH: nearest tenth (ex. 5.55 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<p>TYPE OF PCMP</p> <input checked="" type="checkbox"/> PERISTALTIC SUBMERSIBLE BLADDER <input type="checkbox"/> WATERA <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____	<p>DECON FLUIDS USED</p> <input checked="" type="checkbox"/> LIQUINOX <input checked="" type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input type="checkbox"/> OTHER <u>PECFM</u>	<p>TUBING/PUMP/BLADDER MATERIALS</p> <input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____	<p>EQUIPMENT USED</p> <input checked="" type="checkbox"/> WL METER <u>Aeron</u> <input type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <u>YSE</u> <input checked="" type="checkbox"/> TURB. METER <u>HWCA</u> <input type="checkbox"/> PUMP <input type="checkbox"/> OTHER _____ <input type="checkbox"/> FILTERS NO. _____ TYPE _____
--	---	--	---

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> VOCs	8260	N	HCl 4°C 3x4ml			PVP	
<input checked="" type="checkbox"/> 1-4 Dioxane	8270/9M	N	4°C 2x16ml			PVP	
<input checked="" type="checkbox"/> PFCs	537	N	4°C 2x250µl			PVP	

PURGE OBSERVATIONS

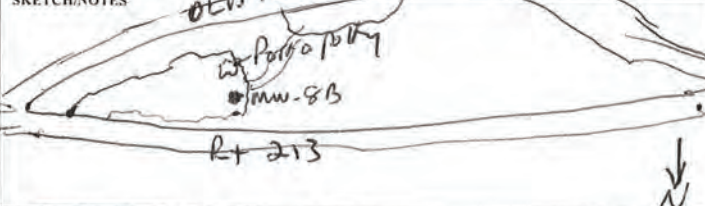
PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED 8.3

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES



Sampler Signature: Jerry Rawchik Print Name: Jerry Rawchik

Checked By: [Signature] Date: 7/17/19

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 SAMPLE ID: 356023-MW8B
 SAMPLE TIME: 7/3/20

LOCATION ID: MW-8B
 DATE: 7/9/19
 START TIME: 0940
 END TIME: 1345
 SITE NAME/NUMBER: 356023
 PAGE: 2 OF 2

WELL DIAMETER (INCHES): 1 2 4 6 8 OTHER _____
 TUBING ID (INCHES): 1/8 1/4 3/8 1/2 5/8 OTHER _____
 MEASUREMENT POINT (MP): TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY
 YES NO N/A
 CAP:
 CASING:
 LOCKED:
 COLLAR:

INITIAL DTW (BMP): 30.94 FT
 FINAL DTW (BMP): 31.16 FT
 PROT. CASING STICKUP (AGS): 0 FT
 TOC/TOR DIFFERENCE: 0.41 FT
 WELL DEPTH (BMP): 100 FT
 SCREEN LENGTH: OPEN TO BR / 100 FT
 PID AMBIENT AIR: _____ PPM
 REFILL TIMER SETTING: _____ SEC
 WATER COLUMN: 6906 FT
 DRAWDOWN VOLUME: 0.3 GAL
 PID WELL MOUTH: _____ PPM
 DISCHARGE TIMER SETTING: _____ SEC
 CALCULATED GAL VOL: 102 GAL
 TOTAL VOL. PURGED: 8.3 GAL
 DRAWDOWN/TOTAL PURGED: 1036
 PRESSURE TO PUMP: _____ PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (± 3 degrees)	SP. CONDUCTANCE (mS/cm) (± 3%)	pH (units) (± 0.1 units)	DISS. O ₂ (mg/L) (± 10%)	TURBIDITY (ntu) (± 10% ~10 ntu)	REDOX (mv) (± 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1104	BEGIN PURGING									
1250	31.15	235	15.3	0.464	7.7	0.4	31	-194	95	
1255	31.15	225	15.1	0.465	7.7	0.4	28	-199		
1300	31.16	245	15.0	0.466	7.7	0.4	25	-199		
1305	31.16	290	13.9	0.467	7.7	0.4	28	-196		Shade

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

14 0.467 7.7 0.4 28 -200

TEMP: nearest degree (ex. 10.1 = 10)
 COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
 pH: nearest tenth (ex. 5.53 = 5.5)
 DO: nearest tenth (ex. 3.51 = 3.5)
 TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
 ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER
 DECON FLUIDS USED: LIQUINOX, DEIONIZED WATER, POTABLE WATER, NITRIC ACID, HEXANE, METHANOL, OTHER: PFC free
 TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING, TEFLON TUBING, TEFLON LINED TUBING, HDPE TUBING, LDPE TUBING, OTHER _____
 EQUIPMENT USED: WL METER: Hecon, PID, WQ METER: YS P 536 mps, TURB. METER: HATCH 2100C, PUMP, OTHER _____, FILTERS: NO. TYPE _____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
✓ VOCs	8260	N	4°C HCL	3x40 ml	Yes	DUP	—
✓ PFI-4 Dioxine	5270 SW7	N	4°C	2x16 AG	Yes	DUP	—
✓ PFCs	537	N	4°C	2x250 poly	Yes	DUP	—

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 9.3
 If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

See page 1

Sampler Signature: *Jerry Paul*
 Print Name: Jerry Paul
 Checked By: *[Signature]*
 Date: 7/17/19



FIGURE 4.17
 LOW FLOW GROUNDWATER SAMPLING RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohok Road Industrial Plant (MRIP)	
PROJECT NUMBER 361191234	
SAMPLE ID 356023-MW11B	SAMPLE TIME 1137

LOCATION ID MW-11B	DATE 07/16/2019
START TIME 0920	END TIME 1200
SITE NAME/NUMBER 356023	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

YES	NO	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

INITIAL DTW (BMP) 31.72 FT	FINAL DTW (BMP) 31.6 FT	PROT. CASING STICKUP (AGS) 1.6 FT	TOC/TOR DIFFERENCE N/A FT
WELL DEPTH (BMP) 181 FT	SCREEN LENGTH OPEN HUB FT	PID AMBIENT AIR PPM	REFILL TIMER SETTING SEC
WATER COLUMN 149 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041) 0.177 GAL	PID WELL MOUTH PPM	DISCHARGE TIMER SETTING SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041) 219 GAL	TOTAL VOL. PURGED 6.2 GAL	DRAWDOWN/TOTAL PURGED 0.028	PRESSURE TO PUMP PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0935	BEGIN PURGING									
0950	31.72	160	12.32	0.629	7.12	21.37	88.6	-87.8		
1010	31.72	160	12.56	0.629	7.18	4.01	86.2	-92.9		USE 20 MINUTE INTERVAL
1030	31.72	160	12.48	0.629	7.23	2.10	88.5	-105.9		1
1050	31.70	160	12.45	0.628	7.18	2.37	86.3	-102.8		NOTE WLT
1110	31.63	160	12.74	0.629	7.21	1.91	85.2	-109.9		1
1115	31.60	160	12.74	0.629	7.21	1.86	81.6	-115.9		1
1120	31.60	160	12.86	0.629	7.21	1.75	93.180.4	-112.1		TURB DIAL HAD HUMIDITY
1125	31.60	160	12.83	0.629	7.21	1.80	77.6	-111.8		
1130	31.60	160	12.76	0.629	7.19	1.94	79.1	-114.8		
1135	31.60	160	12.80	0.630	7.21	1.86	81.0	-110.0		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

13 0.630 7.2 1.9 81 110

TEMP nearest degree (ex. 10.1 = 10)
COND. 3 SF max (ex. 3333 = 3330, 0.096 = 0.096)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<input checked="" type="checkbox"/> PERISTALTIC <input checked="" type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER	<input checked="" type="checkbox"/> LIQUINOX-ALC 99.99% <input type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input checked="" type="checkbox"/> OTHER DEAS FREE H ₂ O	<input type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLO TUBING <input type="checkbox"/> TEFLO LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input checked="" type="checkbox"/> OTHER SILASTIC <input type="checkbox"/> OTHER _____	<input type="checkbox"/> S STEEL PUMP MATERIAL <input type="checkbox"/> PVC PUMP MATERIAL <input type="checkbox"/> GEOPROBE SCREEN <input type="checkbox"/> TEFLO BLADDER <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____	<input checked="" type="checkbox"/> WL METER M200-69 <input type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER M615-10 <input checked="" type="checkbox"/> TURB METER M024-38 <input type="checkbox"/> PUMP 83171 <input type="checkbox"/> OTHER _____ <input type="checkbox"/> FILTERS NO TYPE
--	---	--	--	---

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> 1,4 DIOXANE	8270D	NU	none	2x1L	✓	NU	/
<input checked="" type="checkbox"/> PFAS COMPOUNDS	M0537	NU	none	2x250mL	✓	NU	/
<input checked="" type="checkbox"/> VOCs	8260C	NU	HCL	3x40mL	✓	NU	/
/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/

PURGE OBSERVATIONS

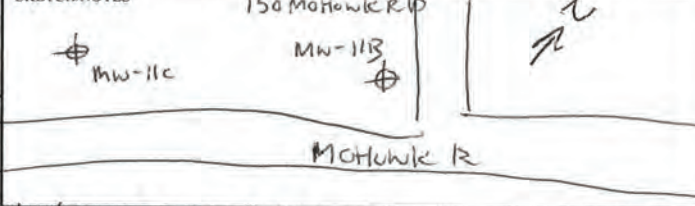
PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED 6.2

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location

SKETCH/NOTES



Sampler Signature: *[Signature]* Print Name: LANDESEN
Checked By: *[Signature]* Date: 7/17/19

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 SAMPLE ID: 356023-MW11C SAMPLE TIME: 1523

LOCATION ID: MW-11C DATE: 07/16/2019
 START TIME: 12:20 13:20 END TIME: 1630
 SITE NAME/NUMBER: 356023 PAGE: 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____
 TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____
 MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY
 YES NO N/A
 CAP
 CASING
 LOCKED
 COLLAR

INITIAL DTW (BMP): 33.67 FT FINAL DTW (BMP): 33.44 FT PROT. CASING STICKUP (AGS): 1.09 FT TOCTOR DIFFERENCE: NA FT
 WELL DEPTH (BMP): 220 FT SCREEN LENGTH: OPENHOLE 37 FT PID AMBIENT AIR: _____ PPM REFILL TIMER SETTING: _____ SEC
 WATER COLUMN: 187 FT DRAWDOWN VOLUME: 0.33 GAL PID WELL MOUTH: _____ PPM DISCHARGE TIMER SETTING: _____ SEC
 CALCULATED GAL/VOL: 276 GAL TOTAL VOL. PURGED: 5 GAL DRAWDOWN/TOTAL PURGED: 0.066 PRESSURE TO PUMP: _____ PSI
(column X well diameter squared X 0.041) (mL per minute X total minutes X 0.00026 gal/mL)

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 2%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1335										BEGIN PURGING
1345	33.43	150	14.96	0.661	7.01	2.85	18.3	47.2	~180	BEGIN WITH 20 MIN INT.
1405	33.51	150	14.92	0.715	6.89	1.67	16.8	24.3	1	/
1425	33.53	150	14.60	0.717	6.83	1.71	20.2	27.7		
1445	33.49	150	14.75	0.713	6.87	1.96	10.0	26.7		
1505	33.47	150	14.85	0.714	6.83	2.20	9.60	32.5		
1510	33.47	150	14.73	0.712	6.84	1.66	9.77	31.5		
1515	33.45	150	14.79	0.711	6.85	1.46	9.63	31.2		
1520	33.44	150	14.90	0.712	6.85	1.40	9.85	31.2		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

15 0.712 6.9 1.4 9.9 31.2

TEMP: nearest degree (ex. 10.1 - 10)
 COND: 3 SF max (ex. 3333 - 3330, 0.096 - 0.0961)
 pH: nearest tenth (ex. 5.53 - 5.5)
 DO: nearest tenth (ex. 3.51 - 3.5)
 TURB: 3 SF max, nearest tenth (6.19 - 6.2, 10.1 - 10.1)
 ORP: 2 SF (44.1 - 44, 191 - 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER WATER OTHER: MEGA Minson

DECON FLUIDS USED: LIQUINOX DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL OTHER: PFA FREE

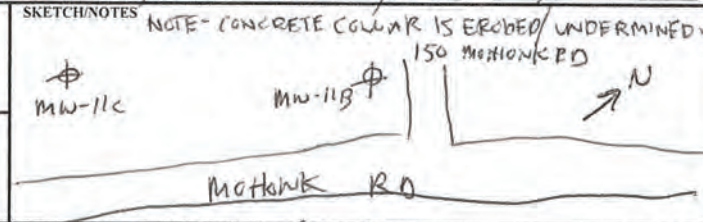
TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING TEFLON TUBING TEFLON LINED TUBING HDPE TUBING LDPE TUBING OTHER: TUBASK

EQUIPMENT USED: WL METER: M250-69 PID WQ METER: M415-10 TURB METER: M624-58 PUMP: 32166 OTHER: FILTERS: NO TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> 1,4 DIOXANE	8270D	NO	NONE	2x1L	✓	NO	
<input checked="" type="checkbox"/> PFA5 Compound	M0537	NO	NONE	2x250mL	✓	NO	
<input checked="" type="checkbox"/> VOLCS	8260C	NO	HCL	3x40m	✓	NO	

PURGE OBSERVATIONS
 PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 5.0
If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.



Sampler Signature: *[Signature]* Print Name: LANDESHAW
 Checked By: Jerry Ruffolo Date: _____



(K) DO slightly out of stabilization after 1.75 hours of purging. (M)

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohonk Road Industrial Plant (MRIP)	
PROJECT NUMBER 3611191234	
SAMPLE ID 356023-MW12B190	SAMPLE TIME 1727

LOCATION ID MW-12B	DATE 07/09/2019
START TIME 1500	END TIME 1805
SITE NAME/NUMBER 356023	PAGE 1 OF 2

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

INITIAL DTW (BMP) 12.26 FT FINAL DTW (BMP) 12.29 FT PROT. CASING STICKUP (AGS) 0.1 FT

WELL DEPTH (BMP) 200 FT SCREEN LENGTH OPEN FT PID AMBIENT AIR _____ PPM

WATER COLUMN 187.7 FT DRAWDOWN VOLUME (initial DTW - final DTW X well diam squared X 0.041) 0.04478 GAL

CALCULATED GAL/VOL (column X well diameter squared X 0.041) -9.8 GAL TOTAL VOL. PURGED 5.05 GAL DRAWDOWN/TOTAL PURGED 0.0087

WELL INTEGRITY

YES	NO	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

TOC/TOR DIFFERENCE NA FT

REFILL TIMER SETTING _____ SEC

DISCHARGE TIMER SETTING _____ SEC

PRESSURE TO PUMP _____ PSI

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 2%)	pH (units) (+/- 0.1 units)	DISS O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1540	BEGIN PURGING									
1545	12.28	160	16.41	0.484	6.59	4.18	43.4	-2.2	190	
1550	12.29	160	17.52	0.495	6.60	4.05	69.7	7.3		
1555	12.29	160	17.39	0.507	6.64	3.94	91.1	12.3		
1600	12.29	160	17.09	0.515	6.66	3.80	87.5	16.2		
1610	12.29	160	17.05	0.515	6.65	3.13	81.2	21.2		SWITCH TO 10 MIN PURG
1620	12.29	160	16.82	0.514	6.56	3.81	77.1	29.1		
1630	12.30	160	16.70	0.513	6.61	2.66	70.7	29.3		
1640	12.30	160	16.84	0.512	6.62	3.02	55.3	29.9		
1650	12.30	160	17.06	0.510	6.58	3.26	46.4	31.1		
1700	12.30	160	17.06	0.509	6.63	2.42	41.8	31.0		
1710	12.30	160	17.01	0.508	6.63	2.03	40.2	32.7		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

SEE PAGE 2 of 2 17 0.509 16.6 1.9 37 34

TEMP nearest degree (ex. 10.1 = 10)
COND. 3 SF max (ex. 3333 - 3330, 0.096 - 0.096)
pH nearest tenth (ex. 5.53 - 5.5)
DO nearest tenth (ex. 3.51 - 3.5)
TURB 3 SF max, nearest tenth (6.19 - 6.2, 10.1 - 10.1)
ORP 2 SF (43.1 - 44, 191 - 190)

EQUIPMENT DOCUMENTATION

<p>TYPE OF PUMP</p> <input type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input type="checkbox"/> WATERA <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<p>DECON FLUIDS USED</p> <input type="checkbox"/> LIQUINOX <input type="checkbox"/> DEIONIZED WATER <input checked="" type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input type="checkbox"/> OTHER	<p>TUBING/PUMP/BLADDER MATERIALS</p> <input type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input checked="" type="checkbox"/> DEIONIZED TUBING <input type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<p>EQUIPMENT USED</p> <input checked="" type="checkbox"/> W. METER <u>Heron</u> <input type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <u>YSI 556 m.p.s.</u> <input checked="" type="checkbox"/> TURB METER <u>14141210 JLR</u> <input type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO TYPE
---	---	--	--

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> VOCs	8260C	N	4°C HCl	3x10ml	Y	-	-
<input checked="" type="checkbox"/> 1-4 Dioxane	8270 SIM	N	4°C	2x16ml	Y	-	-
<input checked="" type="checkbox"/> PFCs	537	N	4°C	2x250ml	Y	-	-
	SEE PAGE 2	2	of	2 poly			

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED 5.1

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES

SEE PAGE 2 of 2

NOTE = LEFT ~ 190' 3/8" HDPE TUBING IN WELL.

located just off panel driveway near garden, beside house - Newly flushed to ground Aluminum well casing

Sampler Signature: [Signature] Print Name: IAN DEJAS

Checked By: [Signature] Date: 7/17/19



FIGURE 4.17
LOW FLOW GROUNDWATER SAMPLING RECORD
NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 SAMPLE ID: 356023-MW12B190
 SAMPLE TIME: 1727

LOCATION ID: MW-12B
 DATE: 7/9/19
 START TIME: 1500
 END TIME: 1805
 SITE NAME/NUMBER: 356023
 PAGE: 2 OF 2

WELL DIAMETER (INCHES): 1 2 4 6 8 OTHER _____
 TUBING ID (INCHES): 1/8 1/4 3/8 1/2 5/8 OTHER _____
 MEASUREMENT POINT (MP): TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY
 YES NO N/A
 CAP
 CASING
 LOCKED
 COLLAR

INITIAL DTW (BMP): 12.26 FT
 FINAL DTW (BMP): 12.29 FT
 PROT. CASING STICKUP (AGS): 0.1 FT
 TOC/TOR DIFFERENCE: NA FT
 WELL DEPTH (BMP): 200 FT
 SCREEN LENGTH: OPEN FT
 PID AMBIENT AIR: _____ PPM
 REFILL TIMER SETTING: _____ SEC
 WATER COLUMN: 187.7 FT
 DRAWDOWN VOLUME: 0.04478 GAL
 PID WELL MOUTH: _____ PPM
 DISCHARGE TIMER SETTING: _____ SEC
 CALCULATED GAL/VOL: -9.8 GAL
 TOTAL VOL. PURGED: 5.05 GAL
 DRAWDOWN/TOTAL PURGED: 0.0087 PSI
(column X well diameter squared X 0.041) (mL per minute X total minutes X 0.00026 gal/mL)

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
BEGIN PURGING										
1715	12.29	160	17.13	0.508	6.64	1.96	38.5	32.1		RESUME 5 MIN. INT
1720	12.29	160	16.89	0.510	6.64	1.91	39.6	33.0		
1725	12.29	160	16.51	0.509	6.64	1.88	36.7	34.2		
<i>[Large handwritten scribble]</i>										

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures(SF))

16.6 0.509 6.6 1.9 36.7 34

TEMP nearest degree (ex 10.1 = 10)
 COND 3 SF max (ex 3333 = 3330, 0.006 = 0.006)
 pH nearest tenth (ex 5.53 = 5.5)
 DO nearest tenth (ex 3.51 = 3.5)
 TURB 3 SF max nearest tenth (6.19 = 6.2, 10.1 = 10.1)
 ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: PERISTALTIC SUBMERSIBLE BLADDER WATERA OTHER: MEGA MOWS
 DECON FLUIDS USED: LIQUINOX DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL OTHER: PMS FREEZ
 TUBING/PUMP/BLADDER MATERIALS: SILICON TUBING TEFLON TUBING TEFLON LINED TUBING HDPE TUBING LDPE TUBING OTHER: SILASTIC
 EQUIPMENT USED: WL METER: 200-69 Heron PID WQ METER: MGS-10 YSP TURB METER: MGS-38 ITRC

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> 1,4 DIOXANE	8270 DIM	NO	NONE	2X 1L	✓	NO	
<input checked="" type="checkbox"/> PFAS COMPOUNDS	MUD532	NO	NONE	2X 250mL	✓	NO	
<input checked="" type="checkbox"/> VOC	82600	NO	HCL	3X 40mL	✓	NO	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 5.1
If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location

SKETCH/NOTES



Sampler Signature: [Signature]
 Checked By: [Signature]
 Print Name: IANDEJARI
 Date: 7/17/19



FIGURE 4.17
 LOW FLOW GROUNDWATER SAMPLING RECORD
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Mohonk Road Industrial Plant (MRIP)
 PROJECT NUMBER: 3611191234
 SAMPLE ID: ~~356023-MW-14B-150~~
 SAMPLE TIME: 11:50

LOCATION ID: MW-14B
 DATE: 07/09/2019
 START TIME: 0900
 END TIME: 12:40
 SITE NAME/NUMBER: 356023
 PAGE: 1 OF 2

WELL DIAMETER (INCHES): 1 2 4 6 8
 TUBING ID (INCHES): 1/8 1/4 3/8 1/2 5/8
 MEASUREMENT POINT (MP): TOP OF RISER (TOR) TOP OF CASING (TOC)
 INITIAL DTW (BMP): 6.26 FT
 FINAL DTW (BMP): 7.16 FT
 WELL DEPTH (BMP): 155 FT
 SCREEN LENGTH: UNK FT
 WATER COLUMN: 148.74 FT
 DRAWDOWN VOLUME: 1.32 GAL
 CALCULATED GAL/VOL: 219.5 GAL
 TOTAL VOL. PURGED: 5.0 GAL

PROT. CASING STICKUP (AGS): 0 FT
 PID AMBIENT AIR: / PPM
 PID WELL MOUTH: / PPM
 DRAWDOWN/TOTAL PURGED: -0.265

WELL INTEGRITY: YES NO N/A
 CAP: X
 CASING LOCKED: X
 COLLAR: X
 TOC/TOR DIFFERENCE: 20.3 FT
 REFILL TIMER SETTING: NA SEC
 DISCHARGE TIMER SETTING: NA SEC
 PRESSURE TO PUMP: NA PSI

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0943	BEGIN PURGING									
0950	6.58	200	15.70	0.577	6.88	7.49	53.8	-62.3		
0955	6.70	150	15.31	0.567	6.81	3.03	45.5	-46.4		
10:00	6.81	150	16.40	0.566	6.85	2.09	48.2	-62.6		
10:15	6.84	150	15.45	0.567	6.89	1.10	37.9	-73.5		
10:10	6.87	150	15.63	0.565	6.89	0.97	33.2	-83.0		
10:15	6.92	150	15.69	0.564	6.90	1.13	30.7	-86.4		
10:20	6.99	150	15.90	0.564	6.88	1.48	47.3	-92.1		STOP PURGE
1035	6.87	150	16.05	0.568	6.91	0.97	46.0	-93.1		RESUME PURGE
1040	6.93	150	16.92	0.569	6.95	0.95	65.0	-94.4		
1045	6.97	150	16.26	0.568	6.94	0.81	30.8	-99.3		
1050	6.98	150	16.34	0.566	6.93	0.73	39.8	-101.7		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])
 SEE PAGE 2 of 2 | 18 | 0.565 | 6.9 | 0.3 | 38 | -99

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: <input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input type="checkbox"/> WATERA <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	DECON FLUIDS USED: <input checked="" type="checkbox"/> LIQUINOX <input type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input checked="" type="checkbox"/> OTHER PFA FREE	TUBING/PUMP/BLADDER MATERIALS: <input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> OTHER SILASIC	EQUIPMENT USED: <input checked="" type="checkbox"/> WL METER 200-69 <input type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER M015-16 <input checked="" type="checkbox"/> TURB METER M024-38 <input type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO TYPE
---	--	--	---

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> 1,4 DIOXANE	8270 D	NO	NONE	2x1L	✓	NO	/
<input checked="" type="checkbox"/> PFAS (21 compounds)	M015-16	NO	NONE	2x250mL	✓	NO	/
<input checked="" type="checkbox"/> VOCs	8260C	NO	HCL	3x40mL	✓	NO	/

PURGE OBSERVATIONS
 PURGE WATER CONTAINERIZED: YES NO
 NO-PURGE METHOD UTILIZED: YES NO
 NUMBER OF GALLONS GENERATED: 5.0
 If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.



Sampler Signature: [Signature]
 Checked By: Jerry Puliff
 Print Name: JAN DE JARUW
 Date: 7/17/19

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohonk Road Industrial Plant (MRIP)	
PROJECT NUMBER 361191234	
SAMPLE ID 356023-MW14B150	SAMPLE TIME 1150

LOCATION ID MW-14B	DATE 07/09/19
START TIME 0900	END TIME 12:40
SITE NAME/NUMBER 356023	PAGE 2 OF 2


WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

YES	NO	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INITIAL DTW (BMP) 6.26 FT	FINAL DTW (BMP) 7.16 FT	PROT. CASING STICKUP (AGS)  FT	TOC/TOR DIFFERENCE NA ± 0.3 FT
WELL DEPTH (BMP) 155 FT	SCREEN LENGTH UNK-OPEN FT	PID AMBIENT AIR PPM	REFILL TIMER SETTING NA SEC
WATER COLUMN 148.74 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041) 1.32 GAL	PID WELL MOUTH PPM	DISCHARGE TIMER SETTING NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041) 219.5 GAL	TOTAL VOL. PURGED 5.0 GAL	DRAWDOWN/TOTAL PURGED -0.265	PRESSURE TO PUMP NA PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
BEGIN PURGING										
1055	7.02	150	16.80	0.566	6.93	0.81	44.7	-106.7		CONT'D FROM PAGE 1
1100	7.04	150	16.89	0.566	6.94	0.66	39.1	-98.3		
1105	7.06	150	17.4	0.566	6.94	0.63	23.3	-99.7		
1110	7.08	150	17.64	0.567	6.95	0.57	17.6	-106.8		TEMP ↑ DUE TO SUN/HEAT
1115	7.11	150	17.44	0.567	6.96	0.51	30.1	-95.3		
1120	7.14	150	17.74	0.565	6.95	0.47	34.5	-90.1		
1125	7.15	150	17.94	0.567	6.91	0.80	19.6	-96.7		
1130	7.16	150	18.27	0.566	6.92	0.56	32.4	-92.9		
1135	7.16	150	18.51	0.566	6.93	0.47	16.8	-88.0		
1140	7.16	150	17.95	0.567	6.95	0.38	31.0	-103.7		
1145	7.16	150	18.22	0.565	6.94	0.32	38.3	-99.2		TURB NOT STABILIZED

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

18 0.565 6.9 0.3 38.5 -99

TEMP nearest degree (ex. 10.1 = 10)
COND 3 SF max (ex. 3333 = 3330, 0.096 = 0.096)
pH nearest tenth (ex. 5.53 = 5.5)
DO nearest tenth (ex. 3.51 = 3.5)
TURB 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER	<input type="checkbox"/> WATERA <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____	DECON FLUIDS USED LIQUINON DEIONIZED WATER POTABLE WATER NITRIC ACID HEXANE METHANOL OTHER <u>ALCOHOL/PEAS</u>	TUBING/PUMP/BLADDER MATERIALS SILICON TUBING TEFLON TUBING TEFLON LINED TUBING HDPE TUBING LDPE TUBING OTHER <u>SILASTIC</u>	S. STEEL PUMP MATERIAL PVC PUMP MATERIAL GEOPROBE SCREEN TEFLON BLADDER OTHER _____ OTHER _____ OTHER _____	EQUIPMENT USED WL METER <u>200-69</u> PID WQ METER <u>M015-16</u> TURB METER <u>M024-38</u> PUMP OTHER _____ FILTERS NO _____ TYPE _____
---	---	---	--	---	---

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> 1,4 DIOXANE	8276D	NO	NONE	2X 1L	✓	NO	
<input checked="" type="checkbox"/> PFA5 (21 COMPOUND)	M0537	NO	NONE	2X 250ml	✓	-	
<input checked="" type="checkbox"/> VOCs	8260C	NO	HCL	3X 40ml	✓	NO	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED 5.0

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location

SKETCH/NOTES



Sampler Signature: [Signature] Print Name: IAN DESJARDIN

Checked By: [Signature] Date: 7/17/19

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohonk Road Industrial Plant (MRIP)	
PROJECT NUMBER 361191234	
SAMPLE ID 356023-MW15B	SAMPLE TIME 0930

LOCATION ID MW-15B	DATE 7/12/19
START TIME 0745	END TIME 1000
SITE NAME/NUMBER 356023	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CASING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LOCKED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COLLAR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INITIAL DTW (BMP) 6.63 FT	FINAL DTW (BMP) 6.80 FT	PROT. CASING STICKUP (AGS) 2.2 FT	TOC/TOR DIFFERENCE NA FT
WELL DEPTH (BMP) 150'66" (HIST) FT	SCREEN LENGTH HOLE OPEN HOLE BVC FT	PID AMBIENT AIR — PPM	REFILL TIMER SETTING — SEC
WATER COLUMN 145.5 FT	DRAWDOWN VOLUME 0.25 GAL	PID WELL MOUTH — PPM	DISCHARGE TIMER SETTING — SEC
CALCULATED GAL/VOL 214 GAL	TOTAL VOL. PURGED 24.6 GAL	DRAWDOWN/TOTAL PURGED 0.05 (m)	PRESSURE TO PUMP — PSI

(column X well diameter squared X 0.041) (mL per minute X total minutes X 0.00026 gal/mL)

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% < 10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
0801	BEGIN PURGING									
0810	6.78	240	12.1	0.292	8.7	2.8	71	65		
0820	6.80	220	12.4	0.459	6.7	2.1	8.6	9.5		Heads stuck to get controller for mtr
0845	6.84	235	12.1	0.505	6.8	2.1	5.0	-15		
0850	6.80	225	12.3	0.503	6.8	2.1	3.6	-16		
0855	6.80	225	12.2	0.508	6.9	2.1	3.2	-18		
0900	6.80	240	12.1	0.510	6.8	2.1	3.5	-19		
0905	6.80	230	12.1	0.513	6.9	2.1	3.1	-20		
0910	6.81	240	12.3	0.512	6.9	2.0	3.5	-21		
0915	6.80	230	12.2	0.515	6.9	2.0	3.5	-22		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures|5F)

12 0.515 6.9 2.0 3.5 -22

TEMP: nearest degree (ex. 10.1 = 10)
COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<p>TYPE OF PUMP</p> <input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input type="checkbox"/> WATERA <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<p>DECON FLUIDS USED</p> <input type="checkbox"/> LIQUINOX <input type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input checked="" type="checkbox"/> METHANOL <input type="checkbox"/> OTHER <i>Acetone</i>	<p>TUBING/PUMP/BLADDER MATERIALS</p> <input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<p>S. STEEL PUMP MATERIAL</p> <input type="checkbox"/> PVC PUMP MATERIAL <input type="checkbox"/> GEOPROBE SCREEN <input type="checkbox"/> TEFLON BLADDER <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<p>EQUIPMENT USED</p> <input checked="" type="checkbox"/> WL METER <input type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <input checked="" type="checkbox"/> TURB. METER <input type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO. _____ TYPE _____
--	--	--	---	---

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> VOCs	8260	N	4°C WCI	3x40ml	4	N	
<input checked="" type="checkbox"/> (-4) Dioxane	8270 SUM	N	4°C	2x125ml	4	N	
<input checked="" type="checkbox"/> PFCs	587	N	4°C	2x250 poly	4	N	

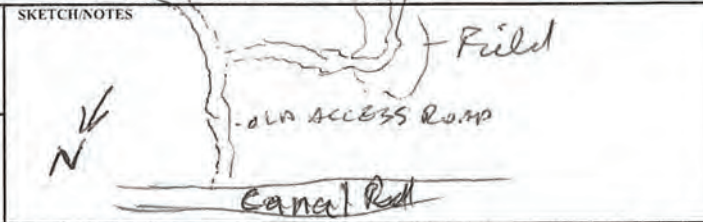
PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED **~4.6**

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.



Sample Station: _____

Checked By: *[Signature]* Date: **7/17/19**

Print Name: **Jean Rawcliffe**

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohonk Road Industrial Plant (MRIP)	
PROJECT NUMBER 3611191234	
SAMPLE ID 356023 MW16	SAMPLE TIME 1710

LOCATION ID MW-16	DATE 7/9/19
START TIME 1520	END TIME 1800
SITE NAME/NUMBER 356023	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 4 6 8 OTHER _____

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8 OTHER _____

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER _____

WELL INTEGRITY

	YES	NO	N/A
CAP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CASING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LOCKED COLLAR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INITIAL DTW (BMP) 30.59 FT	FINAL DTW (BMP) 31.83 FT	PROT. CASING STICKUP (AGS) 2.5 FT	TOCTOR DIFFERENCE 0.27 FT
WELL DEPTH (BMP) 80' 92.7 FT	SCREEN LENGTH 112 FT	PID AMBIENT AIR PPM	REFILL TIMER SETTING SEC
WATER COLUMN 49.4 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041) 0.2 GAL	PID WELL MOUTH PPM	DISCHARGE TIMER SETTING SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041) 2.9 GAL	TOTAL VOL. PURGED 4.1 GAL	DRAWDOWN/TOTAL PURGED 0.49	PRESSURE TO PUMP PSI

FIELD PARAMETERS WITH PROGRAM STABILIZATION CRITERIA (AS LISTED IN THE QAPP)

TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O ₂ (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% -10 ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
1531	BEGIN PURGING									
1540	31.11	210	13.5	0.210	5.2	4.7	71000	20	78	Had to locate phone
1605	31.59	190	12.9	0.215	5.9	4.4	110	-12		
1620	31.69	195	12.8	0.207	6.0	3.6	34	-12		
1630	31.78	200	12.7	0.206	6.0	4.0	14	-16		
1635	31.79	195	12.8	0.205	6.0	4.0	11	-17		
1640	31.80	195	12.7	0.206	6.1	3.8	7.6	-21		
1645	31.82	205	12.8	0.206	6.1	3.8	6.8	-22		
1650	31.83	200	12.8	0.206	6.1	3.7	5.1	-23		

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])

13 1.206 6.1 3.7 5.1 -23

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.53 = 5.5)
DO: nearest tenth (ex. 3.51 = 3.5)
TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101)
ORP: 2 SF (44.1 = 44, 191 = 190)

EQUIPMENT DOCUMENTATION

<p>TYPE OF PUMP</p> <input checked="" type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input type="checkbox"/> WATERA <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<p>DECON FLUIDS USED</p> <input checked="" type="checkbox"/> LIQUINOX <input checked="" type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input checked="" type="checkbox"/> OTHER <i>PPC free</i>	<p>TUBING/PUMP/BLADDER MATERIALS</p> <input checked="" type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER	<p>EQUIPMENT USED</p> <input checked="" type="checkbox"/> WL METER <i>Henry</i> <input type="checkbox"/> PID <input checked="" type="checkbox"/> WQ METER <i>YSI 506 pump</i> <input checked="" type="checkbox"/> TURB. METER <i>HACH 21000</i> <input type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO. _____ TYPE _____
---	--	---	---

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> VOLs	8260	N	4°C HCl	3x 40ml	X	-	-
<input checked="" type="checkbox"/> 1-4 Proxane	8270 SW	N	4°C	2x 1L	X	-	-
<input checked="" type="checkbox"/> PFCs	537	N	4°C	2x 250ml poly	X	-	-

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED = *4.8*

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Sample Signature: *Jerry Hawelt*
 Checked By: *MP*
 Print Name: *Jerry Hawelt*
 Date: *7/17/19*



LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME Mohook Road Industrial Plant (MRIP)	
PROJECT NUMBER 361191234	
SAMPLE ID 856023-MW1801	SAMPLE TIME 1110

LOCATION ID MW-18	DATE 7/10/19
START TIME 0930	END TIME 1145
SITE NAME/NUMBER 356023	PAGE 1 OF 1

WELL DIAMETER (INCHES) 1 2 3/8 4 6 8

TUBING ID (INCHES) 1/8 1/4 3/8 1/2 5/8

MEASUREMENT POINT (MP) TOP OF RISER (TOR) TOP OF CASING (TOC) OTHER FLUTE

INITIAL DTW (BMP) Artesian FT FINAL DTW (BMP) — FT

WELL DEPTH (BMP) — FT SCREEN LENGTH — FT

WATER COLUMN — FT DRAWDOWN VOLUME — GAL

CALCULATED GAL/VOL — GAL TOTAL VOL. PURGED — GAL

(column X well diameter squared X 0.041) (mL per minute X total minutes X 0.00026 gal/mL)

WELL INTEGRITY YES NO N/A

CAP YES NO N/A

CASING LOCKED YES NO N/A

COLLAR YES NO N/A

TOC/TOR DIFFERENCE — FT

REFILL TIMER SETTING — SEC

DISCHARGE TIMER SETTING — SEC

PRESSURE TO PUMP — PSI

TIME	DTW (FT)	PURGE RATE	TEMP. (°C)	SP. CONDUCTANCE	pH (units)	DISS. O ₂ (mg/L)	TURBIDITY (ntu)	REDOX (mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
3-5 Minutes	0.0-0.33 ft Drawdown	(mL/min)	(+/- 3 degrees)	(mS/cm) (+/- 3%)	(+/- 0.1 units)	(+/- 10%)	(+/- 10% < 10 ntu)	(+/- 10 mv)		
BEGIN PURGING										
#1 Port #1 Artesian Flow										
NW8	—	—	13.3	0.491	6.7	1.2	6.7	-165		
#2 Port #2 Artesian Flow										
1120	—	—	10.9	0.488	6.8	0.6	10.9	-187		(23)
#3 Port #3 Artesian Flow										
1130	—	—	12.1	0.491	7.2	0.6	6.6	-181		
Artesian flow from all zones plus from casing - liner is likely detached from sidewall of borehole - likely communication between zones. (23)										

FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures)(SF)										TEMP: nearest degree (ex. 10.1 = 10) COND: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696) pH: nearest tenth (ex. 5.53 = 5.5) DO: nearest tenth (ex. 3.51 = 3.5) TURB: 3 SF max, nearest tenth (6.19 = 6.2, 101 = 101) ORP: 2 SF (44.1 = 44, 191 = 190)
--	--	--	--	--	--	--	--	--	--	--

EQUIPMENT DOCUMENTATION		
TYPE OF PUMP <input type="checkbox"/> PERISTALTIC <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> BLADDER <input checked="" type="checkbox"/> WATER <input type="checkbox"/> OTHER <u>No Pump</u> <input type="checkbox"/> OTHER	DECON FLUIDS USED <input type="checkbox"/> LIQUINOX <input type="checkbox"/> DEIONIZED WATER <input type="checkbox"/> POTABLE WATER <input type="checkbox"/> NITRIC ACID <input type="checkbox"/> HEXANE <input type="checkbox"/> METHANOL <input checked="" type="checkbox"/> OTHER <u>Deionized</u>	TUBING/PUMP/BLADDER MATERIALS <input type="checkbox"/> SILICON TUBING <input type="checkbox"/> TEFLON TUBING <input type="checkbox"/> TEFLON LINED TUBING <input checked="" type="checkbox"/> HDPE TUBING <input type="checkbox"/> LDPE TUBING <input type="checkbox"/> OTHER <input type="checkbox"/> OTHER
EQUIPMENT USED <input type="checkbox"/> WL METER <input type="checkbox"/> PID <input type="checkbox"/> WQ METER <input type="checkbox"/> TURB. METER <input type="checkbox"/> PUMP <input type="checkbox"/> OTHER <input type="checkbox"/> FILTERS NO. TYPE		

ANALYTICAL PARAMETERS	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
<input checked="" type="checkbox"/> VOCs	8260	N	4°C HCl	3 x 40 mL	4	N	
<input checked="" type="checkbox"/> 1-4 Divsion	8270 SIM	N	4°C	2 x 100 mL	4	N	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED YES NO

NO-PURGE METHOD UTILIZED YES NO

NUMBER OF GALLONS GENERATED 4

If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Checked By: Jerry Rawcliffe Date: 7/17/19



Project: Mohonk Road Industrial Plant
 Client: NYSDEC
 Location: Hamlet of High Falls, Marbletown, New York
 Contractor: MACTEC Engineering & Consulting
 Date: 7/8/19 Technician: J. Rawcliffe
 I. Desjardins



FDR 1: Mohonk Road Industrial Plant Site, Monitoring Well Static Groundwater Levels

Monitoring Well	X Coordinate	Y Coordinate	Construction Information			Water Level Information				Comments
			Total Depth (ft BGS)	Bottom Elevation (ft AMSL)	Top of Casing (ft AMSL)	Time	Depth to Water (ft bTOC)	Depth to Bottom (ft bTOC)	Casing Stickup (ft AGS)	
SVE-19	UNK	UNK	55	UNK	~2 ft AGS	13:10	38.14	57.8'	1.40	
SVE-20	UNK	UNK	55	UNK	~2 ft AGS	13:26	39.47	56.4	1.20	
SVE-21	UNK	UNK	55	UNK	~2 ft AGS	13:18	44.45	56.3	1.35	
SVE-22	UNK	UNK	55	UNK	~2 ft AGS	13:13	38.32	56'	1.15	
SVE-23	UNK	UNK	55	UNK	~2 ft AGS	13:34	26.98	55.7	1.25	
ERT-1	571897.25	4629866	195	108.94	303.94	14:32	56.49		2.5	NO TUBING
ERT-2	571843.56	4629843	200	109.81	309.81	14:22	62.09		1.0	NO TUBING
ERT-3	571850.19	4629819	220	95.89	315.89	14:28	68.34		0.8'	NO TUBING
ERT-4	571979.5	4629806.5	50	276.67	326.67	13:22	30.96		2.4'	NO TUBING
MW-1B	571967.38	4629665	100	233.53	333.53	7/9 15:10	53.54	7100	1.75	0.09'
MW-4	571971.06	4629799	21.5	307.71	329.21	13:09	9.36		2.3	NO LOCK, NO TUBING
MW-5B	571981.81	4629825.5	36.2	289.1	325.3	14:05	31.80		2.5'	NO TUBING Δ-0.09 TOR
MW-5R2	572003.06	4629852	125	188.63	313.63	13:52	66.11		1.25	NO TUBING
MW-6B	572042.38	4629780.5	100	223.95	323.95	13:44	75.91	>100'	2.35	Δ-0.41 TOR / NO TUBING LOCK M60
MW-7B	571794.25	4629797	100	213.93	313.93	14:52	65.79		1.75	Δ-0.29 TOR
MW-7R2	571790.75	4629797	180	134.3	314.3	14:50	66.95		2.70	NO TUBING, - LABELED 'MW-7R'
MW-8B	572249.41	4630989.19	100	59.68	159.68	7/9 10:45	30.94	>100'	0	KEY BROKE TOC to Top of Plushment @ 41'
MW-9B	572016.88	4630545	145	103.21	248.21					UNABLE TO LOCATE
MW-10B	572734.6	4630604	100	125.64	225.64					UNABLE TO LOCATE
MW-11B	572126.19	4630011	181	100.72	281.72	15:04	34.71		1.6	NO TUBING
MW-11C	572125	4630007	220	64.58	284.58	15:09	36.68		1.9	NO TUBING
MW-12B	572234.19	4630222.41	200	58.2	258.2	15:37	12.58		0.1	- GEOPUMP W/ NO TUBING
MW-13B3	571312.94	4630103	200	21.93	221.93					- CAPPED 1" PIPE - SEALED
MW-14B	572600.32	4630930.34	155	1.67	156.67	7/9 09:30	6.26	7100' (155 THST)	0	KEY BROKE @ 0.3 TOC to Top of Plushment
MW-15B	571701.56	4630172.5	150	94.89	244.89	18:43	6.98		2.2	NO TUBING
MW-16	572083.65	4630265.75	93	181.11	274.11	15:47	30.89		2.5	Δ-0.27 TOR
MW-17-1			57	184.92	241.92	16:42	9.08			
MW-17-2	572545.72	4630421.63	110	131.92	241.92	16:43	13.15			
MW-17-3			129	112.92	241.92	16:44	13.15			
MW-18-13			101	103.45	204.45					
MW-18-23	571579.98	4630508.22	128	76.45	204.45					} FLOODED
MW-18-33			145	59.45	204.45					
MW-19-13			49	80.88	129.88					
MW-19-23	572596.93	4631100.5	95	34.88	129.88					} UNABLE TO MEASURE } SKINNY DIPPER WOULD NOT BEAD + } PASS FITTING.
MW-19-33			195	-65.12	129.88					
MW-20-1			77	125.84	202.84					
MW-20-2	571966.96	4631057.64	111.5	91.34	202.84	17:30	58.29			
MW-20-3			149	53.84	202.84	17:30	55.46			
MW-21-13			48	185.59	233.59	17:33	74.92			
MW-21-23			69.5	164.09	233.59					ARTESIAN
MW-21-33			78	155.59	233.59					ARTESIAN
MW-21-43	572596	4630042	124	109.59	233.59					ARTESIAN
MW-21-53			145	88.59	233.59					ARTESIAN
MW-21-63			163	70.59	233.59					ARTESIAN

Notes:
 BGS: below ground surface
 AGS: above ground surface
 AMSL: Above mean sea level
 bTOC: Below top of casing

2468

Mohonk Road Industrial Plant (MRIP)

3611191234.04

Groundwater Sampling Long Term Monitoring

Trip Summary

Personnel: Jerry Rawcliffe, Ian Desjarlais; with a special guest appearance by Mike Lounsbury.

7/8/2019 Monday

Jerry Rawcliffe and Ian Desjarlais mobilize to the Mohonk Road Site from Portland, Maine and stage equipment in the Groundwater Extraction and Treatment (GWET) Building. Arrive on Site at approximately 12:00 PM.

1310 Start to locate monitoring wells and collect synoptic water levels.

1900 Complete synoptic round of water level measurements. Could not locate MW-9B and MW-10B. Could not unlock MW-8B and MW-14B as well key snapped in corroded lock. Plan to get bolt cutters and get measurements in AM. MW-13B was unable to be opened as it has been retrofitted with a 1" steel pipe riser and a screw on cap. The cap was rusted closed and I could not get at the cap with tools as it is in a flush mount casing. MW-1B was not on the map and was overlooked at this time.

1910 Leaving site for the night.

7/9/2019 Tuesday

0700 on site to start low flow GW sampling.

Going to start at MW-14B and MW-8B. Picked up bolt cutters but were unable to cut locks. With a great deal of brute force, we were able to pop the well lids off each well and get WL measurements and install tubing or pumps and tubing.

Completed sampling MW-8B, MW-14B, MW-12B, and MW-16. Turbidity on open hole bedrock wells (8B/14B/12B) was elevated but generally stable and less than 50 NTUs (30 -45 NTU). Possibly due to disturbing the boreholes while installing pumps and tubing.

1910 Leaving site for the night.

7/10/2019 Wednesday

0705 On site at GWET Building. Calibrated equipment and helped Ian D. set pumps at MW-11B and MW-11C.

0850 JKR met FLUTE representatives on site to start evaluation of FLUTE wells. Evaluated and sampled MW-18 (difficult access through woods and into low swampy area). Moved onto wells MW-20, MW-19, MW-17, and MW-21. After MW-18 the evaluation consisted of getting water levels, hooking up to each sample port and purging clear once to see if ports were working, replacing any poorly functioning hardware, and checking the water levels within the liner. MW-19 in rough shape, MW-20 and MW-17 are in good shape, MW-21 is artesian but has been filled/sealed with drilling mud and after repairing

one port appears to be in good shape. FLUTE will put together an evaluation report with recommendations for sampling. We will not be sampling the FLUTE wells at this time.

Completed sampling at MW-11B and MW-11C. MW-11B had quite high but relatively stable turbidity of approximately 80 NTU.

1820 Leaving site for the night.

7/11/2019 Thursday

0700 On site at GWET Building.

Calibrated instruments and got set up to start sampling on-site wells. Had some problems with equipment. Ian having problems with Turbidity meter and his control box for the Monsoon pump blew a fuse. I gave him mine and went to hardware store to purchase replacement. Set Tubing at MW-15B in woods.

1100 Mike Lounsbury on site. Got him set up on an on-site well near Ian. Used replacement fuse to fix control box and start purging MW-6B. Fuse blew after approximately 1 hour as sample collection began. Control box is extremely hot. Switched back to other control box and completed sampling.

Collected samples at ERT-4, MW-4, MW-5B, and MW-6B.

ERT-4 had high turbidity (190 NTU) after 2 hours of purging at increasingly slow rates. Getting drawdown even at low rates.

MW-4 had significant drawdown even at low purge rates.

Aztech technicians on site to reset extraction wells which were shut down due to a lightning strike.

Located MW-1B (background well)

Decconned pumps and set them in remaining wells ERT-2, ERT-3, and MW-1B.

1700 Leaving site for the night.

7/12/2019 Friday

0650 On site at GWETs building.

Set up for sampling. JKR to woods and MW-15B MHL and ID to water district and wells ERT-2 and ERT-3.

Could not get either pump to lift water from depth (DTW = 62' and 68.3' TOC respectively) even with geopump assist no water forthcoming.

Had MHL move to MW-1B (DTW = 53.5' TOR) able to purge with geopump assist.

Attempted ERT-2 again with pump from MW-1b and geopump assist. Still unable to purge water from depth.

Worked with Ian D in GWET building to sample extraction wells MW-5R and MW-7R through sampling port in NW corner of GWET building.

Collected samples from MW-15B, MW-1B, MW-5R, and MW-7R.

Were unable to sample ERT-2 and ERT-3 due to equipment limitations. Were unable to collect grab for extraction well ERT-1 due to lightning strike damage.

1215 Completed all sampling activities collected equipment blank from Monsoon pump used in MW-1B. Packed samples, checked COC bottle count. Started packing up for demobilization.

1325 All personnel have left site. JKR to demobilize via the Test America courier center in Albany.

Left sample bottles and coolers in conex box next to GWET building for potential future FLUTe sampling and any other potential GW sampling to be completed as part of the LTM.

ATTACHMENT B
FLUTE™ ASSESSMENT

Wood- High Falls, NY Water Flute Inspections July 10, 2019

MW-18

150', 6.5" 3 Port Water Flute

Port 1 91'-101'

Port 2 118'-128'

Port 3 135'-145'

Well is located in a heavily wooded area 50-75 yards off the road. Access was difficult. Well was overflowing the casing which was 4' from ground surface. Wellhead is roughly 18" down inside the 10" outer casing. The well head consists of a locking camlock with a barb fitting to seal the liner. All pump tubes and sample tubes were fitted with artesian caps upon arrival. Water seemed to be rising from the one extra 5/8 line and also through the annulus. There is a ball valve on the 5/8 line I was able to close and stop the flow of water. Extensions were fitted on each port fitting in order to gauge the true artesian water levels. **Was there a wellhead cover?**

Port 1 8'3" AGS

Port 2 8'9" AGS

Port 3 7'7" AGS

All ports were tested, worked properly, and recharged as they should.



Recommended action:

Tag the depth of the 5/8" tubes to see if it is feasible to fill the liner with grout under pressure to seal the hole. Grout should be allowed to cure with 25 psi pressure. Drill and tap the aluminum cap for vent during grouting. Close valve in the vent when grout arrives. Need long tools for drilling and tapping.

MW-20

150', 6.5" 3 Port Water Flute

Port 1 57'-77'

Port 2 86.5'-111.5'

Port 3 139'-149'

System is located just off the road, over a small stone barrier wall and in a grassy residential front yard. Water Flute appears to be in good condition. System is fitted with standard PVC wellhead which sits in a 10" outer casing. There are two additional 5/8 tubes. One labeled "TAG" and the other "WRT". Ports tagged, purged, and then tagged again.

Before Purge- Measurement taken at top of fitting.

TAG- 42.1

Port 1- 58.8'

Port 2- 56.17'

Port 3- 75.52'

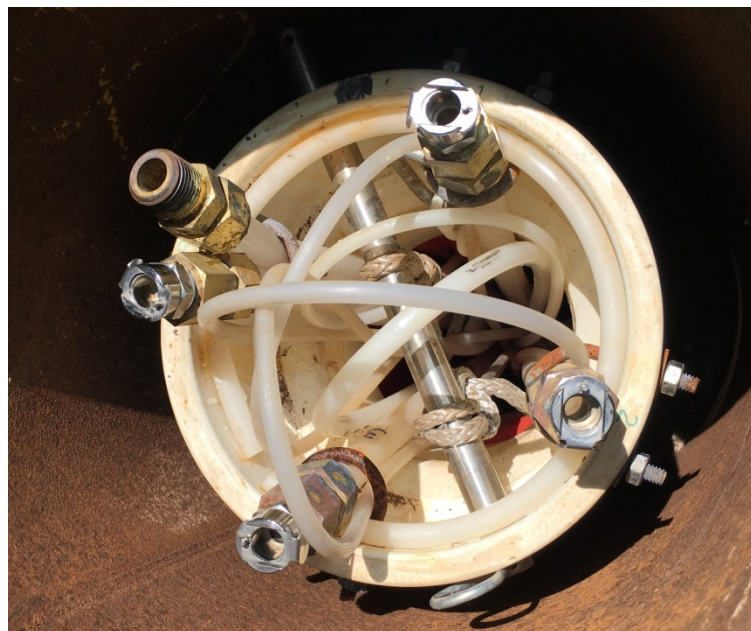
After Purge- All ports fully recharged

TAG- 42.1

Port 1- 58.4'

Port 2- 60.20'

Port 3- 75.50'



Recommended action: None. Water FLUTE seems to be in good condition and fully functional.

MW-19

195', 6.5" 3 Port Water Flute

Port 1 34'-49'

Port 2 80'-95'

Port 3 180'-195'

This system is located in a residential yard. It is close to a large drop-off with a river at the bottom. The well head has major corrosion and is in poor condition. It is a locking camlock with holes drilled for tubing. There is a barb fitting on the underside which is sticking up from the casing a few inches. I was able to move entire wellhead around and unlock the sides but not able to disassemble. All pump tubes and sample tubes were fitted with artesian caps upon arrival. One extra 5/8 pump but was present with a broken valve attached. Valve was removed to tag the system.

Before Purge- Measurement taken at top of fitting. **BGS?**

TAG- 2.0'

Port 1- 2.0'

Port 2- 2.0'

Port 3- 2.0'

System was purged and all ports working and recharging. Tag line topped off. **Was it dropping?**

TAG- 0.0'

Port 1- 4.0'

Port 2- 4.0'

Port 3- 21.0' (recharging)



Recommendation: Test the tag line for flow to the bottom of the liner. If tag line open, drill and tap the camlock cap to allow water/air flow. Install valve on the drill hole. Use the tag line to inject grout to fill liner with 15 psi during cure. Replace corroded surface hardware where needed.

MW-17

130', 6.5" 3 Port Water Flute

Port 1 37'-57'

Port 2 95'-110'

Port 3 119'-129'

Water Flute is located in a field to the right side of a residential driveway. System appears to be in good condition. Water flute is fitted with standard PVC wellhead which sits in a 10" outer casing. There are two additional 5/8 tubes. One labeled "TAG" and the other "WRT". Ports were tagged, purged, and then tagged again.

Before Purge- Measurement taken at top of fitting.

TAG- 7.32'

Port 1- 9.05'

Port 2- 13.3'

Port 3- 13.3'

System was purged and all ports working and recharging.

TAG- 5.63'(potable water left with customer to fill liner before sampling)

Port 1- 9.67'

Port 2- 15.65'(recharging)

Port 3- 19.0'(recharging)



Why was the tag left at only 5.63 ft? Was the liner leaking?

If liner filled to GS, no need or remedy.

MW-21

165', 6.5" 6 Port Water Flute

This system is in a residence yard next to a small pond. The water flute has a standard open well head design. There is visible **mud** in the liner with water coming up around it. All pump tubes and sample tubes were fitted with artesian caps. Artesian water levels gauged with extension tube.

Tag 0.0" is the mud visible actually grout or how deep is the mud?
Port 1 65.5"
Port 2 68.5"
Port 3 76.0"
Port 4 53.0"
Port 5 74.0"
Port 6 70.0"



System was purged and all ports but number 3 was working and recharging. Attempted to clean out port 3 but did not work. T pump added to system and working properly. All ports returned to artesian conditions after purge.

Recommended: Remove wellhead cover base. Remove PVC well head. Build wellhead of very low profile with gas tight fittings for all tubes and a grout injection port of very low profile. Clean out top of liner as deeply as possible. Cut off the grout injection line Use an 840 denier liner to seal between the air tight wellhead and the casing. Install the air tight wellhead. Pressure grout the sealed well head to 20 psi and cure under that pressure. Use air head to maintain pressure. Replace with new wellcover.

ATTACHMENT C

HISTORICAL AND CURRENT SAMPLING RESULTS

TABLE 3GROUNDWATER DATA FROM SELECT MONITORING WELLS
DETECTIONS ABOVE CLEANUP STANDARDS
CONTAMINANTS OF CONERN

MW-ID	Sample Date	1,1,1-TCA	1,1-DCA	1,1-DCE	TCE	1,4-Dioxane
MW-4	October 2017	1400	38	180	340	NS
MW-5B	October 2016	3700	58	480	180	NA
MW-5R	October 2017	8	1.5	4.8	3.6	2
MW-6B	October 2017	790	0.44	2.7	0.50	2U
MW-7R	October 2017	49	17	9.4	1.1	2U
MW-11B	October 2017	2	3.3	5.3	1.2	2U
MW-15B	October 2017	40	12	7.8	1.5	1.4
MW-16	October 2017	38	5	30	4.1J	1.8J
MW-17-1	October 2017	19	6.7	21	4	1.8J
MW-17-2	October 2017	13	11	16	3.4	2
MW-17-3	October 2017	4.2	15	19J	0.46J	1.5J
MW-21-1	October 2017	7.6	1.6	8.3	5.5	5U
MW-21-2	October 2017	4.8	2.4	6.2	2.6	2U
MW-21-4	October 2017	3.6	1.4	5.3	2.6	2U
ERT-1	October 2017	39	7.5	19	5.6	2U
ERT-2	October 2017	5.8	3.2	6.5	2.1	2U
ERT-3	October 2017	63	5.8	12	16	5
ERT-4	October 2017	3300	79	320	160	3.2

NOTES:All concentrations in micrograms per liter ($\mu\text{g/L}$)1,1-DCA - 1,1-Dichloroethane
1,1-DCE - 1,1-Dichloroethene
1,1,1-TCA - 1,1,1-Trichloroethane
TCE - TrichloroetheneNA = Not analyzed
NS – Not sampled
U – Non-detect
J – Estimated value

ANALYTICAL REPORT

Job Number: 480-156213-1

Job Description: Mohonk Rd. #356023 Groundwaters

Contract Number: C100700

For:

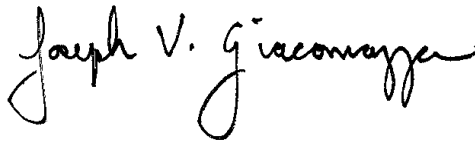
New York State D.E.C.

625 Broadway

Division of Environmental Remediation

Albany, NY 12233-7014

Attention: Charles Gregory



Approved for release.
Joe V Giacomazza
Project Management Assistant II
8/13/2019 9:44 AM

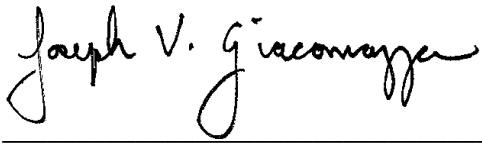
Designee for
Judy L Stone, Senior Project Manager
10 Hazelwood Drive, Amherst, NY, 14228-2298
(484)685-0868
judy.stone@testamericainc.com
08/13/2019

The test results in this report meet all NELAP requirements for analytes 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. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

Job Number: 480-156213-1

Job Description: Mohonk Rd. #356023 Groundwaters

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.



Approved for release.
Joe V Giacomazza
Project Management Assistant II
8/13/2019 9:44 AM

Designee for
Judy L Stone

Table of Contents

Cover Title Page	1
Data Summaries	6
Report Narrative	6
Definitions	8
Sample Summary	9
Detection Summary	10
Method Summary	15
Client Sample Results	16
Surrogate Summary	59
Isotope Dilution Summary	60
QC Sample Results	63
QC Association	74
Chronicle	77
Certification Summary	82
Organic Sample Data	83
GC/MS VOA	83
Method 8260C	83
Method 8260C QC Summary	84
Method 8260C Sample Data	96
Standards Data	263
Method 8260C ICAL Data	263
Method 8260C CCAL Data	348
Raw QC Data	357
Method 8260C Tune Data	357
Method 8260C Blank Data	363
Method 8260C LCS/LCSD Data	372

Table of Contents

Method 8260C MS/MSD Data	379
Method 8260C Run Logs	389
Method 8260C Prep Data	391
GC/MS Semi VOA	394
Method 8270D SIM-ID	394
Method 8270D SIM-ID QC Summary	395
Method 8270D SIM-ID Sample Data	408
Standards Data	508
Method 8270D SIM-ID ICAL Data	508
Method 8270D SIM-ID CCAL Data	527
Raw QC Data	536
Method 8270D SIM-ID Tune Data	536
Method 8270D SIM-ID Blank Data	560
Method 8270D SIM-ID LCS/LCSD Data	565
Method 8270D SIM-ID MS/MSD Data	568
Method 8270D SIM-ID Run Logs	574
Method 8270D SIM-ID Prep Data	578
LCMS	580
PFC_IDA	580
PFC_IDA QC Summary	581
PFC_IDA Sample Data	593
Standards Data	1011
PFC_IDA ICAL Data	1011
PFC_IDA CCAL Data	1085
Raw QC Data	1171
PFC_IDA Blank Data	1171

Table of Contents

PFC_IDA LCS/LCSD Data	1209
PFC_IDA MS/MSD Data	1225
PFC_IDA Run Logs	1254
PFC_IDA Prep Data	1257
Shipping and Receiving Documents	1260
Client Chain of Custody	1261
Sample Receipt Checklist	1263

**Job Narrative
480-156213-1**

Receipt

The samples were received on 7/13/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 1.7° C, 2.0° C, 2.5° C, 2.9° C and 3.1° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13) and 356023-MW5R (480-156213-18). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-482537 recovered above the upper control limit for Dibromochloromethane and 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW11C (480-156213-7), 356023-MW1801 (480-156213-8), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW6B (480-156213-14), 356023-MW15B (480-156213-15), 356023-EB1 (480-156213-16), 356023-MW1B (480-156213-17), 356023-MW5R (480-156213-18), 356023-MW7R (480-156213-19) and 356023-TB1 (480-156213-20).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-482537 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW11C (480-156213-7), 356023-MW1801 (480-156213-8), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW6B (480-156213-14), 356023-MW15B (480-156213-15), 356023-EB1 (480-156213-16), 356023-MW1B (480-156213-17), 356023-MW5R (480-156213-18), 356023-MW7R (480-156213-19) and 356023-TB1 (480-156213-20).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-482537 recovered outside control limits for the following analytes: Dibromochloromethane and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW11C (480-156213-7), 356023-MW1801 (480-156213-8), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW6B (480-156213-14), 356023-MW15B (480-156213-15), 356023-EB1 (480-156213-16), 356023-MW1B (480-156213-17), 356023-MW5R (480-156213-18), 356023-MW7R (480-156213-19) and 356023-TB1 (480-156213-20).

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

GC/MS Semi VOA

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for samples 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW6B (480-156213-14[MS]) and 356023-MW6B (480-156213-14[MSD]) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope.

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for samples 356023-MW11C (480-156213-7), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10) and 356023-MW7R (480-156213-19) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope.

Method(s) 8270D SIM ID: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW15B (480-156213-15) and 356023-MW5R (480-156213-18). Elevated reporting limits (RLs) are provided.

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for samples 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13) and 356023-MW5R (480-156213-18) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope.

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

LCMS

Method(s) 537 (modified): The continuing calibration verification (CCV) associated with batch 200-145761 recovered outside acceptance criteria, low biased, for 8:2 FTS. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 537 (modified): The Ion Ratio associated with PFOS fails our in-house defined limits for the following sample 356023-MW4 (480-156213-13), however the result is being reported because the peaks observed for both mass transitions are within the expected retention time windows for the branched chain isomers in our calibration mix. Since many of these isomers are at very low levels in our mixed calibration source (many are less than 5% of the solution), it's difficult to project how the different isomers responses differ at higher levels, so we don't feel comfortable rejecting the detect based upon the ratio.

Method(s) 537 (modified): The laboratory control sample (LCS) associated with preparation batch 200-145382 and analytical batch 200-145761 was outside acceptance criteria for N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA). Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

Organic Prep

Method(s) 3510C: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the preparation of the following samples within holding time: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4) and 356023-MW12B 190 (480-156213-5).

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

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time

LCMS

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Sample Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-156213-1	356023-MW8B	Water	07/09/19 13:20	07/13/19 09:00	
480-156213-2	356023-MW8BD	Water	07/09/19 13:20	07/13/19 09:00	
480-156213-3	356023-MW16	Water	07/09/19 17:10	07/13/19 09:00	
480-156213-4	356023-MW14B 150	Water	07/09/19 11:50	07/13/19 09:00	
480-156213-5	356023-MW12B 190	Water	07/09/19 17:27	07/13/19 09:00	
480-156213-6	356023-MW11B	Water	07/10/19 11:37	07/13/19 09:00	
480-156213-7	356023-MW11C	Water	07/10/19 15:23	07/13/19 09:00	
480-156213-8	356023-MW1801	Water	07/11/19 11:10	07/13/19 09:00	
480-156213-9	356023-MW1802	Water	07/11/19 11:20	07/13/19 09:00	
480-156213-10	356023-MW1803	Water	07/11/19 11:30	07/13/19 09:00	
480-156213-11	356023-MW5B	Water	07/11/19 13:10	07/13/19 09:00	
480-156213-12	356023-ERT4	Water	07/11/19 11:20	07/13/19 09:00	
480-156213-13	356023-MW4	Water	07/11/19 14:47	07/13/19 09:00	
480-156213-14	356023-MW6B	Water	07/11/19 13:15	07/13/19 09:00	
480-156213-15	356023-MW15B	Water	07/12/19 09:30	07/13/19 09:00	
480-156213-16	356023-EB1	Water	07/12/19 09:45	07/13/19 09:00	
480-156213-17	356023-MW1B	Water	07/12/19 11:15	07/13/19 09:00	
480-156213-18	356023-MW5R	Water	07/12/19 11:10	07/13/19 09:00	
480-156213-19	356023-MW7R	Water	07/12/19 11:30	07/13/19 09:00	
480-156213-20	356023-TB1	Water	07/09/19 12:00	07/13/19 09:00	

Detection Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW8B

Lab Sample ID: 480-156213-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4	H E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Perfluorooctanoic acid (PFOA)	0.56	J	1.7	0.54	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.53	J	1.7	0.52	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW8BD

Lab Sample ID: 480-156213-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.4	H E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Perfluorooctanoic acid (PFOA)	0.65	J	1.7	0.54	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW16

Lab Sample ID: 480-156213-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	13		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	2.2		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	10		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	1.3		1.0	0.46	ug/L	1		8260C	Total/NA
1,4-Dioxane	4.2	H	1.0	0.50	ug/L	5		8270D SIM ID	Total/NA
Perfluorooctanoic acid (PFOA)	0.52	J	1.6	0.50	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW14B 150

Lab Sample ID: 480-156213-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.0		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.66	J	1.0	0.29	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.4	H	1.0	0.50	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	3.0		1.6	0.81	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.9		1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.1		1.6	0.61	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.1	J	1.6	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.4		1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.92	J	1.6	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.8		1.6	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.6	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		1.6	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW12B 190

Lab Sample ID: 480-156213-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	5.3		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	10		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	15		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	3.5		1.0	0.46	ug/L	1		8260C	Total/NA
1,4-Dioxane	9.2	H	2.0	1.0	ug/L	10		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	1.7		1.7	0.83	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.7		1.7	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.63	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.84	J	1.7	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.1		1.7	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.2	J	1.7	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.67	J	1.7	0.67	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	0.51	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW11B

Lab Sample ID: 480-156213-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.4		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	2.4		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	4.9		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	0.93	J	1.0	0.46	ug/L	1		8260C	Total/NA
1,4-Dioxane	3.1		1.0	0.50	ug/L	5		8270D SIM ID	Total/NA
Perfluorooctanoic acid (PFOA)	0.53	J	1.6	0.52	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW11C

Lab Sample ID: 480-156213-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.2		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.80	J	1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	3.2		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	0.64	J	1.0	0.46	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.8	E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Perfluorooctanoic acid (PFOA)	0.56	J	1.6	0.51	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW1801

Lab Sample ID: 480-156213-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.1		1.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.0		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: 356023-MW1802

Lab Sample ID: 480-156213-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.4		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.46	J	1.0	0.29	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.3	E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: 356023-MW1803

Lab Sample ID: 480-156213-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.4		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	0.43	J	1.0	0.29	ug/L	1		8260C	Total/NA
1,4-Dioxane	1.4	E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: 356023-MW5B

Lab Sample ID: 480-156213-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1800		40	33	ug/L	40		8260C	Total/NA
1,1-Dichloroethane	42		40	15	ug/L	40		8260C	Total/NA
1,1-Dichloroethene	200		40	12	ug/L	40		8260C	Total/NA
Methylene Chloride	22	J	40	18	ug/L	40		8260C	Total/NA
Trichloroethene	87		40	18	ug/L	40		8260C	Total/NA
1,4-Dioxane	10		2.0	1.0	ug/L	10		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	4.2		1.6	0.80	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.7		1.6	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.7		1.6	0.61	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.0	J	1.6	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		1.6	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.6	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.0		1.6	0.49	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-ERT4

Lab Sample ID: 480-156213-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3100		50	41	ug/L	50		8260C	Total/NA
1,1-Dichloroethane	78		50	19	ug/L	50		8260C	Total/NA
1,1-Dichloroethene	280		50	15	ug/L	50		8260C	Total/NA
Methylene Chloride	35	J	50	22	ug/L	50		8260C	Total/NA
Trichloroethene	140		50	23	ug/L	50		8260C	Total/NA
1,4-Dioxane	12	E	2.0	1.0	ug/L	10		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	7.4		1.6	0.82	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	7.8		1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.7		1.6	0.62	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.5		1.6	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.8		1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.0	J	1.6	0.22	ng/L	1		537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.61	J	1.6	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.5	J	1.6	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.1	J	1.6	0.65	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.5		1.6	0.50	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW4

Lab Sample ID: 480-156213-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1100		20	16	ug/L	20		8260C	Total/NA
1,1-Dichloroethane	23		20	7.6	ug/L	20		8260C	Total/NA
1,1-Dichloroethene	130		20	5.8	ug/L	20		8260C	Total/NA
Methylene Chloride	14	J	20	8.8	ug/L	20		8260C	Total/NA
Trichloroethene	390		20	9.2	ug/L	20		8260C	Total/NA
1,4-Dioxane	6.4	E	1.0	0.50	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	6.9		1.6	0.80	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	12		1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	6.3		1.6	0.61	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.2		1.6	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.4		1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.42	J	1.6	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.7		1.6	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.72	J	1.6	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1	I	1.6	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW6B

Lab Sample ID: 480-156213-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	8.2	F1	1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	1.8		1.0	0.29	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.76		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	1.6	J	1.8	0.88	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.0		1.8	0.55	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.5	J	1.8	0.67	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.92	J	1.8	0.55	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW15B

Lab Sample ID: 480-156213-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	26		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	8.3		1.0	0.38	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Detection Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW15B (Continued)

Lab Sample ID: 480-156213-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	19		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	1.2		1.0	0.46	ug/L	1		8260C	Total/NA
1,4-Dioxane	5.9		1.0	0.50	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	1.4	J	1.8	0.88	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.89	J	1.8	0.56	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.72	J	1.8	0.43	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-EB1

Lab Sample ID: 480-156213-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10		10	3.0	ug/L	1		8260C	Total/NA
Methylene Chloride	0.60	J	1.0	0.44	ug/L	1		8260C	Total/NA

Client Sample ID: 356023-MW1B

Lab Sample ID: 480-156213-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.1	J	10	3.0	ug/L	1		8260C	Total/NA
Perfluorobutanoic acid (PFBA)	3.1		1.6	0.80	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.0	J	1.6	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.76	J	1.6	0.61	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.0		1.6	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.67	J	1.6	0.39	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.60	J	1.6	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW5R

Lab Sample ID: 480-156213-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	110		2.0	1.6	ug/L	2		8260C	Total/NA
1,1-Dichloroethane	6.7		2.0	0.76	ug/L	2		8260C	Total/NA
1,1-Dichloroethene	24		2.0	0.58	ug/L	2		8260C	Total/NA
Methylene Chloride	1.2	J	2.0	0.88	ug/L	2		8260C	Total/NA
Trichloroethene	7.6		2.0	0.92	ug/L	2		8260C	Total/NA
1,4-Dioxane	6.1	E	1.0	0.50	ug/L	5		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	1.2	J	1.7	0.84	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.89	J	1.7	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.65	J	1.7	0.64	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.2	J	1.7	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.42	J	1.7	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.74	J	1.7	0.51	ng/L	1		537 (modified)	Total/NA

Client Sample ID: 356023-MW7R

Lab Sample ID: 480-156213-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	41		1.0	0.82	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	14		1.0	0.38	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	5.7		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	0.94	J	1.0	0.46	ug/L	1		8260C	Total/NA
1,4-Dioxane	2.3	E	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Perfluorobutanoic acid (PFBA)	1.4	J	1.6	0.81	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.77	J	1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.5	J	1.6	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.72	J	1.6	0.40	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.97	J	1.6	0.50	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-TB1

Lab Sample ID: 480-156213-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.1	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL BUF
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL BUR
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3535	Solid-Phase Extraction (SPE)	SW846	TAL BUR
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = Eurofins TestAmerica, Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW8B

Lab Sample ID: 480-156213-1

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/17/19 22:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/19 22:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 22:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/19 22:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/17/19 22:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/17/19 22:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 22:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 22:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/19 22:23	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/19 22:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/19 22:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/19 22:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/19 22:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/19 22:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/19 22:23	1
1,4-Dioxane	ND		40	9.3	ug/L			07/17/19 22:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/19 22:23	1
2-Hexanone	ND		5.0	1.2	ug/L			07/17/19 22:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/19 22:23	1
Acetone	ND		10	3.0	ug/L			07/17/19 22:23	1
Benzene	ND		1.0	0.41	ug/L			07/17/19 22:23	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/17/19 22:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/19 22:23	1
Bromoform	ND	*	1.0	0.26	ug/L			07/17/19 22:23	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/19 22:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/19 22:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/19 22:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/19 22:23	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 22:23	1
Chloroform	ND		1.0	0.34	ug/L			07/17/19 22:23	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/19 22:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/17/19 22:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/19 22:23	1
Cyclohexane	ND		1.0	0.18	ug/L			07/17/19 22:23	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/17/19 22:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/19 22:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/19 22:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/19 22:23	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/19 22:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/19 22:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/19 22:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/19 22:23	1
Styrene	ND		1.0	0.73	ug/L			07/17/19 22:23	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/19 22:23	1
Toluene	ND		1.0	0.51	ug/L			07/17/19 22:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/19 22:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/19 22:23	1
Trichloroethene	ND		1.0	0.46	ug/L			07/17/19 22:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/19 22:23	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW8B

Lab Sample ID: 480-156213-1

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/19 22:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/19 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		07/17/19 22:23	1
4-Bromofluorobenzene (Surr)	107		73 - 120		07/17/19 22:23	1
Dibromofluoromethane (Surr)	104		75 - 123		07/17/19 22:23	1
Toluene-d8 (Surr)	97		80 - 120		07/17/19 22:23	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.4	H E	0.20	0.10	ug/L		07/17/19 15:17	07/18/19 21:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	31		15 - 110	07/17/19 15:17	07/18/19 21:43	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	0.86	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.54	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.65	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.78	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorooctanoic acid (PFOA)	0.56	J	1.7	0.54	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.66	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.45	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.50	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.51	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.79	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.42	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.68	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.81	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.77	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorooctanesulfonic acid (PFOS)	0.53	J	1.7	0.52	ng/L		07/23/19 10:21	08/02/19 04:13	1
Perfluorooctanesulfonamide (FOSA)	ND		8.6	8.6	ng/L		07/23/19 10:21	08/02/19 04:13	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5	ng/L		07/23/19 10:21	08/02/19 04:13	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.3	ng/L		07/23/19 10:21	08/02/19 04:13	1
6:2 FTS	ND		17	3.9	ng/L		07/23/19 10:21	08/02/19 04:13	1
8:2 FTS	ND		17	2.5	ng/L		07/23/19 10:21	08/02/19 04:13	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	72		25 - 150	07/23/19 10:21	08/02/19 04:13	1
13C4 PFBA	92		25 - 150	07/23/19 10:21	08/02/19 04:13	1
13C5 PFPeA	92		25 - 150	07/23/19 10:21	08/02/19 04:13	1
13C2 PFHxA	93		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C4 PFHpA	93		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C4 PFOA	80		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C5 PFNA	89		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C2 PFDA	90		50 - 150	07/23/19 10:21	08/02/19 04:13	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW8B

Lab Sample ID: 480-156213-1

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	88		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C2 PFDoA	81		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C2 PFTeDA	63		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C3 PFBS	87		50 - 150	07/23/19 10:21	08/02/19 04:13	1
18O2 PFHxS	88		50 - 150	07/23/19 10:21	08/02/19 04:13	1
13C4 PFOS	83		50 - 150	07/23/19 10:21	08/02/19 04:13	1
d3-NMeFOSAA	66		50 - 150	07/23/19 10:21	08/02/19 04:13	1
d5-NEtFOSAA	67		50 - 150	07/23/19 10:21	08/02/19 04:13	1
M2-6:2 FTS	89		25 - 150	07/23/19 10:21	08/02/19 04:13	1
M2-8:2 FTS	99		25 - 150	07/23/19 10:21	08/02/19 04:13	1

Client Sample ID: 356023-MW8BD

Lab Sample ID: 480-156213-2

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/17/19 22:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/19 22:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 22:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/19 22:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/17/19 22:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/17/19 22:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 22:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 22:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/19 22:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/19 22:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/19 22:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/19 22:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/19 22:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/19 22:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/19 22:47	1
1,4-Dioxane	ND		40	9.3	ug/L			07/17/19 22:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/19 22:47	1
2-Hexanone	ND		5.0	1.2	ug/L			07/17/19 22:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/19 22:47	1
Acetone	ND		10	3.0	ug/L			07/17/19 22:47	1
Benzene	ND		1.0	0.41	ug/L			07/17/19 22:47	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/17/19 22:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/19 22:47	1
Bromoform	ND	*	1.0	0.26	ug/L			07/17/19 22:47	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/19 22:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/19 22:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/19 22:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/19 22:47	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 22:47	1
Chloroform	ND		1.0	0.34	ug/L			07/17/19 22:47	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/19 22:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/17/19 22:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/19 22:47	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW8BD

Lab Sample ID: 480-156213-2

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			07/17/19 22:47	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/17/19 22:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/19 22:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/19 22:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/19 22:47	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/19 22:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/19 22:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/19 22:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/19 22:47	1
Styrene	ND		1.0	0.73	ug/L			07/17/19 22:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/19 22:47	1
Toluene	ND		1.0	0.51	ug/L			07/17/19 22:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/19 22:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/19 22:47	1
Trichloroethene	ND		1.0	0.46	ug/L			07/17/19 22:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/19 22:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/19 22:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/19 22:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		07/17/19 22:47	1
4-Bromofluorobenzene (Surr)	106		73 - 120		07/17/19 22:47	1
Dibromofluoromethane (Surr)	105		75 - 123		07/17/19 22:47	1
Toluene-d8 (Surr)	97		80 - 120		07/17/19 22:47	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.4	H E	0.20	0.10	ug/L		07/17/19 15:17	07/18/19 22:07	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	39		15 - 110	07/17/19 15:17	07/18/19 22:07	1			

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.7	0.86	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.54	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.65	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.78	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorooctanoic acid (PFOA)	0.65	J	1.7	0.54	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.66	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.46	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.51	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.52	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.79	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.42	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.69	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.82	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.77	ng/L		07/23/19 10:21	08/02/19 04:21	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.52	ng/L		07/23/19 10:21	08/02/19 04:21	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW8BD

Lab Sample ID: 480-156213-2

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonamide (FOSA)	ND		8.6	8.6	ng/L		07/23/19 10:21	08/02/19 04:21	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5	ng/L		07/23/19 10:21	08/02/19 04:21	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.3	ng/L		07/23/19 10:21	08/02/19 04:21	1
6:2 FTS	ND		17	4.0	ng/L		07/23/19 10:21	08/02/19 04:21	1
8:2 FTS	ND		17	2.5	ng/L		07/23/19 10:21	08/02/19 04:21	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	58		25 - 150				07/23/19 10:21	08/02/19 04:21	1
13C4 PFBA	76		25 - 150				07/23/19 10:21	08/02/19 04:21	1
13C5 PFPeA	80		25 - 150				07/23/19 10:21	08/02/19 04:21	1
13C2 PFHxA	80		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C4 PFHpA	83		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C4 PFOA	79		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C5 PFNA	83		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C2 PFDA	79		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C2 PFUnA	78		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C2 PFDoA	78		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C2 PFTeDA	66		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C3 PFBS	93		50 - 150				07/23/19 10:21	08/02/19 04:21	1
18O2 PFHxS	89		50 - 150				07/23/19 10:21	08/02/19 04:21	1
13C4 PFOS	79		50 - 150				07/23/19 10:21	08/02/19 04:21	1
d3-NMeFOSAA	63		50 - 150				07/23/19 10:21	08/02/19 04:21	1
d5-NEtFOSAA	60		50 - 150				07/23/19 10:21	08/02/19 04:21	1
M2-6:2 FTS	104		25 - 150				07/23/19 10:21	08/02/19 04:21	1
M2-8:2 FTS	101		25 - 150				07/23/19 10:21	08/02/19 04:21	1

Client Sample ID: 356023-MW16

Lab Sample ID: 480-156213-3

Date Collected: 07/09/19 17:10

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	13		1.0	0.82	ug/L			07/17/19 23:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/19 23:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 23:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/19 23:11	1
1,1-Dichloroethane	2.2		1.0	0.38	ug/L			07/17/19 23:11	1
1,1-Dichloroethene	10		1.0	0.29	ug/L			07/17/19 23:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 23:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 23:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/19 23:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/19 23:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/19 23:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/19 23:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/19 23:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/19 23:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/19 23:11	1
1,4-Dioxane	ND		40	9.3	ug/L			07/17/19 23:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/19 23:11	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW16

Lab Sample ID: 480-156213-3

Date Collected: 07/09/19 17:10

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		5.0	1.2	ug/L			07/17/19 23:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/19 23:11	1
Acetone	ND		10	3.0	ug/L			07/17/19 23:11	1
Benzene	ND		1.0	0.41	ug/L			07/17/19 23:11	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/17/19 23:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/19 23:11	1
Bromoform	ND	*	1.0	0.26	ug/L			07/17/19 23:11	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/19 23:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/19 23:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/19 23:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/19 23:11	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 23:11	1
Chloroform	ND		1.0	0.34	ug/L			07/17/19 23:11	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/19 23:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/17/19 23:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/19 23:11	1
Cyclohexane	ND		1.0	0.18	ug/L			07/17/19 23:11	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/17/19 23:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/19 23:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/19 23:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/19 23:11	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/19 23:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/19 23:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/19 23:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/19 23:11	1
Styrene	ND		1.0	0.73	ug/L			07/17/19 23:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/19 23:11	1
Toluene	ND		1.0	0.51	ug/L			07/17/19 23:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/19 23:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/19 23:11	1
Trichloroethene	1.3		1.0	0.46	ug/L			07/17/19 23:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/19 23:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/19 23:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/19 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		07/17/19 23:11	1
4-Bromofluorobenzene (Surr)	105		73 - 120		07/17/19 23:11	1
Dibromofluoromethane (Surr)	103		75 - 123		07/17/19 23:11	1
Toluene-d8 (Surr)	97		80 - 120		07/17/19 23:11	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.2	H	1.0	0.50	ug/L		07/17/19 15:17	07/21/19 17:29	5
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	39		15 - 110	07/17/19 15:17	07/21/19 17:29	5			

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.79	ng/L		07/23/19 10:21	08/02/19 04:29	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW16

Lab Sample ID: 480-156213-3

Date Collected: 07/09/19 17:10

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.50	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.60	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.72	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorooctanoic acid (PFOA)	0.52	J	1.6	0.50	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.21	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.61	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.42	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.39	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.64	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 04:29	1
Perfluorooctanesulfonamide (FOSA)	ND		7.9	7.9	ng/L		07/23/19 10:21	08/02/19 04:29	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 04:29	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 04:29	1
6:2 FTS	ND		16	3.7	ng/L		07/23/19 10:21	08/02/19 04:29	1
8:2 FTS	ND		16	2.3	ng/L		07/23/19 10:21	08/02/19 04:29	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	78		25 - 150	07/23/19 10:21	08/02/19 04:29	1
13C4 PFBA	94		25 - 150	07/23/19 10:21	08/02/19 04:29	1
13C5 PFPeA	90		25 - 150	07/23/19 10:21	08/02/19 04:29	1
13C2 PFHxA	90		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C4 PFHpA	95		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C4 PFOA	82		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C5 PFNA	88		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C2 PFDA	85		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C2 PFUnA	88		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C2 PFDoA	85		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C2 PFTeDA	66		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C3 PFBS	90		50 - 150	07/23/19 10:21	08/02/19 04:29	1
18O2 PFHxS	88		50 - 150	07/23/19 10:21	08/02/19 04:29	1
13C4 PFOS	88		50 - 150	07/23/19 10:21	08/02/19 04:29	1
d3-NMeFOSAA	67		50 - 150	07/23/19 10:21	08/02/19 04:29	1
d5-NEtFOSAA	72		50 - 150	07/23/19 10:21	08/02/19 04:29	1
M2-6:2 FTS	95		25 - 150	07/23/19 10:21	08/02/19 04:29	1
M2-8:2 FTS	102		25 - 150	07/23/19 10:21	08/02/19 04:29	1

Client Sample ID: 356023-MW14B 150

Lab Sample ID: 480-156213-4

Date Collected: 07/09/19 11:50

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/17/19 23:35	1

Euofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW14B 150

Lab Sample ID: 480-156213-4

Date Collected: 07/09/19 11:50

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/19 23:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 23:35	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/19 23:35	1
1,1-Dichloroethane	1.0		1.0	0.38	ug/L			07/17/19 23:35	1
1,1-Dichloroethene	0.66	J	1.0	0.29	ug/L			07/17/19 23:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 23:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 23:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/19 23:35	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/19 23:35	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/19 23:35	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/19 23:35	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/19 23:35	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/19 23:35	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/19 23:35	1
1,4-Dioxane	ND		40	9.3	ug/L			07/17/19 23:35	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/19 23:35	1
2-Hexanone	ND		5.0	1.2	ug/L			07/17/19 23:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/19 23:35	1
Acetone	ND		10	3.0	ug/L			07/17/19 23:35	1
Benzene	ND		1.0	0.41	ug/L			07/17/19 23:35	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/17/19 23:35	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/19 23:35	1
Bromoform	ND	*	1.0	0.26	ug/L			07/17/19 23:35	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/19 23:35	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/19 23:35	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/19 23:35	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/19 23:35	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 23:35	1
Chloroform	ND		1.0	0.34	ug/L			07/17/19 23:35	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/19 23:35	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/17/19 23:35	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/19 23:35	1
Cyclohexane	ND		1.0	0.18	ug/L			07/17/19 23:35	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/17/19 23:35	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/19 23:35	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/19 23:35	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/19 23:35	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/19 23:35	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/19 23:35	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/19 23:35	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/19 23:35	1
Styrene	ND		1.0	0.73	ug/L			07/17/19 23:35	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/19 23:35	1
Toluene	ND		1.0	0.51	ug/L			07/17/19 23:35	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/19 23:35	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/19 23:35	1
Trichloroethene	ND		1.0	0.46	ug/L			07/17/19 23:35	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/19 23:35	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/19 23:35	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW14B 150

Lab Sample ID: 480-156213-4

Date Collected: 07/09/19 11:50

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/19 23:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120					07/17/19 23:35	1
4-Bromofluorobenzene (Surr)	107		73 - 120					07/17/19 23:35	1
Dibromofluoromethane (Surr)	103		75 - 123					07/17/19 23:35	1
Toluene-d8 (Surr)	96		80 - 120					07/17/19 23:35	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.4	H	1.0	0.50	ug/L		07/17/19 15:17	07/21/19 17:53	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	36		15 - 110				07/17/19 15:17	07/21/19 17:53	5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.0		1.6	0.81	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluoropentanoic acid (PFPeA)	2.9		1.6	0.51	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorohexanoic acid (PFHxA)	3.1		1.6	0.61	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluoroheptanoic acid (PFHpA)	1.1	J	1.6	0.73	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorooctanoic acid (PFOA)	4.4		1.6	0.51	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorononanoic acid (PFNA)	0.92	J	1.6	0.22	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.62	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorobutanesulfonic acid (PFBS)	2.8		1.6	0.39	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.6	0.64	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.77	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorooctanesulfonic acid (PFOS)	2.5		1.6	0.49	ng/L		07/23/19 10:21	08/02/19 04:37	1
Perfluorooctanesulfonamide (FOSA)	ND		8.1	8.1	ng/L		07/23/19 10:21	08/02/19 04:37	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 04:37	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 04:37	1
6:2 FTS	ND		16	3.7	ng/L		07/23/19 10:21	08/02/19 04:37	1
8:2 FTS	ND		16	2.3	ng/L		07/23/19 10:21	08/02/19 04:37	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	75		25 - 150				07/23/19 10:21	08/02/19 04:37	1
13C4 PFBA	78		25 - 150				07/23/19 10:21	08/02/19 04:37	1
13C5 PFPeA	86		25 - 150				07/23/19 10:21	08/02/19 04:37	1
13C2 PFHxA	91		50 - 150				07/23/19 10:21	08/02/19 04:37	1
13C4 PFHpA	91		50 - 150				07/23/19 10:21	08/02/19 04:37	1
13C4 PFOA	83		50 - 150				07/23/19 10:21	08/02/19 04:37	1
13C5 PFNA	83		50 - 150				07/23/19 10:21	08/02/19 04:37	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW14B 150

Lab Sample ID: 480-156213-4

Date Collected: 07/09/19 11:50

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	84		50 - 150	07/23/19 10:21	08/02/19 04:37	1
13C2 PFUnA	84		50 - 150	07/23/19 10:21	08/02/19 04:37	1
13C2 PFDoA	77		50 - 150	07/23/19 10:21	08/02/19 04:37	1
13C2 PFTeDA	68		50 - 150	07/23/19 10:21	08/02/19 04:37	1
13C3 PFBS	88		50 - 150	07/23/19 10:21	08/02/19 04:37	1
18O2 PFHxS	92		50 - 150	07/23/19 10:21	08/02/19 04:37	1
13C4 PFOS	83		50 - 150	07/23/19 10:21	08/02/19 04:37	1
d3-NMeFOSAA	63		50 - 150	07/23/19 10:21	08/02/19 04:37	1
d5-NEtFOSAA	64		50 - 150	07/23/19 10:21	08/02/19 04:37	1
M2-6:2 FTS	101		25 - 150	07/23/19 10:21	08/02/19 04:37	1
M2-8:2 FTS	104		25 - 150	07/23/19 10:21	08/02/19 04:37	1

Client Sample ID: 356023-MW12B 190

Lab Sample ID: 480-156213-5

Date Collected: 07/09/19 17:27

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.3		1.0	0.82	ug/L			07/17/19 23:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/19 23:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 23:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/19 23:59	1
1,1-Dichloroethane	10		1.0	0.38	ug/L			07/17/19 23:59	1
1,1-Dichloroethene	15		1.0	0.29	ug/L			07/17/19 23:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 23:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 23:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/19 23:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/19 23:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/19 23:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/19 23:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/19 23:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/19 23:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/19 23:59	1
1,4-Dioxane	ND		40	9.3	ug/L			07/17/19 23:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/19 23:59	1
2-Hexanone	ND		5.0	1.2	ug/L			07/17/19 23:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/19 23:59	1
Acetone	ND		10	3.0	ug/L			07/17/19 23:59	1
Benzene	ND		1.0	0.41	ug/L			07/17/19 23:59	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/17/19 23:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/19 23:59	1
Bromoform	ND *		1.0	0.26	ug/L			07/17/19 23:59	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/19 23:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/19 23:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/19 23:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/19 23:59	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 23:59	1
Chloroform	ND		1.0	0.34	ug/L			07/17/19 23:59	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/19 23:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/17/19 23:59	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW12B 190

Lab Sample ID: 480-156213-5

Date Collected: 07/09/19 17:27

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/19 23:59	1
Cyclohexane	ND		1.0	0.18	ug/L			07/17/19 23:59	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/17/19 23:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/19 23:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/19 23:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/19 23:59	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/19 23:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/19 23:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/19 23:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/19 23:59	1
Styrene	ND		1.0	0.73	ug/L			07/17/19 23:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/19 23:59	1
Toluene	ND		1.0	0.51	ug/L			07/17/19 23:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/19 23:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/19 23:59	1
Trichloroethene	3.5		1.0	0.46	ug/L			07/17/19 23:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/19 23:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/19 23:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/19 23:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		07/17/19 23:59	1
4-Bromofluorobenzene (Surr)	105		73 - 120		07/17/19 23:59	1
Dibromofluoromethane (Surr)	107		75 - 123		07/17/19 23:59	1
Toluene-d8 (Surr)	96		80 - 120		07/17/19 23:59	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	9.2	H	2.0	1.0	ug/L		07/17/19 15:17	07/21/19 18:17	10
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	35		15 - 110	07/17/19 15:17	07/21/19 18:17	10			

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.7		1.7	0.83	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluoropentanoic acid (PFPeA)	1.7		1.7	0.52	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.63	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluoroheptanoic acid (PFHpA)	0.84	J	1.7	0.76	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorooctanoic acid (PFOA)	3.1		1.7	0.52	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.22	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.64	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.44	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.50	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.77	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorobutanesulfonic acid (PFBS)	1.2	J	1.7	0.41	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorohexanesulfonic acid (PFHxS)	0.67	J	1.7	0.67	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.79	ng/L		07/23/19 10:21	08/02/19 04:45	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW12B 190

Lab Sample ID: 480-156213-5

Date Collected: 07/09/19 17:27

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	0.51	ng/L		07/23/19 10:21	08/02/19 04:45	1
Perfluorooctanesulfonamide (FOSA)	ND		8.3	8.3	ng/L		07/23/19 10:21	08/02/19 04:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4	ng/L		07/23/19 10:21	08/02/19 04:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.2	ng/L		07/23/19 10:21	08/02/19 04:45	1
6:2 FTS	ND		17	3.8	ng/L		07/23/19 10:21	08/02/19 04:45	1
8:2 FTS	ND		17	2.4	ng/L		07/23/19 10:21	08/02/19 04:45	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	73		25 - 150	07/23/19 10:21	08/02/19 04:45	1
13C4 PFBA	75		25 - 150	07/23/19 10:21	08/02/19 04:45	1
13C5 PFPeA	82		25 - 150	07/23/19 10:21	08/02/19 04:45	1
13C2 PFHxA	91		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C4 PFHpA	91		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C4 PFOA	81		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C5 PFNA	78		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C2 PFDA	80		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C2 PFUnA	75		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C2 PFDoA	66		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C2 PFTeDA	60		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C3 PFBS	86		50 - 150	07/23/19 10:21	08/02/19 04:45	1
18O2 PFHxS	88		50 - 150	07/23/19 10:21	08/02/19 04:45	1
13C4 PFOS	74		50 - 150	07/23/19 10:21	08/02/19 04:45	1
d3-NMeFOSAA	62		50 - 150	07/23/19 10:21	08/02/19 04:45	1
d5-NEtFOSAA	57		50 - 150	07/23/19 10:21	08/02/19 04:45	1
M2-6:2 FTS	98		25 - 150	07/23/19 10:21	08/02/19 04:45	1
M2-8:2 FTS	93		25 - 150	07/23/19 10:21	08/02/19 04:45	1

Client Sample ID: 356023-MW11B

Lab Sample ID: 480-156213-6

Date Collected: 07/10/19 11:37

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.4		1.0	0.82	ug/L			07/18/19 00:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 00:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 00:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 00:23	1
1,1-Dichloroethane	2.4		1.0	0.38	ug/L			07/18/19 00:23	1
1,1-Dichloroethene	4.9		1.0	0.29	ug/L			07/18/19 00:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 00:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 00:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 00:23	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 00:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 00:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 00:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 00:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 00:23	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW11B

Lab Sample ID: 480-156213-6

Date Collected: 07/10/19 11:37

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 00:23	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 00:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 00:23	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 00:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 00:23	1
Acetone	ND		10	3.0	ug/L			07/18/19 00:23	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 00:23	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 00:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 00:23	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 00:23	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 00:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 00:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 00:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 00:23	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 00:23	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 00:23	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 00:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 00:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 00:23	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 00:23	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 00:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 00:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 00:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 00:23	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 00:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 00:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 00:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 00:23	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 00:23	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 00:23	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 00:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 00:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 00:23	1
Trichloroethene	0.93	J	1.0	0.46	ug/L			07/18/19 00:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 00:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 00:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		07/18/19 00:23	1
4-Bromofluorobenzene (Surr)	104		73 - 120		07/18/19 00:23	1
Dibromofluoromethane (Surr)	105		75 - 123		07/18/19 00:23	1
Toluene-d8 (Surr)	96		80 - 120		07/18/19 00:23	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	3.1		1.0	0.50	ug/L		07/17/19 15:17	07/21/19 18:40	5
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	35		15 - 110	07/17/19 15:17	07/21/19 18:40	5			

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW11B

Lab Sample ID: 480-156213-6

Date Collected: 07/10/19 11:37

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.82	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.52	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.62	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.75	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorooctanoic acid (PFOA)	0.53	J	1.6	0.52	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.22	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.63	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.66	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.78	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.50	ng/L		07/23/19 10:21	08/02/19 04:53	1
Perfluorooctanesulfonamide (FOSA)	ND		8.2	8.2	ng/L		07/23/19 10:21	08/02/19 04:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 04:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 04:53	1
6:2 FTS	ND		16	3.8	ng/L		07/23/19 10:21	08/02/19 04:53	1
8:2 FTS	ND		16	2.4	ng/L		07/23/19 10:21	08/02/19 04:53	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	85		25 - 150				07/23/19 10:21	08/02/19 04:53	1
13C4 PFBA	93		25 - 150				07/23/19 10:21	08/02/19 04:53	1
13C5 PFPeA	94		25 - 150				07/23/19 10:21	08/02/19 04:53	1
13C2 PFHxA	97		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C4 PFHpA	96		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C4 PFOA	92		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C5 PFNA	94		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C2 PFDA	91		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C2 PFUnA	88		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C2 PFDoA	82		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C2 PFTeDA	65		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C3 PFBS	96		50 - 150				07/23/19 10:21	08/02/19 04:53	1
18O2 PFHxS	97		50 - 150				07/23/19 10:21	08/02/19 04:53	1
13C4 PFOS	94		50 - 150				07/23/19 10:21	08/02/19 04:53	1
d3-NMeFOSAA	74		50 - 150				07/23/19 10:21	08/02/19 04:53	1
d5-NEtFOSAA	71		50 - 150				07/23/19 10:21	08/02/19 04:53	1
M2-6:2 FTS	108		25 - 150				07/23/19 10:21	08/02/19 04:53	1
M2-8:2 FTS	97		25 - 150				07/23/19 10:21	08/02/19 04:53	1

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW11C

Lab Sample ID: 480-156213-7

Date Collected: 07/10/19 15:23

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.2		1.0	0.82	ug/L			07/18/19 00:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 00:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 00:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 00:47	1
1,1-Dichloroethane	0.80	J	1.0	0.38	ug/L			07/18/19 00:47	1
1,1-Dichloroethene	3.2		1.0	0.29	ug/L			07/18/19 00:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 00:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 00:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 00:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 00:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 00:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 00:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 00:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 00:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 00:47	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 00:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 00:47	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 00:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 00:47	1
Acetone	ND		10	3.0	ug/L			07/18/19 00:47	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 00:47	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 00:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 00:47	1
Bromoform	ND *		1.0	0.26	ug/L			07/18/19 00:47	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 00:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 00:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 00:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 00:47	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 00:47	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 00:47	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 00:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 00:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 00:47	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 00:47	1
Dibromochloromethane	ND *		1.0	0.32	ug/L			07/18/19 00:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 00:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 00:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 00:47	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 00:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 00:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 00:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 00:47	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 00:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 00:47	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 00:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 00:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 00:47	1
Trichloroethene	0.64	J	1.0	0.46	ug/L			07/18/19 00:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 00:47	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW11C

Lab Sample ID: 480-156213-7

Date Collected: 07/10/19 15:23

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 00:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 00:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120					07/18/19 00:47	1
4-Bromofluorobenzene (Surr)	106		73 - 120					07/18/19 00:47	1
Dibromofluoromethane (Surr)	103		75 - 123					07/18/19 00:47	1
Toluene-d8 (Surr)	95		80 - 120					07/18/19 00:47	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.8	E	0.20	0.10	ug/L		07/17/19 15:17	07/19/19 01:24	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	39		15 - 110				07/17/19 15:17	07/19/19 01:24	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.81	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.51	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.61	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorooctanoic acid (PFOA)	0.56	J	1.6	0.51	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.22	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.62	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.65	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.77	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.49	ng/L		07/23/19 10:21	08/02/19 05:01	1
Perfluorooctanesulfonamide (FOSA)	ND		8.1	8.1	ng/L		07/23/19 10:21	08/02/19 05:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 05:01	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 05:01	1
6:2 FTS	ND		16	3.7	ng/L		07/23/19 10:21	08/02/19 05:01	1
8:2 FTS	ND		16	2.3	ng/L		07/23/19 10:21	08/02/19 05:01	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	79		25 - 150				07/23/19 10:21	08/02/19 05:01	1
13C4 PFBA	87		25 - 150				07/23/19 10:21	08/02/19 05:01	1
13C5 PFPeA	95		25 - 150				07/23/19 10:21	08/02/19 05:01	1
13C2 PFHxA	94		50 - 150				07/23/19 10:21	08/02/19 05:01	1
13C4 PFHpA	95		50 - 150				07/23/19 10:21	08/02/19 05:01	1
13C4 PFOA	90		50 - 150				07/23/19 10:21	08/02/19 05:01	1
13C5 PFNA	92		50 - 150				07/23/19 10:21	08/02/19 05:01	1
13C2 PFDA	94		50 - 150				07/23/19 10:21	08/02/19 05:01	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW11C

Lab Sample ID: 480-156213-7

Date Collected: 07/10/19 15:23

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	90		50 - 150	07/23/19 10:21	08/02/19 05:01	1
13C2 PFDoA	78		50 - 150	07/23/19 10:21	08/02/19 05:01	1
13C2 PFTeDA	65		50 - 150	07/23/19 10:21	08/02/19 05:01	1
13C3 PFBS	97		50 - 150	07/23/19 10:21	08/02/19 05:01	1
18O2 PFHxS	91		50 - 150	07/23/19 10:21	08/02/19 05:01	1
13C4 PFOS	88		50 - 150	07/23/19 10:21	08/02/19 05:01	1
d3-NMeFOSAA	75		50 - 150	07/23/19 10:21	08/02/19 05:01	1
d5-NEtFOSAA	66		50 - 150	07/23/19 10:21	08/02/19 05:01	1
M2-6:2 FTS	101		25 - 150	07/23/19 10:21	08/02/19 05:01	1
M2-8:2 FTS	110		25 - 150	07/23/19 10:21	08/02/19 05:01	1

Client Sample ID: 356023-MW1801

Lab Sample ID: 480-156213-8

Date Collected: 07/11/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/19 01:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 01:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 01:11	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 01:11	1
1,1-Dichloroethane	1.1		1.0	0.38	ug/L			07/18/19 01:11	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/19 01:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 01:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 01:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 01:11	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 01:11	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 01:11	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 01:11	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 01:11	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 01:11	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 01:11	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 01:11	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 01:11	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 01:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 01:11	1
Acetone	ND		10	3.0	ug/L			07/18/19 01:11	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 01:11	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 01:11	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 01:11	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 01:11	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 01:11	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 01:11	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 01:11	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 01:11	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 01:11	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 01:11	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 01:11	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 01:11	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 01:11	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW1801

Lab Sample ID: 480-156213-8

Date Collected: 07/11/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 01:11	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 01:11	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 01:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 01:11	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 01:11	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 01:11	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 01:11	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 01:11	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 01:11	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 01:11	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 01:11	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 01:11	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 01:11	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 01:11	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/19 01:11	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 01:11	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 01:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		07/18/19 01:11	1
4-Bromofluorobenzene (Surr)	103		73 - 120		07/18/19 01:11	1
Dibromofluoromethane (Surr)	105		75 - 123		07/18/19 01:11	1
Toluene-d8 (Surr)	97		80 - 120		07/18/19 01:11	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.0		0.20	0.10	ug/L		07/17/19 15:17	07/19/19 01:48	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	45		15 - 110	07/17/19 15:17	07/19/19 01:48	1			

Client Sample ID: 356023-MW1802

Lab Sample ID: 480-156213-9

Date Collected: 07/11/19 11:20

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/19 01:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 01:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 01:35	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 01:35	1
1,1-Dichloroethane	1.4		1.0	0.38	ug/L			07/18/19 01:35	1
1,1-Dichloroethene	0.46	J	1.0	0.29	ug/L			07/18/19 01:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 01:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 01:35	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 01:35	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 01:35	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 01:35	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 01:35	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 01:35	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW1802

Lab Sample ID: 480-156213-9

Date Collected: 07/11/19 11:20

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 01:35	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 01:35	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 01:35	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 01:35	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 01:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 01:35	1
Acetone	ND		10	3.0	ug/L			07/18/19 01:35	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 01:35	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 01:35	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 01:35	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 01:35	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 01:35	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 01:35	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 01:35	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 01:35	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 01:35	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 01:35	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 01:35	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 01:35	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 01:35	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 01:35	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 01:35	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 01:35	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 01:35	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 01:35	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 01:35	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 01:35	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 01:35	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 01:35	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 01:35	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 01:35	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 01:35	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 01:35	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 01:35	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/19 01:35	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 01:35	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 01:35	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 01:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/18/19 01:35	1
4-Bromofluorobenzene (Surr)	106		73 - 120		07/18/19 01:35	1
Dibromofluoromethane (Surr)	104		75 - 123		07/18/19 01:35	1
Toluene-d8 (Surr)	97		80 - 120		07/18/19 01:35	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.3	E	0.20	0.10	ug/L		07/17/19 15:17	07/19/19 02:11	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	37		15 - 110	07/17/19 15:17	07/19/19 02:11	1			

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW1803

Lab Sample ID: 480-156213-10

Date Collected: 07/11/19 11:30

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/19 01:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 01:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 01:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 01:59	1
1,1-Dichloroethane	1.4		1.0	0.38	ug/L			07/18/19 01:59	1
1,1-Dichloroethene	0.43	J	1.0	0.29	ug/L			07/18/19 01:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 01:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 01:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 01:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 01:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 01:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 01:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 01:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 01:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 01:59	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 01:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 01:59	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 01:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 01:59	1
Acetone	ND		10	3.0	ug/L			07/18/19 01:59	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 01:59	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 01:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 01:59	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 01:59	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 01:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 01:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 01:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 01:59	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 01:59	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 01:59	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 01:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 01:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 01:59	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 01:59	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 01:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 01:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 01:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 01:59	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 01:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 01:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 01:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 01:59	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 01:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 01:59	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 01:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 01:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 01:59	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/19 01:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 01:59	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW1803

Lab Sample ID: 480-156213-10

Date Collected: 07/11/19 11:30

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 01:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 01:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120					07/18/19 01:59	1
4-Bromofluorobenzene (Surr)	106		73 - 120					07/18/19 01:59	1
Dibromofluoromethane (Surr)	105		75 - 123					07/18/19 01:59	1
Toluene-d8 (Surr)	98		80 - 120					07/18/19 01:59	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.4	E	0.20	0.10	ug/L		07/17/19 15:17	07/19/19 02:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	39		15 - 110				07/17/19 15:17	07/19/19 02:35	1

Client Sample ID: 356023-MW5B

Lab Sample ID: 480-156213-11

Date Collected: 07/11/19 13:10

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1800		40	33	ug/L			07/18/19 02:23	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			07/18/19 02:23	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12	ug/L			07/18/19 02:23	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			07/18/19 02:23	40
1,1-Dichloroethane	42		40	15	ug/L			07/18/19 02:23	40
1,1-Dichloroethene	200		40	12	ug/L			07/18/19 02:23	40
1,2,3-Trichlorobenzene	ND		40	16	ug/L			07/18/19 02:23	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			07/18/19 02:23	40
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			07/18/19 02:23	40
1,2-Dibromoethane	ND		40	29	ug/L			07/18/19 02:23	40
1,2-Dichlorobenzene	ND		40	32	ug/L			07/18/19 02:23	40
1,2-Dichloroethane	ND		40	8.4	ug/L			07/18/19 02:23	40
1,2-Dichloropropane	ND		40	29	ug/L			07/18/19 02:23	40
1,3-Dichlorobenzene	ND		40	31	ug/L			07/18/19 02:23	40
1,4-Dichlorobenzene	ND		40	34	ug/L			07/18/19 02:23	40
1,4-Dioxane	ND		1600	370	ug/L			07/18/19 02:23	40
2-Butanone (MEK)	ND		400	53	ug/L			07/18/19 02:23	40
2-Hexanone	ND		200	50	ug/L			07/18/19 02:23	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			07/18/19 02:23	40
Acetone	ND		400	120	ug/L			07/18/19 02:23	40
Benzene	ND		40	16	ug/L			07/18/19 02:23	40
Bromochloromethane	ND		40	35	ug/L			07/18/19 02:23	40
Bromodichloromethane	ND		40	16	ug/L			07/18/19 02:23	40
Bromoform	ND	*	40	10	ug/L			07/18/19 02:23	40
Bromomethane	ND		40	28	ug/L			07/18/19 02:23	40
Carbon disulfide	ND		40	7.6	ug/L			07/18/19 02:23	40
Carbon tetrachloride	ND		40	11	ug/L			07/18/19 02:23	40
Chlorobenzene	ND		40	30	ug/L			07/18/19 02:23	40
Chloroethane	ND		40	13	ug/L			07/18/19 02:23	40

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW5B

Lab Sample ID: 480-156213-11

Date Collected: 07/11/19 13:10

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		40	14	ug/L			07/18/19 02:23	40
Chloromethane	ND		40	14	ug/L			07/18/19 02:23	40
cis-1,2-Dichloroethene	ND		40	32	ug/L			07/18/19 02:23	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			07/18/19 02:23	40
Cyclohexane	ND		40	7.2	ug/L			07/18/19 02:23	40
Dibromochloromethane	ND	*	40	13	ug/L			07/18/19 02:23	40
Dichlorodifluoromethane	ND		40	27	ug/L			07/18/19 02:23	40
Ethylbenzene	ND		40	30	ug/L			07/18/19 02:23	40
Isopropylbenzene	ND		40	32	ug/L			07/18/19 02:23	40
Methyl acetate	ND		100	52	ug/L			07/18/19 02:23	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			07/18/19 02:23	40
Methylcyclohexane	ND		40	6.4	ug/L			07/18/19 02:23	40
Methylene Chloride	22	J	40	18	ug/L			07/18/19 02:23	40
Styrene	ND		40	29	ug/L			07/18/19 02:23	40
Tetrachloroethene	ND		40	14	ug/L			07/18/19 02:23	40
Toluene	ND		40	20	ug/L			07/18/19 02:23	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			07/18/19 02:23	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			07/18/19 02:23	40
Trichloroethene	87		40	18	ug/L			07/18/19 02:23	40
Trichlorofluoromethane	ND		40	35	ug/L			07/18/19 02:23	40
Vinyl chloride	ND		40	36	ug/L			07/18/19 02:23	40
Xylenes, Total	ND		80	26	ug/L			07/18/19 02:23	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		07/18/19 02:23	40
4-Bromofluorobenzene (Surr)	108		73 - 120		07/18/19 02:23	40
Dibromofluoromethane (Surr)	108		75 - 123		07/18/19 02:23	40
Toluene-d8 (Surr)	98		80 - 120		07/18/19 02:23	40

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	10		2.0	1.0	ug/L		07/17/19 15:17	07/21/19 19:04	10
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	34		15 - 110	07/17/19 15:17	07/21/19 19:04	10			

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	4.2		1.6	0.80	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluoropentanoic acid (PFPeA)	3.7		1.6	0.50	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorohexanoic acid (PFHxA)	2.7		1.6	0.61	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluoroheptanoic acid (PFHpA)	1.0	J	1.6	0.73	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorooctanoic acid (PFOA)	2.4		1.6	0.50	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.22	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.61	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.42	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.6	0.39	ng/L		07/23/19 10:21	08/02/19 05:09	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW5B

Lab Sample ID: 480-156213-11

Date Collected: 07/11/19 13:10

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.64	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorooctanesulfonic acid (PFOS)	2.0		1.6	0.49	ng/L		07/23/19 10:21	08/02/19 05:09	1
Perfluorooctanesulfonamide (FOSA)	ND		8.0	8.0	ng/L		07/23/19 10:21	08/02/19 05:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 05:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 05:09	1
6:2 FTS	ND		16	3.7	ng/L		07/23/19 10:21	08/02/19 05:09	1
8:2 FTS	ND		16	2.3	ng/L		07/23/19 10:21	08/02/19 05:09	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	68		25 - 150	07/23/19 10:21	08/02/19 05:09	1
13C4 PFBA	79		25 - 150	07/23/19 10:21	08/02/19 05:09	1
13C5 PFPeA	84		25 - 150	07/23/19 10:21	08/02/19 05:09	1
13C2 PFHxA	85		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C4 PFHpA	87		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C4 PFOA	84		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C5 PFNA	90		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C2 PFDA	85		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C2 PFUnA	75		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C2 PFDoA	73		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C2 PFTeDA	63		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C3 PFBS	94		50 - 150	07/23/19 10:21	08/02/19 05:09	1
18O2 PFHxS	94		50 - 150	07/23/19 10:21	08/02/19 05:09	1
13C4 PFOS	80		50 - 150	07/23/19 10:21	08/02/19 05:09	1
d3-NMeFOSAA	62		50 - 150	07/23/19 10:21	08/02/19 05:09	1
d5-NEtFOSAA	62		50 - 150	07/23/19 10:21	08/02/19 05:09	1
M2-6:2 FTS	105		25 - 150	07/23/19 10:21	08/02/19 05:09	1
M2-8:2 FTS	97		25 - 150	07/23/19 10:21	08/02/19 05:09	1

Client Sample ID: 356023-ERT4

Lab Sample ID: 480-156213-12

Date Collected: 07/11/19 11:20

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	3100		50	41	ug/L			07/18/19 02:47	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			07/18/19 02:47	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			07/18/19 02:47	50
1,1,2-Trichloroethane	ND		50	12	ug/L			07/18/19 02:47	50
1,1-Dichloroethane	78		50	19	ug/L			07/18/19 02:47	50
1,1-Dichloroethene	280		50	15	ug/L			07/18/19 02:47	50
1,2,3-Trichlorobenzene	ND		50	21	ug/L			07/18/19 02:47	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			07/18/19 02:47	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			07/18/19 02:47	50
1,2-Dibromoethane	ND		50	37	ug/L			07/18/19 02:47	50
1,2-Dichlorobenzene	ND		50	40	ug/L			07/18/19 02:47	50
1,2-Dichloroethane	ND		50	11	ug/L			07/18/19 02:47	50

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-ERT4

Lab Sample ID: 480-156213-12

Date Collected: 07/11/19 11:20

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		50	36	ug/L			07/18/19 02:47	50
1,3-Dichlorobenzene	ND		50	39	ug/L			07/18/19 02:47	50
1,4-Dichlorobenzene	ND		50	42	ug/L			07/18/19 02:47	50
1,4-Dioxane	ND		2000	470	ug/L			07/18/19 02:47	50
2-Butanone (MEK)	ND		500	66	ug/L			07/18/19 02:47	50
2-Hexanone	ND		250	62	ug/L			07/18/19 02:47	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			07/18/19 02:47	50
Acetone	ND		500	150	ug/L			07/18/19 02:47	50
Benzene	ND		50	21	ug/L			07/18/19 02:47	50
Bromochloromethane	ND		50	44	ug/L			07/18/19 02:47	50
Bromodichloromethane	ND		50	20	ug/L			07/18/19 02:47	50
Bromoform	ND	*	50	13	ug/L			07/18/19 02:47	50
Bromomethane	ND		50	35	ug/L			07/18/19 02:47	50
Carbon disulfide	ND		50	9.5	ug/L			07/18/19 02:47	50
Carbon tetrachloride	ND		50	14	ug/L			07/18/19 02:47	50
Chlorobenzene	ND		50	38	ug/L			07/18/19 02:47	50
Chloroethane	ND		50	16	ug/L			07/18/19 02:47	50
Chloroform	ND		50	17	ug/L			07/18/19 02:47	50
Chloromethane	ND		50	18	ug/L			07/18/19 02:47	50
cis-1,2-Dichloroethene	ND		50	41	ug/L			07/18/19 02:47	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			07/18/19 02:47	50
Cyclohexane	ND		50	9.0	ug/L			07/18/19 02:47	50
Dibromochloromethane	ND	*	50	16	ug/L			07/18/19 02:47	50
Dichlorodifluoromethane	ND		50	34	ug/L			07/18/19 02:47	50
Ethylbenzene	ND		50	37	ug/L			07/18/19 02:47	50
Isopropylbenzene	ND		50	40	ug/L			07/18/19 02:47	50
Methyl acetate	ND		130	65	ug/L			07/18/19 02:47	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			07/18/19 02:47	50
Methylcyclohexane	ND		50	8.0	ug/L			07/18/19 02:47	50
Methylene Chloride	35	J	50	22	ug/L			07/18/19 02:47	50
Styrene	ND		50	37	ug/L			07/18/19 02:47	50
Tetrachloroethene	ND		50	18	ug/L			07/18/19 02:47	50
Toluene	ND		50	26	ug/L			07/18/19 02:47	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			07/18/19 02:47	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			07/18/19 02:47	50
Trichloroethene	140		50	23	ug/L			07/18/19 02:47	50
Trichlorofluoromethane	ND		50	44	ug/L			07/18/19 02:47	50
Vinyl chloride	ND		50	45	ug/L			07/18/19 02:47	50
Xylenes, Total	ND		100	33	ug/L			07/18/19 02:47	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/18/19 02:47	50
4-Bromofluorobenzene (Surr)	103		73 - 120		07/18/19 02:47	50
Dibromofluoromethane (Surr)	107		75 - 123		07/18/19 02:47	50
Toluene-d8 (Surr)	96		80 - 120		07/18/19 02:47	50

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12	E	2.0	1.0	ug/L		07/17/19 15:17	07/21/19 19:28	10

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-ERT4

Lab Sample ID: 480-156213-12

Date Collected: 07/11/19 11:20

Matrix: Water

Date Received: 07/13/19 09:00

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	28		15 - 110	07/17/19 15:17	07/21/19 19:28	10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.4		1.6	0.82	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluoropentanoic acid (PFPeA)	7.8		1.6	0.51	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorohexanoic acid (PFHxA)	5.7		1.6	0.62	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluoroheptanoic acid (PFHpA)	2.5		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorooctanoic acid (PFOA)	6.8		1.6	0.51	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorononanoic acid (PFNA)	1.0	J	1.6	0.22	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.63	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluoroundecanoic acid (PFUnA)	0.61	J	1.6	0.43	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorobutanesulfonic acid (PFBS)	1.5	J	1.6	0.40	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorohexanesulfonic acid (PFHxS)	1.1	J	1.6	0.65	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.78	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorooctanesulfonic acid (PFOS)	4.5		1.6	0.50	ng/L		07/23/19 10:21	08/02/19 05:25	1
Perfluorooctanesulfonamide (FOSA)	ND		8.2	8.2	ng/L		07/23/19 10:21	08/02/19 05:25	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 05:25	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 05:25	1
6:2 FTS	ND		16	3.8	ng/L		07/23/19 10:21	08/02/19 05:25	1
8:2 FTS	ND		16	2.4	ng/L		07/23/19 10:21	08/02/19 05:25	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	80		25 - 150	07/23/19 10:21	08/02/19 05:25	1
13C4 PFBA	76		25 - 150	07/23/19 10:21	08/02/19 05:25	1
13C5 PFPeA	90		25 - 150	07/23/19 10:21	08/02/19 05:25	1
13C2 PFHxA	89		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C4 PFHpA	92		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C4 PFOA	86		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C5 PFNA	90		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C2 PFDA	91		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C2 PFUnA	88		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C2 PFDoA	78		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C2 PFTeDA	61		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C3 PFBS	95		50 - 150	07/23/19 10:21	08/02/19 05:25	1
18O2 PFHxS	90		50 - 150	07/23/19 10:21	08/02/19 05:25	1
13C4 PFOS	82		50 - 150	07/23/19 10:21	08/02/19 05:25	1
d3-NMeFOSAA	65		50 - 150	07/23/19 10:21	08/02/19 05:25	1
d5-NEtFOSAA	66		50 - 150	07/23/19 10:21	08/02/19 05:25	1
M2-6:2 FTS	99		25 - 150	07/23/19 10:21	08/02/19 05:25	1
M2-8:2 FTS	102		25 - 150	07/23/19 10:21	08/02/19 05:25	1

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW4

Lab Sample ID: 480-156213-13

Date Collected: 07/11/19 14:47

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1100		20	16	ug/L			07/18/19 03:11	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			07/18/19 03:11	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			07/18/19 03:11	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			07/18/19 03:11	20
1,1-Dichloroethane	23		20	7.6	ug/L			07/18/19 03:11	20
1,1-Dichloroethene	130		20	5.8	ug/L			07/18/19 03:11	20
1,2,3-Trichlorobenzene	ND		20	8.2	ug/L			07/18/19 03:11	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			07/18/19 03:11	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			07/18/19 03:11	20
1,2-Dibromoethane	ND		20	15	ug/L			07/18/19 03:11	20
1,2-Dichlorobenzene	ND		20	16	ug/L			07/18/19 03:11	20
1,2-Dichloroethane	ND		20	4.2	ug/L			07/18/19 03:11	20
1,2-Dichloropropane	ND		20	14	ug/L			07/18/19 03:11	20
1,3-Dichlorobenzene	ND		20	16	ug/L			07/18/19 03:11	20
1,4-Dichlorobenzene	ND		20	17	ug/L			07/18/19 03:11	20
1,4-Dioxane	ND		800	190	ug/L			07/18/19 03:11	20
2-Butanone (MEK)	ND		200	26	ug/L			07/18/19 03:11	20
2-Hexanone	ND		100	25	ug/L			07/18/19 03:11	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			07/18/19 03:11	20
Acetone	ND		200	60	ug/L			07/18/19 03:11	20
Benzene	ND		20	8.2	ug/L			07/18/19 03:11	20
Bromochloromethane	ND		20	17	ug/L			07/18/19 03:11	20
Bromodichloromethane	ND		20	7.8	ug/L			07/18/19 03:11	20
Bromoform	ND *		20	5.2	ug/L			07/18/19 03:11	20
Bromomethane	ND		20	14	ug/L			07/18/19 03:11	20
Carbon disulfide	ND		20	3.8	ug/L			07/18/19 03:11	20
Carbon tetrachloride	ND		20	5.4	ug/L			07/18/19 03:11	20
Chlorobenzene	ND		20	15	ug/L			07/18/19 03:11	20
Chloroethane	ND		20	6.4	ug/L			07/18/19 03:11	20
Chloroform	ND		20	6.8	ug/L			07/18/19 03:11	20
Chloromethane	ND		20	7.0	ug/L			07/18/19 03:11	20
cis-1,2-Dichloroethene	ND		20	16	ug/L			07/18/19 03:11	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			07/18/19 03:11	20
Cyclohexane	ND		20	3.6	ug/L			07/18/19 03:11	20
Dibromochloromethane	ND *		20	6.4	ug/L			07/18/19 03:11	20
Dichlorodifluoromethane	ND		20	14	ug/L			07/18/19 03:11	20
Ethylbenzene	ND		20	15	ug/L			07/18/19 03:11	20
Isopropylbenzene	ND		20	16	ug/L			07/18/19 03:11	20
Methyl acetate	ND		50	26	ug/L			07/18/19 03:11	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			07/18/19 03:11	20
Methylcyclohexane	ND		20	3.2	ug/L			07/18/19 03:11	20
Methylene Chloride	14 J		20	8.8	ug/L			07/18/19 03:11	20
Styrene	ND		20	15	ug/L			07/18/19 03:11	20
Tetrachloroethene	ND		20	7.2	ug/L			07/18/19 03:11	20
Toluene	ND		20	10	ug/L			07/18/19 03:11	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			07/18/19 03:11	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			07/18/19 03:11	20
Trichloroethene	390		20	9.2	ug/L			07/18/19 03:11	20
Trichlorofluoromethane	ND		20	18	ug/L			07/18/19 03:11	20

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW4

Lab Sample ID: 480-156213-13

Date Collected: 07/11/19 14:47

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		20	18	ug/L			07/18/19 03:11	20
Xylenes, Total	ND		40	13	ug/L			07/18/19 03:11	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		07/18/19 03:11	20
4-Bromofluorobenzene (Surr)	105		73 - 120		07/18/19 03:11	20
Dibromofluoromethane (Surr)	104		75 - 123		07/18/19 03:11	20
Toluene-d8 (Surr)	98		80 - 120		07/18/19 03:11	20

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.4	E	1.0	0.50	ug/L		07/17/19 15:17	07/21/19 19:51	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	37		15 - 110	07/17/19 15:17	07/21/19 19:51	5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	6.9		1.6	0.80	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluoropentanoic acid (PFPeA)	12		1.6	0.51	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorohexanoic acid (PFHxA)	6.3		1.6	0.61	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluoroheptanoic acid (PFHpA)	2.2		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorooctanoic acid (PFOA)	6.4		1.6	0.51	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorononanoic acid (PFNA)	0.42	J	1.6	0.22	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.62	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorobutanesulfonic acid (PFBS)	1.7		1.6	0.39	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorohexanesulfonic acid (PFHxS)	0.72	J	1.6	0.64	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorooctanesulfonic acid (PFOS)	2.1	I	1.6	0.49	ng/L		07/23/19 10:21	08/02/19 05:33	1
Perfluorooctanesulfonamide (FOSA)	ND		8.0	8.0	ng/L		07/23/19 10:21	08/02/19 05:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 05:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 05:33	1
6:2 FTS	ND		16	3.7	ng/L		07/23/19 10:21	08/02/19 05:33	1
8:2 FTS	ND		16	2.3	ng/L		07/23/19 10:21	08/02/19 05:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	79		25 - 150	07/23/19 10:21	08/02/19 05:33	1
13C4 PFBA	69		25 - 150	07/23/19 10:21	08/02/19 05:33	1
13C5 PFPeA	85		25 - 150	07/23/19 10:21	08/02/19 05:33	1
13C2 PFHxA	88		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C4 PFHpA	90		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C4 PFOA	90		50 - 150	07/23/19 10:21	08/02/19 05:33	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW4

Lab Sample ID: 480-156213-13

Date Collected: 07/11/19 14:47

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	90		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C2 PFDA	93		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C2 PFUnA	89		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C2 PFDoA	78		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C2 PFTeDA	60		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C3 PFBS	89		50 - 150	07/23/19 10:21	08/02/19 05:33	1
18O2 PFHxS	88		50 - 150	07/23/19 10:21	08/02/19 05:33	1
13C4 PFOS	81		50 - 150	07/23/19 10:21	08/02/19 05:33	1
d3-NMeFOSAA	70		50 - 150	07/23/19 10:21	08/02/19 05:33	1
d5-NEtFOSAA	65		50 - 150	07/23/19 10:21	08/02/19 05:33	1
M2-6:2 FTS	103		25 - 150	07/23/19 10:21	08/02/19 05:33	1
M2-8:2 FTS	105		25 - 150	07/23/19 10:21	08/02/19 05:33	1

Client Sample ID: 356023-MW6B

Lab Sample ID: 480-156213-14

Date Collected: 07/11/19 13:15

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	8.2	F1	1.0	0.82	ug/L			07/18/19 03:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 03:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 03:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 03:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/19 03:34	1
1,1-Dichloroethene	1.8		1.0	0.29	ug/L			07/18/19 03:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 03:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 03:34	1
1,2-Dibromo-3-Chloropropane	ND	F1	1.0	0.39	ug/L			07/18/19 03:34	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 03:34	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 03:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 03:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 03:34	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 03:34	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 03:34	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 03:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 03:34	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 03:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 03:34	1
Acetone	ND		10	3.0	ug/L			07/18/19 03:34	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 03:34	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 03:34	1
Bromodichloromethane	ND	F1	1.0	0.39	ug/L			07/18/19 03:34	1
Bromoform	ND	* F1	1.0	0.26	ug/L			07/18/19 03:34	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 03:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 03:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 03:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 03:34	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 03:34	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 03:34	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 03:34	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW6B

Lab Sample ID: 480-156213-14

Date Collected: 07/11/19 13:15

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 03:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 03:34	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 03:34	1
Dibromochloromethane	ND	* F1	1.0	0.32	ug/L			07/18/19 03:34	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 03:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 03:34	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 03:34	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 03:34	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 03:34	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 03:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 03:34	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 03:34	1
Tetrachloroethene	ND	F1	1.0	0.36	ug/L			07/18/19 03:34	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 03:34	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 03:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 03:34	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/19 03:34	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 03:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 03:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 03:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		07/18/19 03:34	1
4-Bromofluorobenzene (Surr)	105		73 - 120		07/18/19 03:34	1
Dibromofluoromethane (Surr)	104		75 - 123		07/18/19 03:34	1
Toluene-d8 (Surr)	97		80 - 120		07/18/19 03:34	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.76		0.20	0.10	ug/L		07/17/19 15:17	07/18/19 21:19	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	43		15 - 110	07/17/19 15:17	07/18/19 21:19	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.6	J	1.8	0.88	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluoropentanoic acid (PFPeA)	2.0		1.8	0.55	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorohexanoic acid (PFHxA)	1.5	J	1.8	0.67	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.80	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorooctanoic acid (PFOA)	0.92	J	1.8	0.55	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.68	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.47	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.52	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.53	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.81	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.43	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.70	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.83	ng/L		07/23/19 10:21	08/02/19 05:41	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW6B

Lab Sample ID: 480-156213-14

Date Collected: 07/11/19 13:15

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.79	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.54	ng/L		07/23/19 10:21	08/02/19 05:41	1
Perfluorooctanesulfonamide (FOSA)	ND		8.8	8.8	ng/L		07/23/19 10:21	08/02/19 05:41	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5	ng/L		07/23/19 10:21	08/02/19 05:41	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	18	1.3	ng/L		07/23/19 10:21	08/02/19 05:41	1
6:2 FTS	ND		18	4.0	ng/L		07/23/19 10:21	08/02/19 05:41	1
8:2 FTS	ND		18	2.5	ng/L		07/23/19 10:21	08/02/19 05:41	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	74		25 - 150				07/23/19 10:21	08/02/19 05:41	1
13C4 PFBA	78		25 - 150				07/23/19 10:21	08/02/19 05:41	1
13C5 PFPeA	86		25 - 150				07/23/19 10:21	08/02/19 05:41	1
13C2 PFHxA	90		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C4 PFHpA	87		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C4 PFOA	82		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C5 PFNA	80		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C2 PFDA	89		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C2 PFUnA	79		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C2 PFDoA	77		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C2 PFTeDA	61		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C3 PFBS	84		50 - 150				07/23/19 10:21	08/02/19 05:41	1
18O2 PFHxS	92		50 - 150				07/23/19 10:21	08/02/19 05:41	1
13C4 PFOS	83		50 - 150				07/23/19 10:21	08/02/19 05:41	1
d3-NMeFOSAA	61		50 - 150				07/23/19 10:21	08/02/19 05:41	1
d5-NEtFOSAA	64		50 - 150				07/23/19 10:21	08/02/19 05:41	1
M2-6:2 FTS	104		25 - 150				07/23/19 10:21	08/02/19 05:41	1
M2-8:2 FTS	96		25 - 150				07/23/19 10:21	08/02/19 05:41	1

Client Sample ID: 356023-MW15B

Lab Sample ID: 480-156213-15

Date Collected: 07/12/19 09:30

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	26		1.0	0.82	ug/L			07/18/19 03:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 03:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 03:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 03:58	1
1,1-Dichloroethane	8.3		1.0	0.38	ug/L			07/18/19 03:58	1
1,1-Dichloroethene	19		1.0	0.29	ug/L			07/18/19 03:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 03:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 03:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 03:58	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 03:58	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 03:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 03:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 03:58	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 03:58	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 03:58	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW15B

Lab Sample ID: 480-156213-15

Date Collected: 07/12/19 09:30

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 03:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 03:58	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 03:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 03:58	1
Acetone	ND		10	3.0	ug/L			07/18/19 03:58	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 03:58	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 03:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 03:58	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 03:58	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 03:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 03:58	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 03:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 03:58	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 03:58	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 03:58	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 03:58	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 03:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 03:58	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 03:58	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 03:58	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 03:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 03:58	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 03:58	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 03:58	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 03:58	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 03:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 03:58	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 03:58	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 03:58	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 03:58	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 03:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 03:58	1
Trichloroethene	1.2		1.0	0.46	ug/L			07/18/19 03:58	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 03:58	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 03:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 03:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/18/19 03:58	1
4-Bromofluorobenzene (Surr)	104		73 - 120		07/18/19 03:58	1
Dibromofluoromethane (Surr)	105		75 - 123		07/18/19 03:58	1
Toluene-d8 (Surr)	95		80 - 120		07/18/19 03:58	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	5.9		1.0	0.50	ug/L		07/17/19 15:17	07/21/19 20:15	5
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	32		15 - 110	07/17/19 15:17	07/21/19 20:15	5			

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW15B

Lab Sample ID: 480-156213-15

Date Collected: 07/12/19 09:30

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.4	J	1.8	0.88	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.56	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.67	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.80	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorooctanoic acid (PFOA)	0.89	J	1.8	0.56	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.24	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.68	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.47	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.52	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.53	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.81	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorobutanesulfonic acid (PFBS)	0.72	J	1.8	0.43	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.71	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.84	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.79	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.54	ng/L		07/23/19 10:21	08/02/19 06:06	1
Perfluorooctanesulfonamide (FOSA)	ND		8.8	8.8	ng/L		07/23/19 10:21	08/02/19 06:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5	ng/L		07/23/19 10:21	08/02/19 06:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	18	1.3	ng/L		07/23/19 10:21	08/02/19 06:06	1
6:2 FTS	ND		18	4.1	ng/L		07/23/19 10:21	08/02/19 06:06	1
8:2 FTS	ND		18	2.6	ng/L		07/23/19 10:21	08/02/19 06:06	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	69		25 - 150	07/23/19 10:21	08/02/19 06:06	1
13C4 PFBA	81		25 - 150	07/23/19 10:21	08/02/19 06:06	1
13C5 PFPeA	87		25 - 150	07/23/19 10:21	08/02/19 06:06	1
13C2 PFHxA	88		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C4 PFHpA	96		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C4 PFOA	91		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C5 PFNA	86		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C2 PFDA	90		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C2 PFUnA	85		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C2 PFDoA	82		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C2 PFTeDA	64		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C3 PFBS	92		50 - 150	07/23/19 10:21	08/02/19 06:06	1
18O2 PFHxS	94		50 - 150	07/23/19 10:21	08/02/19 06:06	1
13C4 PFOS	86		50 - 150	07/23/19 10:21	08/02/19 06:06	1
d3-NMeFOSAA	68		50 - 150	07/23/19 10:21	08/02/19 06:06	1
d5-NEtFOSAA	68		50 - 150	07/23/19 10:21	08/02/19 06:06	1
M2-6:2 FTS	105		25 - 150	07/23/19 10:21	08/02/19 06:06	1
M2-8:2 FTS	101		25 - 150	07/23/19 10:21	08/02/19 06:06	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-EB1

Lab Sample ID: 480-156213-16

Date Collected: 07/12/19 09:45

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/19 04:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 04:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 04:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 04:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/19 04:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/19 04:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 04:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 04:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 04:22	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 04:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 04:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 04:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 04:22	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 04:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 04:22	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 04:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 04:22	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 04:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 04:22	1
Acetone	10		10	3.0	ug/L			07/18/19 04:22	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 04:22	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 04:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 04:22	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 04:22	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 04:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 04:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 04:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 04:22	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 04:22	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 04:22	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 04:22	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 04:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 04:22	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 04:22	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 04:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 04:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 04:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 04:22	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 04:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 04:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 04:22	1
Methylene Chloride	0.60	J	1.0	0.44	ug/L			07/18/19 04:22	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 04:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 04:22	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 04:22	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 04:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 04:22	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/19 04:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 04:22	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-EB1

Lab Sample ID: 480-156213-16

Date Collected: 07/12/19 09:45

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 04:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 04:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/18/19 04:22	1
4-Bromofluorobenzene (Surr)	107		73 - 120		07/18/19 04:22	1
Dibromofluoromethane (Surr)	103		75 - 123		07/18/19 04:22	1
Toluene-d8 (Surr)	96		80 - 120		07/18/19 04:22	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		07/17/19 15:17	07/19/19 04:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	33		15 - 110	07/17/19 15:17	07/19/19 04:32	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		1.6	0.82	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.52	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.62	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.75	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.52	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.22	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.63	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.66	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.78	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.50	ng/L		07/23/19 10:21	08/02/19 06:14	1
Perfluorooctanesulfonamide (FOSA)	ND		8.2	8.2	ng/L		07/23/19 10:21	08/02/19 06:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 06:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 06:14	1
6:2 FTS	ND		16	3.8	ng/L		07/23/19 10:21	08/02/19 06:14	1
8:2 FTS	ND		16	2.4	ng/L		07/23/19 10:21	08/02/19 06:14	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	67		25 - 150	07/23/19 10:21	08/02/19 06:14	1
13C4 PFBA	97		25 - 150	07/23/19 10:21	08/02/19 06:14	1
13C5 PFPeA	94		25 - 150	07/23/19 10:21	08/02/19 06:14	1
13C2 PFHxA	94		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C4 PFHpA	95		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C4 PFOA	90		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C5 PFNA	94		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C2 PFDA	101		50 - 150	07/23/19 10:21	08/02/19 06:14	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-EB1

Lab Sample ID: 480-156213-16

Date Collected: 07/12/19 09:45

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFUnA	91		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C2 PFDoA	76		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C2 PFTeDA	61		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C3 PFBS	89		50 - 150	07/23/19 10:21	08/02/19 06:14	1
18O2 PFHxS	89		50 - 150	07/23/19 10:21	08/02/19 06:14	1
13C4 PFOS	90		50 - 150	07/23/19 10:21	08/02/19 06:14	1
d3-NMeFOSAA	72		50 - 150	07/23/19 10:21	08/02/19 06:14	1
d5-NEtFOSAA	68		50 - 150	07/23/19 10:21	08/02/19 06:14	1
M2-6:2 FTS	99		25 - 150	07/23/19 10:21	08/02/19 06:14	1
M2-8:2 FTS	109		25 - 150	07/23/19 10:21	08/02/19 06:14	1

Client Sample ID: 356023-MW1B

Lab Sample ID: 480-156213-17

Date Collected: 07/12/19 11:15

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/19 04:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 04:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 04:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 04:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/19 04:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/19 04:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 04:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 04:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 04:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 04:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 04:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 04:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 04:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 04:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 04:46	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 04:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 04:46	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 04:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 04:46	1
Acetone	6.1	J	10	3.0	ug/L			07/18/19 04:46	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 04:46	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 04:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 04:46	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 04:46	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 04:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 04:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 04:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 04:46	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 04:46	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 04:46	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 04:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 04:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 04:46	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW1B

Lab Sample ID: 480-156213-17

Date Collected: 07/12/19 11:15

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 04:46	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 04:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 04:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 04:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 04:46	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 04:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 04:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 04:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 04:46	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 04:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 04:46	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 04:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 04:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 04:46	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/19 04:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 04:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 04:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 04:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		07/18/19 04:46	1
4-Bromofluorobenzene (Surr)	103		73 - 120		07/18/19 04:46	1
Dibromofluoromethane (Surr)	104		75 - 123		07/18/19 04:46	1
Toluene-d8 (Surr)	96		80 - 120		07/18/19 04:46	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		07/17/19 15:17	07/19/19 04:56	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	43		15 - 110	07/17/19 15:17	07/19/19 04:56	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.1		1.6	0.80	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluoropentanoic acid (PFPeA)	1.0	J	1.6	0.50	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorohexanoic acid (PFHxA)	0.76	J	1.6	0.61	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorooctanoic acid (PFOA)	2.0		1.6	0.50	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.22	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.61	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.42	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorobutanesulfonic acid (PFBS)	0.67	J	1.6	0.39	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.64	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72	ng/L		07/23/19 10:21	08/02/19 06:22	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW1B

Lab Sample ID: 480-156213-17

Date Collected: 07/12/19 11:15

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	0.60	J	1.6	0.49	ng/L		07/23/19 10:21	08/02/19 06:22	1
Perfluorooctanesulfonamide (FOSA)	ND		8.0	8.0	ng/L		07/23/19 10:21	08/02/19 06:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 06:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 06:22	1
6:2 FTS	ND		16	3.7	ng/L		07/23/19 10:21	08/02/19 06:22	1
8:2 FTS	ND		16	2.3	ng/L		07/23/19 10:21	08/02/19 06:22	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 FOSA	77		25 - 150				07/23/19 10:21	08/02/19 06:22	1
13C4 PFBA	58		25 - 150				07/23/19 10:21	08/02/19 06:22	1
13C5 PFPeA	81		25 - 150				07/23/19 10:21	08/02/19 06:22	1
13C2 PFHxA	85		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C4 PFHpA	92		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C4 PFOA	87		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C5 PFNA	85		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C2 PFDA	92		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C2 PFUnA	87		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C2 PFDoA	79		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C2 PFTeDA	64		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C3 PFBS	86		50 - 150				07/23/19 10:21	08/02/19 06:22	1
18O2 PFHxS	85		50 - 150				07/23/19 10:21	08/02/19 06:22	1
13C4 PFOS	81		50 - 150				07/23/19 10:21	08/02/19 06:22	1
d3-NMeFOSAA	69		50 - 150				07/23/19 10:21	08/02/19 06:22	1
d5-NEtFOSAA	69		50 - 150				07/23/19 10:21	08/02/19 06:22	1
M2-6:2 FTS	107		25 - 150				07/23/19 10:21	08/02/19 06:22	1
M2-8:2 FTS	109		25 - 150				07/23/19 10:21	08/02/19 06:22	1

Client Sample ID: 356023-MW5R

Lab Sample ID: 480-156213-18

Date Collected: 07/12/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	110		2.0	1.6	ug/L			07/18/19 05:09	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			07/18/19 05:09	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			07/18/19 05:09	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			07/18/19 05:09	2
1,1-Dichloroethane	6.7		2.0	0.76	ug/L			07/18/19 05:09	2
1,1-Dichloroethene	24		2.0	0.58	ug/L			07/18/19 05:09	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			07/18/19 05:09	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			07/18/19 05:09	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			07/18/19 05:09	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			07/18/19 05:09	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			07/18/19 05:09	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			07/18/19 05:09	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			07/18/19 05:09	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			07/18/19 05:09	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			07/18/19 05:09	2

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW5R

Lab Sample ID: 480-156213-18

Date Collected: 07/12/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		80	19	ug/L			07/18/19 05:09	2
2-Butanone (MEK)	ND		20	2.6	ug/L			07/18/19 05:09	2
2-Hexanone	ND		10	2.5	ug/L			07/18/19 05:09	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			07/18/19 05:09	2
Acetone	ND		20	6.0	ug/L			07/18/19 05:09	2
Benzene	ND		2.0	0.82	ug/L			07/18/19 05:09	2
Bromochloromethane	ND		2.0	1.7	ug/L			07/18/19 05:09	2
Bromodichloromethane	ND		2.0	0.78	ug/L			07/18/19 05:09	2
Bromoform	ND	*	2.0	0.52	ug/L			07/18/19 05:09	2
Bromomethane	ND		2.0	1.4	ug/L			07/18/19 05:09	2
Carbon disulfide	ND		2.0	0.38	ug/L			07/18/19 05:09	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			07/18/19 05:09	2
Chlorobenzene	ND		2.0	1.5	ug/L			07/18/19 05:09	2
Chloroethane	ND		2.0	0.64	ug/L			07/18/19 05:09	2
Chloroform	ND		2.0	0.68	ug/L			07/18/19 05:09	2
Chloromethane	ND		2.0	0.70	ug/L			07/18/19 05:09	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			07/18/19 05:09	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			07/18/19 05:09	2
Cyclohexane	ND		2.0	0.36	ug/L			07/18/19 05:09	2
Dibromochloromethane	ND	*	2.0	0.64	ug/L			07/18/19 05:09	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			07/18/19 05:09	2
Ethylbenzene	ND		2.0	1.5	ug/L			07/18/19 05:09	2
Isopropylbenzene	ND		2.0	1.6	ug/L			07/18/19 05:09	2
Methyl acetate	ND		5.0	2.6	ug/L			07/18/19 05:09	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			07/18/19 05:09	2
Methylcyclohexane	ND		2.0	0.32	ug/L			07/18/19 05:09	2
Methylene Chloride	1.2	J	2.0	0.88	ug/L			07/18/19 05:09	2
Styrene	ND		2.0	1.5	ug/L			07/18/19 05:09	2
Tetrachloroethene	ND		2.0	0.72	ug/L			07/18/19 05:09	2
Toluene	ND		2.0	1.0	ug/L			07/18/19 05:09	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			07/18/19 05:09	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			07/18/19 05:09	2
Trichloroethene	7.6		2.0	0.92	ug/L			07/18/19 05:09	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			07/18/19 05:09	2
Vinyl chloride	ND		2.0	1.8	ug/L			07/18/19 05:09	2
Xylenes, Total	ND		4.0	1.3	ug/L			07/18/19 05:09	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		07/18/19 05:09	2
4-Bromofluorobenzene (Surr)	104		73 - 120		07/18/19 05:09	2
Dibromofluoromethane (Surr)	104		75 - 123		07/18/19 05:09	2
Toluene-d8 (Surr)	95		80 - 120		07/18/19 05:09	2

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	6.1	E	1.0	0.50	ug/L		07/17/19 15:17	07/21/19 20:38	5
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,4-Dioxane-d8	37		15 - 110	07/17/19 15:17	07/21/19 20:38	5			

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW5R

Lab Sample ID: 480-156213-18

Date Collected: 07/12/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.2	J	1.7	0.84	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluoropentanoic acid (PFPeA)	0.89	J	1.7	0.53	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorohexanoic acid (PFHxA)	0.65	J	1.7	0.64	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.76	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorooctanoic acid (PFOA)	1.2	J	1.7	0.53	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.23	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.64	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.44	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.50	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.77	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorobutanesulfonic acid (PFBS)	0.42	J	1.7	0.41	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.67	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.80	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorooctanesulfonic acid (PFOS)	0.74	J	1.7	0.51	ng/L		07/23/19 10:21	08/02/19 06:30	1
Perfluorooctanesulfonamide (FOSA)	ND		8.4	8.4	ng/L		07/23/19 10:21	08/02/19 06:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4	ng/L		07/23/19 10:21	08/02/19 06:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.3	ng/L		07/23/19 10:21	08/02/19 06:30	1
6:2 FTS	ND		17	3.9	ng/L		07/23/19 10:21	08/02/19 06:30	1
8:2 FTS	ND		17	2.4	ng/L		07/23/19 10:21	08/02/19 06:30	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	60		25 - 150				07/23/19 10:21	08/02/19 06:30	1
13C4 PFBA	84		25 - 150				07/23/19 10:21	08/02/19 06:30	1
13C5 PFPeA	85		25 - 150				07/23/19 10:21	08/02/19 06:30	1
13C2 PFHxA	82		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C4 PFHpA	90		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C4 PFOA	80		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C5 PFNA	82		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C2 PFDA	85		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C2 PFUnA	77		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C2 PFDoA	72		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C2 PFTeDA	61		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C3 PFBS	89		50 - 150				07/23/19 10:21	08/02/19 06:30	1
18O2 PFHxS	87		50 - 150				07/23/19 10:21	08/02/19 06:30	1
13C4 PFOS	82		50 - 150				07/23/19 10:21	08/02/19 06:30	1
d3-NMeFOSAA	60		50 - 150				07/23/19 10:21	08/02/19 06:30	1
d5-NEtFOSAA	64		50 - 150				07/23/19 10:21	08/02/19 06:30	1
M2-6:2 FTS	101		25 - 150				07/23/19 10:21	08/02/19 06:30	1
M2-8:2 FTS	91		25 - 150				07/23/19 10:21	08/02/19 06:30	1

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW7R

Lab Sample ID: 480-156213-19

Date Collected: 07/12/19 11:30

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	41		1.0	0.82	ug/L			07/18/19 05:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 05:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 05:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 05:34	1
1,1-Dichloroethane	14		1.0	0.38	ug/L			07/18/19 05:34	1
1,1-Dichloroethene	5.7		1.0	0.29	ug/L			07/18/19 05:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 05:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 05:34	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 05:34	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 05:34	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 05:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 05:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 05:34	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 05:34	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 05:34	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 05:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 05:34	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 05:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 05:34	1
Acetone	ND		10	3.0	ug/L			07/18/19 05:34	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 05:34	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 05:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 05:34	1
Bromoform	ND *		1.0	0.26	ug/L			07/18/19 05:34	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 05:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 05:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 05:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 05:34	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 05:34	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 05:34	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 05:34	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 05:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 05:34	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 05:34	1
Dibromochloromethane	ND *		1.0	0.32	ug/L			07/18/19 05:34	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 05:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 05:34	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 05:34	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 05:34	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 05:34	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 05:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 05:34	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 05:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 05:34	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 05:34	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 05:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 05:34	1
Trichloroethene	0.94 J		1.0	0.46	ug/L			07/18/19 05:34	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 05:34	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW7R

Lab Sample ID: 480-156213-19

Date Collected: 07/12/19 11:30

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 05:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 05:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120					07/18/19 05:34	1
4-Bromofluorobenzene (Surr)	107		73 - 120					07/18/19 05:34	1
Dibromofluoromethane (Surr)	107		75 - 123					07/18/19 05:34	1
Toluene-d8 (Surr)	97		80 - 120					07/18/19 05:34	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.3	E	0.20	0.10	ug/L		07/17/19 15:17	07/19/19 05:43	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	41		15 - 110				07/17/19 15:17	07/19/19 05:43	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.4	J	1.6	0.81	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluoropentanoic acid (PFPeA)	0.77	J	1.6	0.51	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.62	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.74	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorooctanoic acid (PFOA)	1.5	J	1.6	0.51	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.22	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.63	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorobutanesulfonic acid (PFBS)	0.72	J	1.6	0.40	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.65	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.77	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorooctanesulfonic acid (PFOS)	0.97	J	1.6	0.50	ng/L		07/23/19 10:21	08/02/19 06:38	1
Perfluorooctanesulfonamide (FOSA)	ND		8.1	8.1	ng/L		07/23/19 10:21	08/02/19 06:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4	ng/L		07/23/19 10:21	08/02/19 06:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2	ng/L		07/23/19 10:21	08/02/19 06:38	1
6:2 FTS	ND		16	3.7	ng/L		07/23/19 10:21	08/02/19 06:38	1
8:2 FTS	ND		16	2.4	ng/L		07/23/19 10:21	08/02/19 06:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8 FOSA	55		25 - 150				07/23/19 10:21	08/02/19 06:38	1
13C4 PFBA	77		25 - 150				07/23/19 10:21	08/02/19 06:38	1
13C5 PFPeA	76		25 - 150				07/23/19 10:21	08/02/19 06:38	1
13C2 PFHxA	77		50 - 150				07/23/19 10:21	08/02/19 06:38	1
13C4 PFHpA	82		50 - 150				07/23/19 10:21	08/02/19 06:38	1
13C4 PFOA	79		50 - 150				07/23/19 10:21	08/02/19 06:38	1
13C5 PFNA	78		50 - 150				07/23/19 10:21	08/02/19 06:38	1

Eurofins TestAmerica, Buffalo

Client Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW7R

Lab Sample ID: 480-156213-19

Date Collected: 07/12/19 11:30

Matrix: Water

Date Received: 07/13/19 09:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	76		50 - 150	07/23/19 10:21	08/02/19 06:38	1
13C2 PFUnA	76		50 - 150	07/23/19 10:21	08/02/19 06:38	1
13C2 PFDoA	71		50 - 150	07/23/19 10:21	08/02/19 06:38	1
13C2 PFTeDA	59		50 - 150	07/23/19 10:21	08/02/19 06:38	1
13C3 PFBS	86		50 - 150	07/23/19 10:21	08/02/19 06:38	1
18O2 PFHxS	87		50 - 150	07/23/19 10:21	08/02/19 06:38	1
13C4 PFOS	80		50 - 150	07/23/19 10:21	08/02/19 06:38	1
d3-NMeFOSAA	57		50 - 150	07/23/19 10:21	08/02/19 06:38	1
d5-NEtFOSAA	59		50 - 150	07/23/19 10:21	08/02/19 06:38	1
M2-6:2 FTS	95		25 - 150	07/23/19 10:21	08/02/19 06:38	1
M2-8:2 FTS	103		25 - 150	07/23/19 10:21	08/02/19 06:38	1

Client Sample ID: 356023-TB1

Lab Sample ID: 480-156213-20

Date Collected: 07/09/19 12:00

Matrix: Water

Date Received: 07/13/19 09:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/18/19 05:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/18/19 05:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/18/19 05:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/18/19 05:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/18/19 05:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/18/19 05:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 05:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/18/19 05:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/18/19 05:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/18/19 05:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/18/19 05:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/18/19 05:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/18/19 05:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/18/19 05:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/18/19 05:57	1
1,4-Dioxane	ND		40	9.3	ug/L			07/18/19 05:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/18/19 05:57	1
2-Hexanone	ND		5.0	1.2	ug/L			07/18/19 05:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/18/19 05:57	1
Acetone	4.1	J	10	3.0	ug/L			07/18/19 05:57	1
Benzene	ND		1.0	0.41	ug/L			07/18/19 05:57	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/18/19 05:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/18/19 05:57	1
Bromoform	ND	*	1.0	0.26	ug/L			07/18/19 05:57	1
Bromomethane	ND		1.0	0.69	ug/L			07/18/19 05:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/18/19 05:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/18/19 05:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/18/19 05:57	1
Chloroethane	ND		1.0	0.32	ug/L			07/18/19 05:57	1
Chloroform	ND		1.0	0.34	ug/L			07/18/19 05:57	1
Chloromethane	ND		1.0	0.35	ug/L			07/18/19 05:57	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/18/19 05:57	1

Client Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-TB1

Lab Sample ID: 480-156213-20

Date Collected: 07/09/19 12:00

Matrix: Water

Date Received: 07/13/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/18/19 05:57	1
Cyclohexane	ND		1.0	0.18	ug/L			07/18/19 05:57	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			07/18/19 05:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/18/19 05:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/18/19 05:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/18/19 05:57	1
Methyl acetate	ND		2.5	1.3	ug/L			07/18/19 05:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/18/19 05:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/18/19 05:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/18/19 05:57	1
Styrene	ND		1.0	0.73	ug/L			07/18/19 05:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/18/19 05:57	1
Toluene	ND		1.0	0.51	ug/L			07/18/19 05:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/18/19 05:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/18/19 05:57	1
Trichloroethene	ND		1.0	0.46	ug/L			07/18/19 05:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/18/19 05:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/18/19 05:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/18/19 05:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		07/18/19 05:57	1
4-Bromofluorobenzene (Surr)	105		73 - 120		07/18/19 05:57	1
Dibromofluoromethane (Surr)	102		75 - 123		07/18/19 05:57	1
Toluene-d8 (Surr)	96		80 - 120		07/18/19 05:57	1

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-156213-1	356023-MW8B	101	107	104	97
480-156213-2	356023-MW8BD	101	106	105	97
480-156213-3	356023-MW16	99	105	103	97
480-156213-4	356023-MW14B 150	102	107	103	96
480-156213-5	356023-MW12B 190	105	105	107	96
480-156213-6	356023-MW11B	106	104	105	96
480-156213-7	356023-MW11C	103	106	103	95
480-156213-8	356023-MW1801	104	103	105	97
480-156213-9	356023-MW1802	103	106	104	97
480-156213-10	356023-MW1803	103	106	105	98
480-156213-11	356023-MW5B	104	108	108	98
480-156213-12	356023-ERT4	103	103	107	96
480-156213-13	356023-MW4	102	105	104	98
480-156213-14	356023-MW6B	100	105	104	97
480-156213-14 MS	356023-MW6B	105	103	103	96
480-156213-14 MSD	356023-MW6B	104	107	104	98
480-156213-15	356023-MW15B	103	104	105	95
480-156213-16	356023-EB1	103	107	103	96
480-156213-17	356023-MW1B	102	103	104	96
480-156213-18	356023-MW5R	104	104	104	95
480-156213-19	356023-MW7R	104	107	107	97
480-156213-20	356023-TB1	101	105	102	96
LCS 480-482537/5	Lab Control Sample	100	107	100	98
MB 480-482537/7	Method Blank	102	105	102	97

Surrogate Legend

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

Isotope Dilution Summary

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DXE (15-110)
480-156213-1	356023-MW8B	31
480-156213-2	356023-MW8BD	39
480-156213-3	356023-MW16	39
480-156213-4	356023-MW14B 150	36
480-156213-5	356023-MW12B 190	35
480-156213-6	356023-MW11B	35
480-156213-7	356023-MW11C	39
480-156213-8	356023-MW1801	45
480-156213-9	356023-MW1802	37
480-156213-10	356023-MW1803	39
480-156213-11	356023-MW5B	34
480-156213-12	356023-ERT4	28
480-156213-13	356023-MW4	37
480-156213-14	356023-MW6B	43
480-156213-14 MS	356023-MW6B	34
480-156213-14 MSD	356023-MW6B	38
480-156213-15	356023-MW15B	32
480-156213-16	356023-EB1	33
480-156213-17	356023-MW1B	43
480-156213-18	356023-MW5R	37
480-156213-19	356023-MW7R	41
LCS 480-482507/2-A	Lab Control Sample	34
MB 480-482507/1-A	Method Blank	38

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	PFHpA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
480-156213-1	356023-MW8B	72	92	92	93	93	80	89	90
480-156213-2	356023-MW8BD	58	76	80	80	83	79	83	79
480-156213-3	356023-MW16	78	94	90	90	95	82	88	85
480-156213-4	356023-MW14B 150	75	78	86	91	91	83	83	84
480-156213-5	356023-MW12B 190	73	75	82	91	91	81	78	80
480-156213-6	356023-MW11B	85	93	94	97	96	92	94	91
480-156213-7	356023-MW11C	79	87	95	94	95	90	92	94
480-156213-11	356023-MW5B	68	79	84	85	87	84	90	85
480-156213-12	356023-ERT4	80	76	90	89	92	86	90	91
480-156213-13	356023-MW4	79	69	85	88	90	90	90	93
480-156213-14	356023-MW6B	74	78	86	90	87	82	80	89
480-156213-14 MS	356023-MW6B	74	82	88	88	90	85	86	87
480-156213-14 MSD	356023-MW6B	71	83	86	89	92	81	83	85
480-156213-15	356023-MW15B	69	81	87	88	96	91	86	90
480-156213-16	356023-EB1	67	97	94	94	95	90	94	101
480-156213-17	356023-MW1B	77	58	81	85	92	87	85	92
480-156213-18	356023-MW5R	60	84	85	82	90	80	82	85

Isotope Dilution Summary

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFOSA (25-150)	PFBA (25-150)	PFPeA (25-150)	PFHxA (50-150)	PFHpA (50-150)	PFOA (50-150)	PFNA (50-150)	PFDA (50-150)
480-156213-19	356023-MW7R	55	77	76	77	82	79	78	76
LCS 200-145382/2-A	Lab Control Sample	70	104	102	100	100	87	104	104
MB 200-145382/1-A	Method Blank	73	94	92	95	93	89	94	102

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFUnA (50-150)	PFDoA (50-150)	PFTDA (50-150)	3C3-PFB† (50-150)	PFHxS (50-150)	PFOS (50-150)	-NMeFOS (50-150)	-NEtFOS/ (50-150)
480-156213-1	356023-MW8B	88	81	63	87	88	83	66	67
480-156213-2	356023-MW8BD	78	78	66	93	89	79	63	60
480-156213-3	356023-MW16	88	85	66	90	88	88	67	72
480-156213-4	356023-MW14B 150	84	77	68	88	92	83	63	64
480-156213-5	356023-MW12B 190	75	66	60	86	88	74	62	57
480-156213-6	356023-MW11B	88	82	65	96	97	94	74	71
480-156213-7	356023-MW11C	90	78	65	97	91	88	75	66
480-156213-11	356023-MW5B	75	73	63	94	94	80	62	62
480-156213-12	356023-ERT4	88	78	61	95	90	82	65	66
480-156213-13	356023-MW4	89	78	60	89	88	81	70	65
480-156213-14	356023-MW6B	79	77	61	84	92	83	61	64
480-156213-14 MS	356023-MW6B	86	83	67	93	94	89	64	67
480-156213-14 MSD	356023-MW6B	80	87	63	101	90	86	64	65
480-156213-15	356023-MW15B	85	82	64	92	94	86	68	68
480-156213-16	356023-EB1	91	76	61	89	89	90	72	68
480-156213-17	356023-MW1B	87	79	64	86	85	81	69	69
480-156213-18	356023-MW5R	77	72	61	89	87	82	60	64
480-156213-19	356023-MW7R	76	71	59	86	87	80	57	59
LCS 200-145382/2-A	Lab Control Sample	93	79	59	96	93	99	76	71
MB 200-145382/1-A	Method Blank	94	96	65	90	89	90	82	79

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)	
		M262FTS (25-150)	M282FTS (25-150)
480-156213-1	356023-MW8B	89	99
480-156213-2	356023-MW8BD	104	101
480-156213-3	356023-MW16	95	102
480-156213-4	356023-MW14B 150	101	104
480-156213-5	356023-MW12B 190	98	93
480-156213-6	356023-MW11B	108	97
480-156213-7	356023-MW11C	101	110
480-156213-11	356023-MW5B	105	97
480-156213-12	356023-ERT4	99	102
480-156213-13	356023-MW4	103	105
480-156213-14	356023-MW6B	104	96
480-156213-14 MS	356023-MW6B	104	111
480-156213-14 MSD	356023-MW6B	109	104
480-156213-15	356023-MW15B	105	101
480-156213-16	356023-EB1	99	109
480-156213-17	356023-MW1B	107	109
480-156213-18	356023-MW5R	101	91
480-156213-19	356023-MW7R	95	103
LCS 200-145382/2-A	Lab Control Sample	102	117
MB 200-145382/1-A	Method Blank	101	111

Isotope Dilution Summary

Client: New York State D.E.C.

Job ID: 480-156213-1

Project/Site: Mohonk Rd. #356023 Groundwaters

Surrogate Legend

PFOSA = 13C8 FOSA

PFBA = 13C4 PFBA

PFPeA = 13C5 PFPeA

PFHxA = 13C2 PFHxA

PFHpA = 13C4 PFHpA

PFOA = 13C4 PFOA

PFNA = 13C5 PFNA

PFDA = 13C2 PFDA

PFUnA = 13C2 PFUnA

PFDoA = 13C2 PFDoA

PFTDA = 13C2 PFTeDA

13C3-PFBS = 13C3 PFBS

PFHxS = 18O2 PFHxS

PFOS = 13C4 PFOS

d3-NMeFOSAA = d3-NMeFOSAA

d5-NEtFOSAA = d5-NEtFOSAA

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

QC Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-482537/7
Matrix: Water
Analysis Batch: 482537

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/17/19 21:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/17/19 21:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/17/19 21:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/17/19 21:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/17/19 21:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/17/19 21:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 21:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/17/19 21:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/17/19 21:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/17/19 21:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/17/19 21:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/17/19 21:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/17/19 21:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/17/19 21:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/17/19 21:43	1
1,4-Dioxane	ND		40	9.3	ug/L			07/17/19 21:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/17/19 21:43	1
2-Hexanone	ND		5.0	1.2	ug/L			07/17/19 21:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/17/19 21:43	1
Acetone	ND		10	3.0	ug/L			07/17/19 21:43	1
Benzene	ND		1.0	0.41	ug/L			07/17/19 21:43	1
Bromochloromethane	ND		1.0	0.87	ug/L			07/17/19 21:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/17/19 21:43	1
Bromoform	ND		1.0	0.26	ug/L			07/17/19 21:43	1
Bromomethane	ND		1.0	0.69	ug/L			07/17/19 21:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/17/19 21:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/17/19 21:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/17/19 21:43	1
Chloroethane	ND		1.0	0.32	ug/L			07/17/19 21:43	1
Chloroform	ND		1.0	0.34	ug/L			07/17/19 21:43	1
Chloromethane	ND		1.0	0.35	ug/L			07/17/19 21:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/17/19 21:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/17/19 21:43	1
Cyclohexane	ND		1.0	0.18	ug/L			07/17/19 21:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/17/19 21:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/17/19 21:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/17/19 21:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/17/19 21:43	1
Methyl acetate	ND		2.5	1.3	ug/L			07/17/19 21:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/17/19 21:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/17/19 21:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/17/19 21:43	1
Styrene	ND		1.0	0.73	ug/L			07/17/19 21:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/17/19 21:43	1
Toluene	ND		1.0	0.51	ug/L			07/17/19 21:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/17/19 21:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/17/19 21:43	1
Trichloroethene	ND		1.0	0.46	ug/L			07/17/19 21:43	1

QC Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: MB 480-4825377
Matrix: Water
Analysis Batch: 482537

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/19 21:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/19 21:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/19 21:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		07/17/19 21:43	1
4-Bromofluorobenzene (Surr)	105		73 - 120		07/17/19 21:43	1
Dibromofluoromethane (Surr)	102		75 - 123		07/17/19 21:43	1
Toluene-d8 (Surr)	97		80 - 120		07/17/19 21:43	1

Lab Sample ID: LCS 480-482537/5
Matrix: Water
Analysis Batch: 482537

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	25.0	27.4		ug/L		110	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.7		ug/L		107	61 - 148
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	76 - 122
1,1-Dichloroethane	25.0	24.9		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127
1,2,3-Trichlorobenzene	25.0	26.7		ug/L		107	75 - 123
1,2,4-Trichlorobenzene	25.0	27.8		ug/L		111	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	30.7		ug/L		123	56 - 134
1,2-Dibromoethane	25.0	26.8		ug/L		107	77 - 120
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	25.9		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.1		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 120
1,4-Dioxane	500	550		ug/L		110	50 - 150
2-Butanone (MEK)	125	145		ug/L		116	57 - 140
2-Hexanone	125	147		ug/L		118	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	125	176		ug/L		141	56 - 142
Benzene	25.0	23.9		ug/L		96	71 - 124
Bromochloromethane	25.0	25.6		ug/L		102	72 - 130
Bromodichloromethane	25.0	29.0		ug/L		116	80 - 122
Bromoform	25.0	35.8	*	ug/L		143	61 - 132
Bromomethane	25.0	19.0		ug/L		76	55 - 144
Carbon disulfide	25.0	25.5		ug/L		102	59 - 134
Carbon tetrachloride	25.0	28.8		ug/L		115	72 - 134
Chlorobenzene	25.0	25.0		ug/L		100	80 - 120
Chloroethane	25.0	17.8		ug/L		71	69 - 136
Chloroform	25.0	24.3		ug/L		97	73 - 127
Chloromethane	25.0	20.5		ug/L		82	68 - 124
cis-1,2-Dichloroethene	25.0	24.6		ug/L		99	74 - 124
cis-1,3-Dichloropropene	25.0	25.2		ug/L		101	74 - 124

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: LCS 480-482537/5
Matrix: Water
Analysis Batch: 482537

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	25.0	25.7		ug/L		103	59 - 135
Dibromochloromethane	25.0	33.0	*	ug/L		132	75 - 125
Dichlorodifluoromethane	25.0	18.1		ug/L		73	59 - 135
Ethylbenzene	25.0	25.2		ug/L		101	77 - 123
Isopropylbenzene	25.0	24.8		ug/L		99	77 - 122
Methyl acetate	50.0	49.6		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	24.6		ug/L		98	77 - 120
Methylcyclohexane	25.0	25.5		ug/L		102	68 - 134
Methylene Chloride	25.0	27.2		ug/L		109	75 - 124
Styrene	25.0	24.7		ug/L		99	80 - 120
Tetrachloroethene	25.0	28.2		ug/L		113	74 - 122
Toluene	25.0	24.3		ug/L		97	80 - 122
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	80 - 120
Trichloroethene	25.0	24.3		ug/L		97	74 - 123
Trichlorofluoromethane	25.0	20.2		ug/L		81	62 - 150
Vinyl chloride	25.0	20.2		ug/L		81	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		77 - 120
4-Bromofluorobenzene (Surr)	107		73 - 120
Dibromofluoromethane (Surr)	100		75 - 123
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: 480-156213-14 MS
Matrix: Water
Analysis Batch: 482537

Client Sample ID: 356023-MW6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	8.2	F1	25.0	40.3	F1	ug/L		128	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	26.3		ug/L		105	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.8		ug/L		115	61 - 148
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	76 - 122
1,1-Dichloroethane	ND		25.0	28.0		ug/L		112	77 - 120
1,1-Dichloroethene	1.8		25.0	31.3		ug/L		118	66 - 127
1,2,3-Trichlorobenzene	ND		25.0	27.7		ug/L		111	75 - 123
1,2,4-Trichlorobenzene	ND		25.0	27.6		ug/L		111	79 - 122
1,2-Dibromo-3-Chloropropane	ND	F1	25.0	32.4		ug/L		129	56 - 134
1,2-Dibromoethane	ND		25.0	27.0		ug/L		108	77 - 120
1,2-Dichlorobenzene	ND		25.0	26.4		ug/L		106	80 - 124
1,2-Dichloroethane	ND		25.0	27.8		ug/L		111	75 - 120
1,2-Dichloropropane	ND		25.0	26.9		ug/L		108	76 - 120
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		105	77 - 120
1,4-Dichlorobenzene	ND		25.0	26.0		ug/L		104	78 - 124
1,4-Dioxane	ND		500	499		ug/L		100	50 - 150
2-Butanone (MEK)	ND		125	140		ug/L		112	57 - 140
2-Hexanone	ND		125	140		ug/L		112	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	133		ug/L		107	71 - 125

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: 480-156213-14 MS
Matrix: Water
Analysis Batch: 482537

Client Sample ID: 356023-MW6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		125	158		ug/L		126	56 - 142
Benzene	ND		25.0	26.1		ug/L		104	71 - 124
Bromochloromethane	ND		25.0	28.2		ug/L		113	72 - 130
Bromodichloromethane	ND	F1	25.0	31.0	F1	ug/L		124	80 - 122
Bromoform	ND	* F1	25.0	33.5	F1	ug/L		134	61 - 132
Bromomethane	ND		25.0	22.9		ug/L		92	55 - 144
Carbon disulfide	ND		25.0	27.6		ug/L		110	59 - 134
Carbon tetrachloride	ND		25.0	33.3		ug/L		133	72 - 134
Chlorobenzene	ND		25.0	26.2		ug/L		105	80 - 120
Chloroethane	ND		25.0	22.8		ug/L		91	69 - 136
Chloroform	ND		25.0	27.1		ug/L		108	73 - 127
Chloromethane	ND		25.0	24.5		ug/L		98	68 - 124
cis-1,2-Dichloroethene	ND		25.0	27.2		ug/L		109	74 - 124
cis-1,3-Dichloropropene	ND		25.0	25.9		ug/L		104	74 - 124
Cyclohexane	ND		25.0	28.0		ug/L		112	59 - 135
Dibromochloromethane	ND	* F1	25.0	32.8	F1	ug/L		131	75 - 125
Dichlorodifluoromethane	ND		25.0	21.1		ug/L		85	59 - 135
Ethylbenzene	ND		25.0	26.6		ug/L		107	77 - 123
Isopropylbenzene	ND		25.0	26.5		ug/L		106	77 - 122
Methyl acetate	ND		50.0	48.9		ug/L		98	74 - 133
Methyl tert-butyl ether	ND		25.0	25.5		ug/L		102	77 - 120
Methylcyclohexane	ND		25.0	27.8		ug/L		111	68 - 134
Methylene Chloride	ND		25.0	28.0		ug/L		112	75 - 124
Styrene	ND		25.0	26.0		ug/L		104	80 - 120
Tetrachloroethene	ND	F1	25.0	30.0		ug/L		120	74 - 122
Toluene	ND		25.0	25.9		ug/L		104	80 - 122
trans-1,2-Dichloroethene	ND		25.0	28.4		ug/L		114	73 - 127
trans-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	80 - 120
Trichloroethene	ND		25.0	28.0		ug/L		112	74 - 123
Trichlorofluoromethane	ND		25.0	25.4		ug/L		102	62 - 150
Vinyl chloride	ND		25.0	25.7		ug/L		103	65 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		77 - 120
4-Bromofluorobenzene (Surr)	103		73 - 120
Dibromofluoromethane (Surr)	103		75 - 123
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 480-156213-14 MSD
Matrix: Water
Analysis Batch: 482537

Client Sample ID: 356023-MW6B
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	8.2	F1	25.0	39.9	F1	ug/L		127	73 - 126	1	15
1,1,1,2-Tetrachloroethane	ND		25.0	26.2		ug/L		105	76 - 120	0	15
1,1,2-Trichloro-1,1,2,2-trifluoroethane	ND		25.0	28.1		ug/L		112	61 - 148	2	20
1,1,2-Trichloroethane	ND		25.0	26.0		ug/L		104	76 - 122	1	15
1,1-Dichloroethane	ND		25.0	27.9		ug/L		112	77 - 120	0	20

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: 480-156213-14 MSD

Matrix: Water

Analysis Batch: 482537

Client Sample ID: 356023-MW6B

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,1-Dichloroethene	1.8		25.0	30.4		ug/L		114	66 - 127	3	16
1,2,3-Trichlorobenzene	ND		25.0	28.0		ug/L		112	75 - 123	1	20
1,2,4-Trichlorobenzene	ND		25.0	28.3		ug/L		113	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND	F1	25.0	33.9	F1	ug/L		136	56 - 134	5	15
1,2-Dibromoethane	ND		25.0	27.6		ug/L		110	77 - 120	2	15
1,2-Dichlorobenzene	ND		25.0	26.6		ug/L		106	80 - 124	1	20
1,2-Dichloroethane	ND		25.0	27.3		ug/L		109	75 - 120	2	20
1,2-Dichloropropane	ND		25.0	26.2		ug/L		105	76 - 120	3	20
1,3-Dichlorobenzene	ND		25.0	26.4		ug/L		105	77 - 120	1	20
1,4-Dichlorobenzene	ND		25.0	26.0		ug/L		104	78 - 124	0	20
1,4-Dioxane	ND		500	559		ug/L		112	50 - 150	11	20
2-Butanone (MEK)	ND		125	143		ug/L		115	57 - 140	3	20
2-Hexanone	ND		125	144		ug/L		115	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)	ND		125	137		ug/L		109	71 - 125	2	35
Acetone	ND		125	155		ug/L		124	56 - 142	2	15
Benzene	ND		25.0	26.1		ug/L		104	71 - 124	0	13
Bromochloromethane	ND		25.0	27.5		ug/L		110	72 - 130	3	15
Bromodichloromethane	ND	F1	25.0	31.3	F1	ug/L		125	80 - 122	1	15
Bromoform	ND	* F1	25.0	34.9	F1	ug/L		140	61 - 132	4	15
Bromomethane	ND		25.0	22.3		ug/L		89	55 - 144	3	15
Carbon disulfide	ND		25.0	27.3		ug/L		109	59 - 134	1	15
Carbon tetrachloride	ND		25.0	33.5		ug/L		134	72 - 134	1	15
Chlorobenzene	ND		25.0	26.5		ug/L		106	80 - 120	1	25
Chloroethane	ND		25.0	23.9		ug/L		96	69 - 136	5	15
Chloroform	ND		25.0	26.8		ug/L		107	73 - 127	1	20
Chloromethane	ND		25.0	23.9		ug/L		96	68 - 124	2	15
cis-1,2-Dichloroethene	ND		25.0	26.7		ug/L		107	74 - 124	2	15
cis-1,3-Dichloropropene	ND		25.0	26.0		ug/L		104	74 - 124	0	15
Cyclohexane	ND		25.0	27.7		ug/L		111	59 - 135	1	20
Dibromochloromethane	ND	* F1	25.0	33.7	F1	ug/L		135	75 - 125	3	15
Dichlorodifluoromethane	ND		25.0	20.7		ug/L		83	59 - 135	2	20
Ethylbenzene	ND		25.0	27.2		ug/L		109	77 - 123	2	15
Isopropylbenzene	ND		25.0	26.8		ug/L		107	77 - 122	1	20
Methyl acetate	ND		50.0	48.9		ug/L		98	74 - 133	0	20
Methyl tert-butyl ether	ND		25.0	25.6		ug/L		103	77 - 120	0	37
Methylcyclohexane	ND		25.0	27.4		ug/L		109	68 - 134	2	20
Methylene Chloride	ND		25.0	26.9		ug/L		108	75 - 124	4	15
Styrene	ND		25.0	26.5		ug/L		106	80 - 120	2	20
Tetrachloroethene	ND	F1	25.0	30.7	F1	ug/L		123	74 - 122	2	20
Toluene	ND		25.0	26.2		ug/L		105	80 - 122	1	15
trans-1,2-Dichloroethene	ND		25.0	28.7		ug/L		115	73 - 127	1	20
trans-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	80 - 120	2	15
Trichloroethene	ND		25.0	27.0		ug/L		108	74 - 123	3	16
Trichlorofluoromethane	ND		25.0	25.2		ug/L		101	62 - 150	1	20
Vinyl chloride	ND		25.0	25.6		ug/L		102	65 - 133	1	15

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		77 - 120

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: 480-156213-14 MSD
Matrix: Water
Analysis Batch: 482537

Client Sample ID: 356023-MW6B
Prep Type: Total/NA

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		73 - 120
Dibromofluoromethane (Surr)	104		75 - 123
Toluene-d8 (Surr)	98		80 - 120

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-482507/1-A
Matrix: Water
Analysis Batch: 482664

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482507

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dioxane	ND		0.20	0.10	ug/L		07/17/19 15:17	07/18/19 19:44	1
Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,4-Dioxane-d8	38		15 - 110	07/17/19 15:17	07/18/19 19:44	1			

Lab Sample ID: LCS 480-482507/2-A
Matrix: Water
Analysis Batch: 482664

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482507

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
1,4-Dioxane	1.00	1.15		ug/L		115	40 - 140
Isotope Dilution	LCS LCS		Limits				
	%Recovery	Qualifier					
1,4-Dioxane-d8	34		15 - 110				

Lab Sample ID: 480-156213-14 MS
Matrix: Water
Analysis Batch: 482664

Client Sample ID: 356023-MW6B
Prep Type: Total/NA
Prep Batch: 482507

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
1,4-Dioxane	0.76		1.00	1.93	E	ug/L		117	40 - 140
Isotope Dilution	MS MS		Limits						
	%Recovery	Qualifier							
1,4-Dioxane-d8	34		15 - 110						

Lab Sample ID: 480-156213-14 MSD
Matrix: Water
Analysis Batch: 482664

Client Sample ID: 356023-MW6B
Prep Type: Total/NA
Prep Batch: 482507

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	Limits	RPD	Limit
				Result	Qualifier						
1,4-Dioxane	0.76		1.00	1.90	E	ug/L		114	40 - 140	2	20
Isotope Dilution	MSD MSD		Limits								
	%Recovery	Qualifier									
1,4-Dioxane-d8	38		15 - 110								

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 200-145382/1-A
Matrix: Water
Analysis Batch: 145761

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145382

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	ND		2.0	1.0	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.63	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.76	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.91	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.63	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.77	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.53	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.59	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.60	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.92	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.49	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.80	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.95	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.90	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.61	ng/L		07/23/19 10:21	08/02/19 03:57	1
Perfluorooctanesulfonamide (FOSA)	ND		10	10	ng/L		07/23/19 10:21	08/02/19 03:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	1.7	ng/L		07/23/19 10:21	08/02/19 03:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.5	ng/L		07/23/19 10:21	08/02/19 03:57	1
6:2 FTS	ND		20	4.6	ng/L		07/23/19 10:21	08/02/19 03:57	1
8:2 FTS	ND		20	2.9	ng/L		07/23/19 10:21	08/02/19 03:57	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 FOSA	73		25 - 150	07/23/19 10:21	08/02/19 03:57	1
13C4 PFBA	94		25 - 150	07/23/19 10:21	08/02/19 03:57	1
13C5 PFPeA	92		25 - 150	07/23/19 10:21	08/02/19 03:57	1
13C2 PFHxA	95		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C4 PFHpA	93		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C4 PFOA	89		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C5 PFNA	94		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C2 PFDA	102		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C2 PFUnA	94		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C2 PFDoA	96		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C2 PFTeDA	65		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C3 PFBS	90		50 - 150	07/23/19 10:21	08/02/19 03:57	1
18O2 PFHxS	89		50 - 150	07/23/19 10:21	08/02/19 03:57	1
13C4 PFOS	90		50 - 150	07/23/19 10:21	08/02/19 03:57	1
d3-NMeFOSAA	82		50 - 150	07/23/19 10:21	08/02/19 03:57	1
d5-NEtFOSAA	79		50 - 150	07/23/19 10:21	08/02/19 03:57	1
M2-6:2 FTS	101		25 - 150	07/23/19 10:21	08/02/19 03:57	1
M2-8:2 FTS	111		25 - 150	07/23/19 10:21	08/02/19 03:57	1

QC Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-145382/2-A
Matrix: Water
Analysis Batch: 145761

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 145382
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	41.6		ng/L		104	50 - 150
Perfluoropentanoic acid (PFPeA)	40.0	39.5		ng/L		99	50 - 150
Perfluorohexanoic acid (PFHxA)	40.0	40.7		ng/L		102	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	43.2		ng/L		108	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	42.8		ng/L		107	70 - 130
Perfluorononanoic acid (PFNA)	40.0	42.0		ng/L		105	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	40.8		ng/L		102	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	41.6		ng/L		104	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	42.4		ng/L		106	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	45.0		ng/L		112	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	48.5		ng/L		121	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	36.5		ng/L		103	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.2		ng/L		99	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.0		ng/L		102	50 - 150
Perfluorodecanesulfonic acid (PFDS)	38.6	34.9		ng/L		90	50 - 150
Perfluorooctanesulfonic acid (PFOS)	37.1	40.9		ng/L		110	70 - 130
Perfluorooctanesulfonamide (FOSA)	40.0	42.1		ng/L		105	50 - 150
N-methylperfluorooctanesulfonamide doacetic acid (NMeFOSAA)	40.0	51.4		ng/L		128	70 - 130
N-ethylperfluorooctanesulfonamide doacetic acid (NEtFOSAA)	40.0	52.6 *		ng/L		132	70 - 130
6:2 FTS	37.9	32.5		ng/L		86	50 - 150
8:2 FTS	38.3	26.1		ng/L		68	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C8 FOSA	70		25 - 150
13C4 PFBA	104		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	100		50 - 150
13C4 PFHpA	100		50 - 150
13C4 PFOA	87		50 - 150
13C5 PFNA	104		50 - 150
13C2 PFDA	104		50 - 150
13C2 PFUnA	93		50 - 150
13C2 PFDoA	79		50 - 150
13C2 PFTeA	59		50 - 150
13C3 PFBS	96		50 - 150
18O2 PFHxS	93		50 - 150
13C4 PFOS	99		50 - 150
d3-NMeFOSAA	76		50 - 150
d5-NEtFOSAA	71		50 - 150

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 200-145382/2-A

Matrix: Water

Analysis Batch: 145761

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145382

<i>Isotope Dilution</i>	LCS LCS		<i>Limits</i>
	%Recovery	Qualifier	
M2-6:2 FTS	102		25 - 150
M2-8:2 FTS	117		25 - 150

Lab Sample ID: 480-156213-14 MS

Matrix: Water

Analysis Batch: 145761

Client Sample ID: 356023-MW6B

Prep Type: Total/NA

Prep Batch: 145382

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Perfluorobutanoic acid (PFBA)	1.6	J	36.7	40.2		ng/L		105	40 - 160
Perfluoropentanoic acid (PFPeA)	2.0		36.7	38.9		ng/L		101	40 - 160
Perfluorohexanoic acid (PFHxA)	1.5	J	36.7	38.3		ng/L		100	40 - 160
Perfluoroheptanoic acid (PFHpA)	ND		36.7	41.0		ng/L		112	40 - 160
Perfluorooctanoic acid (PFOA)	0.92	J	36.7	37.9		ng/L		101	40 - 160
Perfluorononanoic acid (PFNA)	ND		36.7	36.9		ng/L		101	40 - 160
Perfluorodecanoic acid (PFDA)	ND		36.7	39.5		ng/L		108	40 - 160
Perfluoroundecanoic acid (PFUnA)	ND		36.7	35.6		ng/L		97	40 - 160
Perfluorododecanoic acid (PFDoA)	ND		36.7	37.8		ng/L		103	40 - 160
Perfluorotridecanoic acid (PFTriA)	ND		36.7	42.7		ng/L		116	40 - 160
Perfluorotetradecanoic acid (PFTeA)	ND		36.7	44.5		ng/L		121	40 - 160
Perfluorobutanesulfonic acid (PFBS)	ND		32.4	32.5		ng/L		100	40 - 160
Perfluorohexanesulfonic acid (PFHxS)	ND		33.4	33.4		ng/L		100	40 - 160
Perfluoroheptanesulfonic Acid (PFHpS)	ND		34.9	38.3		ng/L		110	40 - 160
Perfluorodecanesulfonic acid (PFDS)	ND		35.4	35.1		ng/L		99	40 - 160
Perfluorooctanesulfonic acid (PFOS)	ND		34.0	38.4		ng/L		113	40 - 160
Perfluorooctanesulfonamide (FOSA)	ND		36.7	42.6		ng/L		116	40 - 160
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		36.7	43.6		ng/L		119	40 - 160
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	36.7	45.7		ng/L		125	40 - 160
6:2 FTS	ND		34.8	26.9		ng/L		77	40 - 160
8:2 FTS	ND		35.1	25.6		ng/L		73	40 - 160

<i>Isotope Dilution</i>	MS MS		<i>Limits</i>
	%Recovery	Qualifier	
13C8 FOSA	74		25 - 150
13C4 PFBA	82		25 - 150
13C5 PFPeA	88		25 - 150
13C2 PFHxA	88		50 - 150
13C4 PFHpA	90		50 - 150
13C4 PFOA	85		50 - 150
13C5 PFNA	86		50 - 150
13C2 PFDA	87		50 - 150
13C2 PFUnA	86		50 - 150

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-156213-14 MS
Matrix: Water
Analysis Batch: 145761

Client Sample ID: 356023-MW6B
Prep Type: Total/NA
Prep Batch: 145382

<i>Isotope Dilution</i>	<i>MS</i>	<i>MS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C2 PFDoA	83		50 - 150
13C2 PFTeDA	67		50 - 150
13C3 PFBS	93		50 - 150
18O2 PFHxS	94		50 - 150
13C4 PFOS	89		50 - 150
d3-NMeFOSAA	64		50 - 150
d5-NEtFOSAA	67		50 - 150
M2-6:2 FTS	104		25 - 150
M2-8:2 FTS	111		25 - 150

Lab Sample ID: 480-156213-14 MSD
Matrix: Water
Analysis Batch: 145761

Client Sample ID: 356023-MW6B
Prep Type: Total/NA
Prep Batch: 145382

<i>Analyte</i>	<i>Sample</i>	<i>Sample</i>	<i>Spike</i>	<i>MSD</i>	<i>MSD</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i>	<i>RPD</i>	<i>RPD</i>	<i>Limit</i>
	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>				<i>Limits</i>	<i>RPD</i>		
Perfluorobutanoic acid (PFBA)	1.6	J	34.7	38.4		ng/L		106	40 - 160	5		30
Perfluoropentanoic acid (PFPeA)	2.0		34.7	39.1		ng/L		107	40 - 160	0		30
Perfluorohexanoic acid (PFHxA)	1.5	J	34.7	38.0		ng/L		105	40 - 160	1		20
Perfluoroheptanoic acid (PFHpA)	ND		34.7	38.5		ng/L		111	40 - 160	6		20
Perfluorooctanoic acid (PFOA)	0.92	J	34.7	39.7		ng/L		112	40 - 160	5		20
Perfluorononanoic acid (PFNA)	ND		34.7	39.3		ng/L		113	40 - 160	6		20
Perfluorodecanoic acid (PFDA)	ND		34.7	39.1		ng/L		112	40 - 160	1		20
Perfluoroundecanoic acid (PFUnA)	ND		34.7	33.6		ng/L		97	40 - 160	6		20
Perfluorododecanoic acid (PFDoA)	ND		34.7	35.3		ng/L		102	40 - 160	7		20
Perfluorotridecanoic acid (PFTriA)	ND		34.7	34.9		ng/L		100	40 - 160	20		20
Perfluorotetradecanoic acid (PFTeA)	ND		34.7	43.5		ng/L		125	40 - 160	2		20
Perfluorobutanesulfonic acid (PFBS)	ND		30.7	30.1		ng/L		98	40 - 160	8		20
Perfluorohexanesulfonic acid (PFHxS)	ND		31.6	33.8		ng/L		107	40 - 160	1		20
Perfluoroheptanesulfonic Acid (PFHpS)	ND		33.1	40.9		ng/L		124	40 - 160	7		30
Perfluorodecanesulfonic acid (PFDS)	ND		33.5	34.1		ng/L		102	40 - 160	3		30
Perfluorooctanesulfonic acid (PFOS)	ND		32.2	37.3		ng/L		116	40 - 160	3		20
Perfluorooctanesulfonamide (FOSA)	ND		34.7	41.4		ng/L		119	40 - 160	3		30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		34.7	43.0		ng/L		124	40 - 160	1		20
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	34.7	43.5		ng/L		125	40 - 160	5		20
6:2 FTS	ND		32.9	25.4		ng/L		77	40 - 160	6		30
8:2 FTS	ND		33.3	25.6		ng/L		77	40 - 160	0		30

<i>Isotope Dilution</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C8 FOSA	71		25 - 150
13C4 PFBA	83		25 - 150

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 480-156213-14 MSD

Matrix: Water

Analysis Batch: 145761

Client Sample ID: 356023-MW6B

Prep Type: Total/NA

Prep Batch: 145382

<i>Isotope Dilution</i>	<i>MSD %Recovery</i>	<i>MSD Qualifier</i>	<i>Limits</i>
13C5 PFPeA	86		25 - 150
13C2 PFHxA	89		50 - 150
13C4 PFHpA	92		50 - 150
13C4 PFOA	81		50 - 150
13C5 PFNA	83		50 - 150
13C2 PFDA	85		50 - 150
13C2 PFUnA	80		50 - 150
13C2 PFDoA	87		50 - 150
13C2 PFTeDA	63		50 - 150
13C3 PFBS	101		50 - 150
18O2 PFHxS	90		50 - 150
13C4 PFOS	86		50 - 150
d3-NMeFOSAA	64		50 - 150
d5-NEtFOSAA	65		50 - 150
M2-6:2 FTS	109		25 - 150
M2-8:2 FTS	104		25 - 150

QC Association Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

GC/MS VOA

Analysis Batch: 482537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-1	356023-MW8B	Total/NA	Water	8260C	
480-156213-2	356023-MW8BD	Total/NA	Water	8260C	
480-156213-3	356023-MW16	Total/NA	Water	8260C	
480-156213-4	356023-MW14B 150	Total/NA	Water	8260C	
480-156213-5	356023-MW12B 190	Total/NA	Water	8260C	
480-156213-6	356023-MW11B	Total/NA	Water	8260C	
480-156213-7	356023-MW11C	Total/NA	Water	8260C	
480-156213-8	356023-MW1801	Total/NA	Water	8260C	
480-156213-9	356023-MW1802	Total/NA	Water	8260C	
480-156213-10	356023-MW1803	Total/NA	Water	8260C	
480-156213-11	356023-MW5B	Total/NA	Water	8260C	
480-156213-12	356023-ERT4	Total/NA	Water	8260C	
480-156213-13	356023-MW4	Total/NA	Water	8260C	
480-156213-14	356023-MW6B	Total/NA	Water	8260C	
480-156213-15	356023-MW15B	Total/NA	Water	8260C	
480-156213-16	356023-EB1	Total/NA	Water	8260C	
480-156213-17	356023-MW1B	Total/NA	Water	8260C	
480-156213-18	356023-MW5R	Total/NA	Water	8260C	
480-156213-19	356023-MW7R	Total/NA	Water	8260C	
480-156213-20	356023-TB1	Total/NA	Water	8260C	
MB 480-482537/7	Method Blank	Total/NA	Water	8260C	
LCS 480-482537/5	Lab Control Sample	Total/NA	Water	8260C	
480-156213-14 MS	356023-MW6B	Total/NA	Water	8260C	
480-156213-14 MSD	356023-MW6B	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 482507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-1	356023-MW8B	Total/NA	Water	3510C	
480-156213-2	356023-MW8BD	Total/NA	Water	3510C	
480-156213-3	356023-MW16	Total/NA	Water	3510C	
480-156213-4	356023-MW14B 150	Total/NA	Water	3510C	
480-156213-5	356023-MW12B 190	Total/NA	Water	3510C	
480-156213-6	356023-MW11B	Total/NA	Water	3510C	
480-156213-7	356023-MW11C	Total/NA	Water	3510C	
480-156213-8	356023-MW1801	Total/NA	Water	3510C	
480-156213-9	356023-MW1802	Total/NA	Water	3510C	
480-156213-10	356023-MW1803	Total/NA	Water	3510C	
480-156213-11	356023-MW5B	Total/NA	Water	3510C	
480-156213-12	356023-ERT4	Total/NA	Water	3510C	
480-156213-13	356023-MW4	Total/NA	Water	3510C	
480-156213-14	356023-MW6B	Total/NA	Water	3510C	
480-156213-15	356023-MW15B	Total/NA	Water	3510C	
480-156213-16	356023-EB1	Total/NA	Water	3510C	
480-156213-17	356023-MW1B	Total/NA	Water	3510C	
480-156213-18	356023-MW5R	Total/NA	Water	3510C	
480-156213-19	356023-MW7R	Total/NA	Water	3510C	
MB 480-482507/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-482507/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-156213-14 MS	356023-MW6B	Total/NA	Water	3510C	

QC Association Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

GC/MS Semi VOA (Continued)

Prep Batch: 482507 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-14 MSD	356023-MW6B	Total/NA	Water	3510C	

Analysis Batch: 482664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-1	356023-MW8B	Total/NA	Water	8270D SIM ID	482507
480-156213-2	356023-MW8BD	Total/NA	Water	8270D SIM ID	482507
480-156213-14	356023-MW6B	Total/NA	Water	8270D SIM ID	482507
MB 480-482507/1-A	Method Blank	Total/NA	Water	8270D SIM ID	482507
LCS 480-482507/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	482507
480-156213-14 MS	356023-MW6B	Total/NA	Water	8270D SIM ID	482507
480-156213-14 MSD	356023-MW6B	Total/NA	Water	8270D SIM ID	482507

Analysis Batch: 482665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-7	356023-MW11C	Total/NA	Water	8270D SIM ID	482507
480-156213-8	356023-MW1801	Total/NA	Water	8270D SIM ID	482507
480-156213-9	356023-MW1802	Total/NA	Water	8270D SIM ID	482507
480-156213-10	356023-MW1803	Total/NA	Water	8270D SIM ID	482507
480-156213-16	356023-EB1	Total/NA	Water	8270D SIM ID	482507
480-156213-17	356023-MW1B	Total/NA	Water	8270D SIM ID	482507
480-156213-19	356023-MW7R	Total/NA	Water	8270D SIM ID	482507

Analysis Batch: 482965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-3	356023-MW16	Total/NA	Water	8270D SIM ID	482507
480-156213-4	356023-MW14B 150	Total/NA	Water	8270D SIM ID	482507
480-156213-5	356023-MW12B 190	Total/NA	Water	8270D SIM ID	482507
480-156213-6	356023-MW11B	Total/NA	Water	8270D SIM ID	482507
480-156213-11	356023-MW5B	Total/NA	Water	8270D SIM ID	482507
480-156213-12	356023-ERT4	Total/NA	Water	8270D SIM ID	482507
480-156213-13	356023-MW4	Total/NA	Water	8270D SIM ID	482507
480-156213-15	356023-MW15B	Total/NA	Water	8270D SIM ID	482507
480-156213-18	356023-MW5R	Total/NA	Water	8270D SIM ID	482507

LCMS

Prep Batch: 145382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-1	356023-MW8B	Total/NA	Water	3535	
480-156213-2	356023-MW8BD	Total/NA	Water	3535	
480-156213-3	356023-MW16	Total/NA	Water	3535	
480-156213-4	356023-MW14B 150	Total/NA	Water	3535	
480-156213-5	356023-MW12B 190	Total/NA	Water	3535	
480-156213-6	356023-MW11B	Total/NA	Water	3535	
480-156213-7	356023-MW11C	Total/NA	Water	3535	
480-156213-11	356023-MW5B	Total/NA	Water	3535	
480-156213-12	356023-ERT4	Total/NA	Water	3535	
480-156213-13	356023-MW4	Total/NA	Water	3535	
480-156213-14	356023-MW6B	Total/NA	Water	3535	
480-156213-15	356023-MW15B	Total/NA	Water	3535	
480-156213-16	356023-EB1	Total/NA	Water	3535	

QC Association Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

LCMS (Continued)

Prep Batch: 145382 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-17	356023-MW1B	Total/NA	Water	3535	
480-156213-18	356023-MW5R	Total/NA	Water	3535	
480-156213-19	356023-MW7R	Total/NA	Water	3535	
MB 200-145382/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-145382/2-A	Lab Control Sample	Total/NA	Water	3535	
480-156213-14 MS	356023-MW6B	Total/NA	Water	3535	
480-156213-14 MSD	356023-MW6B	Total/NA	Water	3535	

Analysis Batch: 145761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156213-1	356023-MW8B	Total/NA	Water	537 (modified)	145382
480-156213-2	356023-MW8BD	Total/NA	Water	537 (modified)	145382
480-156213-3	356023-MW16	Total/NA	Water	537 (modified)	145382
480-156213-4	356023-MW14B 150	Total/NA	Water	537 (modified)	145382
480-156213-5	356023-MW12B 190	Total/NA	Water	537 (modified)	145382
480-156213-6	356023-MW11B	Total/NA	Water	537 (modified)	145382
480-156213-7	356023-MW11C	Total/NA	Water	537 (modified)	145382
480-156213-11	356023-MW5B	Total/NA	Water	537 (modified)	145382
480-156213-12	356023-ERT4	Total/NA	Water	537 (modified)	145382
480-156213-13	356023-MW4	Total/NA	Water	537 (modified)	145382
480-156213-14	356023-MW6B	Total/NA	Water	537 (modified)	145382
480-156213-15	356023-MW15B	Total/NA	Water	537 (modified)	145382
480-156213-16	356023-EB1	Total/NA	Water	537 (modified)	145382
480-156213-17	356023-MW1B	Total/NA	Water	537 (modified)	145382
480-156213-18	356023-MW5R	Total/NA	Water	537 (modified)	145382
480-156213-19	356023-MW7R	Total/NA	Water	537 (modified)	145382
MB 200-145382/1-A	Method Blank	Total/NA	Water	537 (modified)	145382
LCS 200-145382/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	145382
480-156213-14 MS	356023-MW6B	Total/NA	Water	537 (modified)	145382
480-156213-14 MSD	356023-MW6B	Total/NA	Water	537 (modified)	145382

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW8B

Lab Sample ID: 480-156213-1

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/17/19 22:23	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482664	07/18/19 21:43	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 04:13	JM1	TAL BUR

Client Sample ID: 356023-MW8BD

Lab Sample ID: 480-156213-2

Date Collected: 07/09/19 13:20

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/17/19 22:47	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482664	07/18/19 22:07	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 04:21	JM1	TAL BUR

Client Sample ID: 356023-MW16

Lab Sample ID: 480-156213-3

Date Collected: 07/09/19 17:10

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/17/19 23:11	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	482965	07/21/19 17:29	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 04:29	JM1	TAL BUR

Client Sample ID: 356023-MW14B 150

Lab Sample ID: 480-156213-4

Date Collected: 07/09/19 11:50

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/17/19 23:35	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	482965	07/21/19 17:53	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 04:37	JM1	TAL BUR

Client Sample ID: 356023-MW12B 190

Lab Sample ID: 480-156213-5

Date Collected: 07/09/19 17:27

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/17/19 23:59	RJF	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW12B 190

Lab Sample ID: 480-156213-5

Date Collected: 07/09/19 17:27

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		10	482965	07/21/19 18:17	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 04:45	JM1	TAL BUR

Client Sample ID: 356023-MW11B

Lab Sample ID: 480-156213-6

Date Collected: 07/10/19 11:37

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 00:23	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	482965	07/21/19 18:40	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 04:53	JM1	TAL BUR

Client Sample ID: 356023-MW11C

Lab Sample ID: 480-156213-7

Date Collected: 07/10/19 15:23

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 00:47	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482665	07/19/19 01:24	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 05:01	JM1	TAL BUR

Client Sample ID: 356023-MW1801

Lab Sample ID: 480-156213-8

Date Collected: 07/11/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 01:11	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482665	07/19/19 01:48	RJS	TAL BUF

Client Sample ID: 356023-MW1802

Lab Sample ID: 480-156213-9

Date Collected: 07/11/19 11:20

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 01:35	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482665	07/19/19 02:11	RJS	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW1803

Lab Sample ID: 480-156213-10

Date Collected: 07/11/19 11:30

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 01:59	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482665	07/19/19 02:35	RJS	TAL BUF

Client Sample ID: 356023-MW5B

Lab Sample ID: 480-156213-11

Date Collected: 07/11/19 13:10

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		40	482537	07/18/19 02:23	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		10	482965	07/21/19 19:04	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 05:09	JM1	TAL BUR

Client Sample ID: 356023-ERT4

Lab Sample ID: 480-156213-12

Date Collected: 07/11/19 11:20

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	482537	07/18/19 02:47	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		10	482965	07/21/19 19:28	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 05:25	JM1	TAL BUR

Client Sample ID: 356023-MW4

Lab Sample ID: 480-156213-13

Date Collected: 07/11/19 14:47

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	482537	07/18/19 03:11	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	482965	07/21/19 19:51	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 05:33	JM1	TAL BUR

Client Sample ID: 356023-MW6B

Lab Sample ID: 480-156213-14

Date Collected: 07/11/19 13:15

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 03:34	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482664	07/18/19 21:19	RJS	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW6B

Lab Sample ID: 480-156213-14

Date Collected: 07/11/19 13:15

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 05:41	JM1	TAL BUR

Client Sample ID: 356023-MW15B

Lab Sample ID: 480-156213-15

Date Collected: 07/12/19 09:30

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 03:58	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	482965	07/21/19 20:15	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 06:06	JM1	TAL BUR

Client Sample ID: 356023-EB1

Lab Sample ID: 480-156213-16

Date Collected: 07/12/19 09:45

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 04:22	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482665	07/19/19 04:32	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 06:14	JM1	TAL BUR

Client Sample ID: 356023-MW1B

Lab Sample ID: 480-156213-17

Date Collected: 07/12/19 11:15

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 04:46	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482665	07/19/19 04:56	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 06:22	JM1	TAL BUR

Client Sample ID: 356023-MW5R

Lab Sample ID: 480-156213-18

Date Collected: 07/12/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	482537	07/18/19 05:09	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	482965	07/21/19 20:38	RJS	TAL BUF

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Client Sample ID: 356023-MW5R

Lab Sample ID: 480-156213-18

Date Collected: 07/12/19 11:10

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 06:30	JM1	TAL BUR

Client Sample ID: 356023-MW7R

Lab Sample ID: 480-156213-19

Date Collected: 07/12/19 11:30

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 05:34	RJF	TAL BUF
Total/NA	Prep	3510C			482507	07/17/19 15:17	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	482665	07/19/19 05:43	RJS	TAL BUF
Total/NA	Prep	3535			145382	07/23/19 10:21	TPB	TAL BUR
Total/NA	Analysis	537 (modified)		1	145761	08/02/19 06:38	JM1	TAL BUR

Client Sample ID: 356023-TB1

Lab Sample ID: 480-156213-20

Date Collected: 07/09/19 12:00

Matrix: Water

Date Received: 07/13/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482537	07/18/19 05:57	RJF	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = Eurofins TestAmerica, Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

Laboratory: Eurofins TestAmerica, Burlington

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
ANAB	Dept. of Defense ELAP		L2336	02-25-20
ANAB	DoD		L2336	02-25-20
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-20
Florida	NELAP	4	E87467	06-30-20
Florida	NELAP		E87467	06-01-20
Minnesota	NELAP	5	050-999-436	12-31-19
New Hampshire	NELAP	1	2006	12-18-19
New Jersey	NELAP	2	VT972	06-30-20
New Jersey	NELAP		VT972	06-30-20
New York	NELAP	2	10391	04-01-20
New York	NELAP		<cert No.>	03-31-20
Pennsylvania	NELAP	3	68-00489	04-30-20
Pennsylvania	NELAP		68-00489	04-30-20
Rhode Island	State Program	1	LAO00298	12-30-19
USDA	Federal		P330-11-00093	07-24-20
Vermont	State Program	1	VT-4000	12-31-19
Virginia	NELAP	3	460209	12-14-19

Method 8260C

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo

Job No.: 480-156213-1

SDG No.: _____

Matrix: Water

Level: Low

GC Column (1): ZB-624 (20) ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
356023-MW8B	480-156213-1	104	101	97	107
356023-MW8BD	480-156213-2	105	101	97	106
356023-MW16	480-156213-3	103	99	97	105
356023-MW14B 150	480-156213-4	103	102	96	107
356023-MW12B 190	480-156213-5	107	105	96	105
356023-MW11B	480-156213-6	105	106	96	104
356023-MW11C	480-156213-7	103	103	95	106
356023-MW1801	480-156213-8	105	104	97	103
356023-MW1802	480-156213-9	104	103	97	106
356023-MW1803	480-156213-10	105	103	98	106
356023-MW5B	480-156213-11	108	104	98	108
356023-ERT4	480-156213-12	107	103	96	103
356023-MW4	480-156213-13	104	102	98	105
356023-MW6B	480-156213-14	104	100	97	105
356023-MW15B	480-156213-15	105	103	95	104
356023-EB1	480-156213-16	103	103	96	107
356023-MW1B	480-156213-17	104	102	96	103
356023-MW5R	480-156213-18	104	104	95	104
356023-MW7R	480-156213-19	107	104	97	107
356023-TB1	480-156213-20	102	101	96	105
	MB 480-482537/7	102	102	97	105
	LCS 480-482537/5	100	100	98	107
356023-MW6B MS	480-156213-14 MS	103	105	96	103
356023-MW6B MSD	480-156213-14 MSD	104	104	98	107

QC LIMITS

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

75-123
77-120
80-120
73-120

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: T3127.D

Lab ID: LCS 480-482537/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	27.4	110	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.8	103	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.7	107	61-148	
1,1,2-Trichloroethane	25.0	26.0	104	76-122	
1,1-Dichloroethane	25.0	24.9	100	77-120	
1,1-Dichloroethene	25.0	24.7	99	66-127	
1,2,3-Trichlorobenzene	25.0	26.7	107	75-123	
1,2,4-Trichlorobenzene	25.0	27.8	111	79-122	
1,2-Dibromo-3-Chloropropane	25.0	30.7	123	56-134	
1,2-Dibromoethane	25.0	26.8	107	77-120	
1,2-Dichlorobenzene	25.0	25.4	102	80-124	
1,2-Dichloroethane	25.0	25.9	104	75-120	
1,2-Dichloropropane	25.0	24.7	99	76-120	
1,3-Dichlorobenzene	25.0	25.1	100	77-120	
1,4-Dichlorobenzene	25.0	24.9	100	80-120	
1,4-Dioxane	500	550	110	50-150	
2-Butanone (MEK)	125	145	116	57-140	
2-Hexanone	125	147	118	65-127	
4-Methyl-2-pentanone (MIBK)	125	136	109	71-125	
Acetone	125	176	141	56-142	
Benzene	25.0	23.9	96	71-124	
Bromochloromethane	25.0	25.6	102	72-130	
Bromodichloromethane	25.0	29.0	116	80-122	
Bromoform	25.0	35.8	143	61-132	*
Bromomethane	25.0	19.0	76	55-144	
Carbon disulfide	25.0	25.5	102	59-134	
Carbon tetrachloride	25.0	28.8	115	72-134	
Chlorobenzene	25.0	25.0	100	80-120	
Chloroethane	25.0	17.8	71	69-136	
Chloroform	25.0	24.3	97	73-127	
Chloromethane	25.0	20.5	82	68-124	
cis-1,2-Dichloroethene	25.0	24.6	99	74-124	
cis-1,3-Dichloropropene	25.0	25.2	101	74-124	
Cyclohexane	25.0	25.7	103	59-135	
Dibromochloromethane	25.0	33.0	132	75-125	*
Dichlorodifluoromethane	25.0	18.1	73	59-135	
Ethylbenzene	25.0	25.2	101	77-123	
Isopropylbenzene	25.0	24.8	99	77-122	
Methyl acetate	50.0	49.6	99	74-133	
Methyl tert-butyl ether	25.0	24.6	98	77-120	
Methylcyclohexane	25.0	25.5	102	68-134	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: T3127.D

Lab ID: LCS 480-482537/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	27.2	109	75-124	
Styrene	25.0	24.7	99	80-120	
Tetrachloroethene	25.0	28.2	113	74-122	
Toluene	25.0	24.3	97	80-122	
trans-1,2-Dichloroethene	25.0	25.0	100	73-127	
trans-1,3-Dichloropropene	25.0	26.0	104	80-120	
Trichloroethene	25.0	24.3	97	74-123	
Trichlorofluoromethane	25.0	20.2	81	62-150	
Vinyl chloride	25.0	20.2	81	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo

Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: T3150.D

Lab ID: 480-156213-14 MS

Client ID: 356023-MW6B MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	8.2	40.3	128	73-126	F1
1,1,2,2-Tetrachloroethane	25.0	ND	26.3	105	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	ND	28.8	115	61-148	
1,1,2-Trichloroethane	25.0	ND	25.7	103	76-122	
1,1-Dichloroethane	25.0	ND	28.0	112	77-120	
1,1-Dichloroethene	25.0	1.8	31.3	118	66-127	
1,2,3-Trichlorobenzene	25.0	ND	27.7	111	75-123	
1,2,4-Trichlorobenzene	25.0	ND	27.6	111	79-122	
1,2-Dibromo-3-Chloropropane	25.0	ND	32.4	129	56-134	
1,2-Dibromoethane	25.0	ND	27.0	108	77-120	
1,2-Dichlorobenzene	25.0	ND	26.4	106	80-124	
1,2-Dichloroethane	25.0	ND	27.8	111	75-120	
1,2-Dichloropropane	25.0	ND	26.9	108	76-120	
1,3-Dichlorobenzene	25.0	ND	26.1	105	77-120	
1,4-Dichlorobenzene	25.0	ND	26.0	104	78-124	
1,4-Dioxane	500	ND	499	100	50-150	
2-Butanone (MEK)	125	ND	140	112	57-140	
2-Hexanone	125	ND	140	112	65-127	
4-Methyl-2-pentanone (MIBK)	125	ND	133	107	71-125	
Acetone	125	ND	158	126	56-142	
Benzene	25.0	ND	26.1	104	71-124	
Bromochloromethane	25.0	ND	28.2	113	72-130	
Bromodichloromethane	25.0	ND	31.0	124	80-122	F1
Bromoform	25.0	ND	33.5	134	61-132	F1
Bromomethane	25.0	ND	22.9	92	55-144	
Carbon disulfide	25.0	ND	27.6	110	59-134	
Carbon tetrachloride	25.0	ND	33.3	133	72-134	
Chlorobenzene	25.0	ND	26.2	105	80-120	
Chloroethane	25.0	ND	22.8	91	69-136	
Chloroform	25.0	ND	27.1	108	73-127	
Chloromethane	25.0	ND	24.5	98	68-124	
cis-1,2-Dichloroethene	25.0	ND	27.2	109	74-124	
cis-1,3-Dichloropropene	25.0	ND	25.9	104	74-124	
Cyclohexane	25.0	ND	28.0	112	59-135	
Dibromochloromethane	25.0	ND	32.8	131	75-125	F1
Dichlorodifluoromethane	25.0	ND	21.1	85	59-135	
Ethylbenzene	25.0	ND	26.6	107	77-123	
Isopropylbenzene	25.0	ND	26.5	106	77-122	
Methyl acetate	50.0	ND	48.9	98	74-133	
Methyl tert-butyl ether	25.0	ND	25.5	102	77-120	
Methylcyclohexane	25.0	ND	27.8	111	68-134	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: T3150.D
 Lab ID: 480-156213-14 MS Client ID: 356023-MW6B MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methylene Chloride	25.0	ND	28.0	112	75-124	
Styrene	25.0	ND	26.0	104	80-120	
Tetrachloroethene	25.0	ND	30.0	120	74-122	
Toluene	25.0	ND	25.9	104	80-122	
trans-1,2-Dichloroethene	25.0	ND	28.4	114	73-127	
trans-1,3-Dichloropropene	25.0	ND	25.3	101	80-120	
Trichloroethene	25.0	ND	28.0	112	74-123	
Trichlorofluoromethane	25.0	ND	25.4	102	62-150	
Vinyl chloride	25.0	ND	25.7	103	65-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo

Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: T3151.D

Lab ID: 480-156213-14 MSD

Client ID: 356023-MW6B MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1-Trichloroethane	25.0	39.9	127	1	15	73-126	F1
1,1,2,2-Tetrachloroethane	25.0	26.2	105	0	15	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.1	112	2	20	61-148	
1,1,2-Trichloroethane	25.0	26.0	104	1	15	76-122	
1,1-Dichloroethane	25.0	27.9	112	0	20	77-120	
1,1-Dichloroethene	25.0	30.4	114	3	16	66-127	
1,2,3-Trichlorobenzene	25.0	28.0	112	1	20	75-123	
1,2,4-Trichlorobenzene	25.0	28.3	113	2	20	79-122	
1,2-Dibromo-3-Chloropropane	25.0	33.9	136	5	15	56-134	F1
1,2-Dibromoethane	25.0	27.6	110	2	15	77-120	
1,2-Dichlorobenzene	25.0	26.6	106	1	20	80-124	
1,2-Dichloroethane	25.0	27.3	109	2	20	75-120	
1,2-Dichloropropane	25.0	26.2	105	3	20	76-120	
1,3-Dichlorobenzene	25.0	26.4	105	1	20	77-120	
1,4-Dichlorobenzene	25.0	26.0	104	0	20	78-124	
1,4-Dioxane	500	559	112	11	20	50-150	
2-Butanone (MEK)	125	143	115	3	20	57-140	
2-Hexanone	125	144	115	3	15	65-127	
4-Methyl-2-pentanone (MIBK)	125	137	109	2	35	71-125	
Acetone	125	155	124	2	15	56-142	
Benzene	25.0	26.1	104	0	13	71-124	
Bromochloromethane	25.0	27.5	110	3	15	72-130	
Bromodichloromethane	25.0	31.3	125	1	15	80-122	F1
Bromoform	25.0	34.9	140	4	15	61-132	F1
Bromomethane	25.0	22.3	89	3	15	55-144	
Carbon disulfide	25.0	27.3	109	1	15	59-134	
Carbon tetrachloride	25.0	33.5	134	1	15	72-134	
Chlorobenzene	25.0	26.5	106	1	25	80-120	
Chloroethane	25.0	23.9	96	5	15	69-136	
Chloroform	25.0	26.8	107	1	20	73-127	
Chloromethane	25.0	23.9	96	2	15	68-124	
cis-1,2-Dichloroethene	25.0	26.7	107	2	15	74-124	
cis-1,3-Dichloropropene	25.0	26.0	104	0	15	74-124	
Cyclohexane	25.0	27.7	111	1	20	59-135	
Dibromochloromethane	25.0	33.7	135	3	15	75-125	F1
Dichlorodifluoromethane	25.0	20.7	83	2	20	59-135	
Ethylbenzene	25.0	27.2	109	2	15	77-123	
Isopropylbenzene	25.0	26.8	107	1	20	77-122	
Methyl acetate	50.0	48.9	98	0	20	74-133	
Methyl tert-butyl ether	25.0	25.6	103	0	37	77-120	
Methylcyclohexane	25.0	27.4	109	2	20	68-134	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: T3151.D

Lab ID: 480-156213-14 MSD Client ID: 356023-MW6B MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Methylene Chloride	25.0	26.9	108	4	15	75-124	
Styrene	25.0	26.5	106	2	20	80-120	
Tetrachloroethene	25.0	30.7	123	2	20	74-122	F1
Toluene	25.0	26.2	105	1	15	80-122	
trans-1,2-Dichloroethene	25.0	28.7	115	1	20	73-127	
trans-1,3-Dichloropropene	25.0	25.8	103	2	15	80-120	
Trichloroethene	25.0	27.0	108	3	16	74-123	
Trichlorofluoromethane	25.0	25.2	101	1	20	62-150	
Vinyl chloride	25.0	25.6	102	1	15	65-133	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: T3129.D Lab Sample ID: MB 480-482537/7
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: HP5975T Date Analyzed: 07/17/2019 21:43
 GC Column: ZB-624 (20) ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-482537/5	T3127.D	07/17/2019 20:54
356023-MW8B	480-156213-1	T3130.D	07/17/2019 22:23
356023-MW8BD	480-156213-2	T3131.D	07/17/2019 22:47
356023-MW16	480-156213-3	T3132.D	07/17/2019 23:11
356023-MW14B 150	480-156213-4	T3133.D	07/17/2019 23:35
356023-MW12B 190	480-156213-5	T3134.D	07/17/2019 23:59
356023-MW11B	480-156213-6	T3135.D	07/18/2019 00:23
356023-MW11C	480-156213-7	T3136.D	07/18/2019 00:47
356023-MW1801	480-156213-8	T3137.D	07/18/2019 01:11
356023-MW1802	480-156213-9	T3138.D	07/18/2019 01:35
356023-MW1803	480-156213-10	T3139.D	07/18/2019 01:59
356023-MW5B	480-156213-11	T3140.D	07/18/2019 02:23
356023-ERT4	480-156213-12	T3141.D	07/18/2019 02:47
356023-MW4	480-156213-13	T3142.D	07/18/2019 03:11
356023-MW6B	480-156213-14	T3143.D	07/18/2019 03:34
356023-MW15B	480-156213-15	T3144.D	07/18/2019 03:58
356023-EB1	480-156213-16	T3145.D	07/18/2019 04:22
356023-MW1B	480-156213-17	T3146.D	07/18/2019 04:46
356023-MW5R	480-156213-18	T3147.D	07/18/2019 05:09
356023-MW7R	480-156213-19	T3148.D	07/18/2019 05:34
356023-TB1	480-156213-20	T3149.D	07/18/2019 05:57
356023-MW6B MS	480-156213-14 MS	T3150.D	07/18/2019 06:21
356023-MW6B MSD	480-156213-14 MSD	T3151.D	07/18/2019 06:45

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: T2785.D BFB Injection Date: 07/08/2019
 Instrument ID: HP5975T BFB Injection Time: 13:56
 Analysis Batch No.: 481153

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.2	
75	30.0 - 60.0 % of mass 95	48.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.9	(1.1) 1
174	50.0 - 120.00 % of mass 95	88.3	
175	5.0 - 9.0 % of mass 174	6.7	(7.5) 1
176	95.0 - 101.0 % of mass 174	87.8	(99.5) 1
177	5.0 - 9.0 % of mass 176	6.1	(7.0) 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
	IC 480-481153/5	T2787.D	07/08/2019	14:46
	IC 480-481153/6	T2788.D	07/08/2019	15:10
	IC 480-481153/7	T2789.D	07/08/2019	15:35
	IC 480-481153/8	T2790.D	07/08/2019	15:59
	IC 480-481153/9	T2791.D	07/08/2019	16:23
	ICIS 480-481153/10	T2792.D	07/08/2019	16:47
	IC 480-481153/11	T2793.D	07/08/2019	17:11
	IC 480-481153/12	T2794.D	07/08/2019	17:35

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: T3124.D BFB Injection Date: 07/17/2019
 Instrument ID: HP5975T BFB Injection Time: 19:36
 Analysis Batch No.: 482537

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.2
75	30.0 - 60.0 % of mass 95	48.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.9 (1.0) 1
174	50.0 - 120.00 % of mass 95	90.5
175	5.0 - 9.0 % of mass 174	6.6 (7.3) 1
176	95.0 - 101.0 % of mass 174	90.5 (100.0) 1
177	5.0 - 9.0 % of mass 176	6.1 (6.8) 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 480-482537/3	T3125.D	07/17/2019	20:06
	LCS 480-482537/5	T3127.D	07/17/2019	20:54
	MB 480-482537/7	T3129.D	07/17/2019	21:43
356023-MW8B	480-156213-1	T3130.D	07/17/2019	22:23
356023-MW8BD	480-156213-2	T3131.D	07/17/2019	22:47
356023-MW16	480-156213-3	T3132.D	07/17/2019	23:11
356023-MW14B 150	480-156213-4	T3133.D	07/17/2019	23:35
356023-MW12B 190	480-156213-5	T3134.D	07/17/2019	23:59
356023-MW11B	480-156213-6	T3135.D	07/18/2019	00:23
356023-MW11C	480-156213-7	T3136.D	07/18/2019	00:47
356023-MW1801	480-156213-8	T3137.D	07/18/2019	01:11
356023-MW1802	480-156213-9	T3138.D	07/18/2019	01:35
356023-MW1803	480-156213-10	T3139.D	07/18/2019	01:59
356023-MW5B	480-156213-11	T3140.D	07/18/2019	02:23
356023-ERT4	480-156213-12	T3141.D	07/18/2019	02:47
356023-MW4	480-156213-13	T3142.D	07/18/2019	03:11
356023-MW6B	480-156213-14	T3143.D	07/18/2019	03:34
356023-MW15B	480-156213-15	T3144.D	07/18/2019	03:58
356023-EB1	480-156213-16	T3145.D	07/18/2019	04:22
356023-MW1B	480-156213-17	T3146.D	07/18/2019	04:46
356023-MW5R	480-156213-18	T3147.D	07/18/2019	05:09
356023-MW7R	480-156213-19	T3148.D	07/18/2019	05:34
356023-TB1	480-156213-20	T3149.D	07/18/2019	05:57
356023-MW6B MS	480-156213-14 MS	T3150.D	07/18/2019	06:21
356023-MW6B MSD	480-156213-14 MSD	T3151.D	07/18/2019	06:45

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: ICIS 480-481153/10 Date Analyzed: 07/08/2019 16:47
 Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm)
 Lab File ID (Standard): T2792.D Heated Purge: (Y/N) N
 Calibration ID: 37204

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	167087	4.68	719413	6.98	401726	8.83
UPPER LIMIT	334174	5.18	1438826	7.48	803452	9.33
LOWER LIMIT	83544	4.18	359707	6.48	200863	8.33
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCVIS 480-482537/3	181521	4.69	784358	6.98	452684	8.83

FB = Fluorobenzene (IS)
 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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: CCVIS 480-482537/3 Date Analyzed: 07/17/2019 20:06
 Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm)
 Lab File ID (Standard): T3125.D Heated Purge: (Y/N) N
 Calibration ID: 37223

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	181521	4.69	784358	6.98	452684	8.83	
UPPER LIMIT	363042	5.19	1568716	7.48	905368	9.33	
LOWER LIMIT	90761	4.19	392179	6.48	226342	8.33	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-482537/5		179313	4.69	764667	6.98	443129	8.83
MB 480-482537/7		172717	4.68	753670	6.98	449206	8.83
480-156213-1	356023-MW8B	169613	4.68	745526	6.98	440273	8.83
480-156213-2	356023-MW8BD	166325	4.68	734693	6.98	437109	8.83
480-156213-3	356023-MW16	166999	4.69	732458	6.98	433138	8.83
480-156213-4	356023-MW14B 150	168917	4.68	736767	6.98	436240	8.83
480-156213-5	356023-MW12B 190	165118	4.68	745393	6.98	434549	8.83
480-156213-6	356023-MW11B	164666	4.69	746971	6.98	439942	8.83
480-156213-7	356023-MW11C	166625	4.68	747080	6.98	428634	8.83
480-156213-8	356023-MW1801	166523	4.69	743289	6.98	433147	8.83
480-156213-9	356023-MW1802	167637	4.69	745253	6.98	434007	8.83
480-156213-10	356023-MW1803	166477	4.68	731088	6.98	439443	8.83
480-156213-11	356023-MW5B	164345	4.68	716816	6.98	434282	8.83
480-156213-12	356023-ERT4	164679	4.69	736696	6.98	436767	8.83
480-156213-13	356023-MW4	169040	4.68	735683	6.98	433348	8.83
480-156213-14	356023-MW6B	169140	4.68	740637	6.98	431582	8.83
480-156213-15	356023-MW15B	165617	4.69	742540	6.98	431417	8.83
480-156213-16	356023-EB1	169585	4.68	743325	6.98	432244	8.83
480-156213-17	356023-MW1B	168574	4.68	741778	6.98	438143	8.83
480-156213-18	356023-MW5R	164880	4.68	741272	6.98	432045	8.83
480-156213-19	356023-MW7R	166429	4.68	737594	6.98	428698	8.83
480-156213-20	356023-TB1	168946	4.68	745831	6.98	435357	8.83
480-156213-14 MS	356023-MW6B MS	168717	4.68	753814	6.98	436100	8.83
480-156213-14 MSD	356023-MW6B MSD	171331	4.68	749405	6.98	438666	8.83

FB = Fluorobenzene (IS)
 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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8B Lab Sample ID: 480-156213-1
 Matrix: Water Lab File ID: T3130.D
 Analysis Method: 8260C Date Collected: 07/09/2019 13:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 22:23
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8B Lab Sample ID: 480-156213-1
 Matrix: Water Lab File ID: T3130.D
 Analysis Method: 8260C Date Collected: 07/09/2019 13:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 22:23
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3130.D
 Lims ID: 480-156213-D-1
 Client ID: 356023-MW8B
 Sample Type: Client
 Inject. Date: 17-Jul-2019 22:23:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-1
 Misc. Info.: 480-0082700-009
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 04:59:49 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 09:48:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.678	4.688	-0.010	99	169613	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	85	745526	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	440273	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	93	244207	26.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	272864	25.3	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	92	885309	24.2	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	326617	26.6	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.336	2.346	-0.010	96	1914	0.2460	
23 Acetone	43	2.450	2.460	-0.010	74	2326	0.8875	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	86	6203	0.1790	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	91	3493	0.2351	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3130.D

Injection Date: 17-Jul-2019 22:23:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-1

Lab Sample ID: 480-156213-1

Worklist Smp#: 9

Client ID: 356023-MW8B

Purge Vol: 5.000 mL

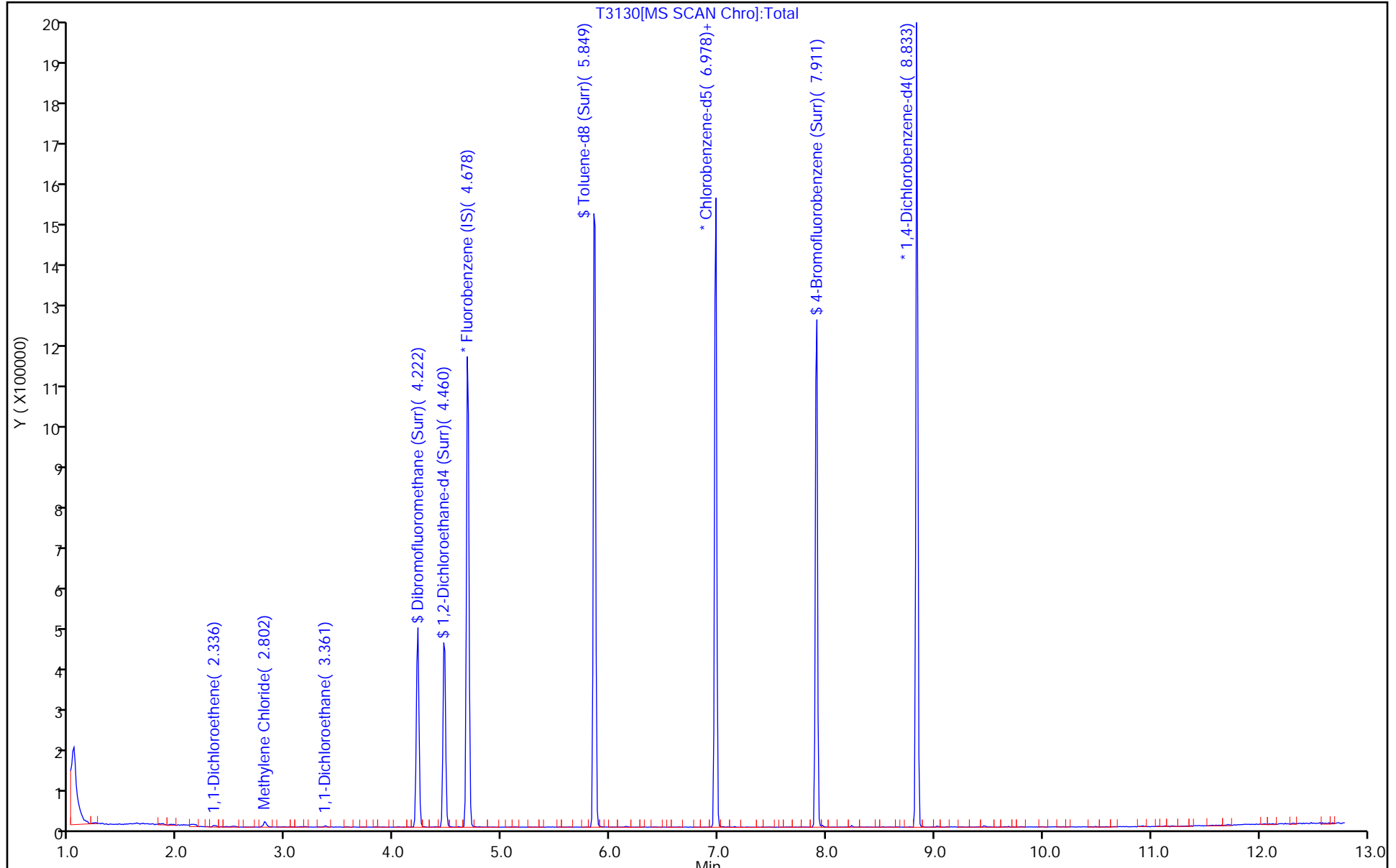
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8BD Lab Sample ID: 480-156213-2
 Matrix: Water Lab File ID: T3131.D
 Analysis Method: 8260C Date Collected: 07/09/2019 13:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 22:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8BD Lab Sample ID: 480-156213-2
 Matrix: Water Lab File ID: T3131.D
 Analysis Method: 8260C Date Collected: 07/09/2019 13:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 22:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3131.D
 Lims ID: 480-156213-D-2
 Client ID: 356023-MW8BD
 Sample Type: Client
 Inject. Date: 17-Jul-2019 22:47:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-2
 Misc. Info.: 480-0082700-010
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 09:52:48 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 09:52:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	166325	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	734693	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	437109	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	93	242162	26.3	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	267896	25.4	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	874711	24.3	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	320444	26.5	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96		2.346				ND	Ua
23 Acetone	43	2.460	2.460	0.000	96	5201	2.02	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	92	6784	0.2574	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	93	3816	0.2619	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3131.D

Injection Date: 17-Jul-2019 22:47:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-2

Lab Sample ID: 480-156213-2

Worklist Smp#: 10

Client ID: 356023-MW8BD

Purge Vol: 5.000 mL

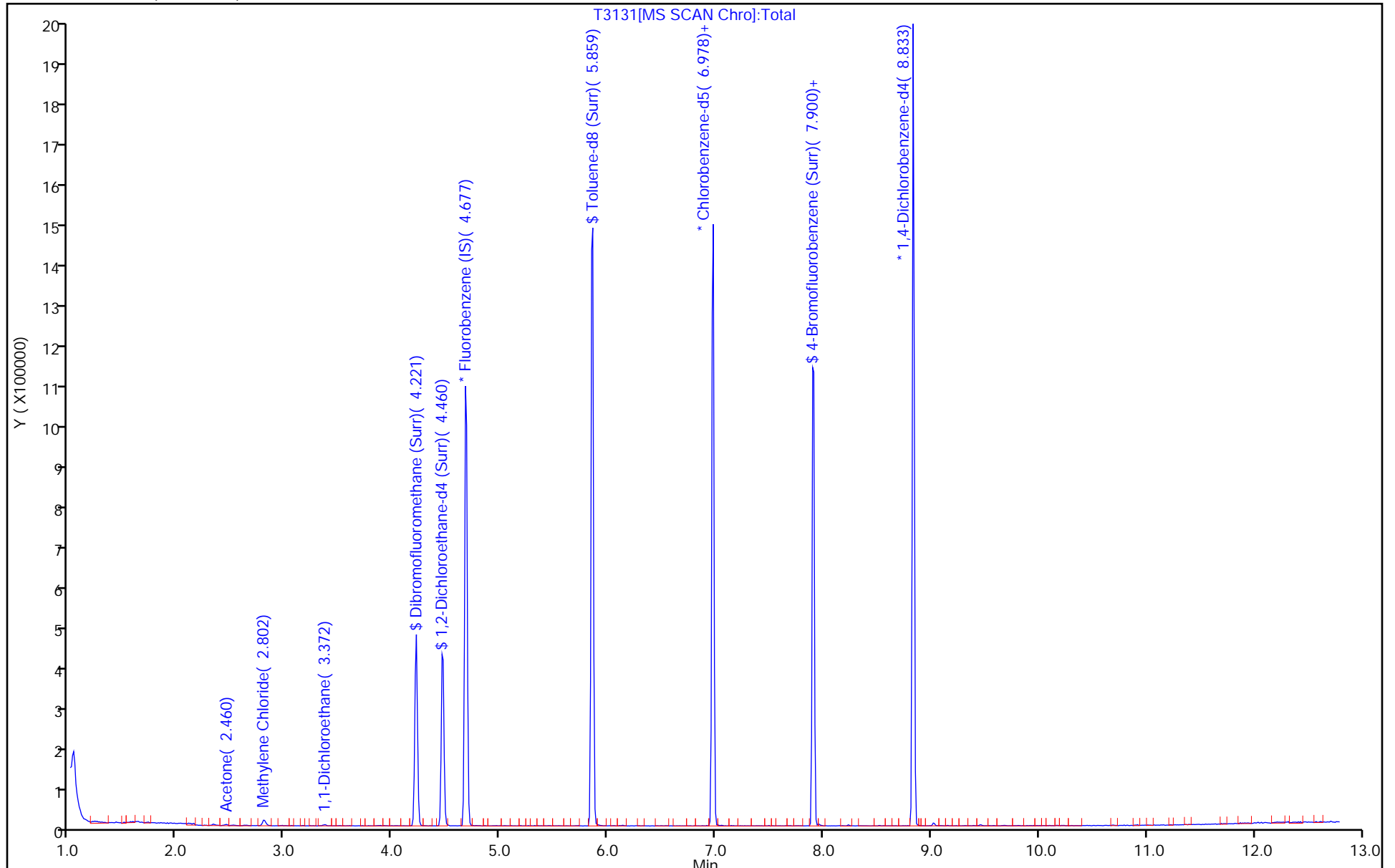
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW16 Lab Sample ID: 480-156213-3
 Matrix: Water Lab File ID: T3132.D
 Analysis Method: 8260C Date Collected: 07/09/2019 17:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 23:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	13		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	2.2		1.0	0.38
75-35-4	1,1-Dichloroethene	10		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW16 Lab Sample ID: 480-156213-3
 Matrix: Water Lab File ID: T3132.D
 Analysis Method: 8260C Date Collected: 07/09/2019 17:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 23:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	1.3		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3132.D
 Lims ID: 480-156213-D-3
 Client ID: 356023-MW16
 Sample Type: Client
 Inject. Date: 17-Jul-2019 23:11:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-3
 Misc. Info.: 480-0082700-011
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 09:53:37 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 09:53:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	166999	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	732458	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	433138	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	94	237854	25.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	261356	24.6	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	873278	24.3	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	316723	26.3	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	98	80240	10.5	
23 Acetone	43	2.449	2.460	-0.011	68	2557	0.99	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	93	5715	0.1353	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	97	31824	2.18	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	Ua
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.190	4.190	0.000	98	149059	13.1	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	94	11990	1.28	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3132.D

Injection Date: 17-Jul-2019 23:11:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-3

Lab Sample ID: 480-156213-3

Worklist Smp#: 11

Client ID: 356023-MW16

Purge Vol: 5.000 mL

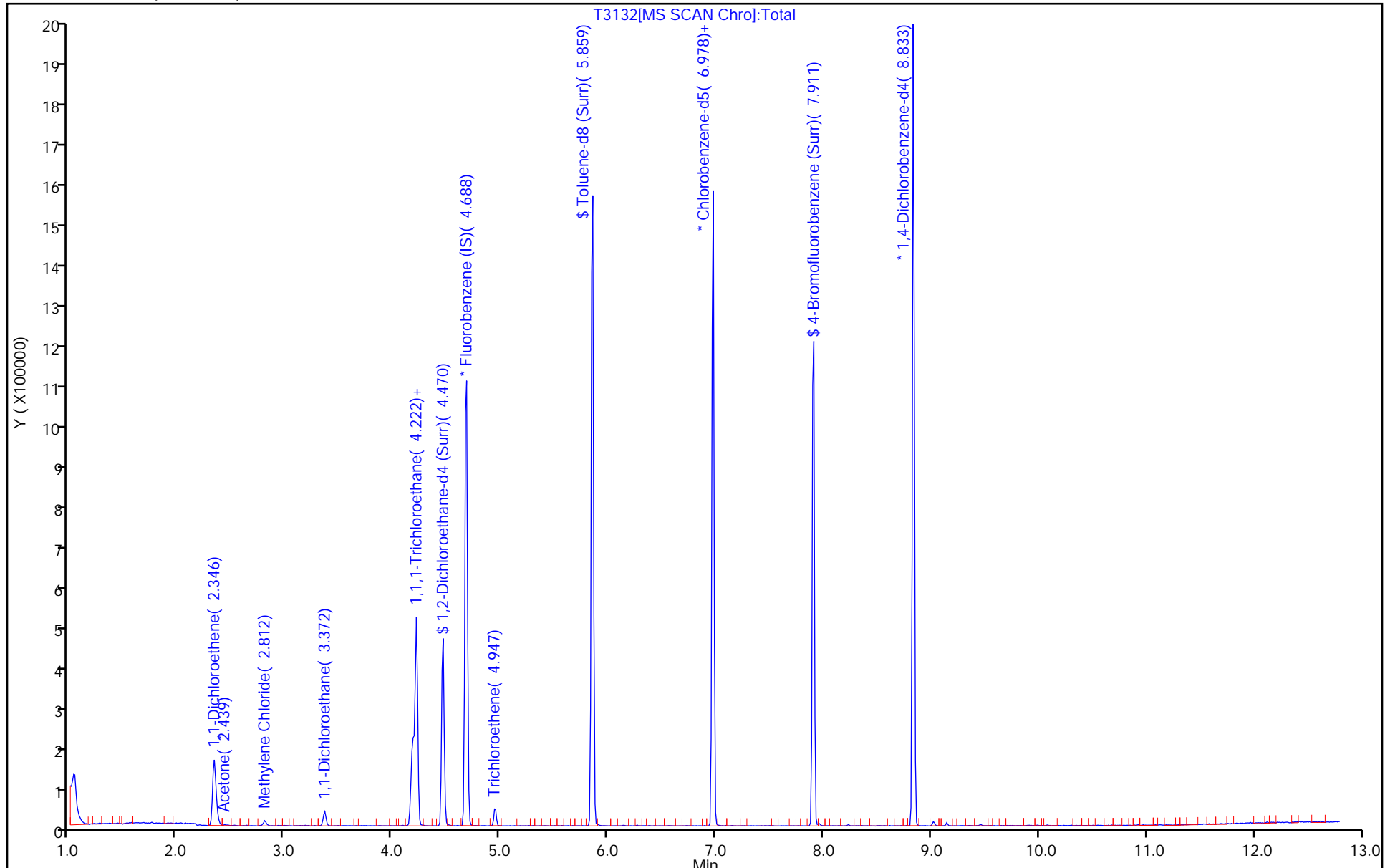
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3132.D

Injection Date: 17-Jul-2019 23:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-3

Lab Sample ID: 480-156213-3

Client ID: 356023-MW16

Operator ID: AEM

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

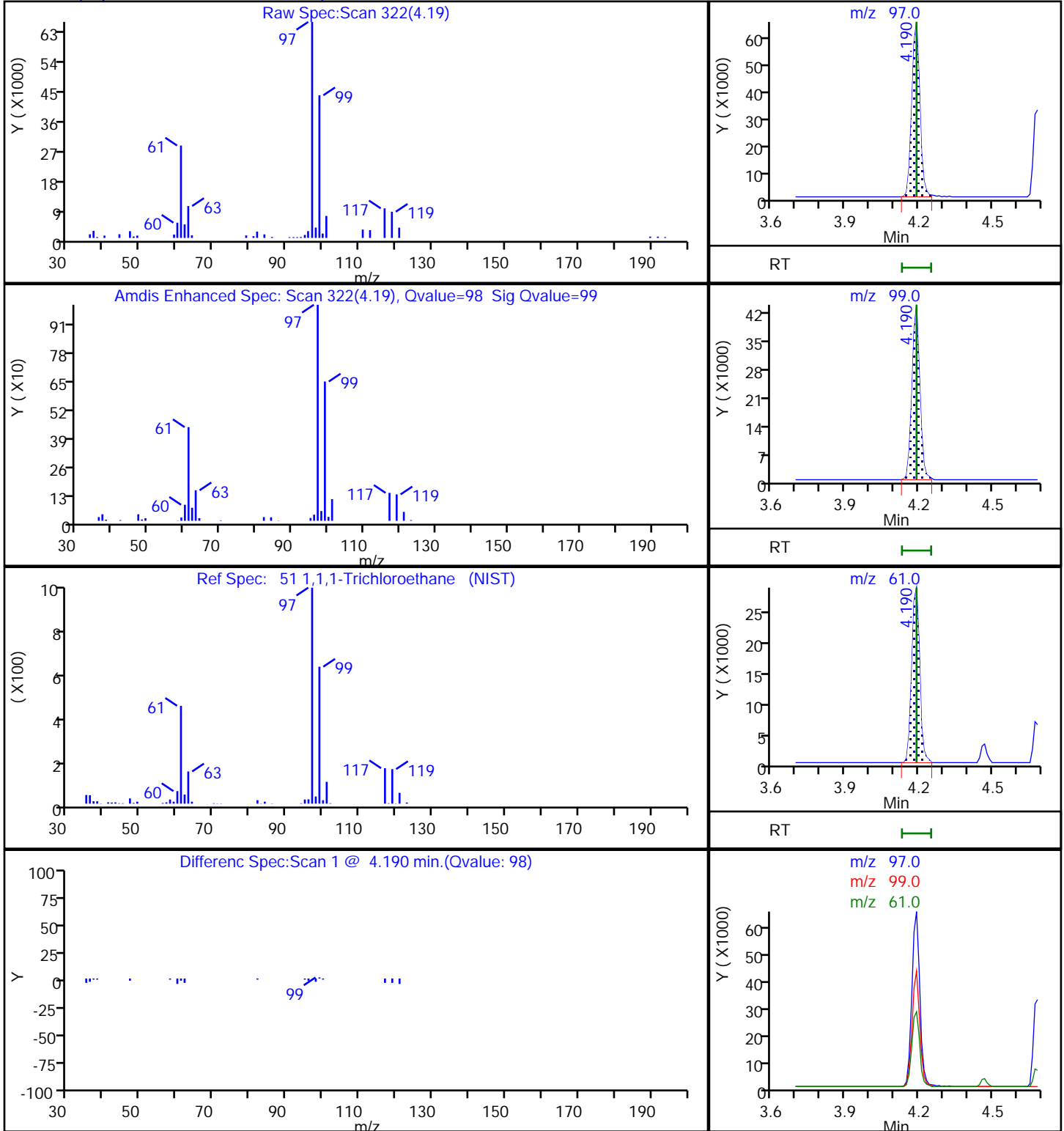
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3132.D

Injection Date: 17-Jul-2019 23:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-3

Lab Sample ID: 480-156213-3

Client ID: 356023-MW16

Operator ID: AEM

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

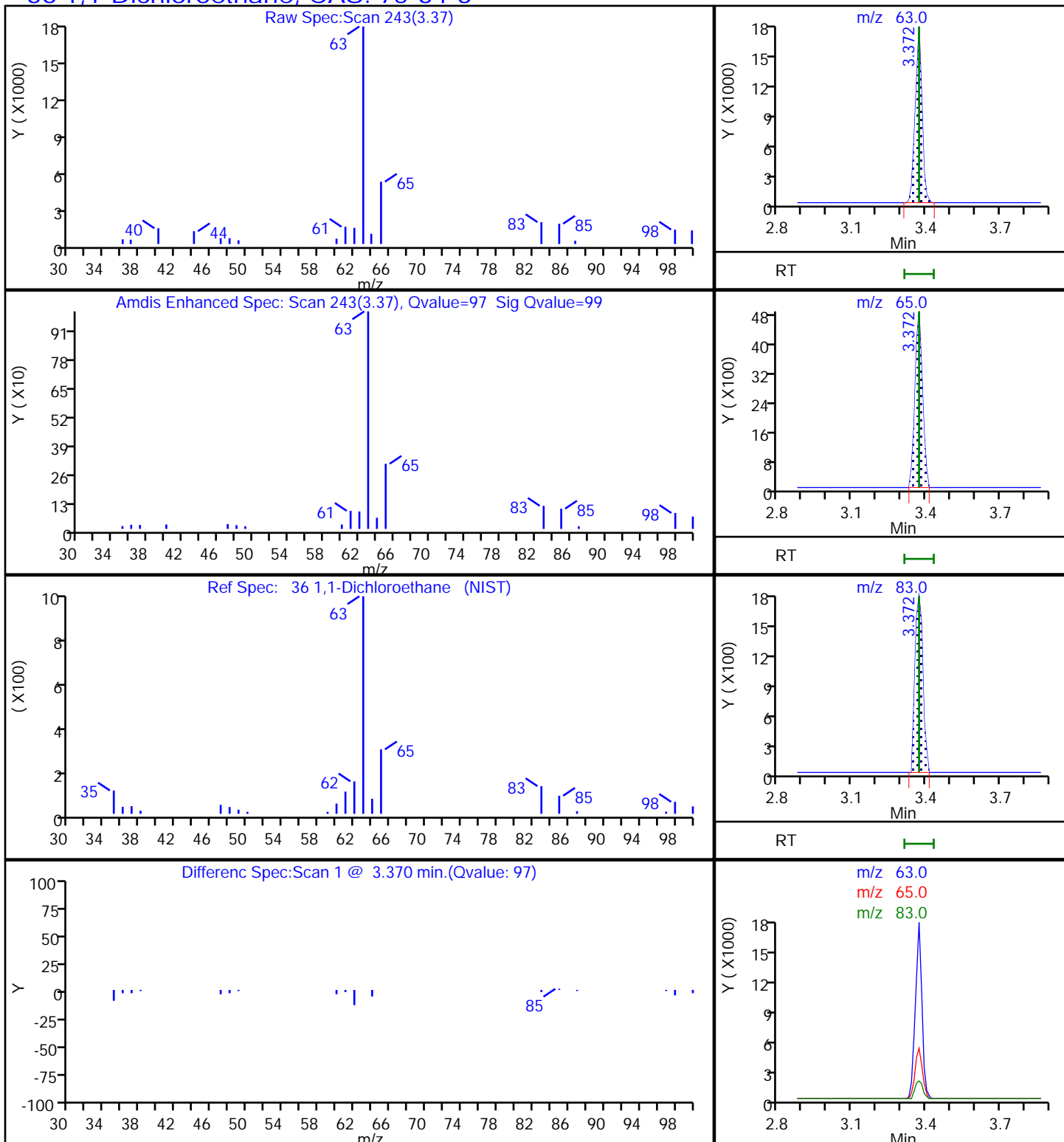
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3132.D

Injection Date: 17-Jul-2019 23:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-3

Lab Sample ID: 480-156213-3

Client ID: 356023-MW16

Operator ID: AEM

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

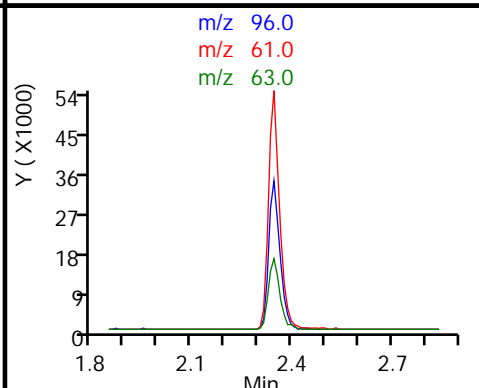
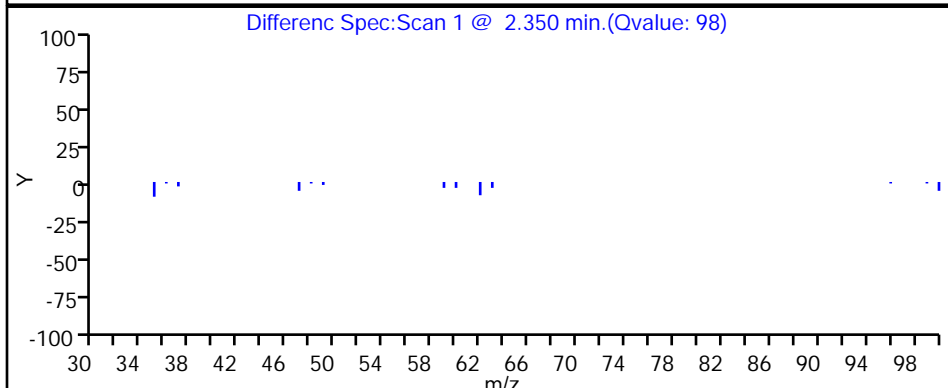
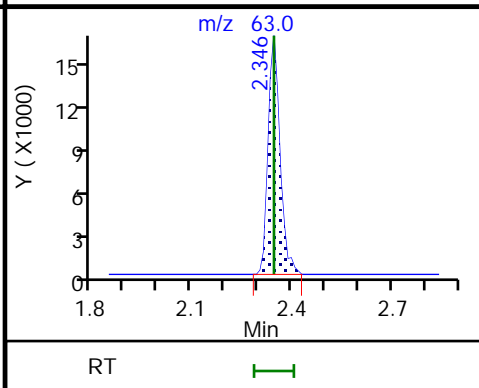
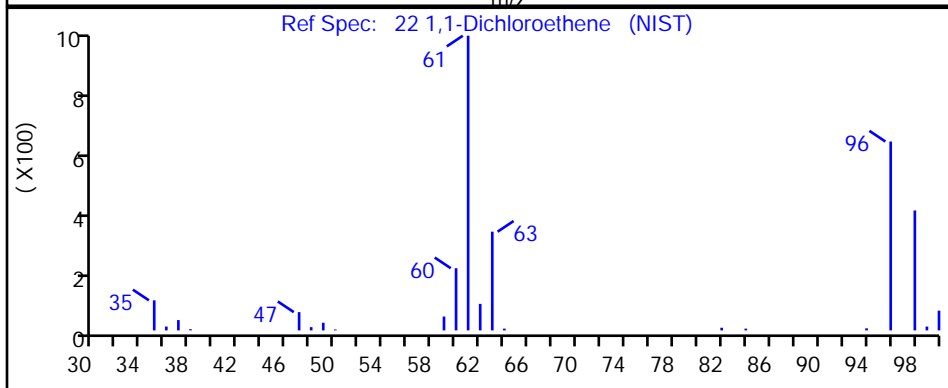
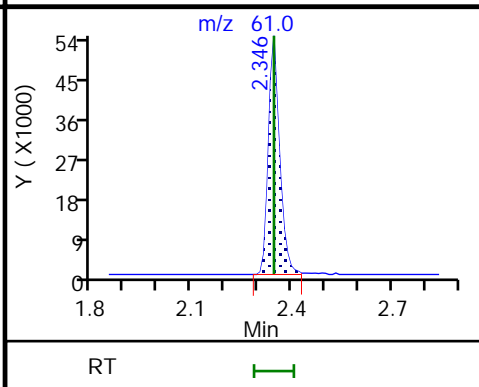
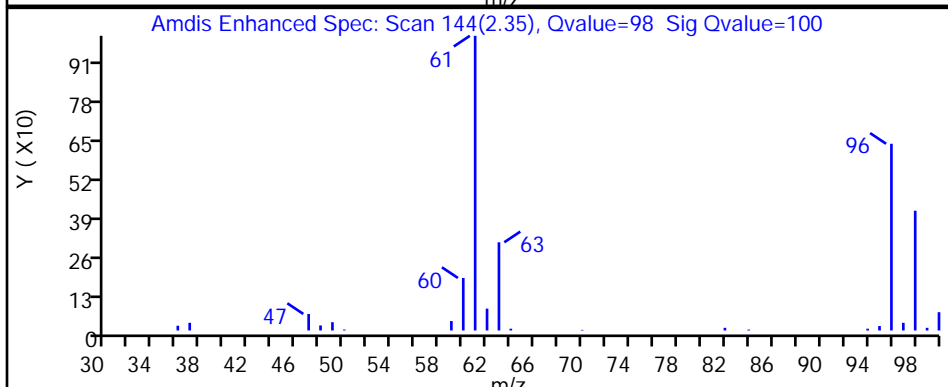
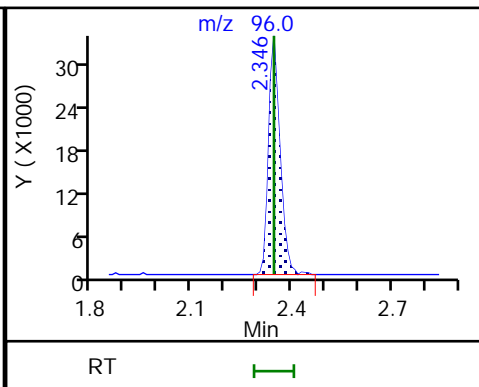
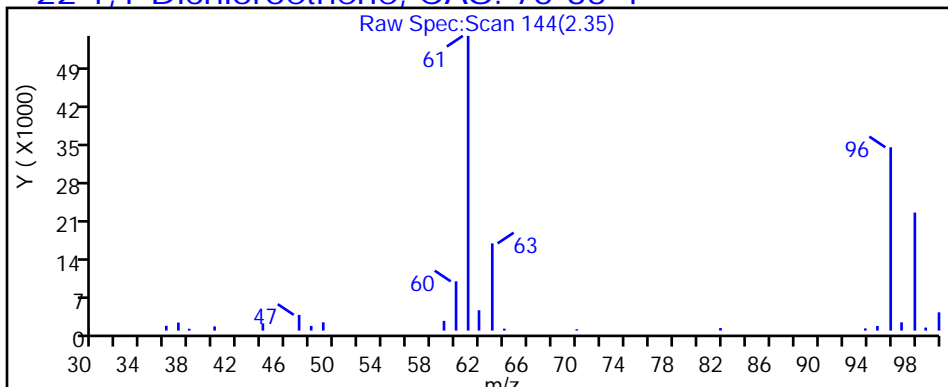
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3132.D

Injection Date: 17-Jul-2019 23:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-3

Lab Sample ID: 480-156213-3

Client ID: 356023-MW16

Operator ID: AEM

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

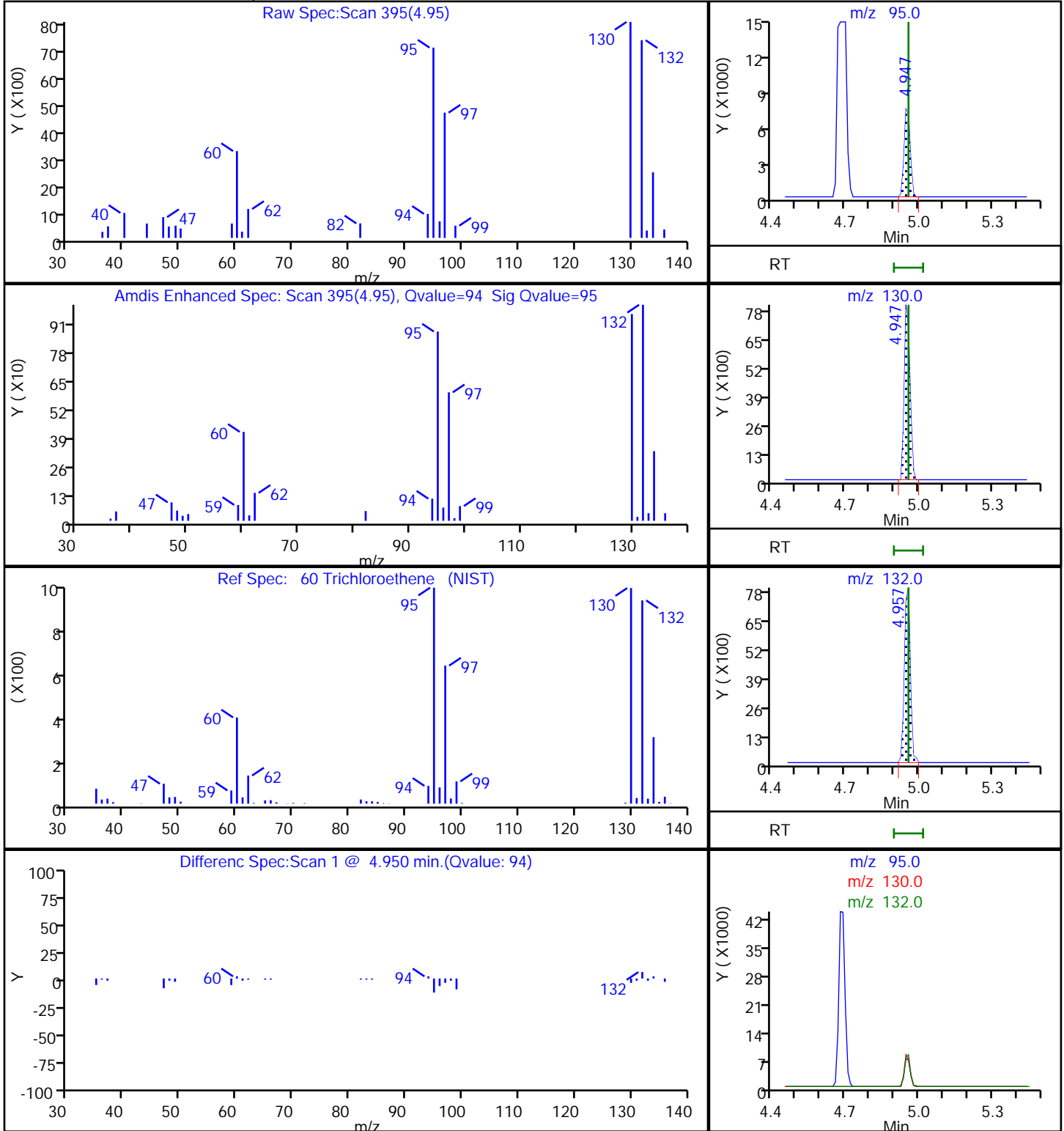
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW14B 150 Lab Sample ID: 480-156213-4
 Matrix: Water Lab File ID: T3133.D
 Analysis Method: 8260C Date Collected: 07/09/2019 11:50
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 23:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	1.0		1.0	0.38
75-35-4	1,1-Dichloroethene	0.66	J	1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW14B 150 Lab Sample ID: 480-156213-4
 Matrix: Water Lab File ID: T3133.D
 Analysis Method: 8260C Date Collected: 07/09/2019 11:50
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 23:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3133.D
 Lims ID: 480-156213-D-4
 Client ID: 356023-MW14B 150
 Sample Type: Client
 Inject. Date: 17-Jul-2019 23:35:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-4
 Misc. Info.: 480-0082700-012
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 10:06:41 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 10:06:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	168917	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	736767	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	436240	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	94	239704	25.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	272575	25.4	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	863458	23.9	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	323676	26.7	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	U
14 Vinyl chloride	62		1.403				ND	U
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.335	2.335	-0.011	95	5106	0.6591	
23 Acetone	43	2.449	2.460	-0.011	78	2705	1.04	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	92	6493	0.2137	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	96	15390	1.04	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3133.D

Injection Date: 17-Jul-2019 23:35:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-4

Lab Sample ID: 480-156213-4

Worklist Smp#: 12

Client ID: 356023-MW14B 150

Purge Vol: 5.000 mL

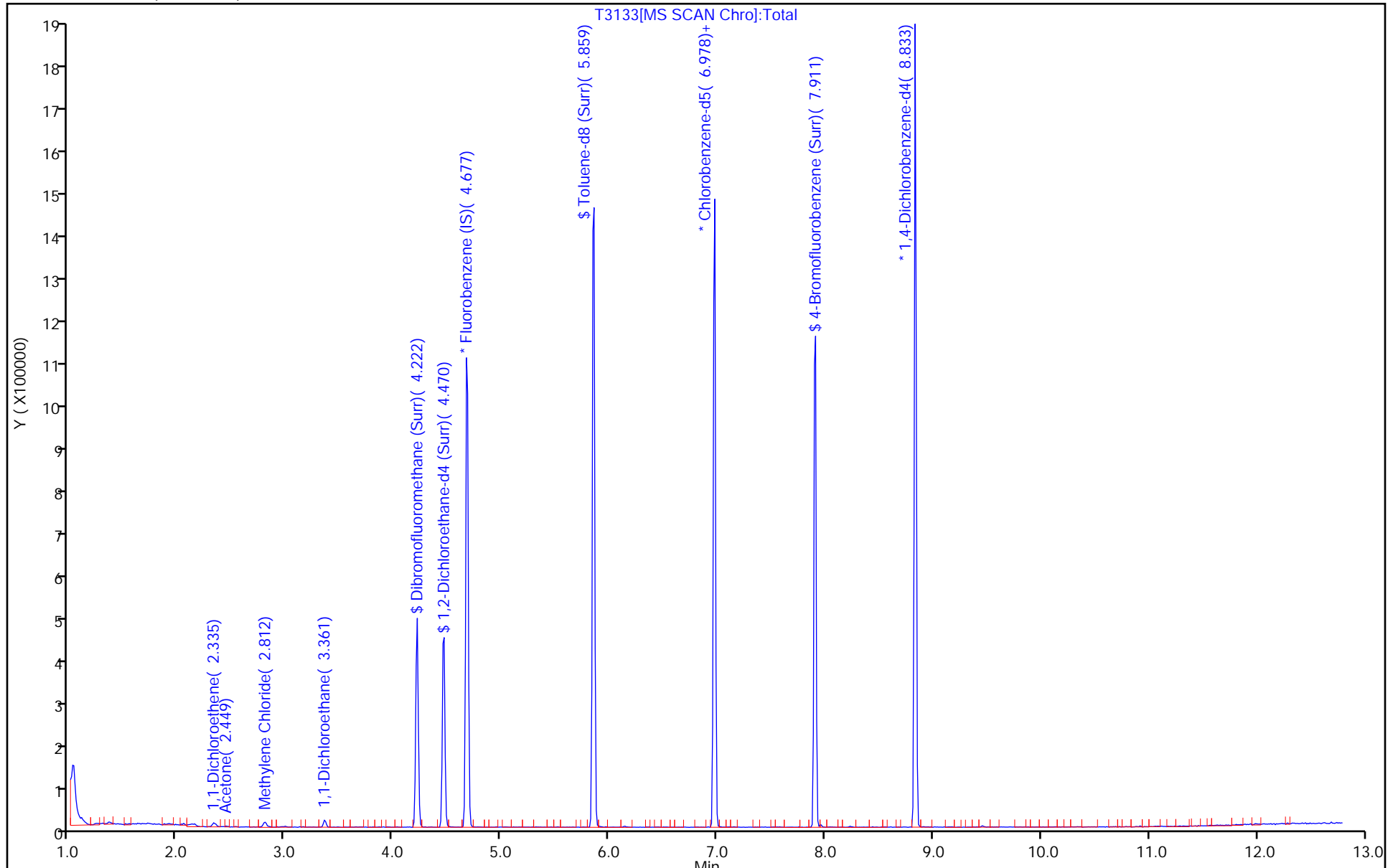
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3133.D

Injection Date: 17-Jul-2019 23:35:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-4

Lab Sample ID: 480-156213-4

Client ID: 356023-MW14B 150

Operator ID: AEM

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

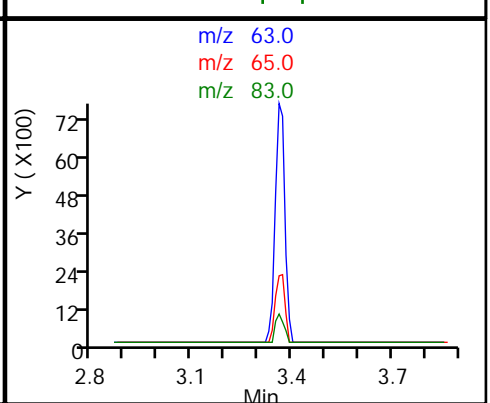
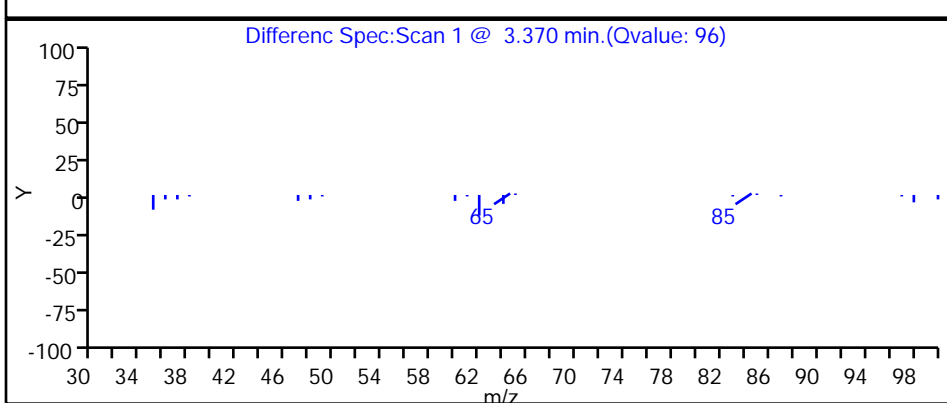
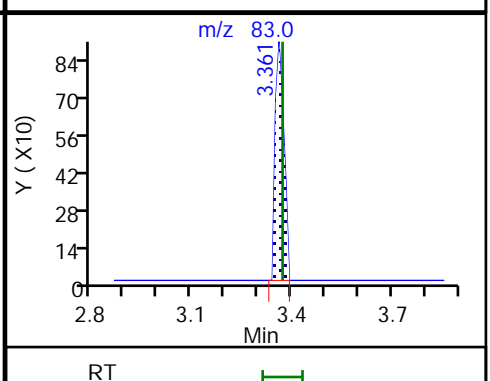
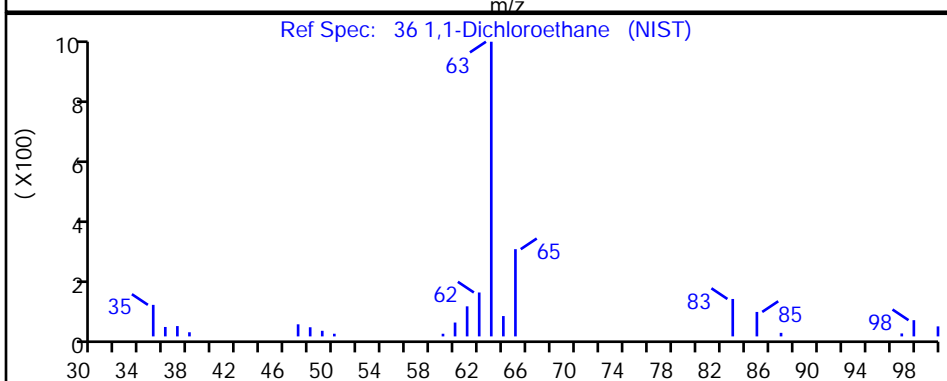
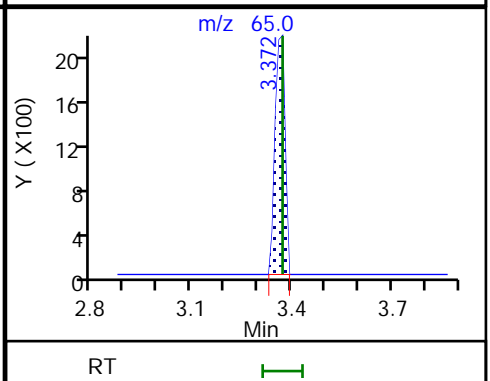
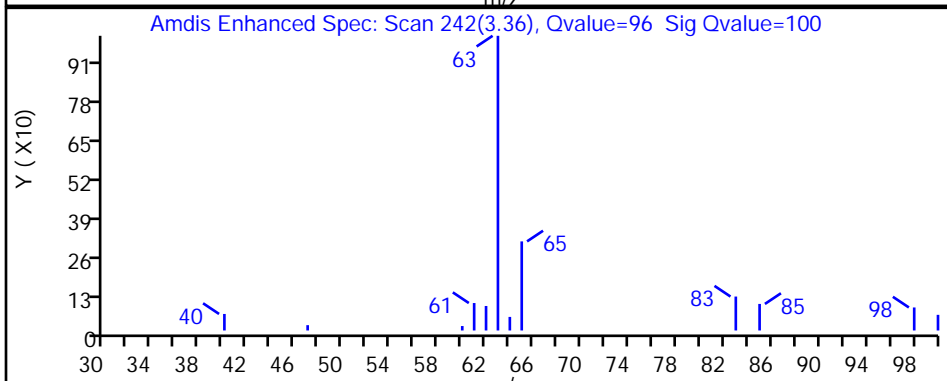
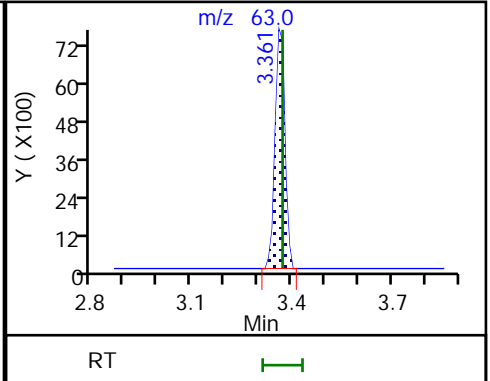
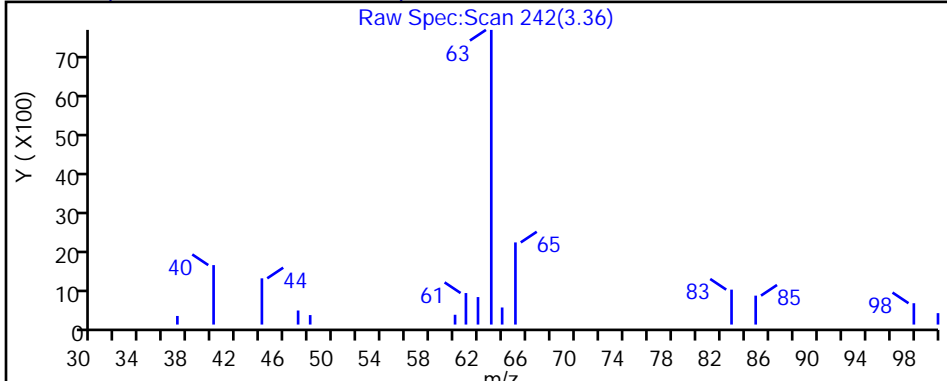
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3133.D

Injection Date: 17-Jul-2019 23:35:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-4

Lab Sample ID: 480-156213-4

Client ID: 356023-MW14B 150

Operator ID: AEM

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

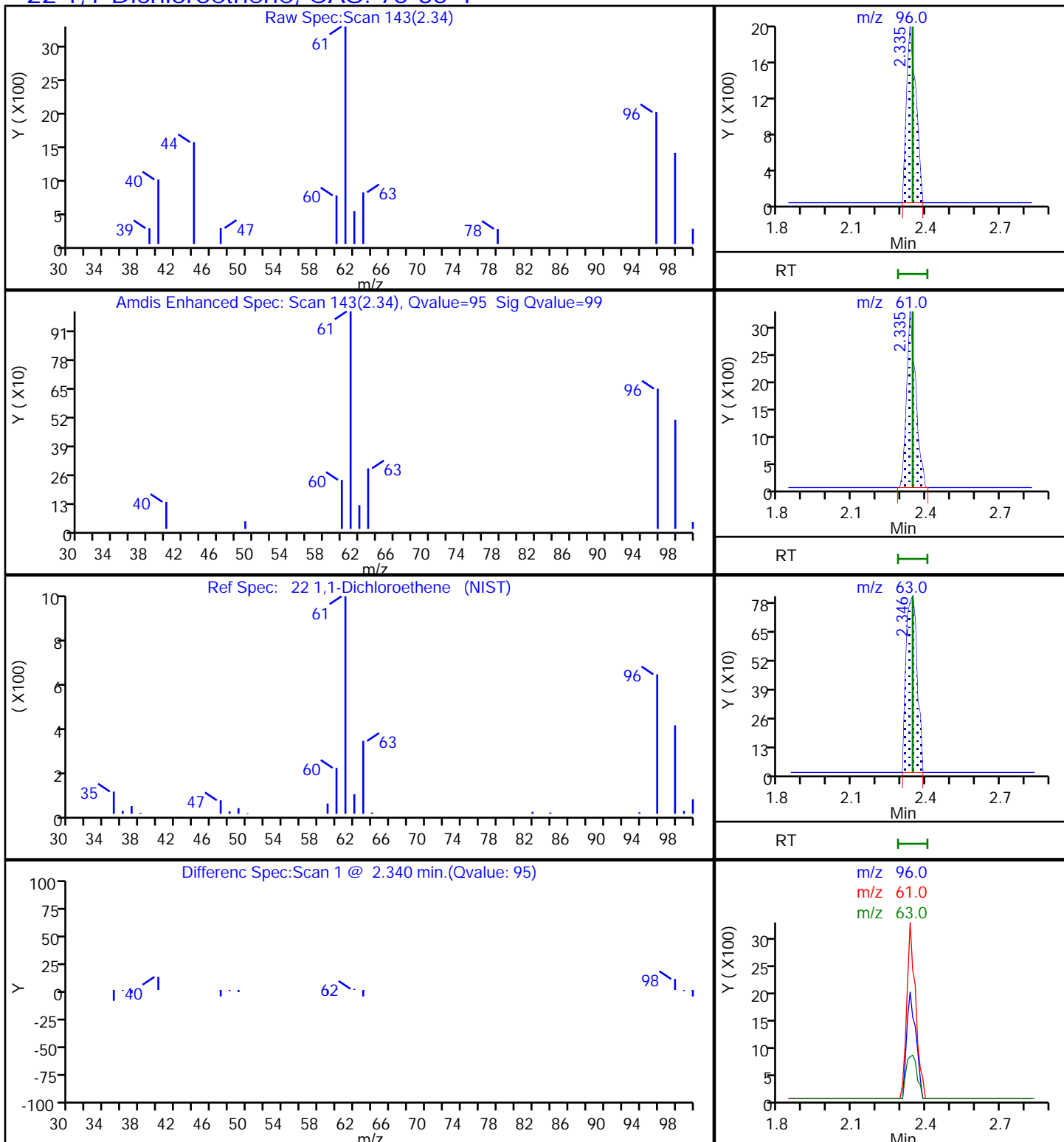
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

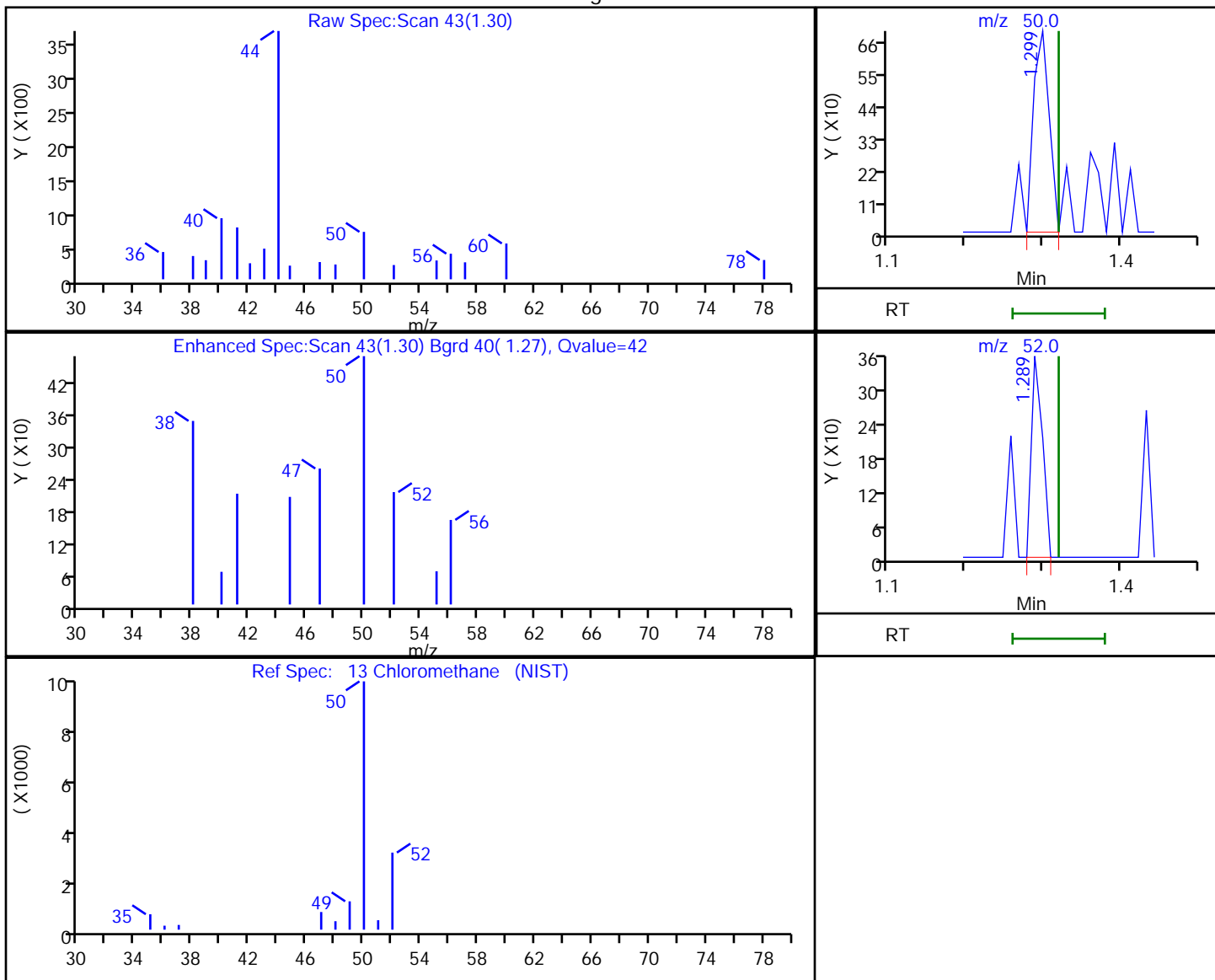


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3133.D
 Injection Date: 17-Jul-2019 23:35:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-4 Lab Sample ID: 480-156213-4
 Client ID: 356023-MW14B 150
 Operator ID: AEM ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

13 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
1.30	50.00	980	0.094000
1.29	52.00	350	

Reviewer: farrellr, 18-Jul-2019 10:06:04

Audit Action: Marked Compound Undetected

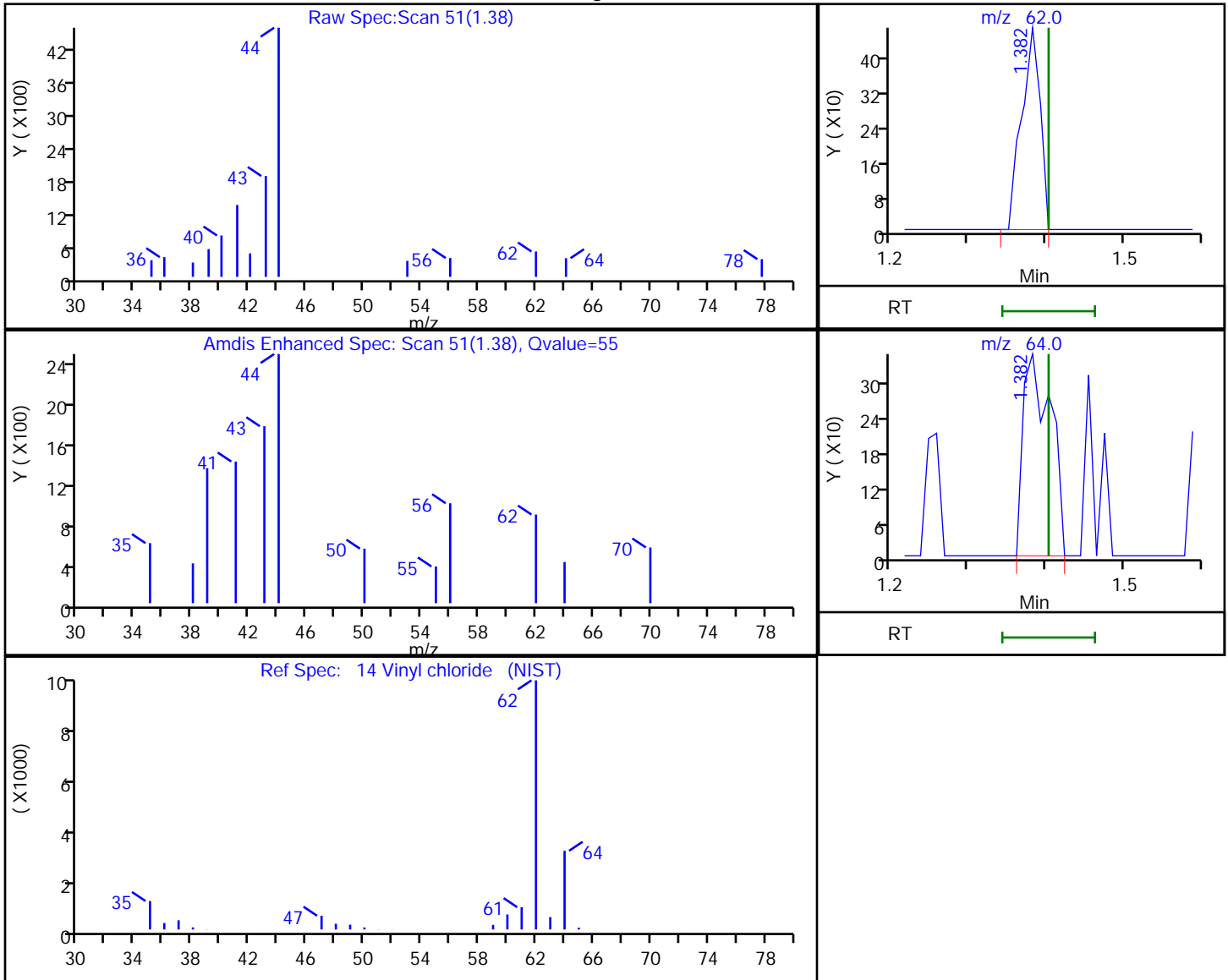
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3133.D
Injection Date: 17-Jul-2019 23:35:30 Instrument ID: HP5975T
Lims ID: 480-156213-D-4 Lab Sample ID: 480-156213-4
Client ID: 356023-MW14B 150
Operator ID: AEM ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.38	62.00	779	0.072820
1.38	64.00	851	

Reviewer: farrellr, 18-Jul-2019 10:06:06

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW12B 190 Lab Sample ID: 480-156213-5
 Matrix: Water Lab File ID: T3134.D
 Analysis Method: 8260C Date Collected: 07/09/2019 17:27
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 23:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	5.3		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	10		1.0	0.38
75-35-4	1,1-Dichloroethene	15		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW12B 190 Lab Sample ID: 480-156213-5
 Matrix: Water Lab File ID: T3134.D
 Analysis Method: 8260C Date Collected: 07/09/2019 17:27
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 23:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	3.5		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3134.D
 Lims ID: 480-156213-D-5
 Client ID: 356023-MW12B 190
 Sample Type: Client
 Inject. Date: 17-Jul-2019 23:59:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-5
 Misc. Info.: 480-0082700-013
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 12:03:03 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 12:03:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	165118	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	745393	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	434549	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	93	244431	26.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	274598	26.2	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	875329	23.9	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	320735	26.2	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.335	2.335	-0.011	99	116076	15.3	
23 Acetone	43	2.460	2.460	0.000	98	4578	1.79	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	86	6114	0.1875	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	96	150154	10.4	
43 cis-1,2-Dichloroethene	96		3.838				ND	Ua
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	Ua
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	98	59291	5.29	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62	4.522	4.532	-0.010	95	2281	0.1866	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	94	32572	3.52	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3134.D

Injection Date: 17-Jul-2019 23:59:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-5

Lab Sample ID: 480-156213-5

Worklist Smp#: 13

Client ID: 356023-MW12B 190

Purge Vol: 5.000 mL

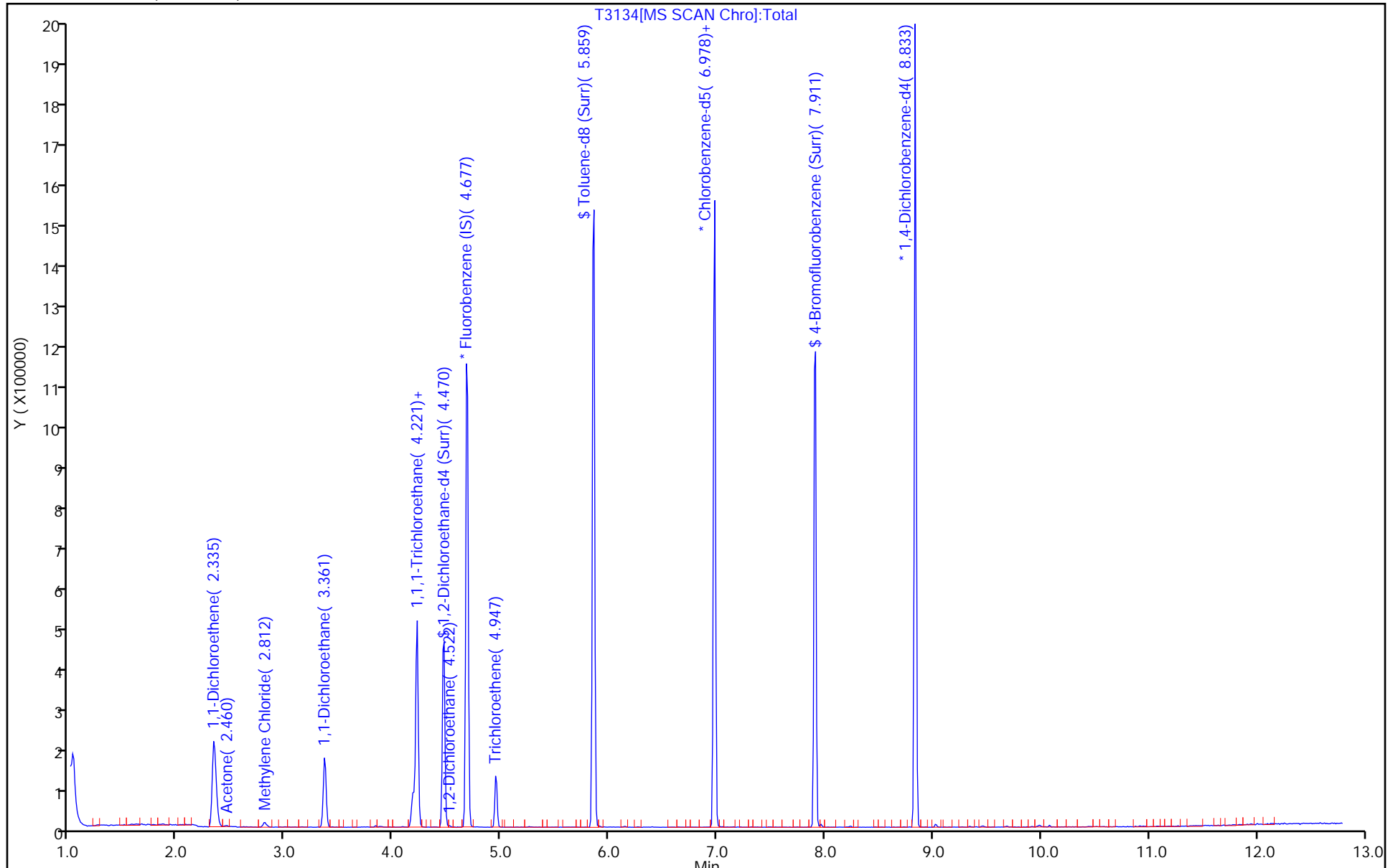
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3134.D

Injection Date: 17-Jul-2019 23:59:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-5

Lab Sample ID: 480-156213-5

Client ID: 356023-MW12B 190

Operator ID: AEM

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

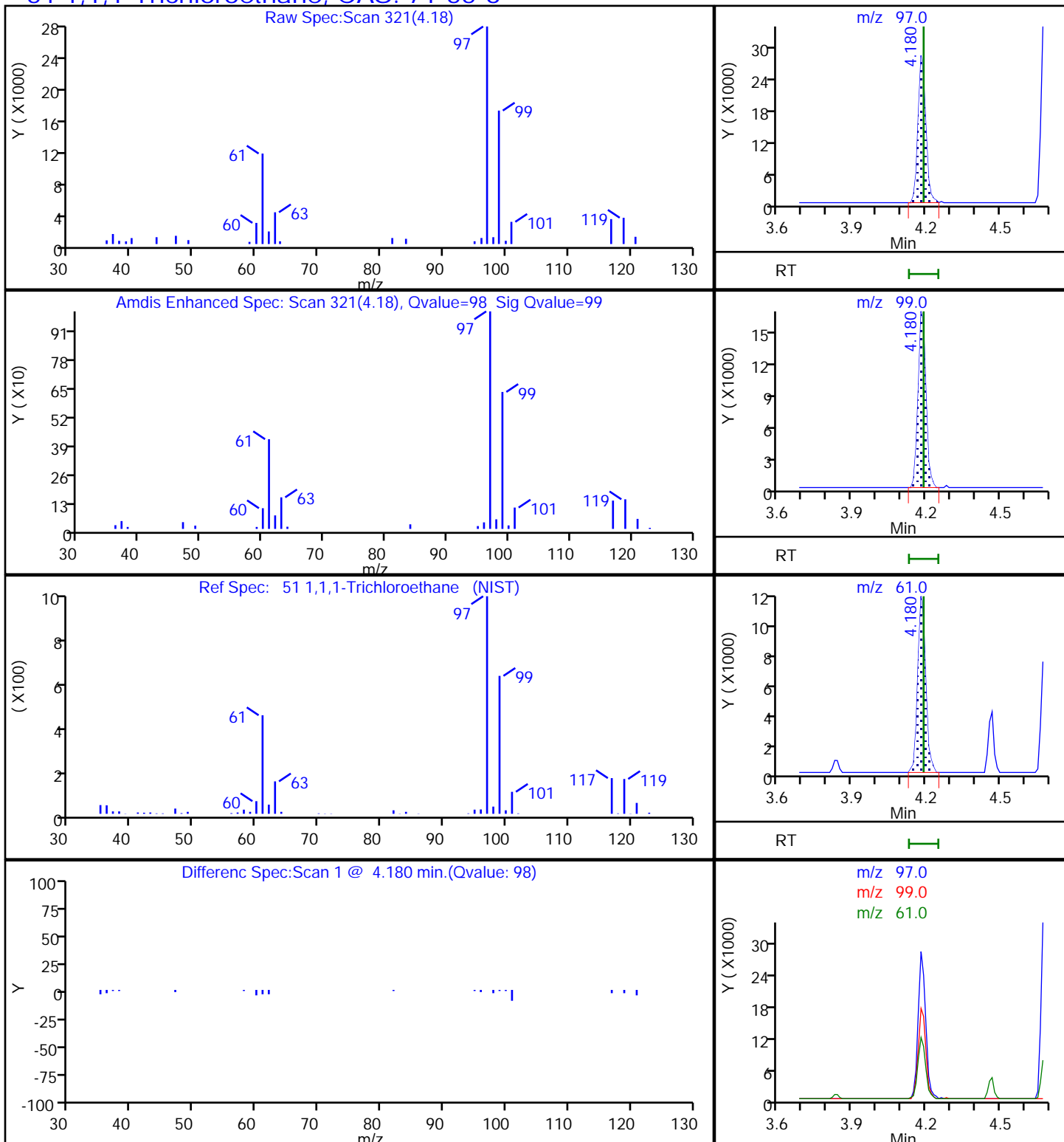
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3134.D

Injection Date: 17-Jul-2019 23:59:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-5

Lab Sample ID: 480-156213-5

Client ID: 356023-MW12B 190

Operator ID: AEM

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

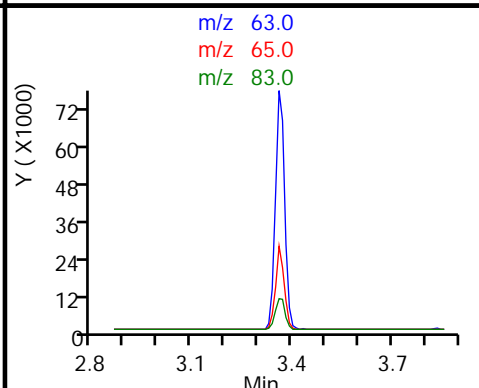
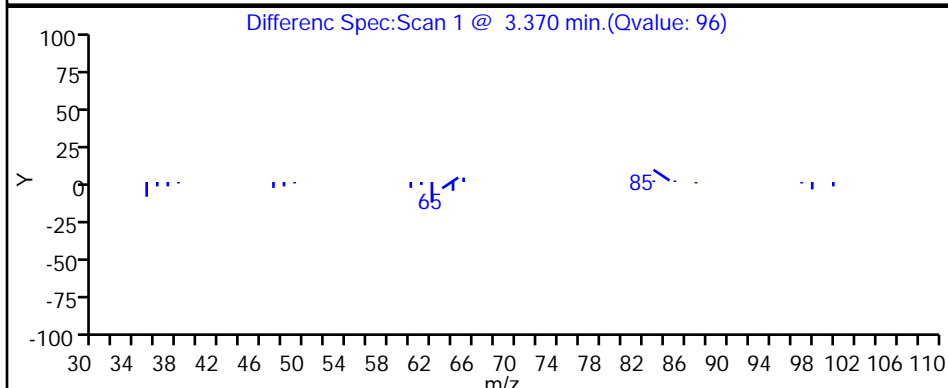
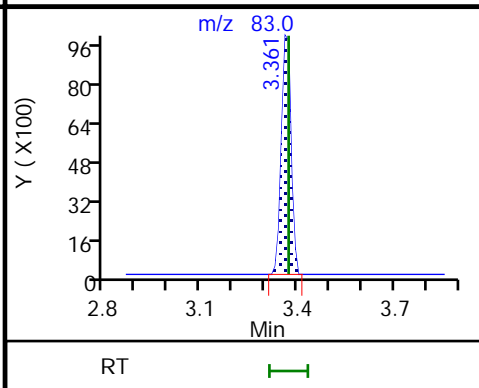
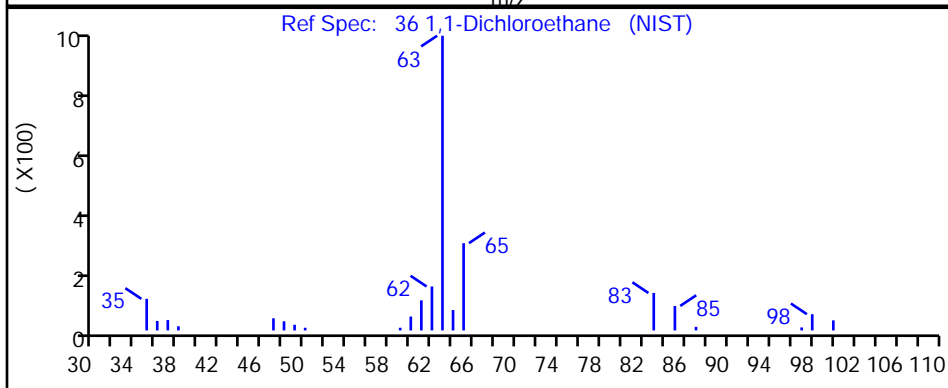
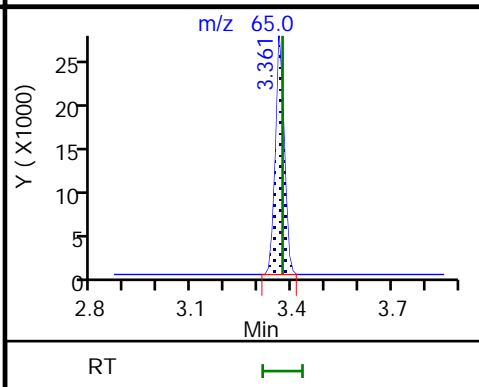
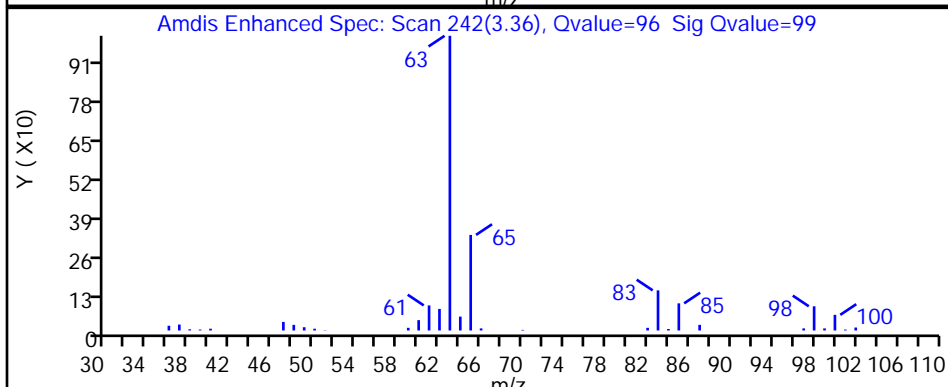
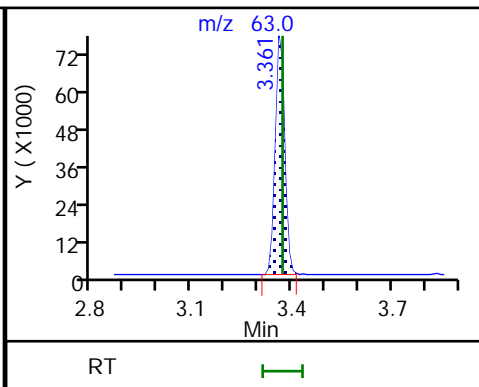
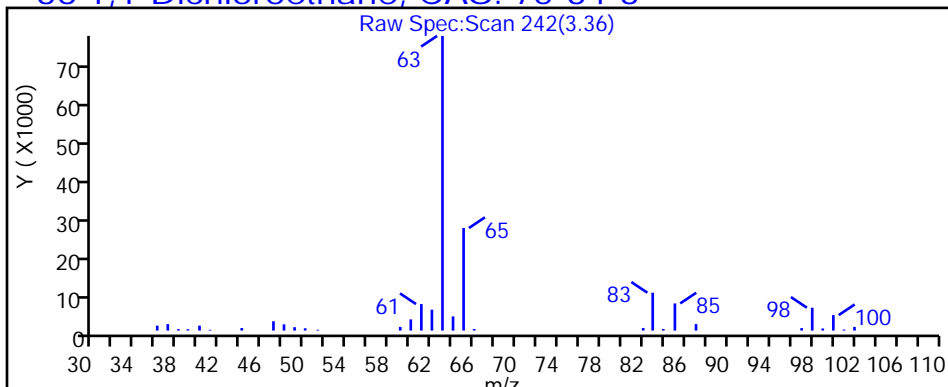
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3134.D

Injection Date: 17-Jul-2019 23:59:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-5

Lab Sample ID: 480-156213-5

Client ID: 356023-MW12B 190

Operator ID: AEM

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

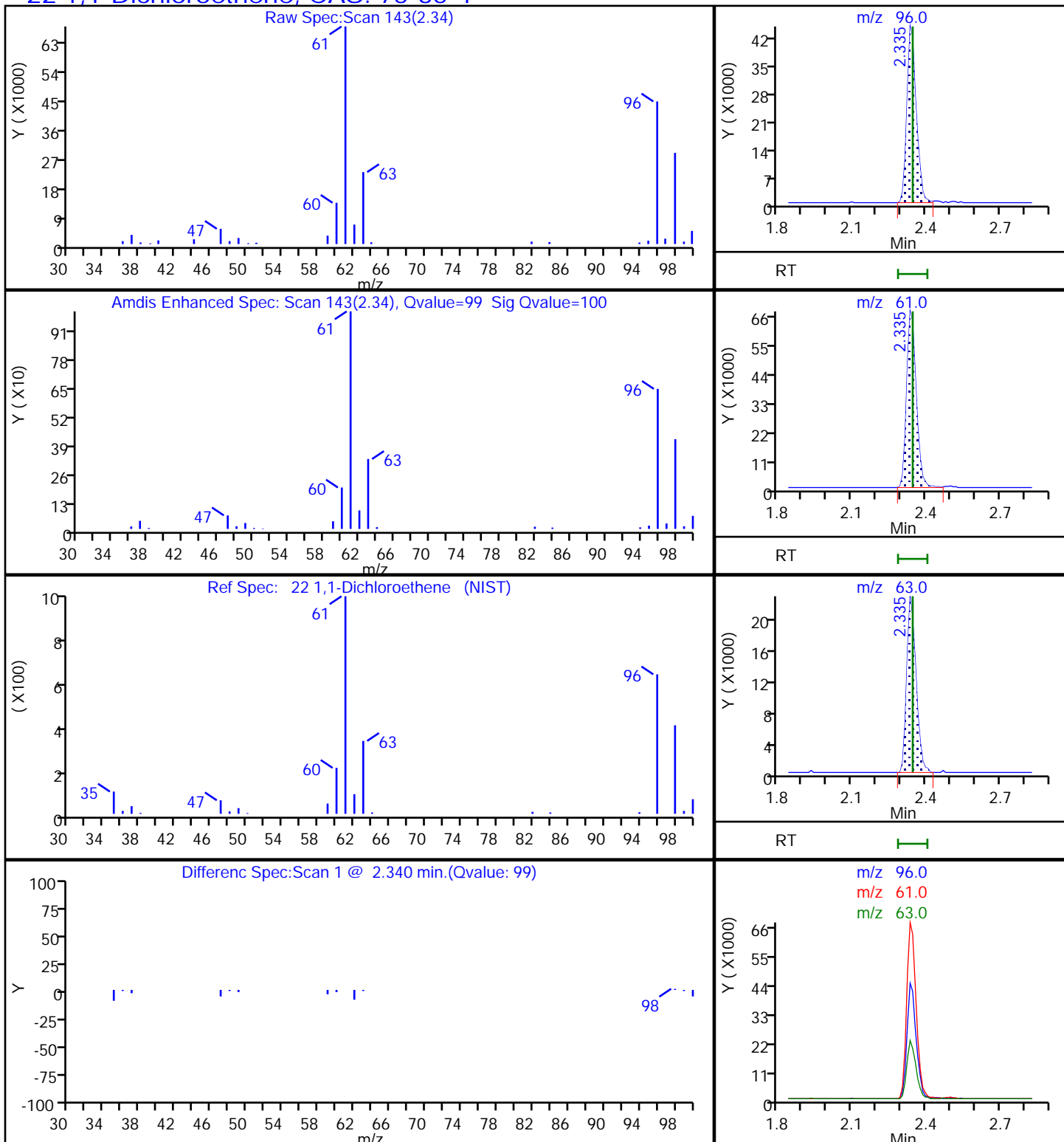
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3134.D

Injection Date: 17-Jul-2019 23:59:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-5

Lab Sample ID: 480-156213-5

Client ID: 356023-MW12B 190

Operator ID: AEM

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

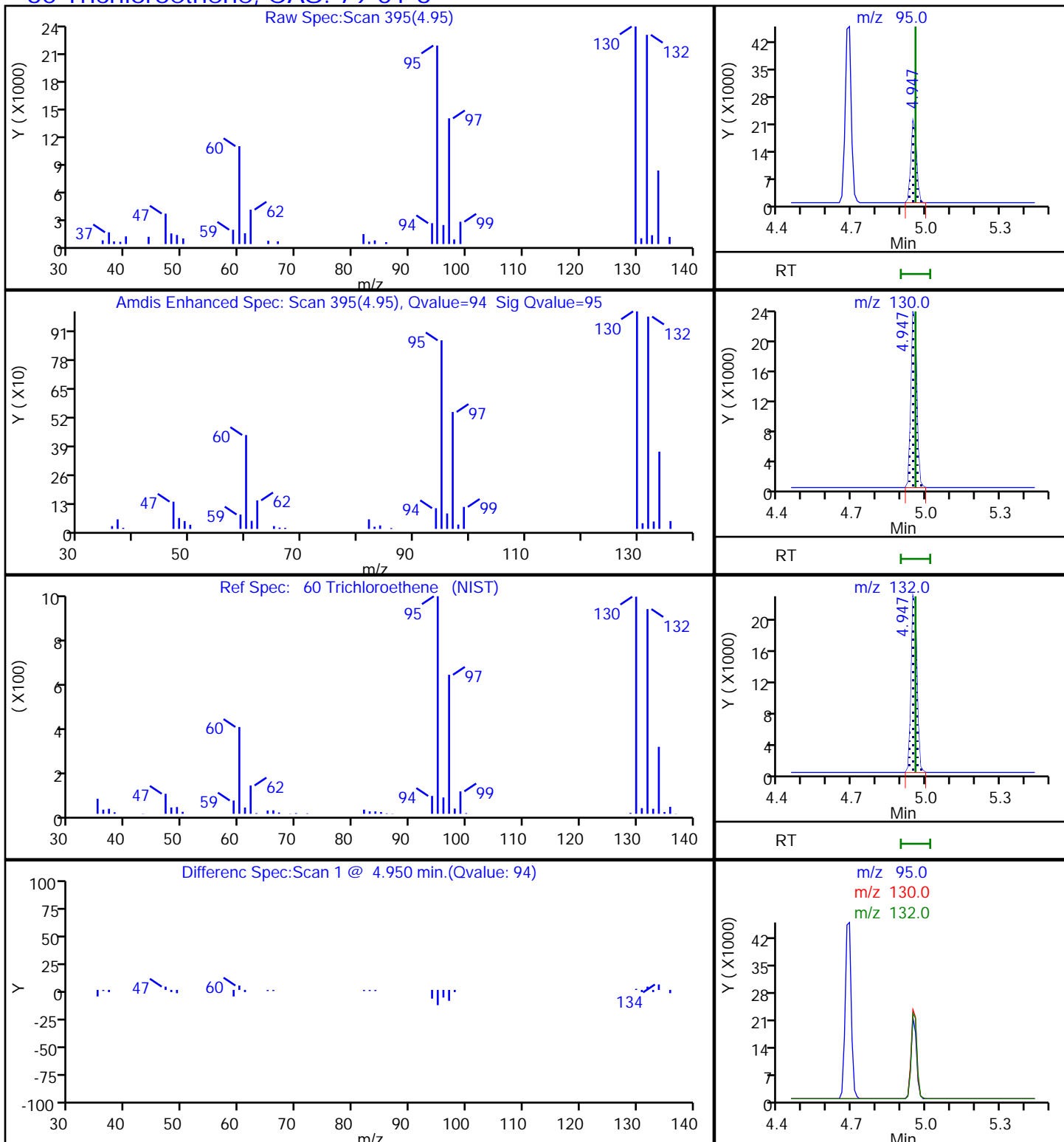
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11B Lab Sample ID: 480-156213-6
 Matrix: Water Lab File ID: T3135.D
 Analysis Method: 8260C Date Collected: 07/10/2019 11:37
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 00:23
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.4		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	2.4		1.0	0.38
75-35-4	1,1-Dichloroethene	4.9		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11B Lab Sample ID: 480-156213-6
 Matrix: Water Lab File ID: T3135.D
 Analysis Method: 8260C Date Collected: 07/10/2019 11:37
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 00:23
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	0.93	J	1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3135.D
 Lims ID: 480-156213-D-6
 Client ID: 356023-MW11B
 Sample Type: Client
 Inject. Date: 18-Jul-2019 00:23:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-6
 Misc. Info.: 480-0082700-014
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 12:03:03 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:23:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	164666	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	746971	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	439942	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	94	238785	26.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	276297	26.4	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	875294	23.9	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	319065	26.0	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	97	37187	4.92	
23 Acetone	43	2.449	2.460	-0.011	98	4784	1.88	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	97	6663	0.2514	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	35270	2.45	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	97	15447	1.38	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	95	8576	0.9291	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3135.D

Injection Date: 18-Jul-2019 00:23:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-6

Lab Sample ID: 480-156213-6

Worklist Smp#: 14

Client ID: 356023-MW11B

Purge Vol: 5.000 mL

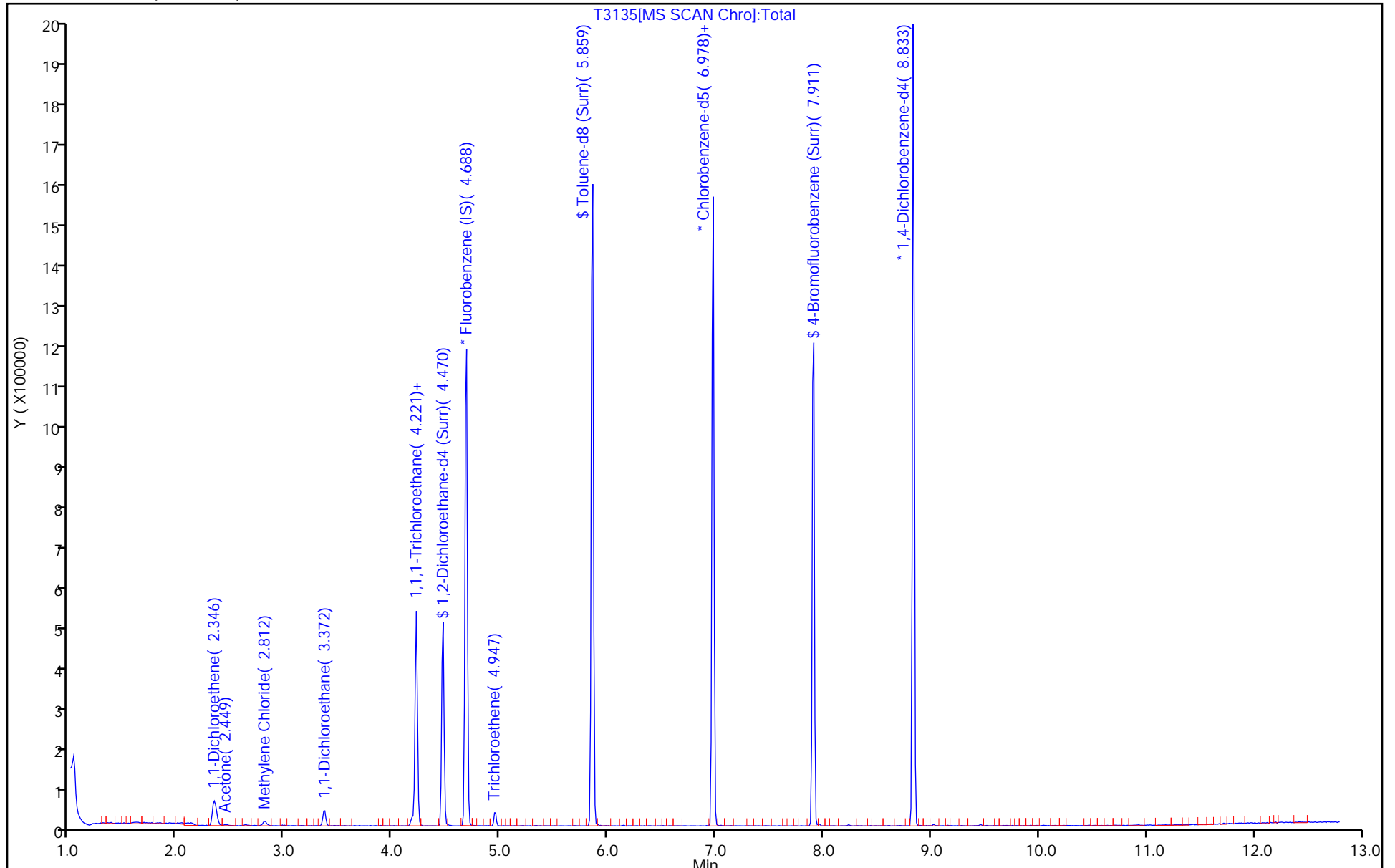
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3135.D

Injection Date: 18-Jul-2019 00:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-6

Lab Sample ID: 480-156213-6

Client ID: 356023-MW11B

Operator ID: AEM

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

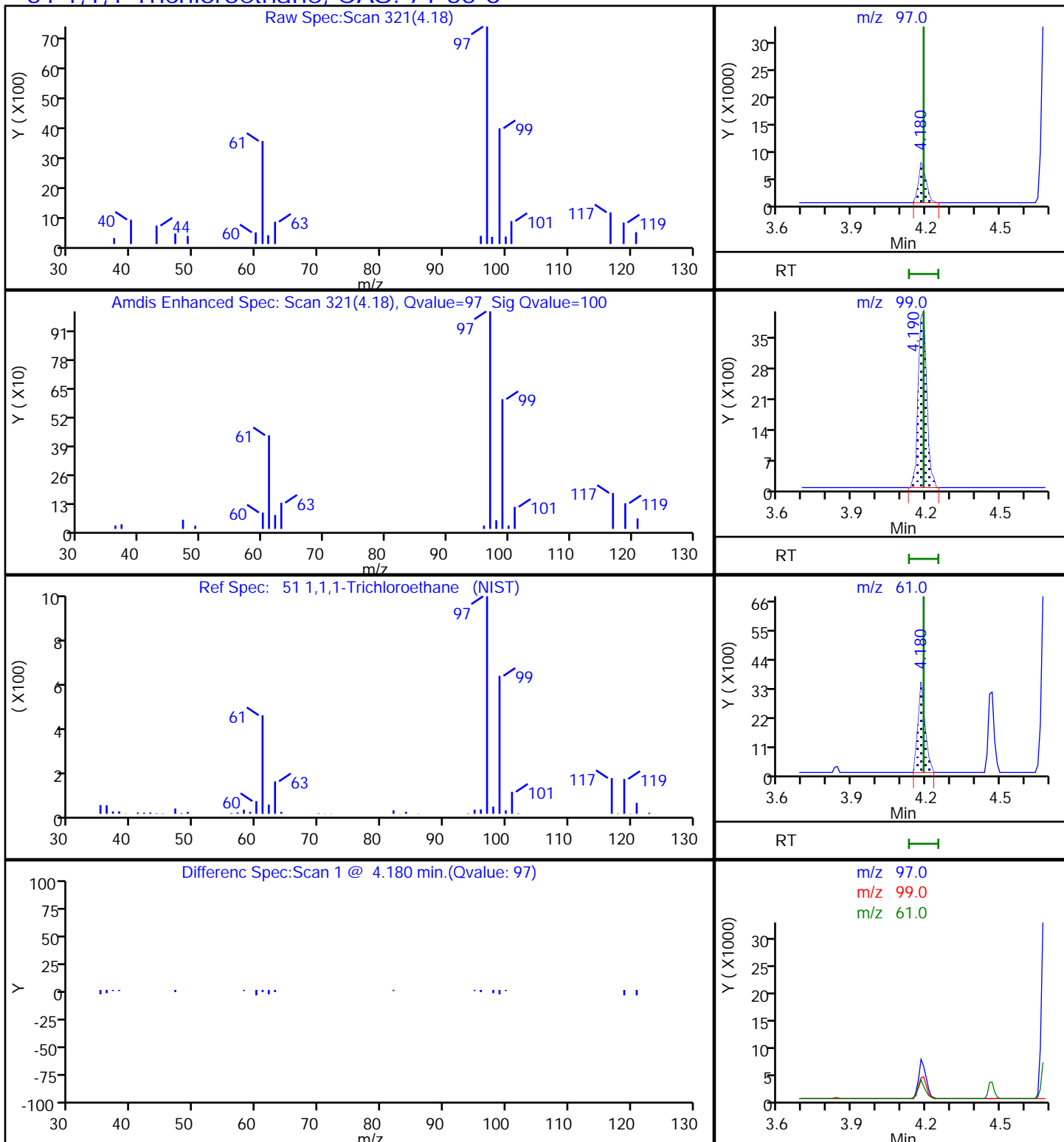
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3135.D

Injection Date: 18-Jul-2019 00:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-6

Lab Sample ID: 480-156213-6

Client ID: 356023-MW11B

Operator ID: AEM

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

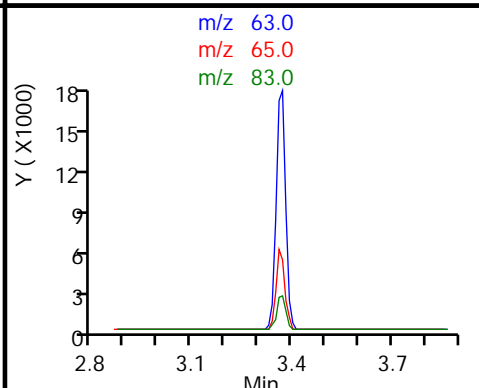
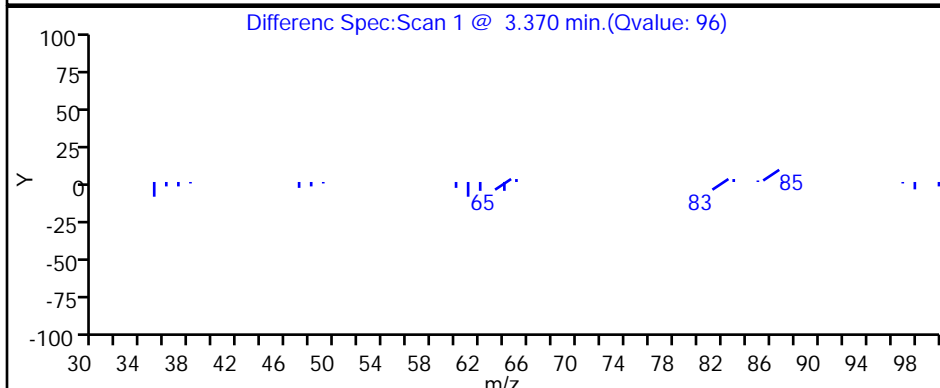
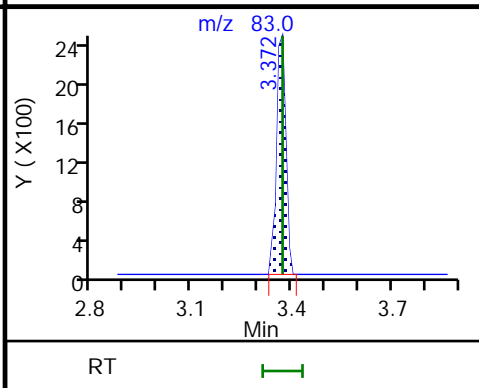
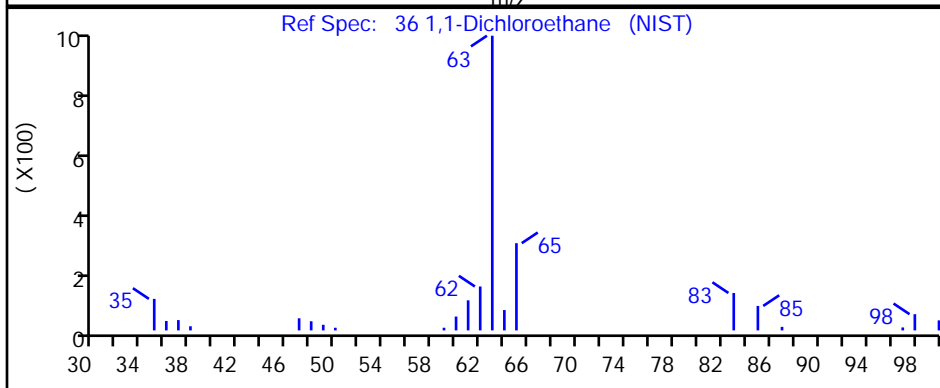
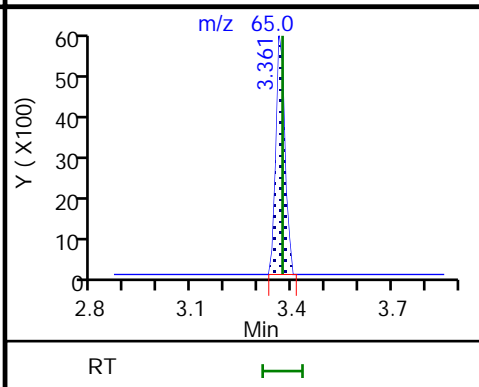
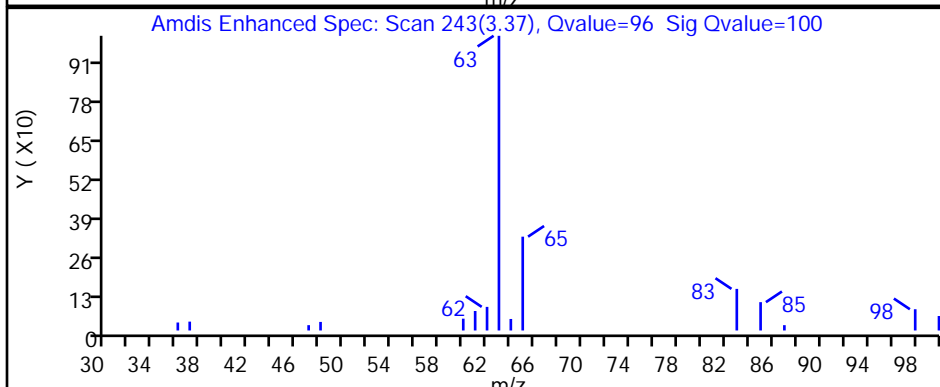
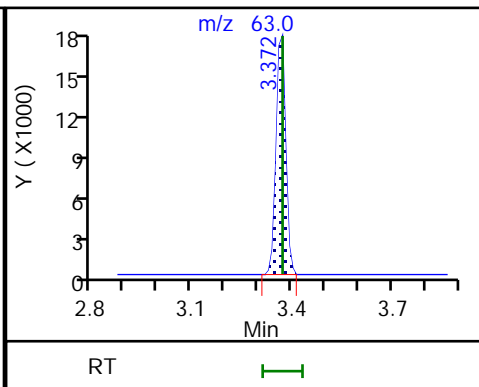
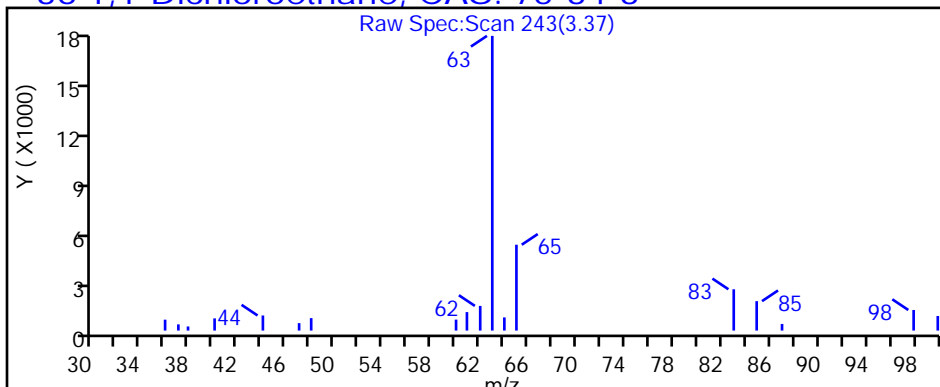
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3135.D

Injection Date: 18-Jul-2019 00:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-6

Lab Sample ID: 480-156213-6

Client ID: 356023-MW11B

Operator ID: AEM

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

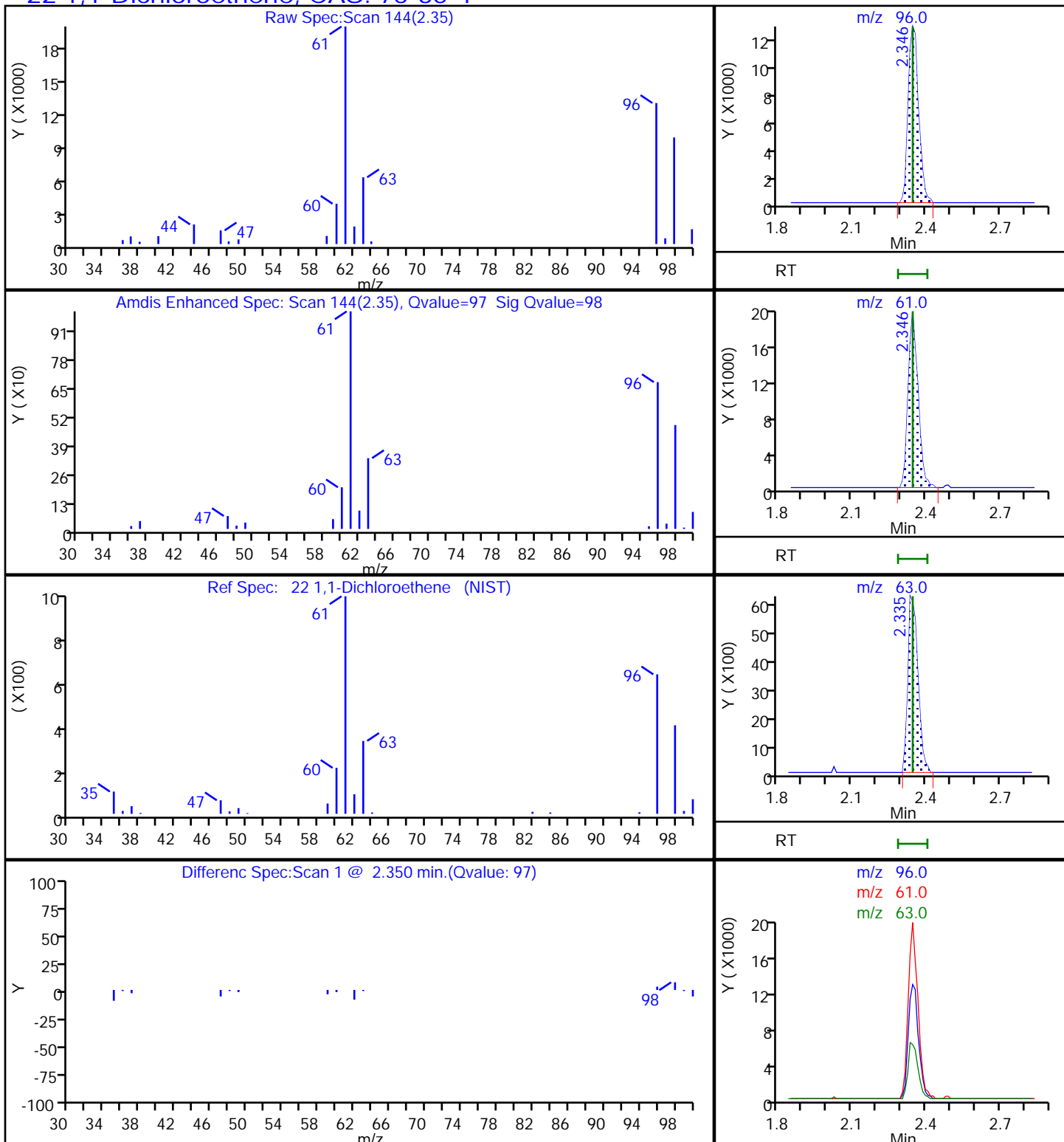
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3135.D

Injection Date: 18-Jul-2019 00:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-6

Lab Sample ID: 480-156213-6

Client ID: 356023-MW11B

Operator ID: AEM

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

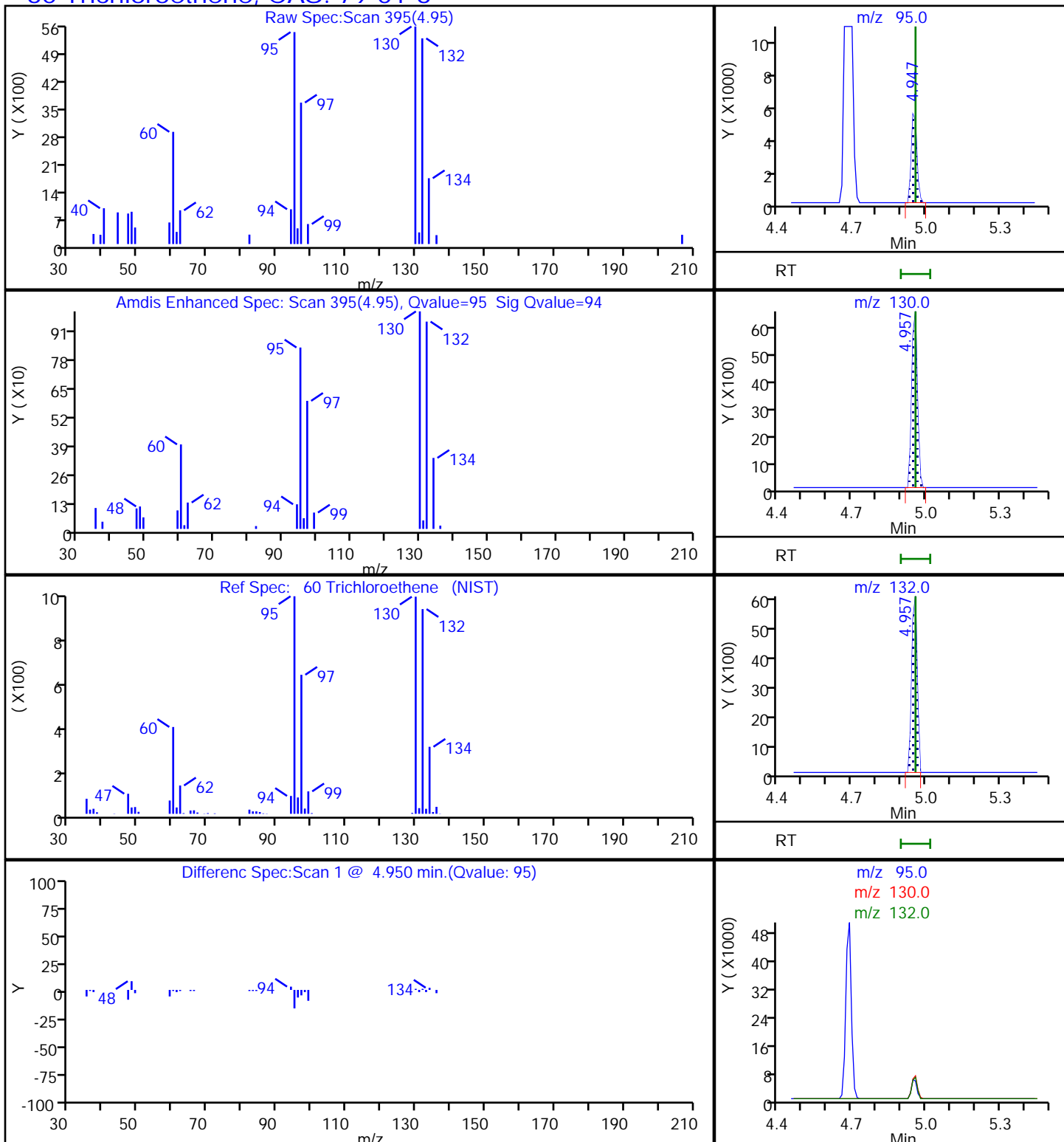
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11C Lab Sample ID: 480-156213-7
 Matrix: Water Lab File ID: T3136.D
 Analysis Method: 8260C Date Collected: 07/10/2019 15:23
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 00:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	2.2		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	0.80	J	1.0	0.38
75-35-4	1,1-Dichloroethene	3.2		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11C Lab Sample ID: 480-156213-7
 Matrix: Water Lab File ID: T3136.D
 Analysis Method: 8260C Date Collected: 07/10/2019 15:23
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 00:47
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	0.64	J	1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3136.D
 Lims ID: 480-156213-D-7
 Client ID: 356023-MW11C
 Sample Type: Client
 Inject. Date: 18-Jul-2019 00:47:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-7
 Misc. Info.: 480-0082700-015
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:23:55 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 13:23:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	166625	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	747080	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	428634	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	93	237691	25.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	272864	25.8	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	92	873392	23.8	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	325867	26.5	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.335	2.335	-0.011	98	24200	3.17	
23 Acetone	43	2.449	2.460	-0.011	92	7323	2.84	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	88	7473	0.3329	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	95	11717	0.8028	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	98	24698	2.18	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	90	5970	0.6392	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	U
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3136.D

Injection Date: 18-Jul-2019 00:47:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-7

Lab Sample ID: 480-156213-7

Worklist Smp#: 15

Client ID: 356023-MW11C

Purge Vol: 5.000 mL

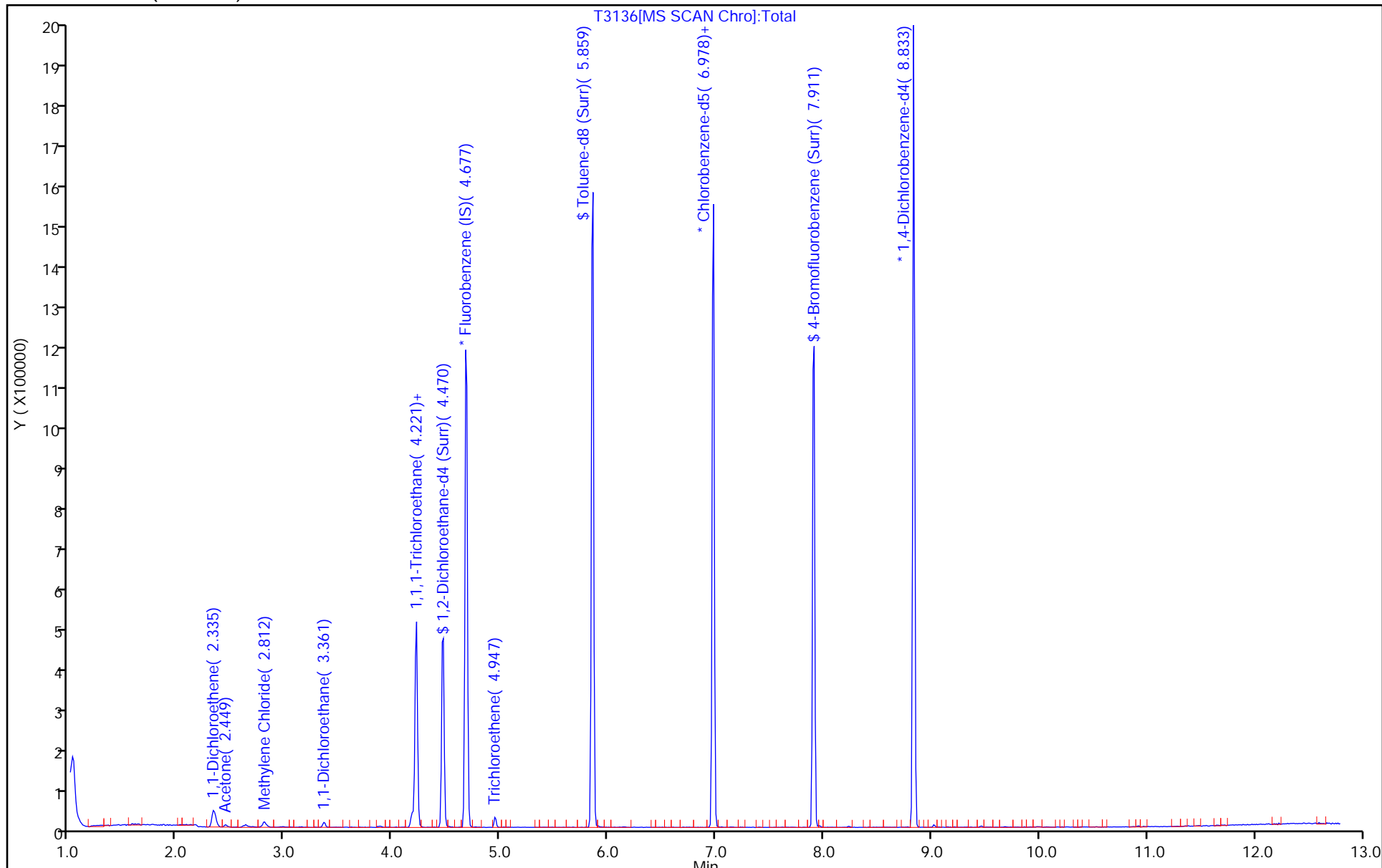
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3136.D

Injection Date: 18-Jul-2019 00:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-7

Lab Sample ID: 480-156213-7

Client ID: 356023-MW11C

Operator ID: AEM

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

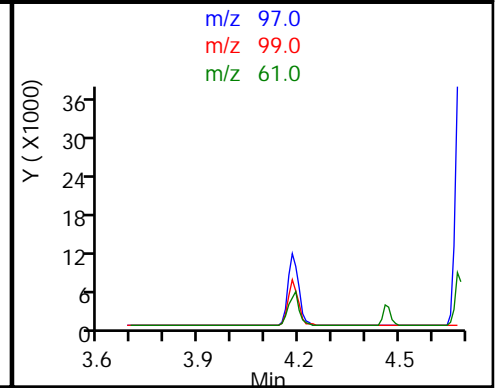
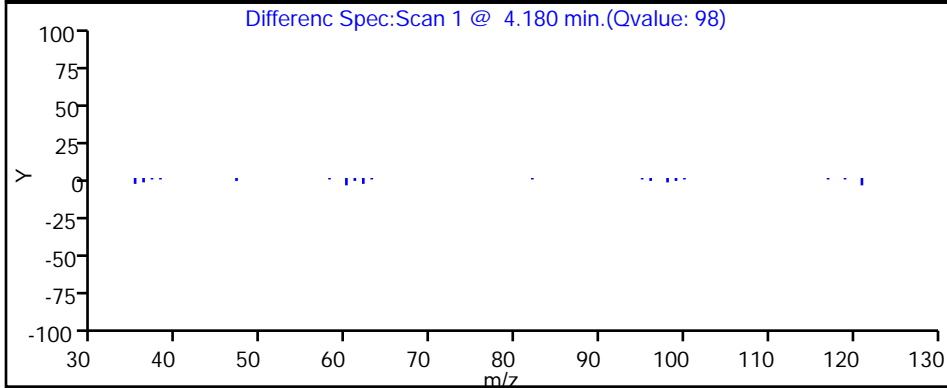
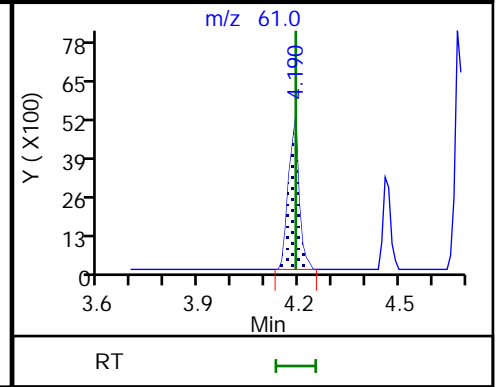
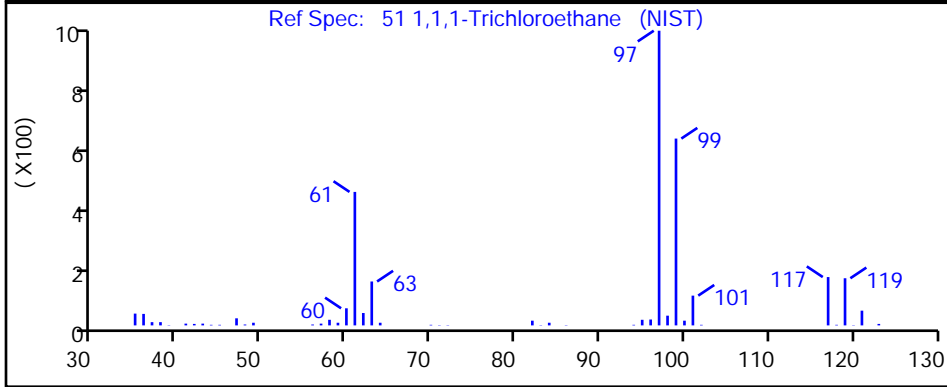
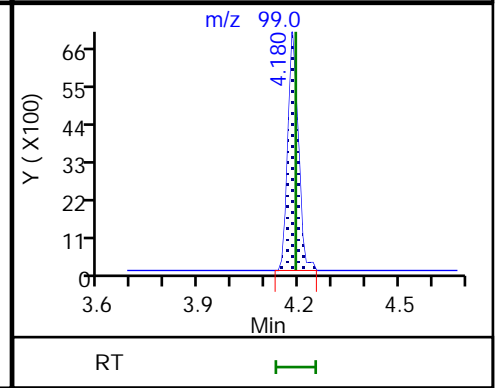
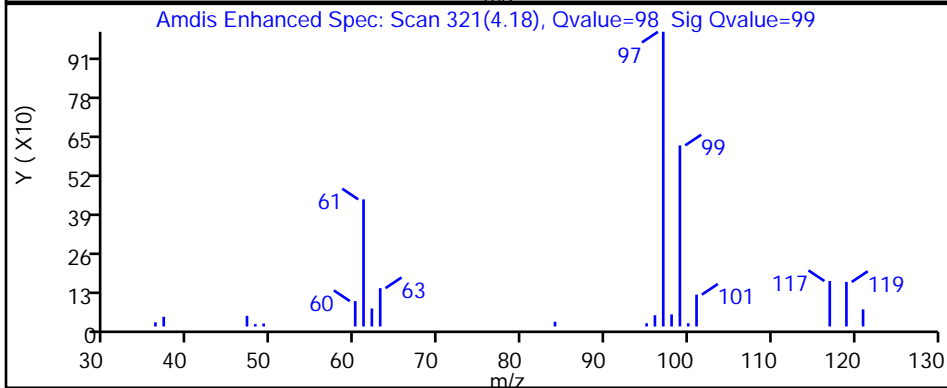
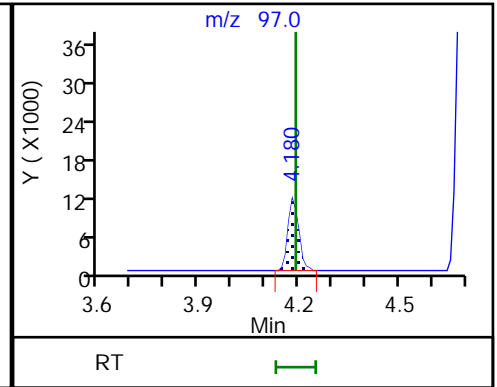
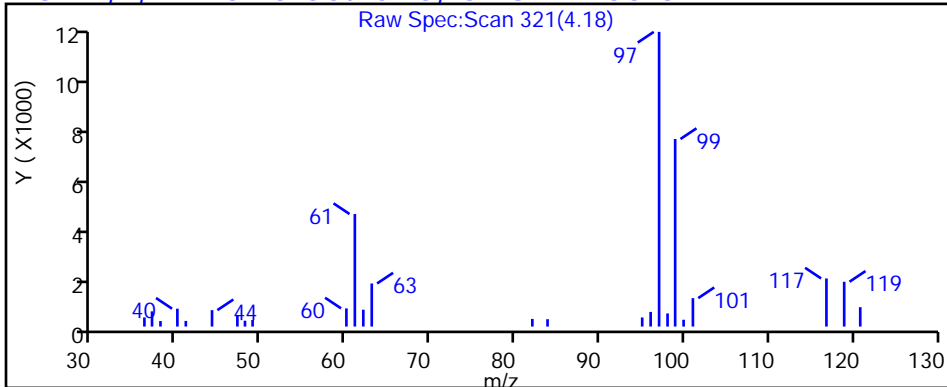
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3136.D

Injection Date: 18-Jul-2019 00:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-7

Lab Sample ID: 480-156213-7

Client ID: 356023-MW11C

Operator ID: AEM

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

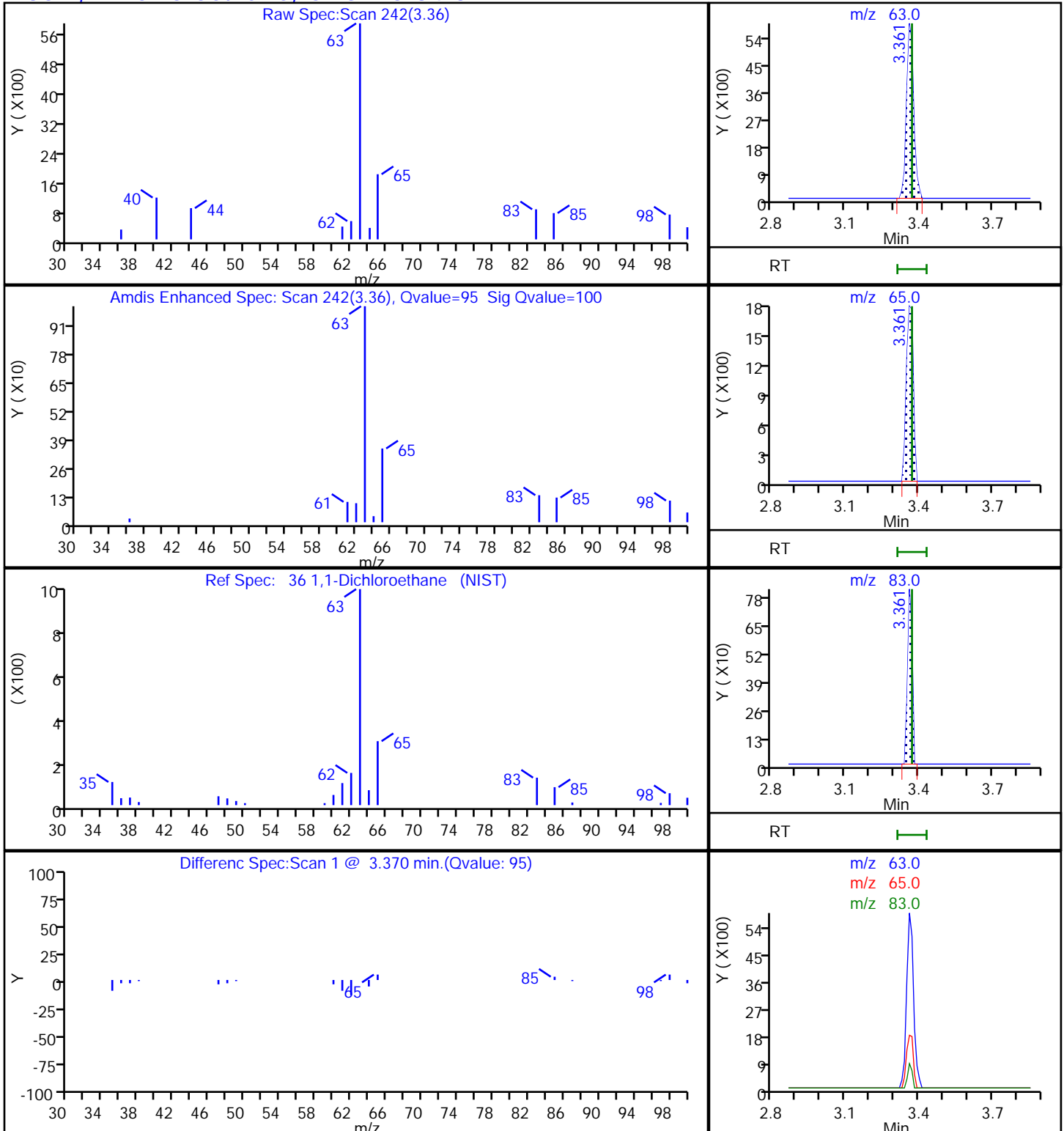
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3136.D

Injection Date: 18-Jul-2019 00:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-7

Lab Sample ID: 480-156213-7

Client ID: 356023-MW11C

Operator ID: AEM

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

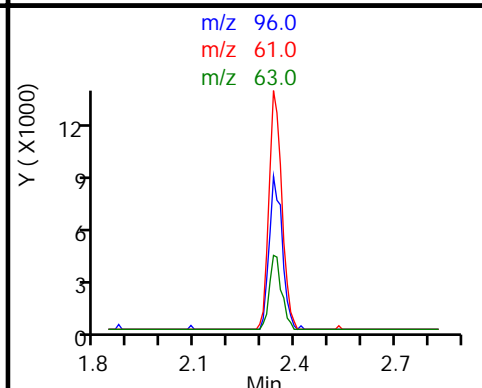
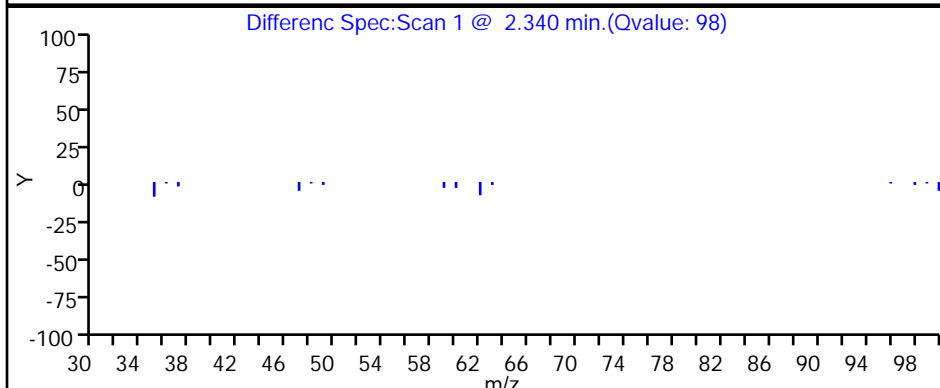
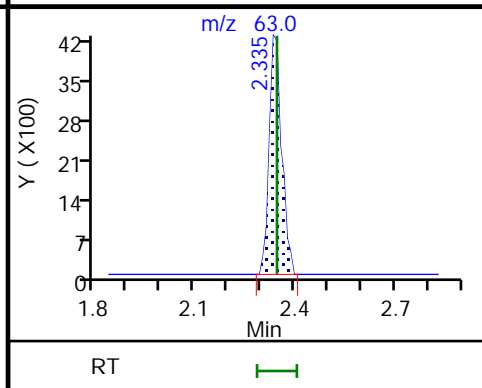
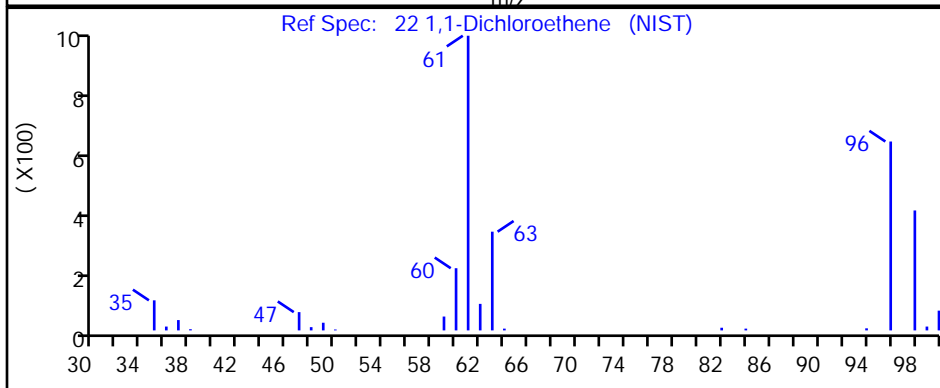
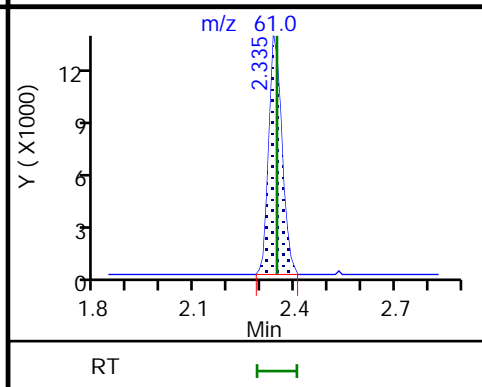
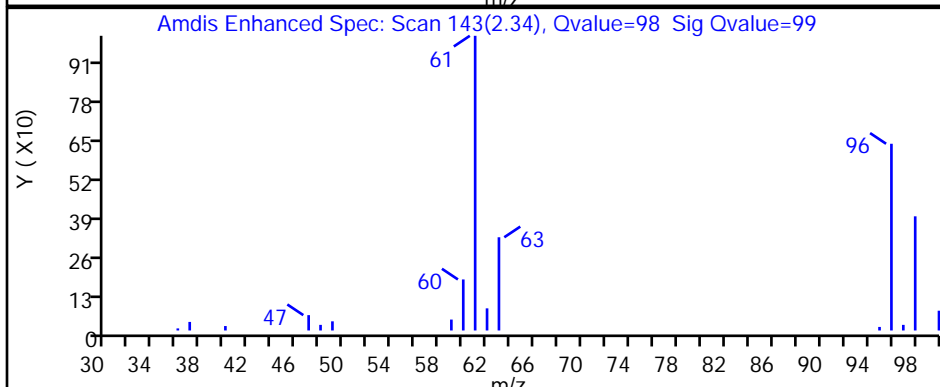
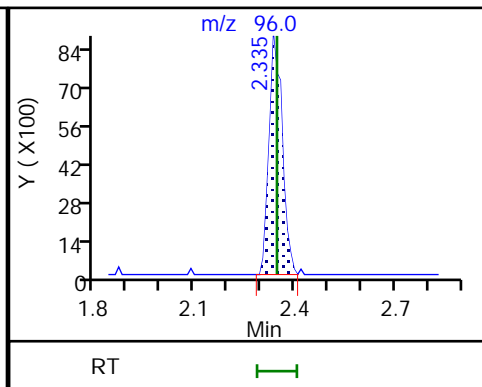
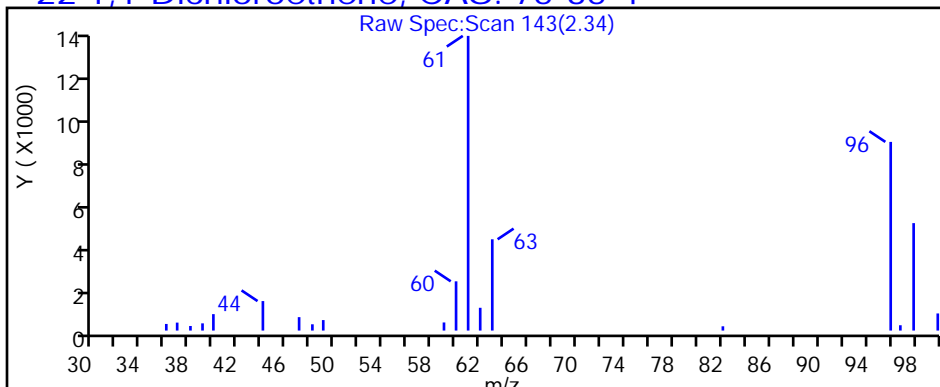
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3136.D

Injection Date: 18-Jul-2019 00:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-7

Lab Sample ID: 480-156213-7

Client ID: 356023-MW11C

Operator ID: AEM

ALS Bottle#: 14

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

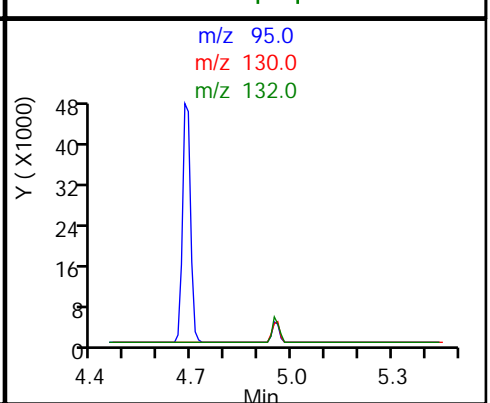
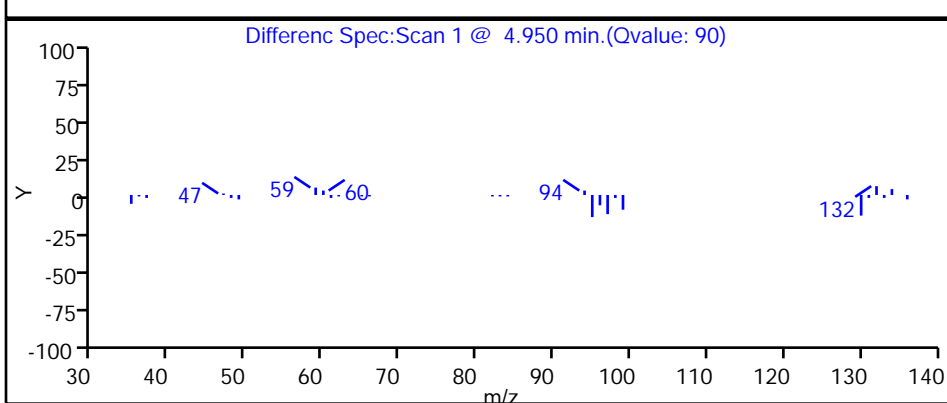
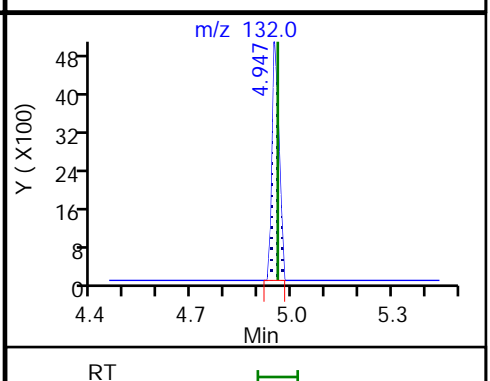
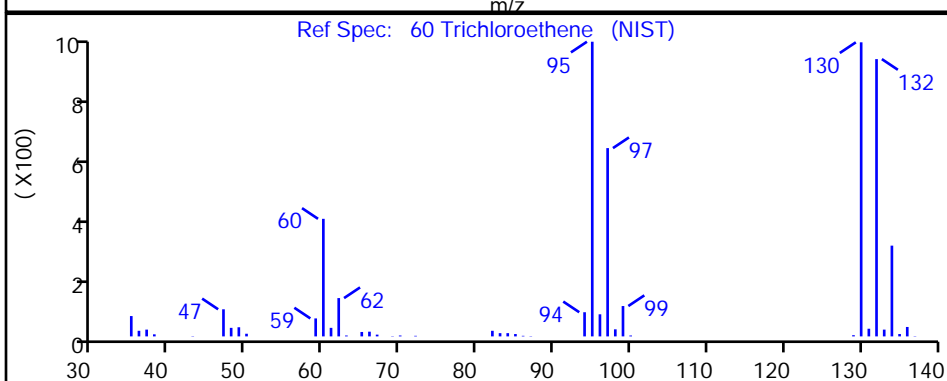
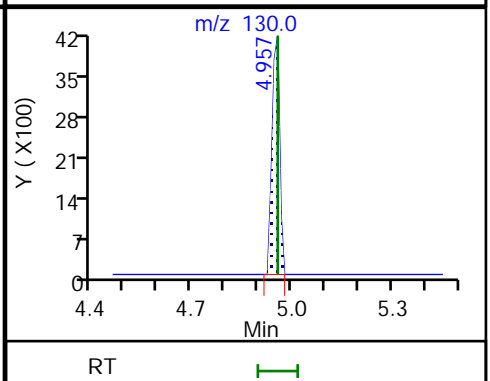
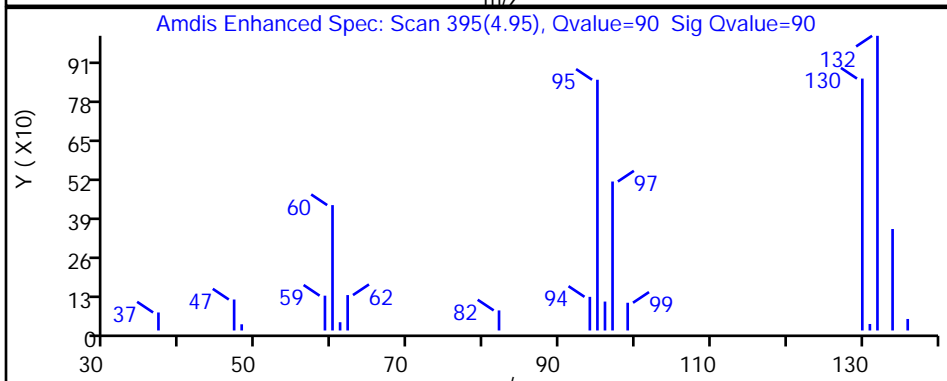
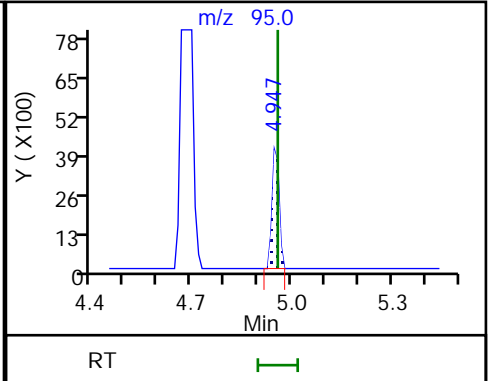
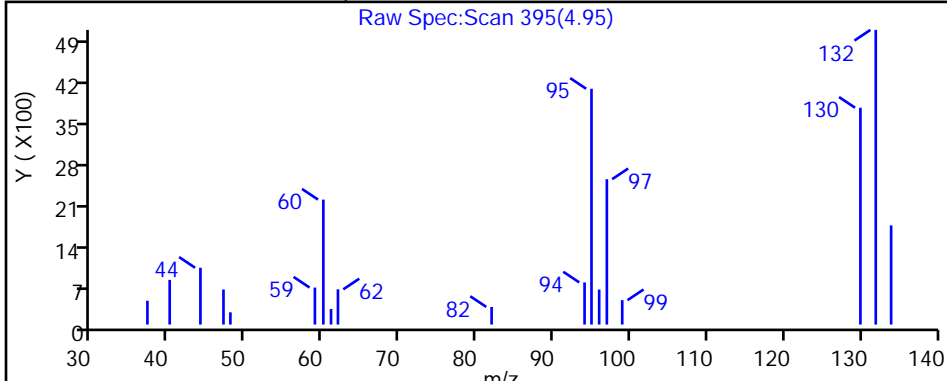
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6

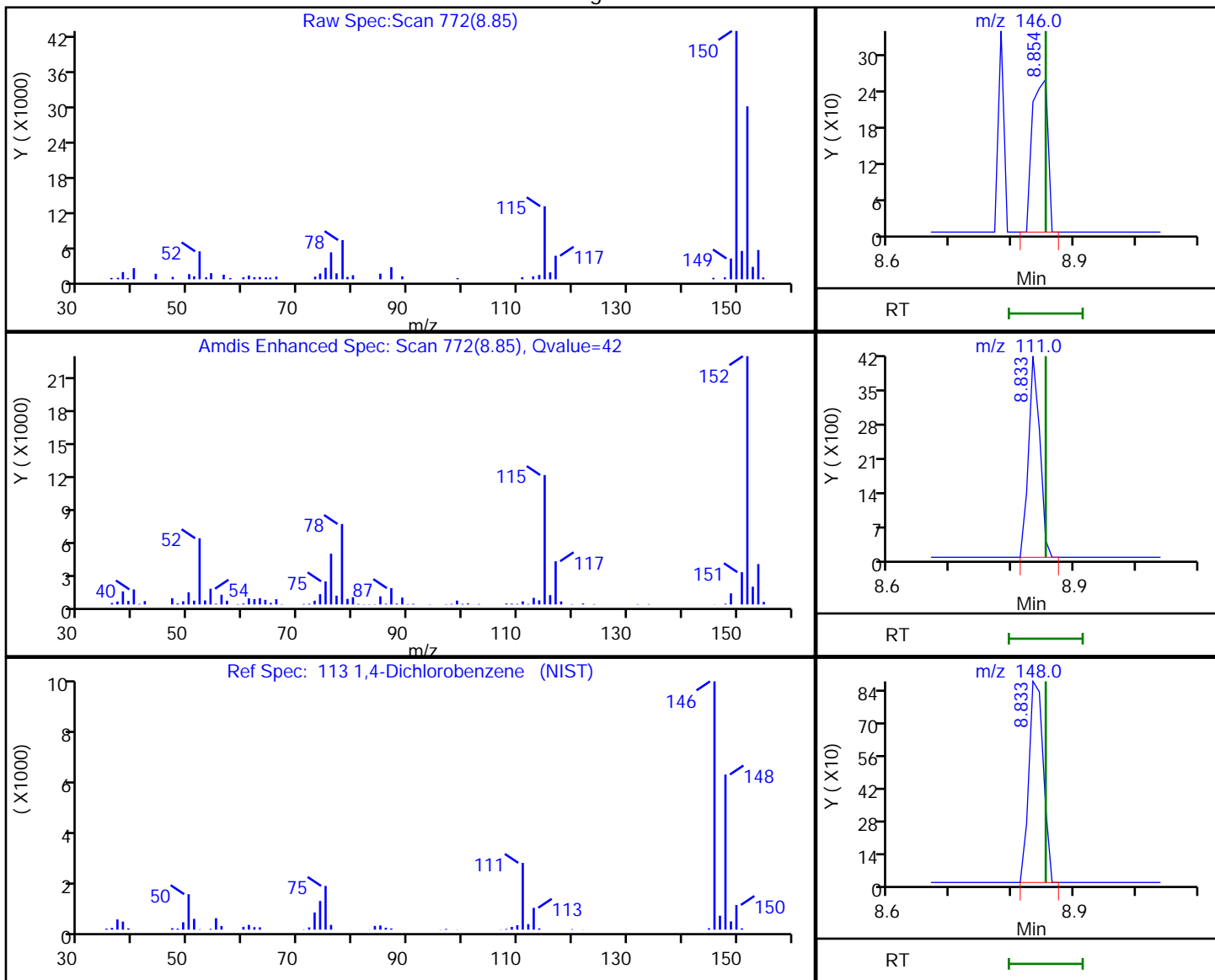


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3136.D
 Injection Date: 18-Jul-2019 00:47:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-7 Lab Sample ID: 480-156213-7
 Client ID: 356023-MW11C
 Operator ID: AEM ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
8.85	146.00	440	0.017237
8.83	111.00	5301	
8.83	148.00	1428	

Reviewer: farrellr, 18-Jul-2019 13:23:51

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1801 Lab Sample ID: 480-156213-8
 Matrix: Water Lab File ID: T3137.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 01:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	1.1		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1801 Lab Sample ID: 480-156213-8
 Matrix: Water Lab File ID: T3137.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 01:11
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3137.D
 Lims ID: 480-156213-D-8
 Client ID: 356023-MW1801
 Sample Type: Client
 Inject. Date: 18-Jul-2019 01:11:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-8
 Misc. Info.: 480-0082700-016
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:24:37 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 13:24:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	166523	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	743289	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	433147	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	93	241674	26.3	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	273975	25.9	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	879758	24.1	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	315654	25.8	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	U
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96		2.346				ND	MUa
23 Acetone	43	2.460	2.460	0.000	97	4039	1.57	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	94	6713	0.2486	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	15651	1.07	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3137.D

Injection Date: 18-Jul-2019 01:11:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-8

Lab Sample ID: 480-156213-8

Worklist Smp#: 16

Client ID: 356023-MW1801

Purge Vol: 5.000 mL

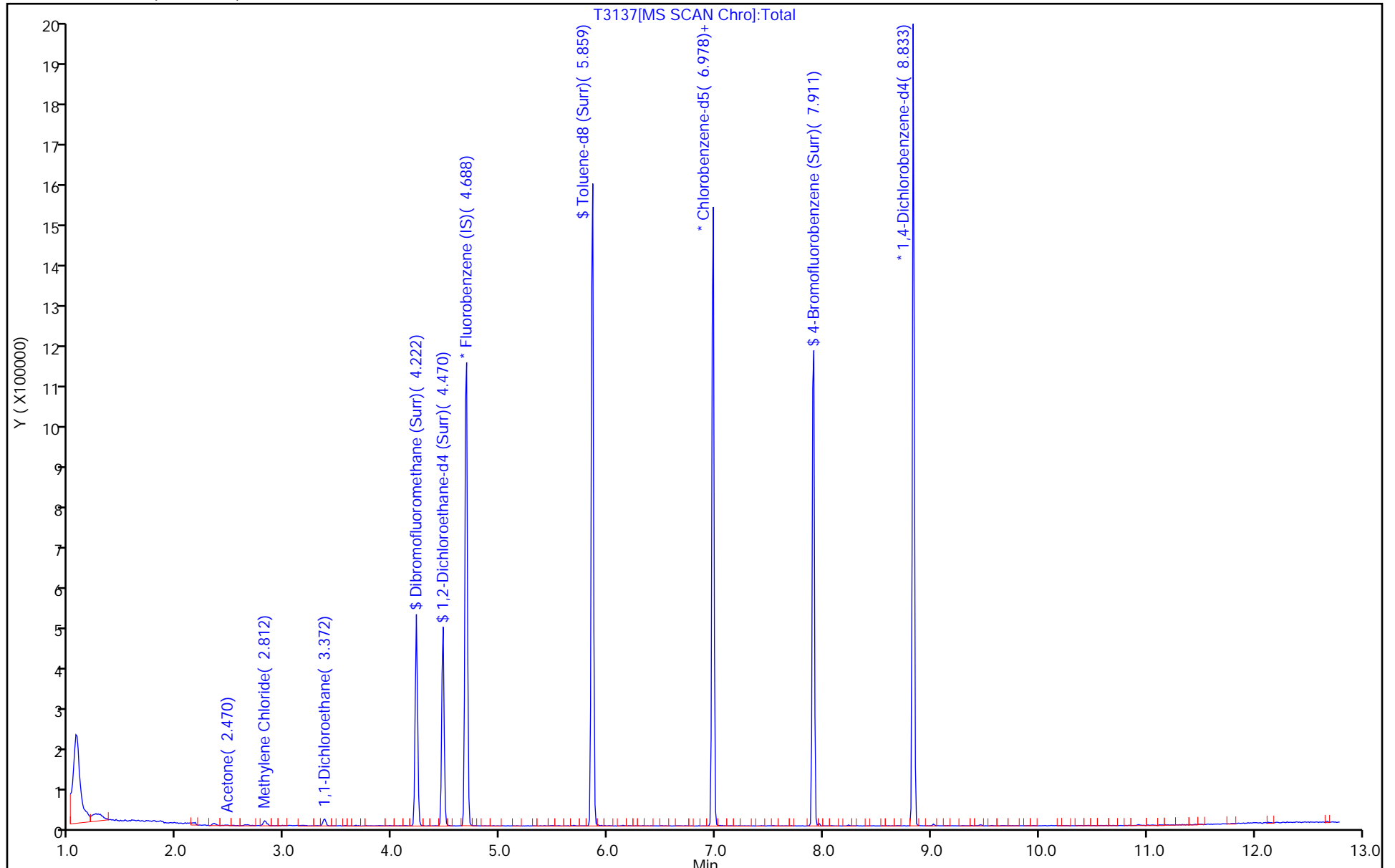
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3137.D

Injection Date: 18-Jul-2019 01:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-8

Lab Sample ID: 480-156213-8

Client ID: 356023-MW1801

Operator ID: AEM

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

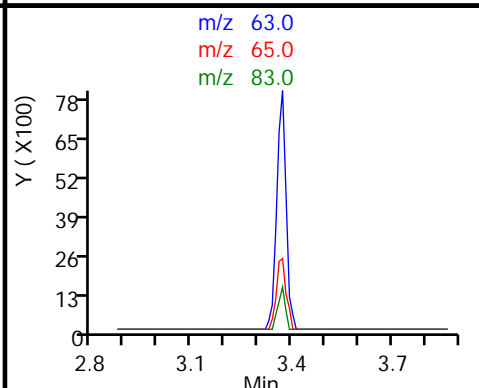
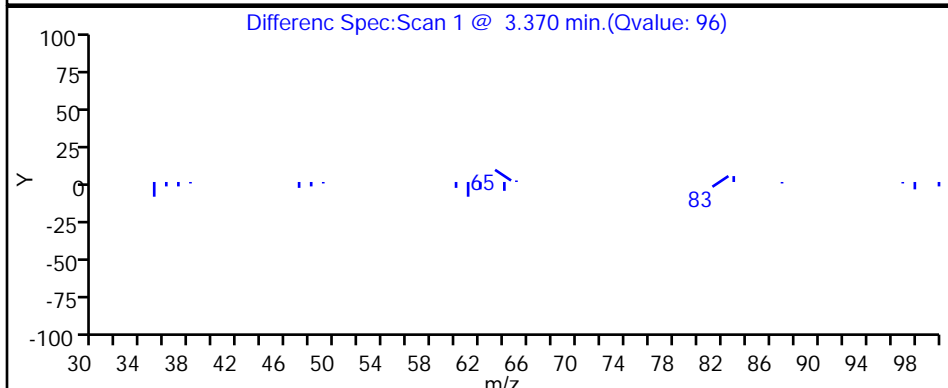
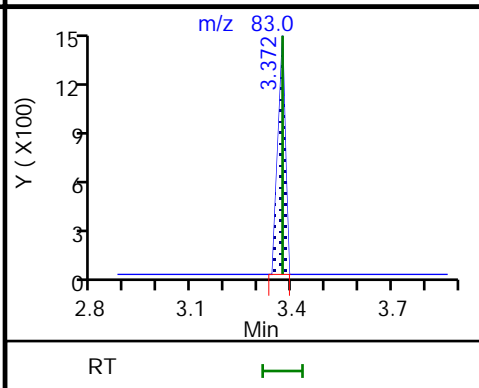
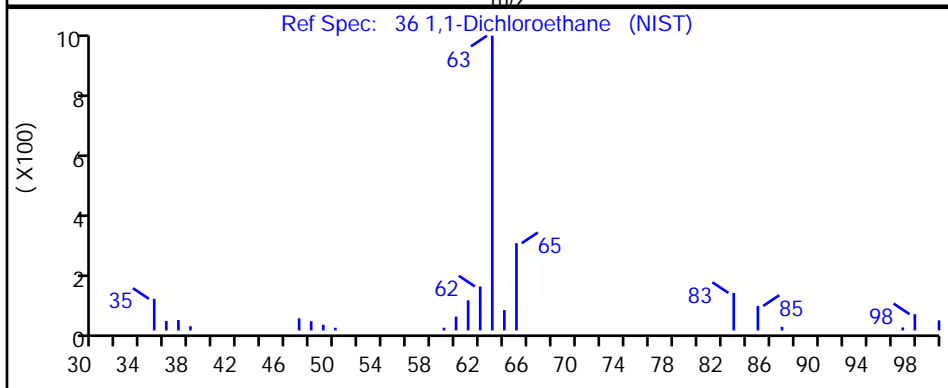
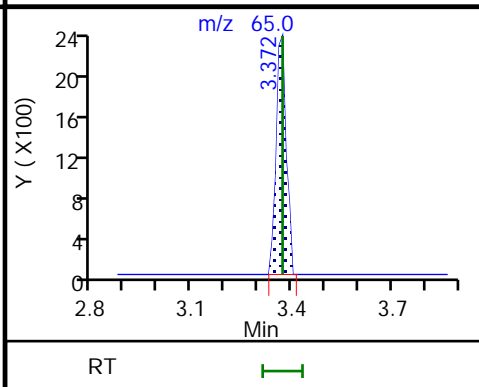
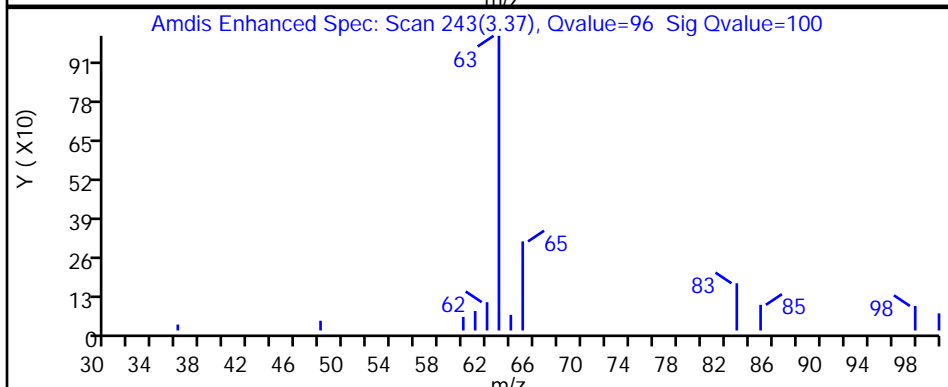
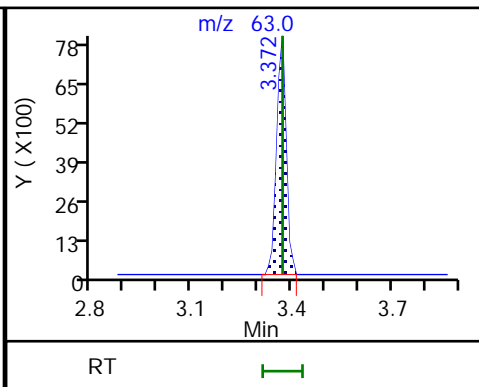
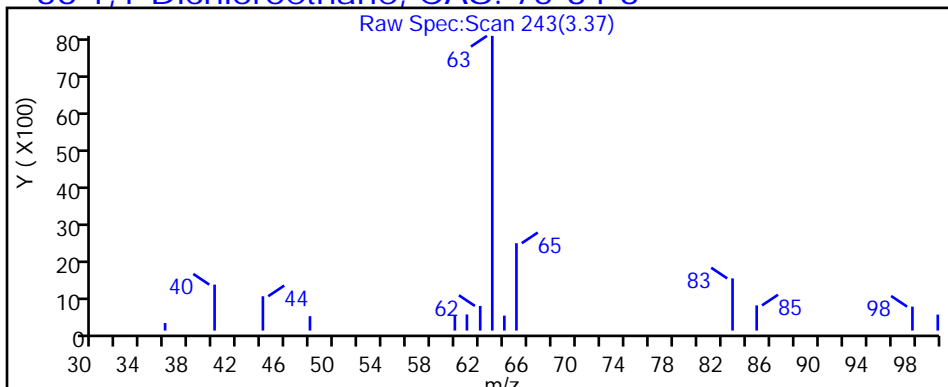
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3

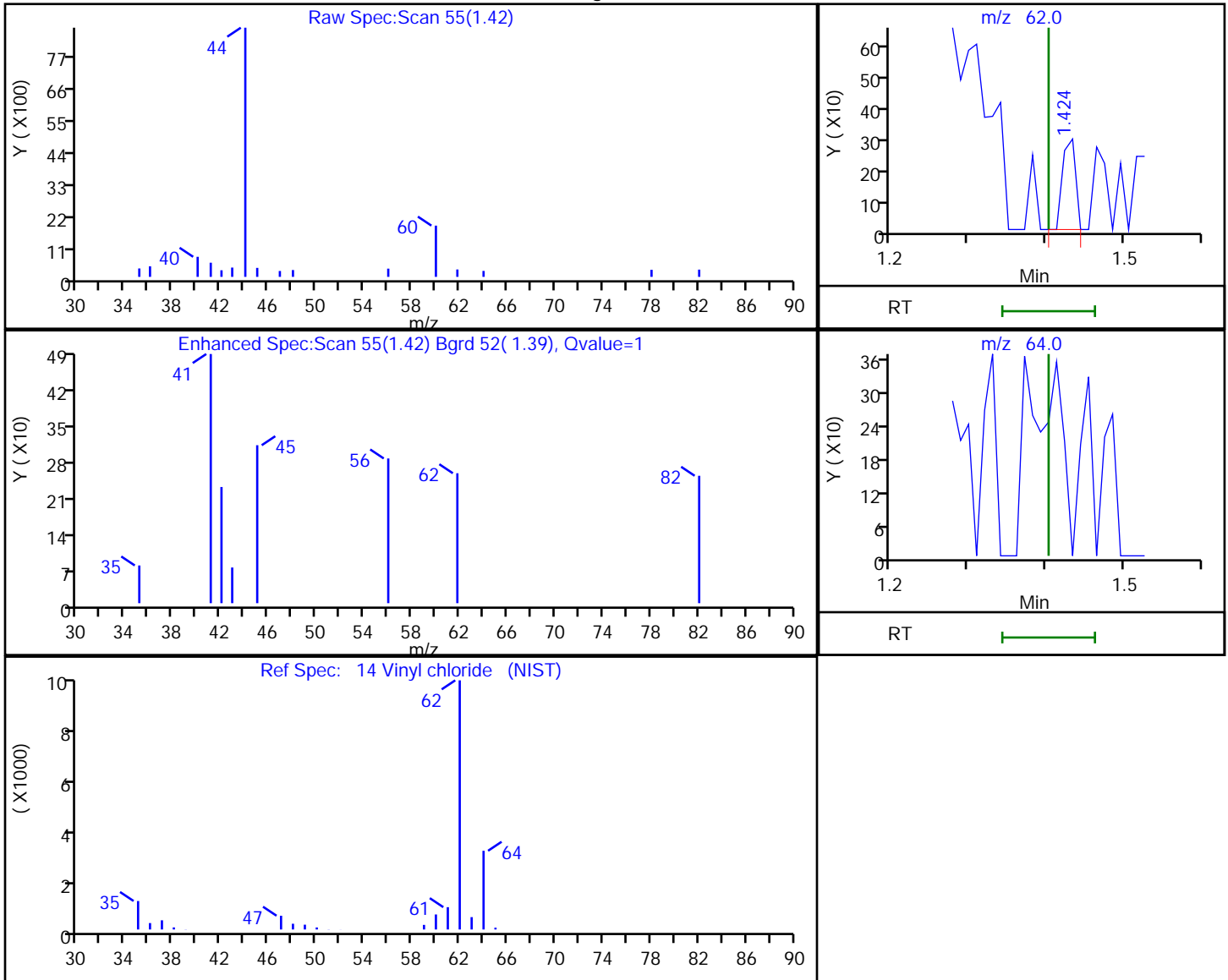


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3137.D
 Injection Date: 18-Jul-2019 01:11:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-8 Lab Sample ID: 480-156213-8
 Client ID: 356023-MW1801
 Operator ID: AEM ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.42	62.00	340	0.032240
1.40	64.00	0	

Reviewer: farrellr, 18-Jul-2019 13:24:03

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1802 Lab Sample ID: 480-156213-9
 Matrix: Water Lab File ID: T3138.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 01:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	1.4		1.0	0.38
75-35-4	1,1-Dichloroethene	0.46	J	1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1802 Lab Sample ID: 480-156213-9
 Matrix: Water Lab File ID: T3138.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 01:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3138.D
 Lims ID: 480-156213-D-9
 Client ID: 356023-MW1802
 Sample Type: Client
 Inject. Date: 18-Jul-2019 01:35:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-9
 Misc. Info.: 480-0082700-017
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:26:56 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 13:26:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	167637	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	745253	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	434007	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	93	240136	25.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	273139	25.7	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	882487	24.1	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	324200	26.4	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	U
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	96	3502	0.4555	
23 Acetone	43		2.460				ND	U
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.823	2.823	0.000	90	6416	0.2106	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	21210	1.44	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3138.D

Injection Date: 18-Jul-2019 01:35:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-9

Lab Sample ID: 480-156213-9

Worklist Smp#: 17

Client ID: 356023-MW1802

Purge Vol: 5.000 mL

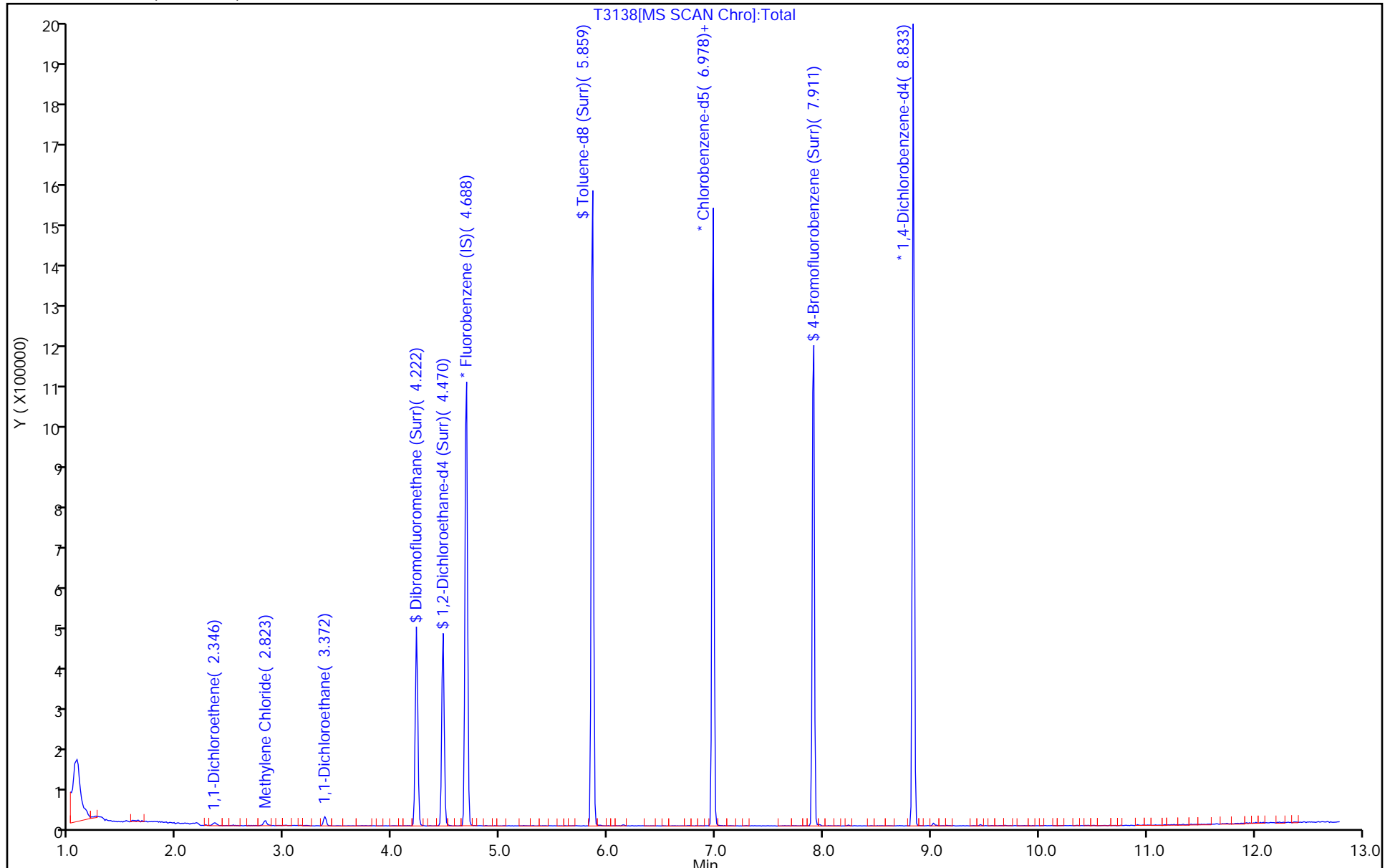
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3138.D

Injection Date: 18-Jul-2019 01:35:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-9

Lab Sample ID: 480-156213-9

Client ID: 356023-MW1802

Operator ID: AEM

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

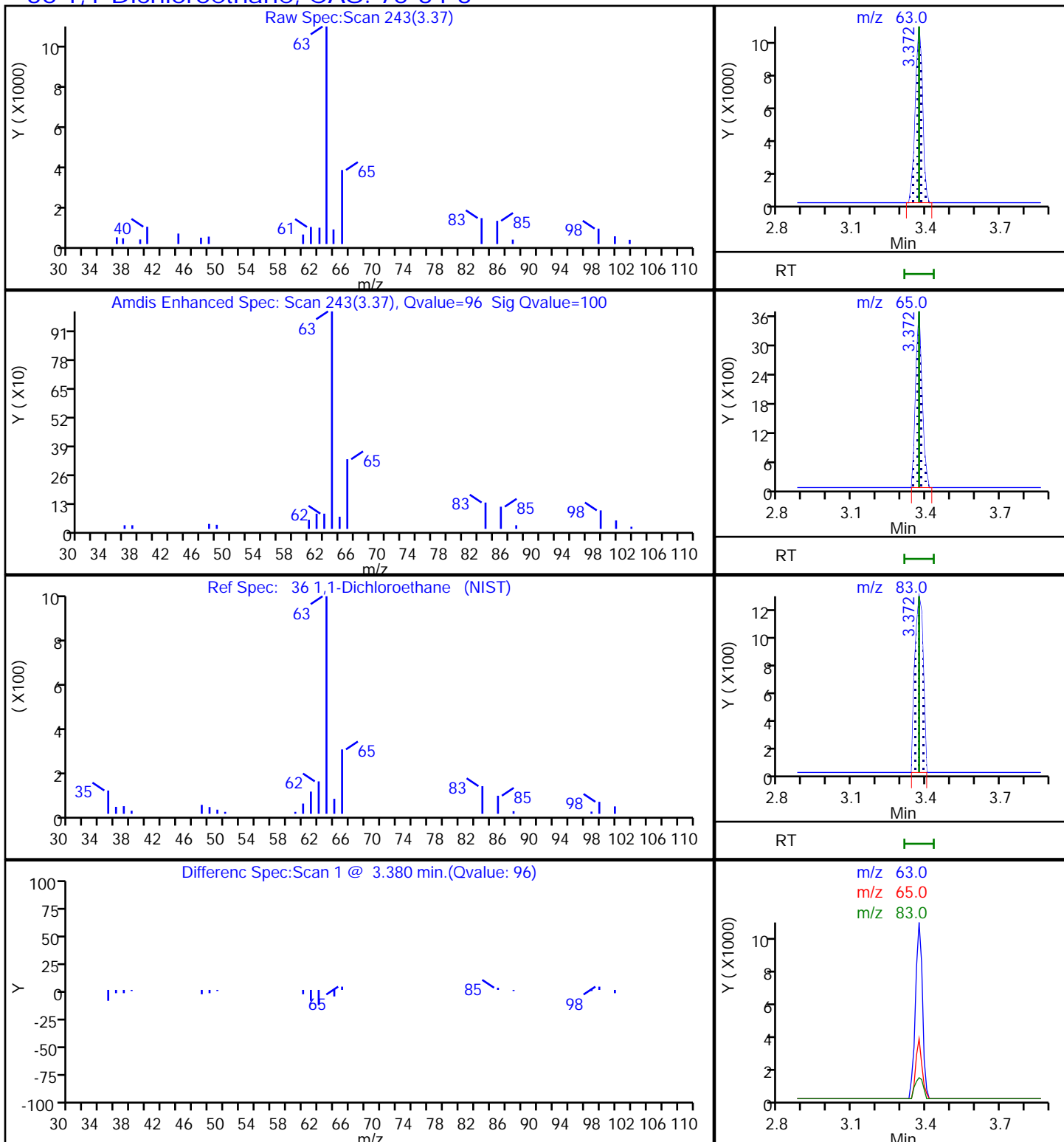
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3138.D

Injection Date: 18-Jul-2019 01:35:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-9

Lab Sample ID: 480-156213-9

Client ID: 356023-MW1802

Operator ID: AEM

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

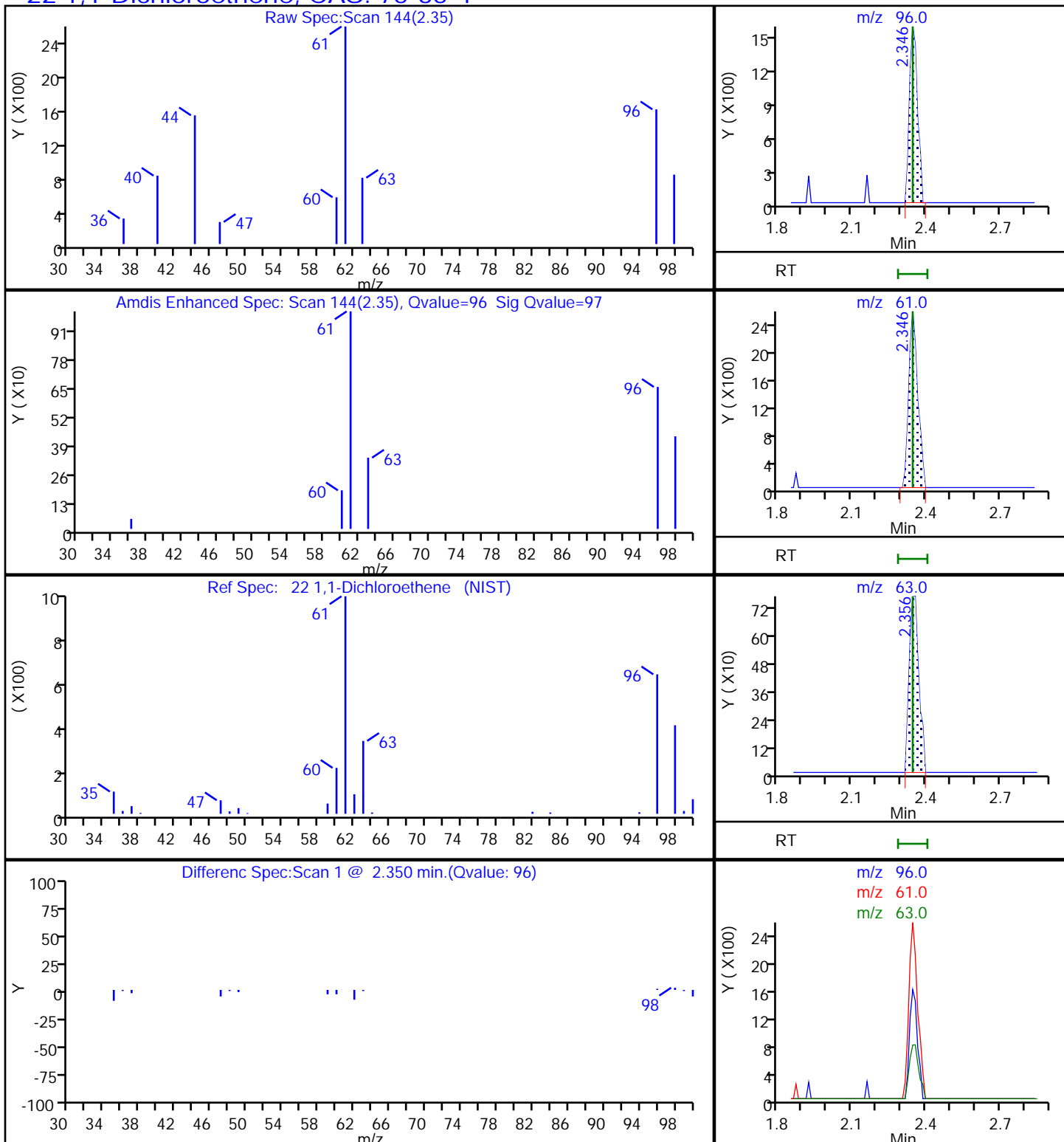
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4

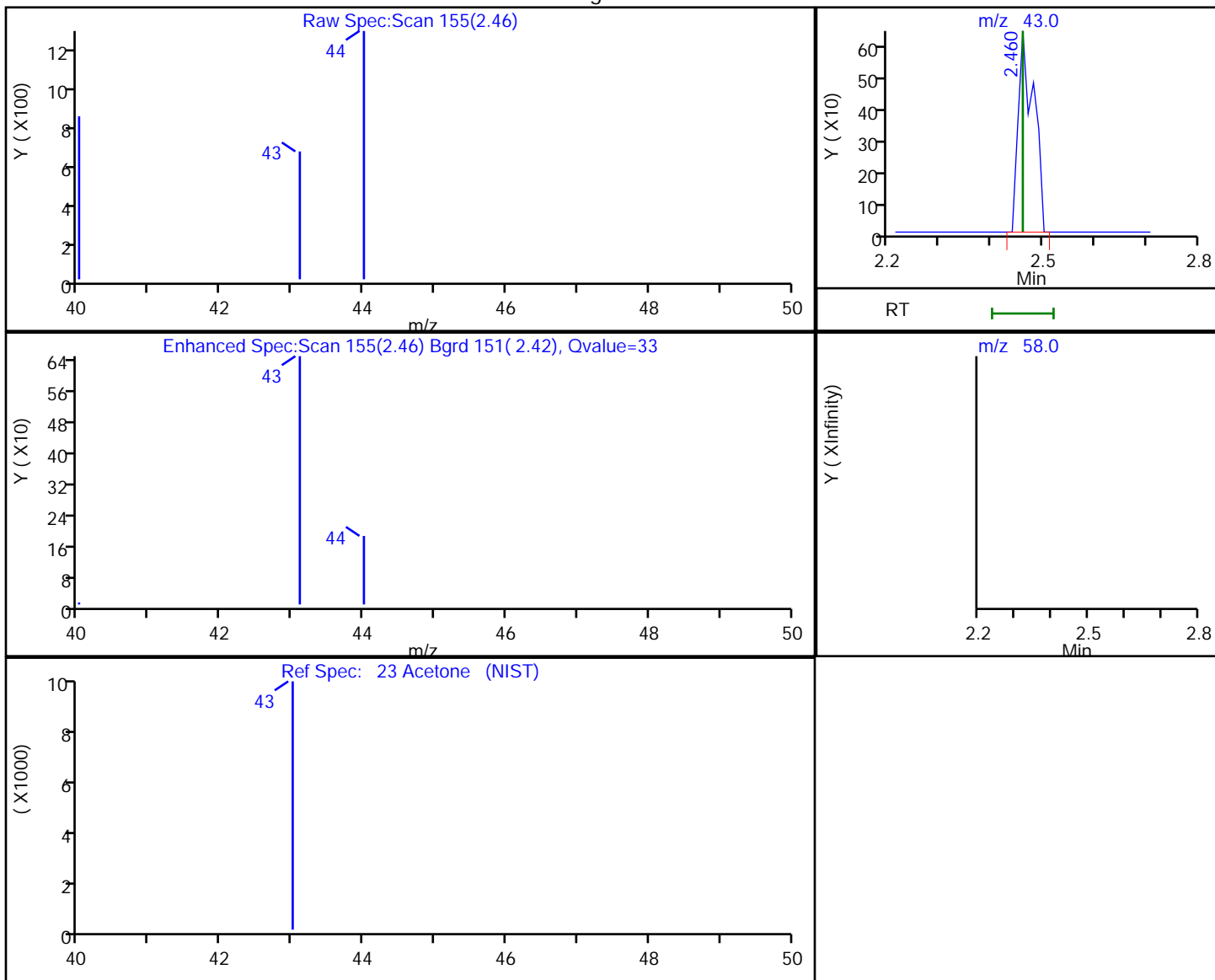


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3138.D
 Injection Date: 18-Jul-2019 01:35:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-9 Lab Sample ID: 480-156213-9
 Client ID: 356023-MW1802
 Operator ID: AEM ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.46	43.00	1339	0.516920
2.46	58.00	0	

Reviewer: farrellr, 18-Jul-2019 13:26:07

Audit Action: Marked Compound Undetected

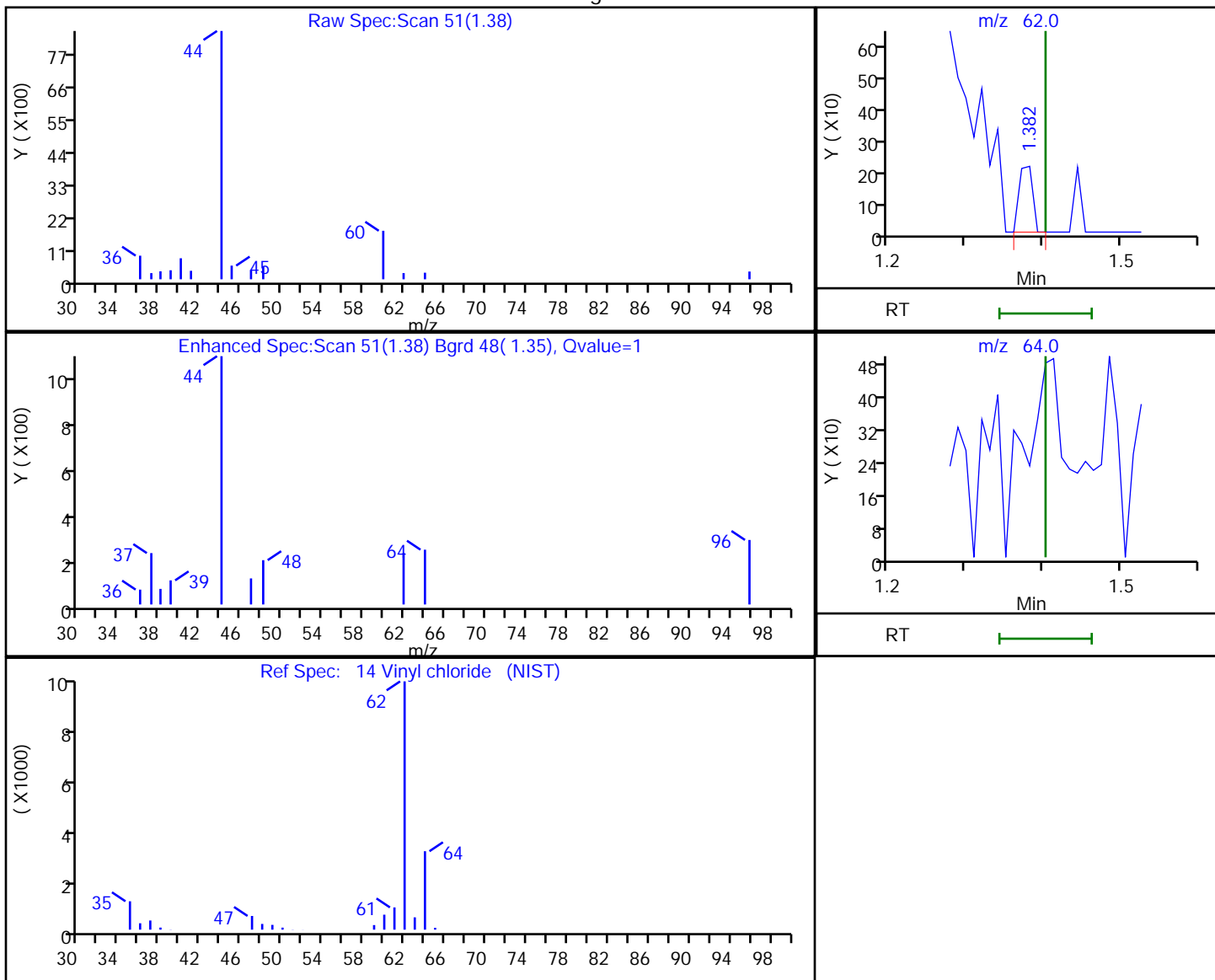
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3138.D
 Injection Date: 18-Jul-2019 01:35:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-9 Lab Sample ID: 480-156213-9
 Client ID: 356023-MW1802
 Operator ID: AEM ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.38	62.00	259	0.024396
1.40	64.00	0	

Reviewer: farrellr, 18-Jul-2019 13:25:52

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1803 Lab Sample ID: 480-156213-10
 Matrix: Water Lab File ID: T3139.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:30
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 01:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	1.4		1.0	0.38
75-35-4	1,1-Dichloroethene	0.43	J	1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1803 Lab Sample ID: 480-156213-10
 Matrix: Water Lab File ID: T3139.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:30
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 01:59
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3139.D
 Lims ID: 480-156213-D-10
 Client ID: 356023-MW1803
 Sample Type: Client
 Inject. Date: 18-Jul-2019 01:59:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-10
 Misc. Info.: 480-0082700-018
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:26:56 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:28:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	166477	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	731088	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	439443	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	94	242110	26.3	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	272379	25.8	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	875014	24.4	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	317415	26.4	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	93	3316	0.4343	
23 Acetone	43	2.460	2.460	0.000	97	5054	1.96	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	88	7388	0.3241	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	20629	1.41	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3139.D

Injection Date: 18-Jul-2019 01:59:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-10

Lab Sample ID: 480-156213-10

Worklist Smp#: 18

Client ID: 356023-MW1803

Purge Vol: 5.000 mL

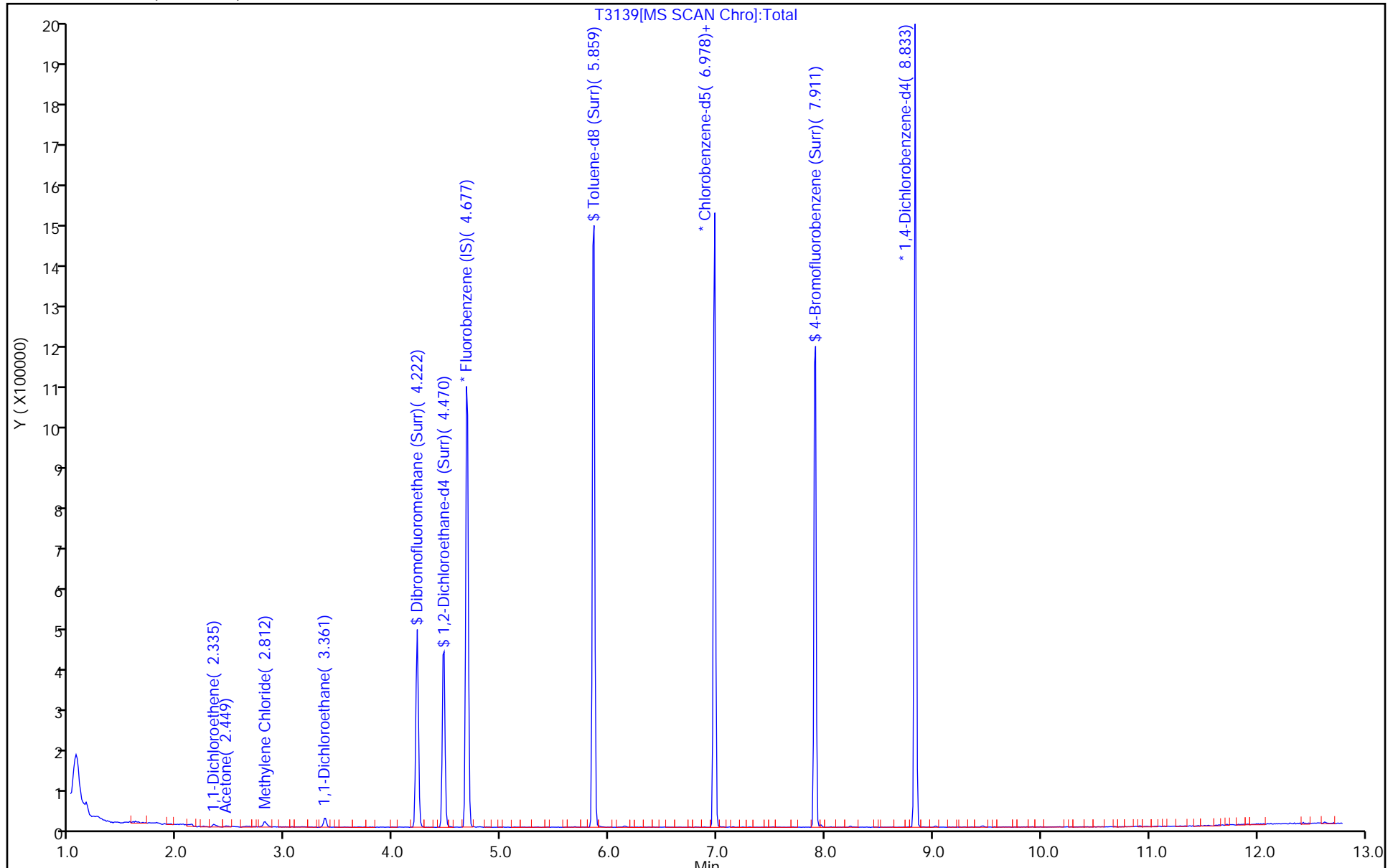
Dil. Factor: 1.0000

ALS Bottle#: 17

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3139.D

Injection Date: 18-Jul-2019 01:59:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-10

Lab Sample ID: 480-156213-10

Client ID: 356023-MW1803

Operator ID: AEM

ALS Bottle#: 17 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

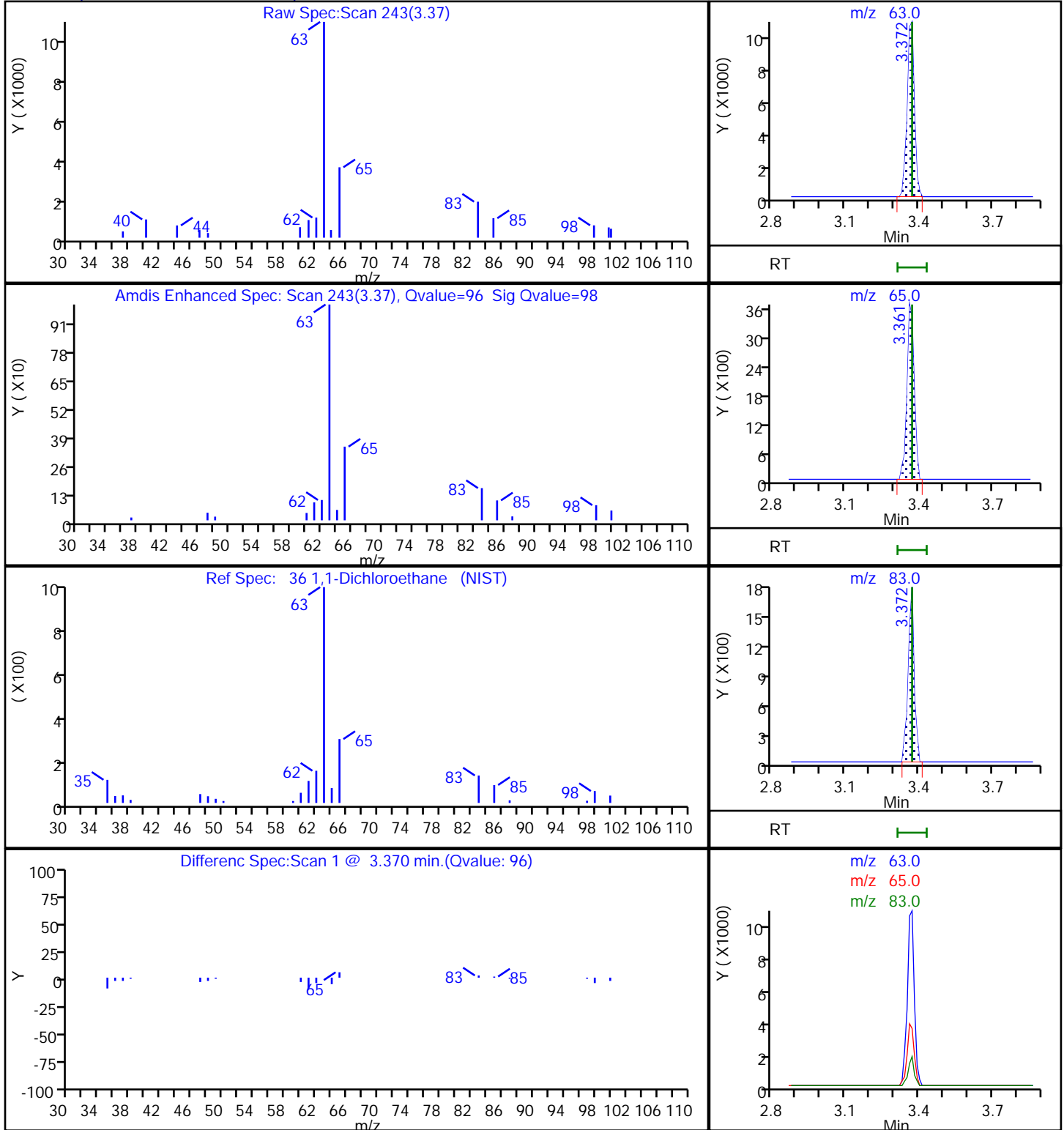
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3139.D

Injection Date: 18-Jul-2019 01:59:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-10

Lab Sample ID: 480-156213-10

Client ID: 356023-MW1803

Operator ID: AEM

ALS Bottle#: 17 Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

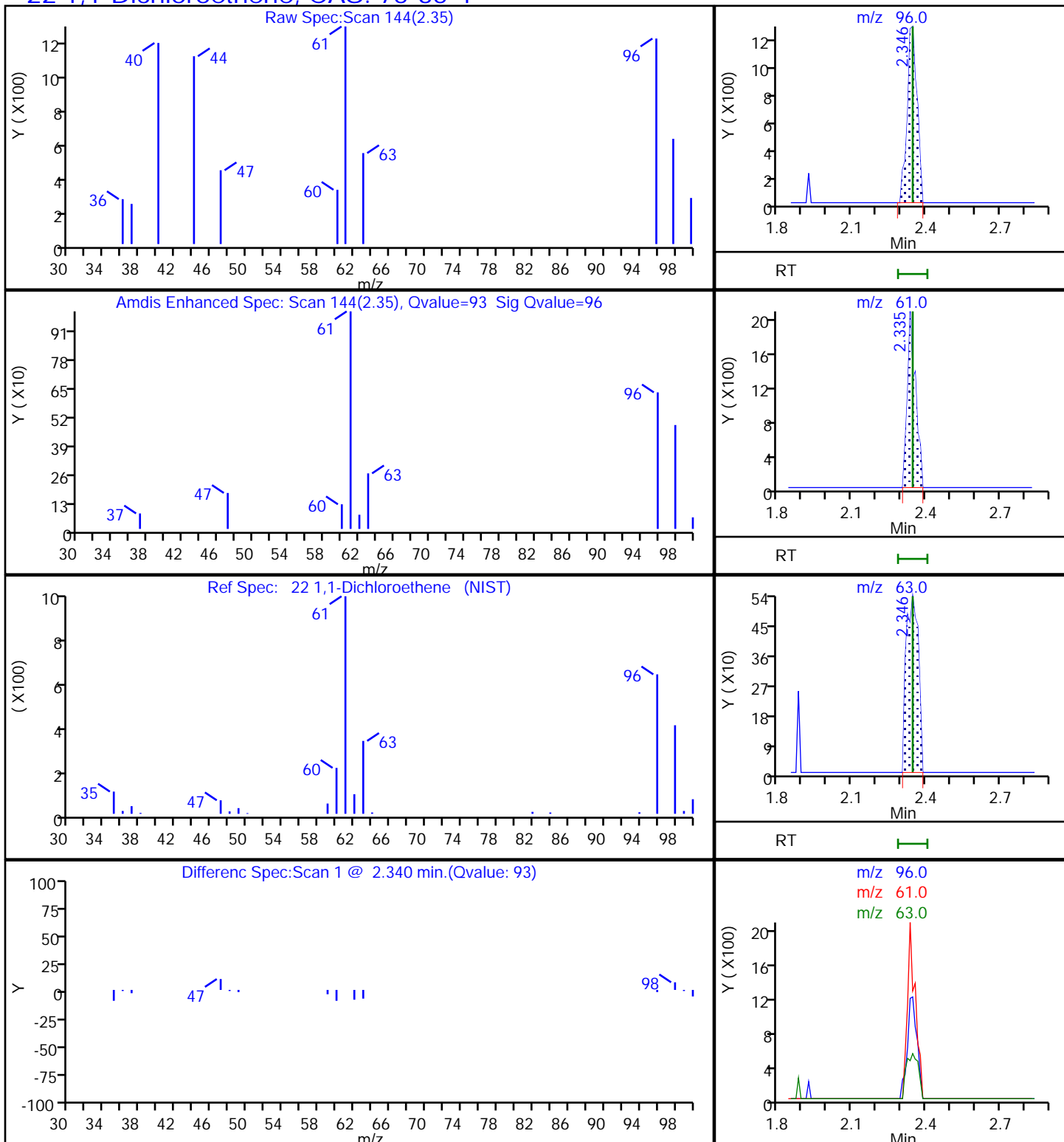
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5B Lab Sample ID: 480-156213-11
 Matrix: Water Lab File ID: T3140.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 02:23
 Soil Aliquot Vol: _____ Dilution Factor: 40
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1800		40	33
79-34-5	1,1,2,2-Tetrachloroethane	ND		40	8.4
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12
79-00-5	1,1,2-Trichloroethane	ND		40	9.2
75-34-3	1,1-Dichloroethane	42		40	15
75-35-4	1,1-Dichloroethene	200		40	12
87-61-6	1,2,3-Trichlorobenzene	ND		40	16
120-82-1	1,2,4-Trichlorobenzene	ND		40	16
96-12-8	1,2-Dibromo-3-Chloropropane	ND		40	16
106-93-4	1,2-Dibromoethane	ND		40	29
95-50-1	1,2-Dichlorobenzene	ND		40	32
107-06-2	1,2-Dichloroethane	ND		40	8.4
78-87-5	1,2-Dichloropropane	ND		40	29
541-73-1	1,3-Dichlorobenzene	ND		40	31
106-46-7	1,4-Dichlorobenzene	ND		40	34
123-91-1	1,4-Dioxane	ND		1600	370
78-93-3	2-Butanone (MEK)	ND		400	53
591-78-6	2-Hexanone	ND		200	50
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		200	84
67-64-1	Acetone	ND		400	120
71-43-2	Benzene	ND		40	16
74-97-5	Bromochloromethane	ND		40	35
75-27-4	Bromodichloromethane	ND		40	16
75-25-2	Bromoform	ND	*	40	10
74-83-9	Bromomethane	ND		40	28
75-15-0	Carbon disulfide	ND		40	7.6
56-23-5	Carbon tetrachloride	ND		40	11
108-90-7	Chlorobenzene	ND		40	30
75-00-3	Chloroethane	ND		40	13
67-66-3	Chloroform	ND		40	14
74-87-3	Chloromethane	ND		40	14
156-59-2	cis-1,2-Dichloroethene	ND		40	32
10061-01-5	cis-1,3-Dichloropropene	ND		40	14
110-82-7	Cyclohexane	ND		40	7.2
124-48-1	Dibromochloromethane	ND	*	40	13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5B Lab Sample ID: 480-156213-11
 Matrix: Water Lab File ID: T3140.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 02:23
 Soil Aliquot Vol: _____ Dilution Factor: 40
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		40	27
100-41-4	Ethylbenzene	ND		40	30
98-82-8	Isopropylbenzene	ND		40	32
79-20-9	Methyl acetate	ND		100	52
1634-04-4	Methyl tert-butyl ether	ND		40	6.4
108-87-2	Methylcyclohexane	ND		40	6.4
75-09-2	Methylene Chloride	22	J	40	18
100-42-5	Styrene	ND		40	29
127-18-4	Tetrachloroethene	ND		40	14
108-88-3	Toluene	ND		40	20
156-60-5	trans-1,2-Dichloroethene	ND		40	36
10061-02-6	trans-1,3-Dichloropropene	ND		40	15
79-01-6	Trichloroethene	87		40	18
75-69-4	Trichlorofluoromethane	ND		40	35
75-01-4	Vinyl chloride	ND		40	36
1330-20-7	Xylenes, Total	ND		80	26

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	108		73-120
1868-53-7	Dibromofluoromethane (Surr)	108		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D
 Lims ID: 480-156213-D-11
 Client ID: 356023-MW5B
 Sample Type: Client
 Inject. Date: 18-Jul-2019 02:23:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 40.0000
 Sample Info: 480-156213-D-11
 Misc. Info.: 480-0082700-019
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:29:25 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 13:29:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	164345	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	85	716816	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	434282	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	94	244952	27.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	270277	25.9	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	92	865194	24.6	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	319601	27.1	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	U
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	97	37544	4.98	
23 Acetone	43		2.460				ND	U
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	89	9203	0.5401	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	95	15139	1.05	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83	4.097	4.076	0.000	91	2717	0.1769	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	98	510745	45.7	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	95	20037	2.18	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D

Injection Date: 18-Jul-2019 02:23:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-11

Lab Sample ID: 480-156213-11

Worklist Smp#: 19

Client ID: 356023-MW5B

Purge Vol: 5.000 mL

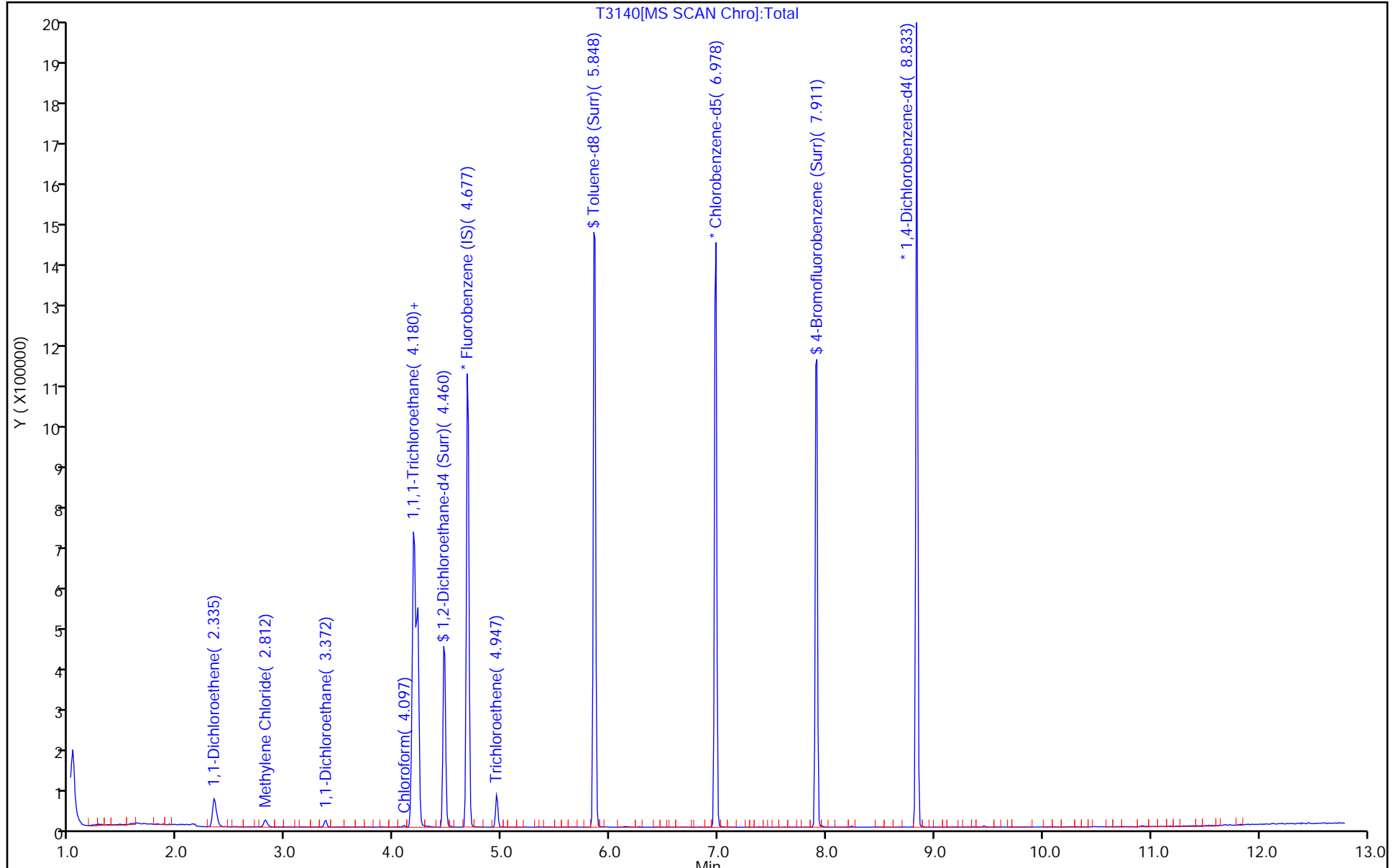
Dil. Factor: 40.0000

ALS Bottle#: 18

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D

Injection Date: 18-Jul-2019 02:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-11

Lab Sample ID: 480-156213-11

Client ID: 356023-MW5B

Operator ID: AEM

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

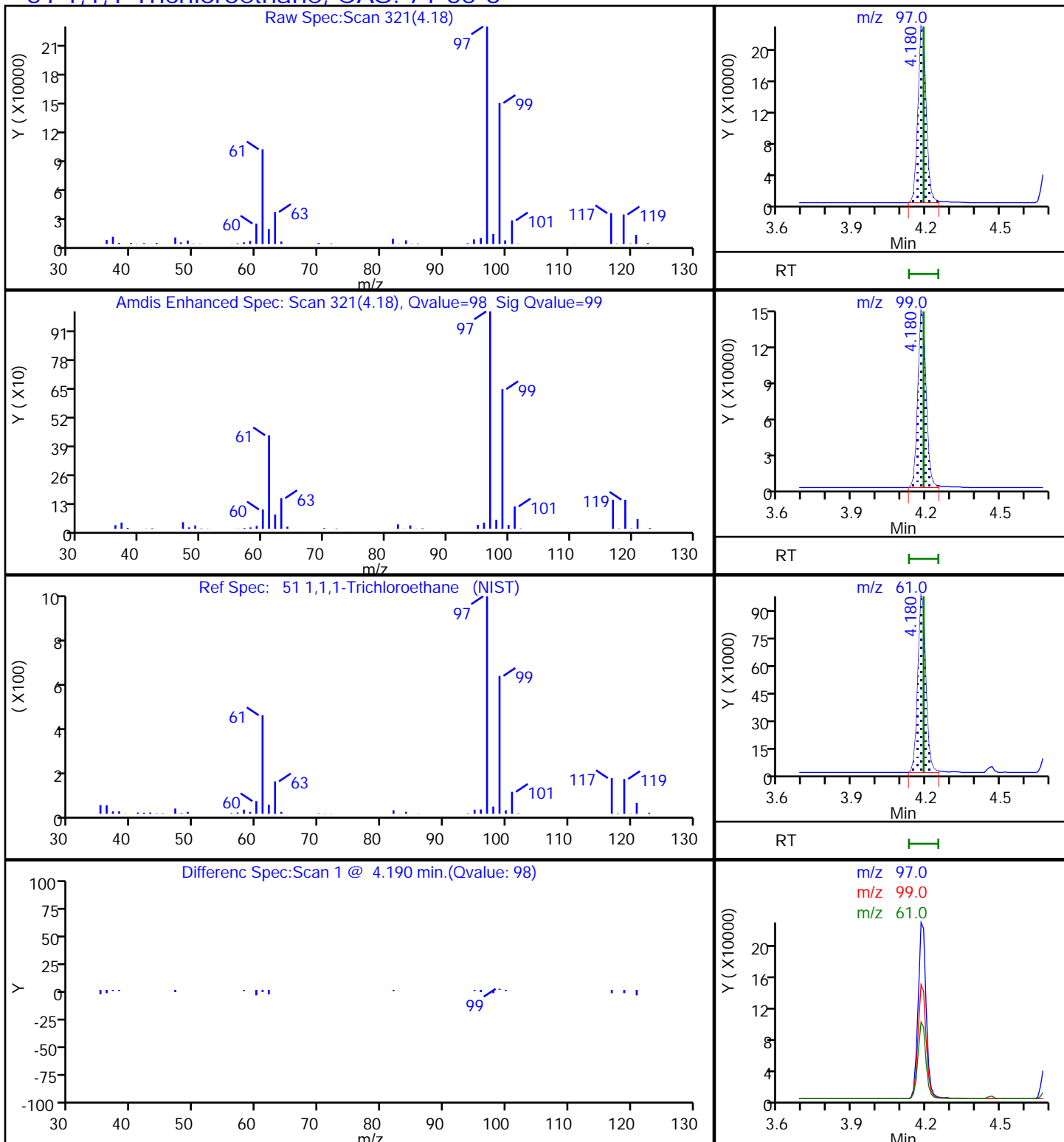
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D

Injection Date: 18-Jul-2019 02:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-11

Lab Sample ID: 480-156213-11

Client ID: 356023-MW5B

Operator ID: AEM

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

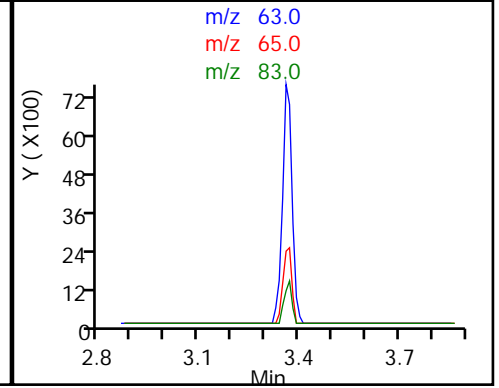
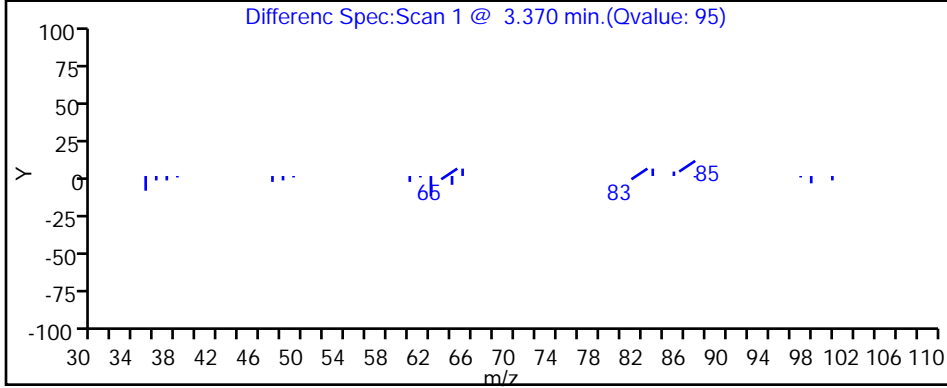
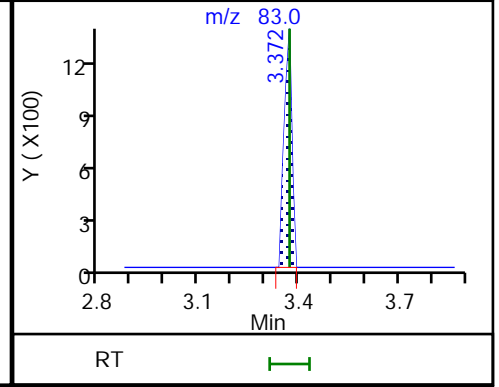
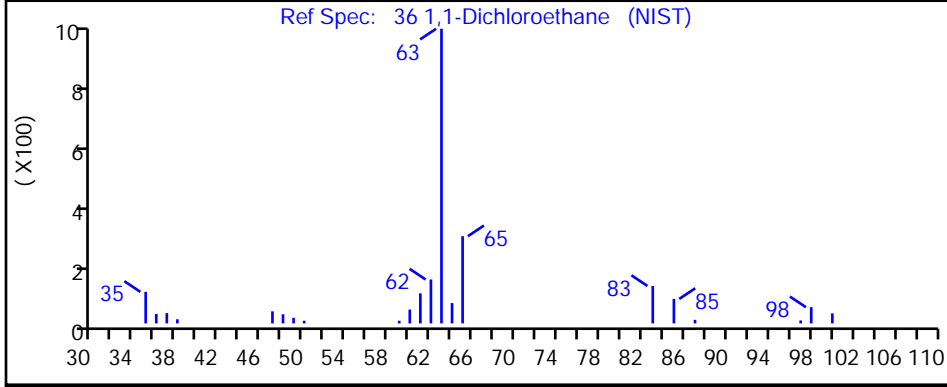
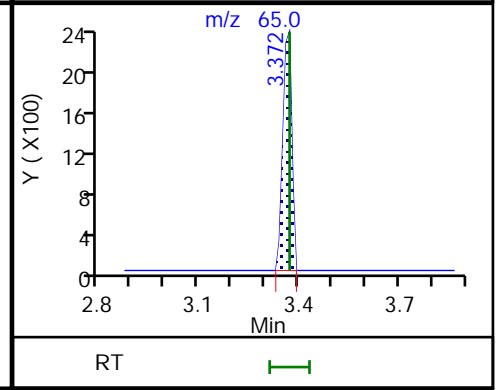
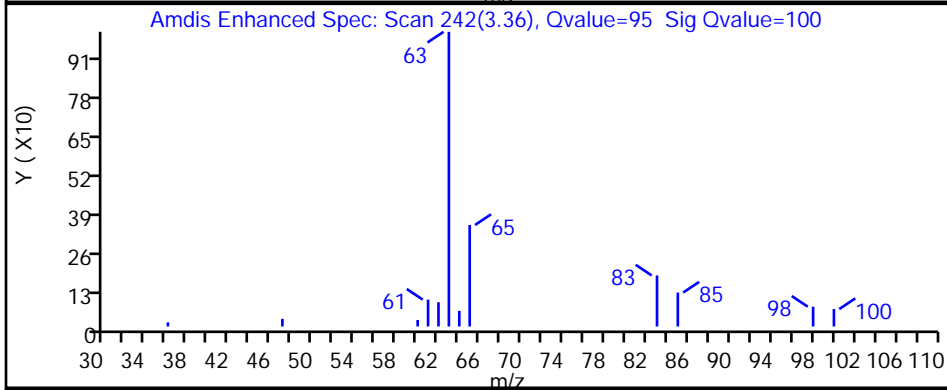
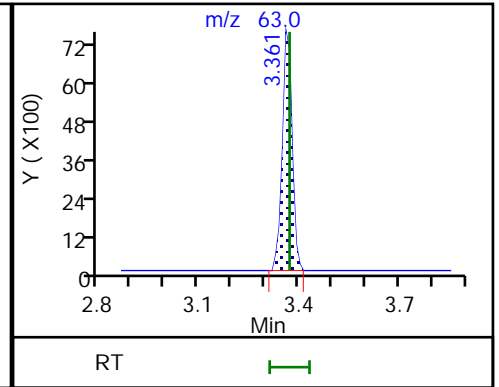
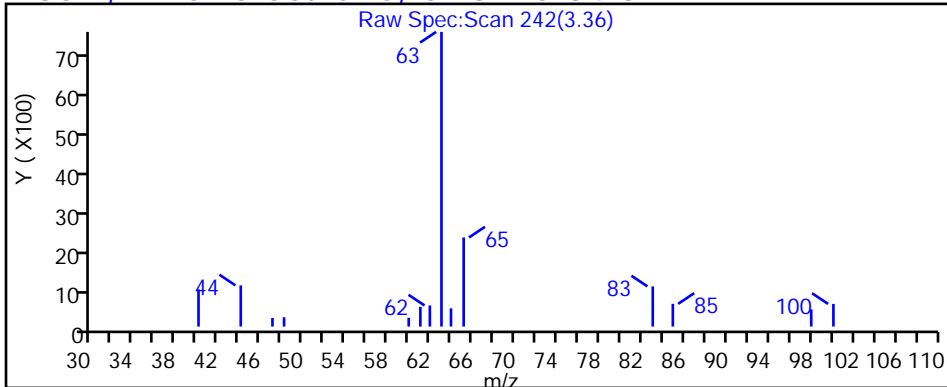
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D

Injection Date: 18-Jul-2019 02:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-11

Lab Sample ID: 480-156213-11

Client ID: 356023-MW5B

Operator ID: AEM

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

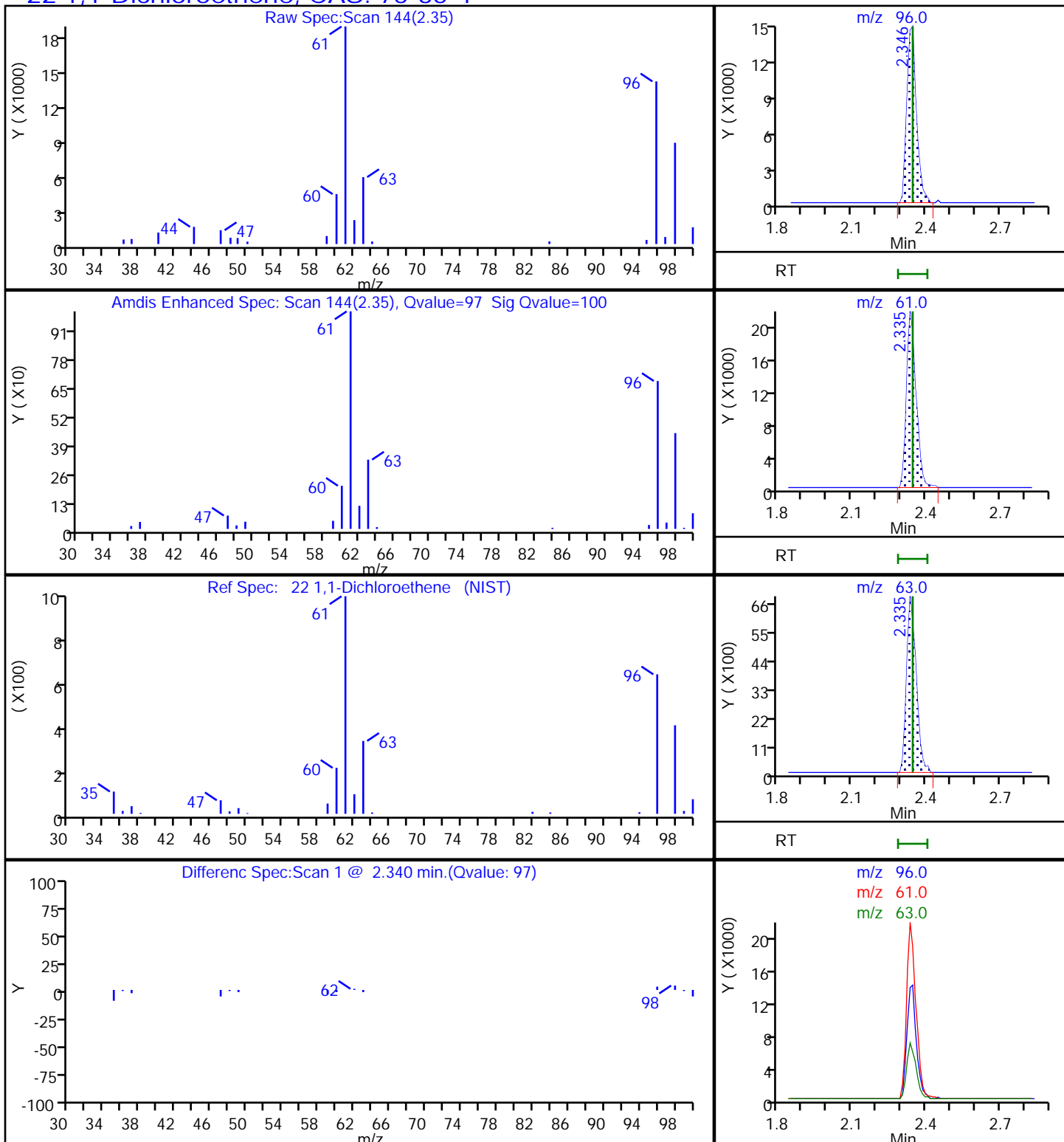
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D

Injection Date: 18-Jul-2019 02:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-11

Lab Sample ID: 480-156213-11

Client ID: 356023-MW5B

Operator ID: AEM

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

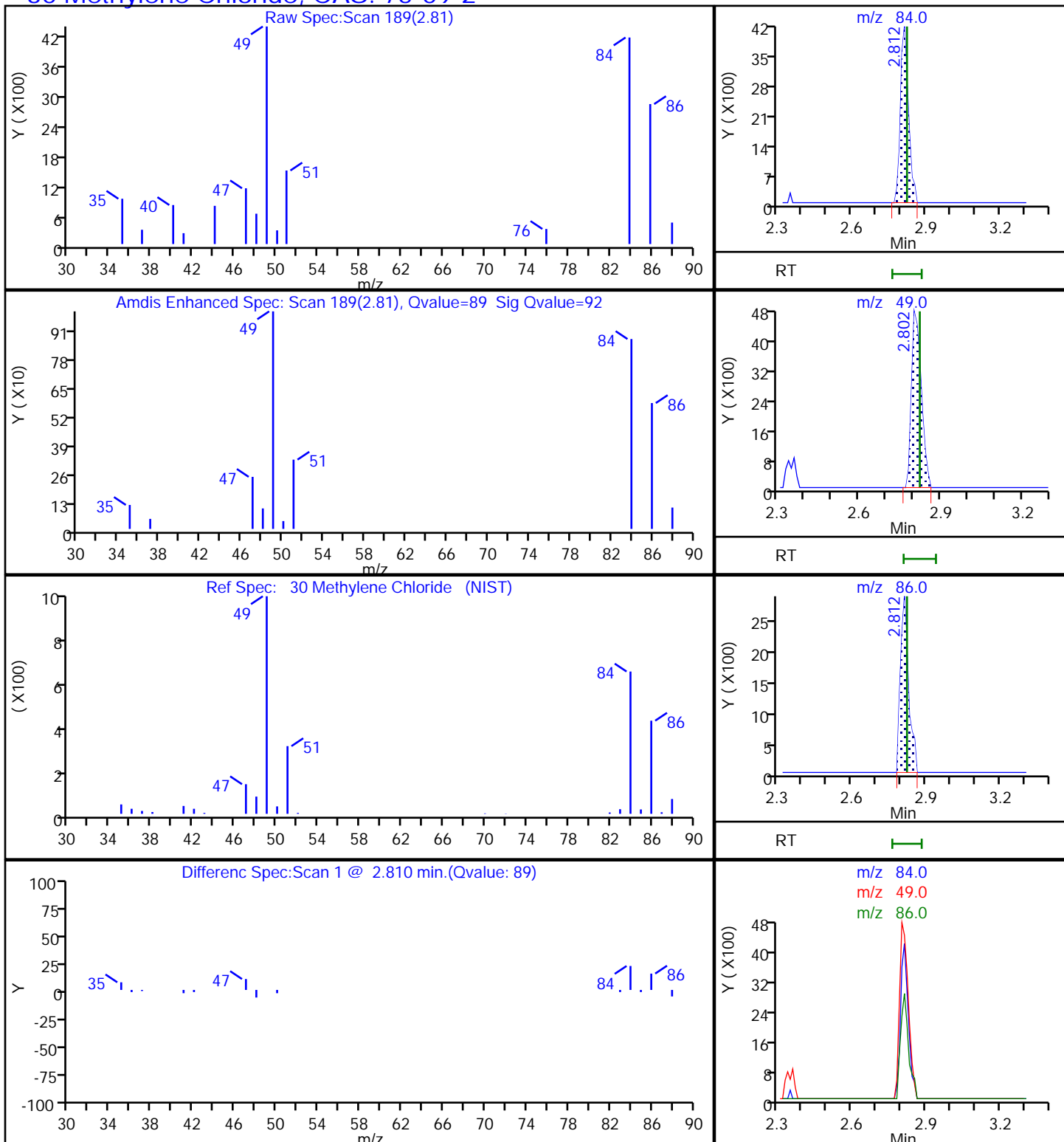
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

30 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D

Injection Date: 18-Jul-2019 02:23:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-11

Lab Sample ID: 480-156213-11

Client ID: 356023-MW5B

Operator ID: AEM

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

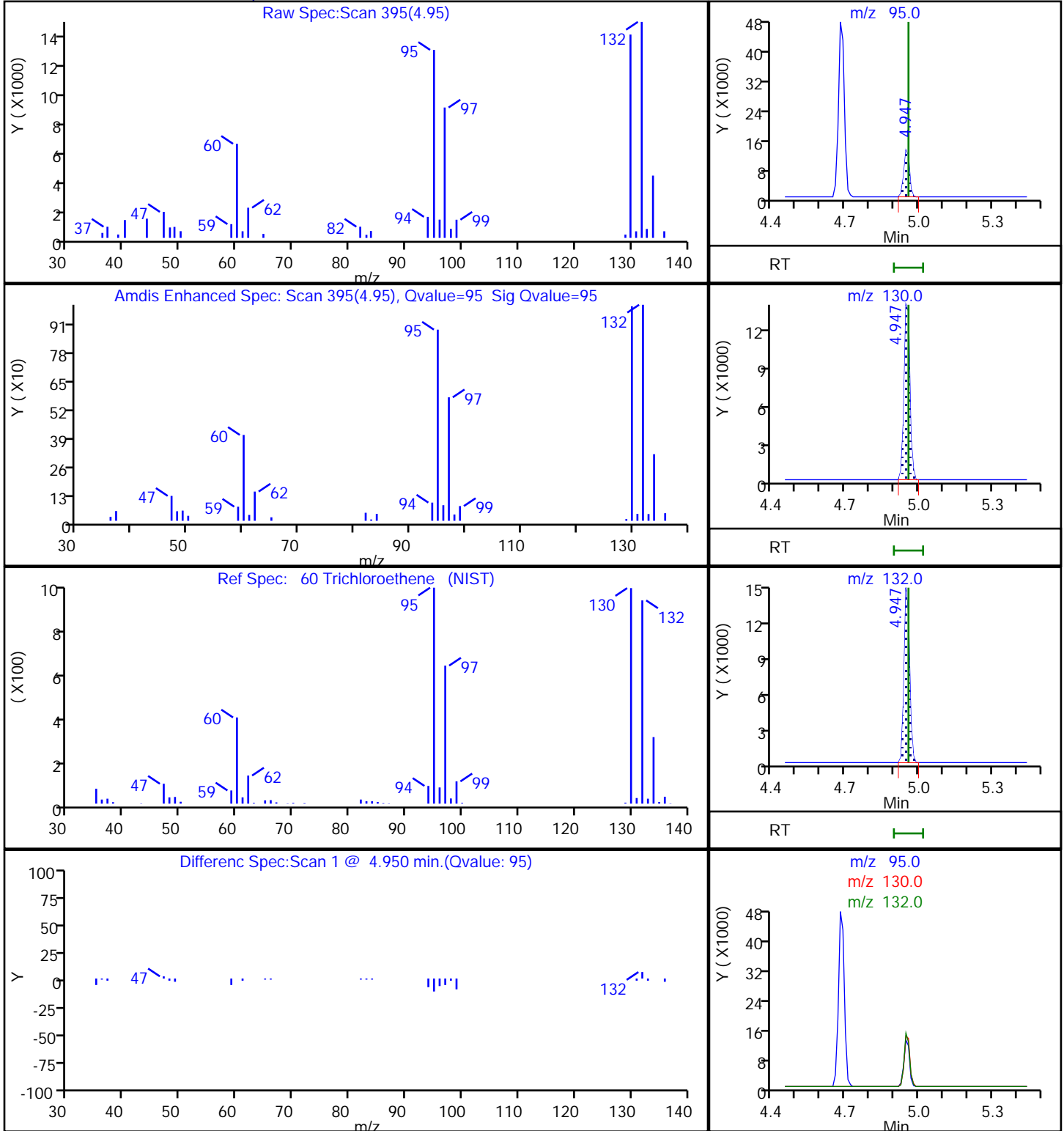
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6

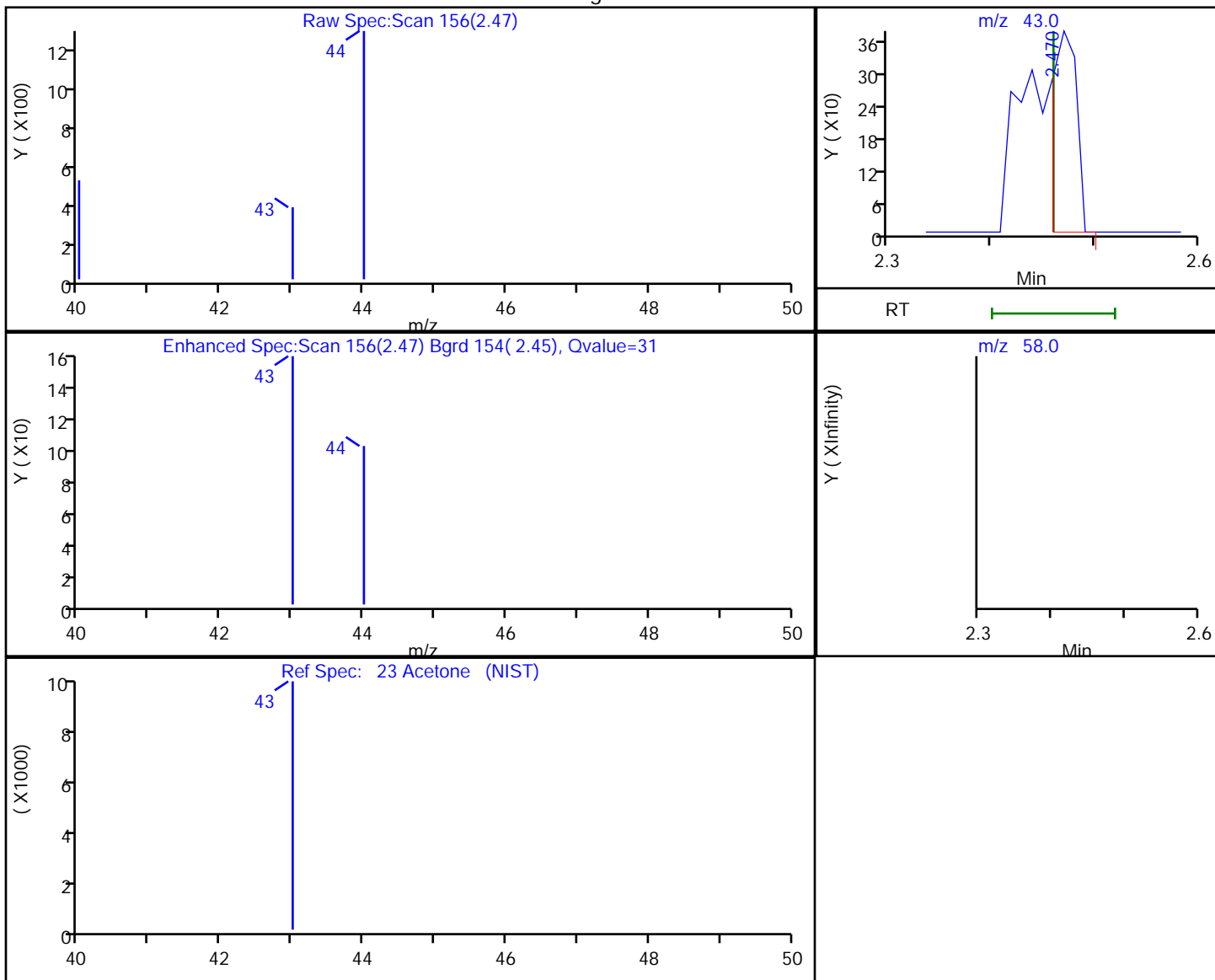


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D
 Injection Date: 18-Jul-2019 02:23:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-11 Lab Sample ID: 480-156213-11
 Client ID: 356023-MW5B
 Operator ID: AEM ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 40.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
2.47	43.00	612	0.240995
2.46	58.00	0	

Reviewer: farrellr, 18-Jul-2019 13:28:28

Audit Action: Marked Compound Undetected

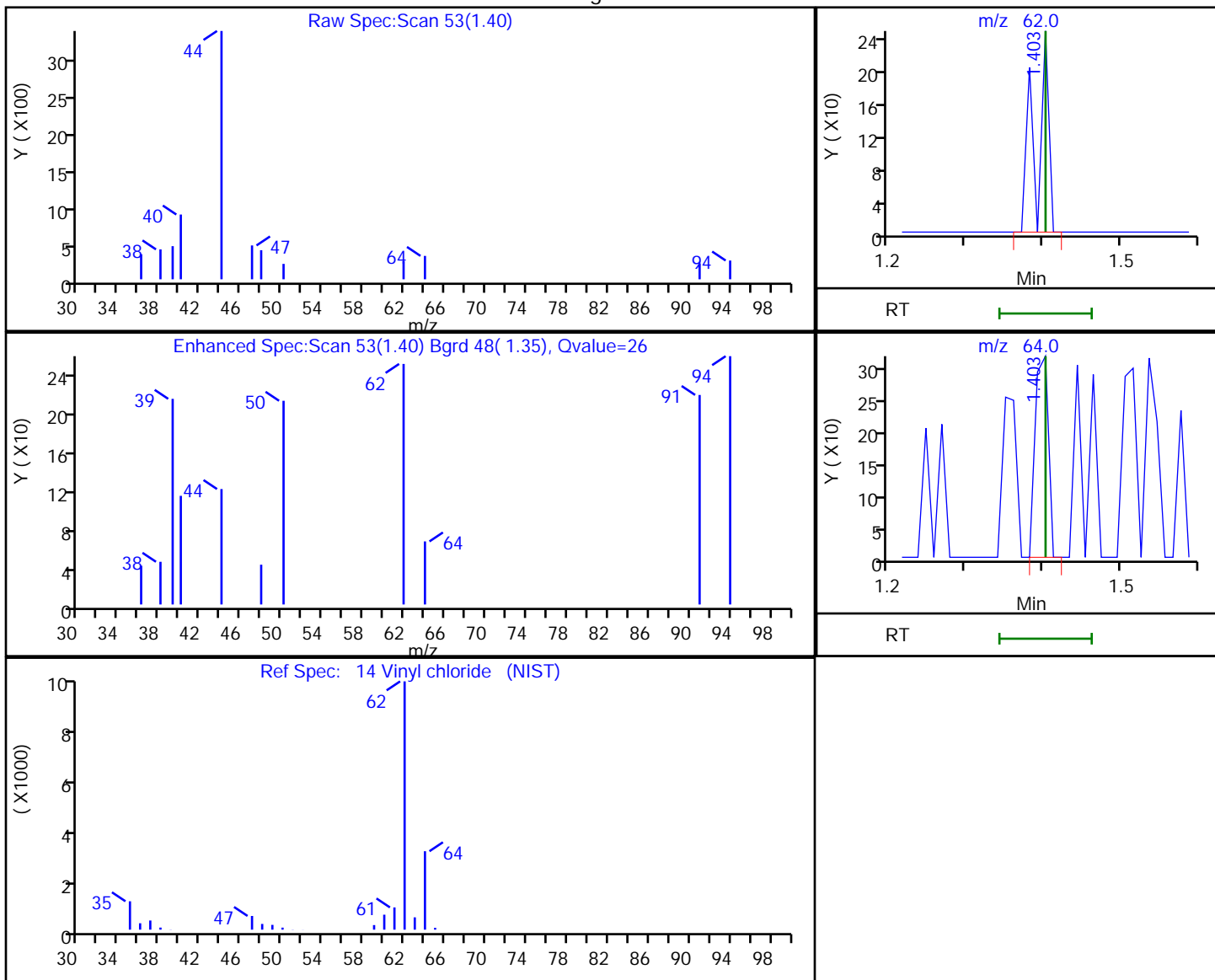
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3140.D
 Injection Date: 18-Jul-2019 02:23:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-11 Lab Sample ID: 480-156213-11
 Client ID: 356023-MW5B
 Operator ID: AEM ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 40.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

14 Vinyl chloride, CAS: 75-01-4

Processing Results



RT	Mass	Response	Amount
1.40	62.00	280	0.026902
1.40	64.00	381	

Reviewer: farrellr, 18-Jul-2019 13:28:21

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-ERT4 Lab Sample ID: 480-156213-12
 Matrix: Water Lab File ID: T3141.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 02:47
 Soil Aliquot Vol: _____ Dilution Factor: 50
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	3100		50	41
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	11
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16
79-00-5	1,1,2-Trichloroethane	ND		50	12
75-34-3	1,1-Dichloroethane	78		50	19
75-35-4	1,1-Dichloroethene	280		50	15
87-61-6	1,2,3-Trichlorobenzene	ND		50	21
120-82-1	1,2,4-Trichlorobenzene	ND		50	21
96-12-8	1,2-Dibromo-3-Chloropropane	ND		50	20
106-93-4	1,2-Dibromoethane	ND		50	37
95-50-1	1,2-Dichlorobenzene	ND		50	40
107-06-2	1,2-Dichloroethane	ND		50	11
78-87-5	1,2-Dichloropropane	ND		50	36
541-73-1	1,3-Dichlorobenzene	ND		50	39
106-46-7	1,4-Dichlorobenzene	ND		50	42
123-91-1	1,4-Dioxane	ND		2000	470
78-93-3	2-Butanone (MEK)	ND		500	66
591-78-6	2-Hexanone	ND		250	62
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		250	110
67-64-1	Acetone	ND		500	150
71-43-2	Benzene	ND		50	21
74-97-5	Bromochloromethane	ND		50	44
75-27-4	Bromodichloromethane	ND		50	20
75-25-2	Bromoform	ND	*	50	13
74-83-9	Bromomethane	ND		50	35
75-15-0	Carbon disulfide	ND		50	9.5
56-23-5	Carbon tetrachloride	ND		50	14
108-90-7	Chlorobenzene	ND		50	38
75-00-3	Chloroethane	ND		50	16
67-66-3	Chloroform	ND		50	17
74-87-3	Chloromethane	ND		50	18
156-59-2	cis-1,2-Dichloroethene	ND		50	41
10061-01-5	cis-1,3-Dichloropropene	ND		50	18
110-82-7	Cyclohexane	ND		50	9.0
124-48-1	Dibromochloromethane	ND	*	50	16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-ERT4 Lab Sample ID: 480-156213-12
 Matrix: Water Lab File ID: T3141.D
 Analysis Method: 8260C Date Collected: 07/11/2019 11:20
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 02:47
 Soil Aliquot Vol: _____ Dilution Factor: 50
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		50	34
100-41-4	Ethylbenzene	ND		50	37
98-82-8	Isopropylbenzene	ND		50	40
79-20-9	Methyl acetate	ND		130	65
1634-04-4	Methyl tert-butyl ether	ND		50	8.0
108-87-2	Methylcyclohexane	ND		50	8.0
75-09-2	Methylene Chloride	35	J	50	22
100-42-5	Styrene	ND		50	37
127-18-4	Tetrachloroethene	ND		50	18
108-88-3	Toluene	ND		50	26
156-60-5	trans-1,2-Dichloroethene	ND		50	45
10061-02-6	trans-1,3-Dichloropropene	ND		50	19
79-01-6	Trichloroethene	140		50	23
75-69-4	Trichlorofluoromethane	ND		50	44
75-01-4	Vinyl chloride	ND		50	45
1330-20-7	Xylenes, Total	ND		100	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3141.D
 Lims ID: 480-156213-D-12
 Client ID: 356023-ERT4
 Sample Type: Client
 Inject. Date: 18-Jul-2019 02:47:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 50.0000
 Sample Info: 480-156213-D-12
 Misc. Info.: 480-0082700-020
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:29:25 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:30:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	164679	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	736696	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	436767	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	93	244448	26.9	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	268723	25.7	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	867375	24.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	313263	25.8	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	98	41550	5.50	
23 Acetone	43	2.470	2.460	0.010	67	1128	0.4433	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	84	10713	0.7085	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	22605	1.57	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83	4.097	4.076	0.000	89	2601	0.1690	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.190	4.190	0.000	98	690830	61.8	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	94	26731	2.90	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3141.D

Injection Date: 18-Jul-2019 02:47:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-12

Lab Sample ID: 480-156213-12

Worklist Smp#: 20

Client ID: 356023-ERT4

Purge Vol: 5.000 mL

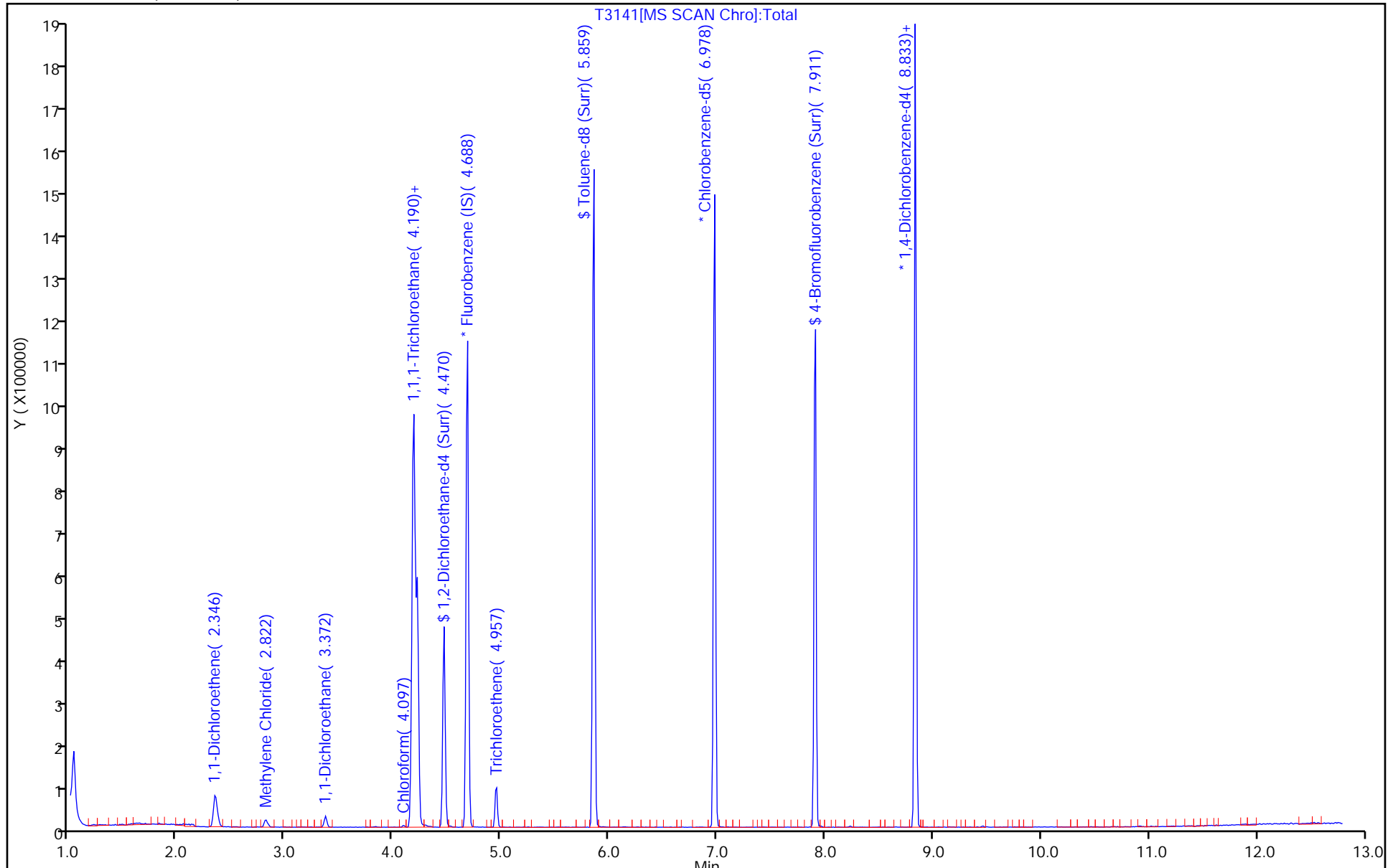
Dil. Factor: 50.0000

ALS Bottle#: 19

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3141.D

Injection Date: 18-Jul-2019 02:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-12

Lab Sample ID: 480-156213-12

Client ID: 356023-ERT4

Operator ID: AEM

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

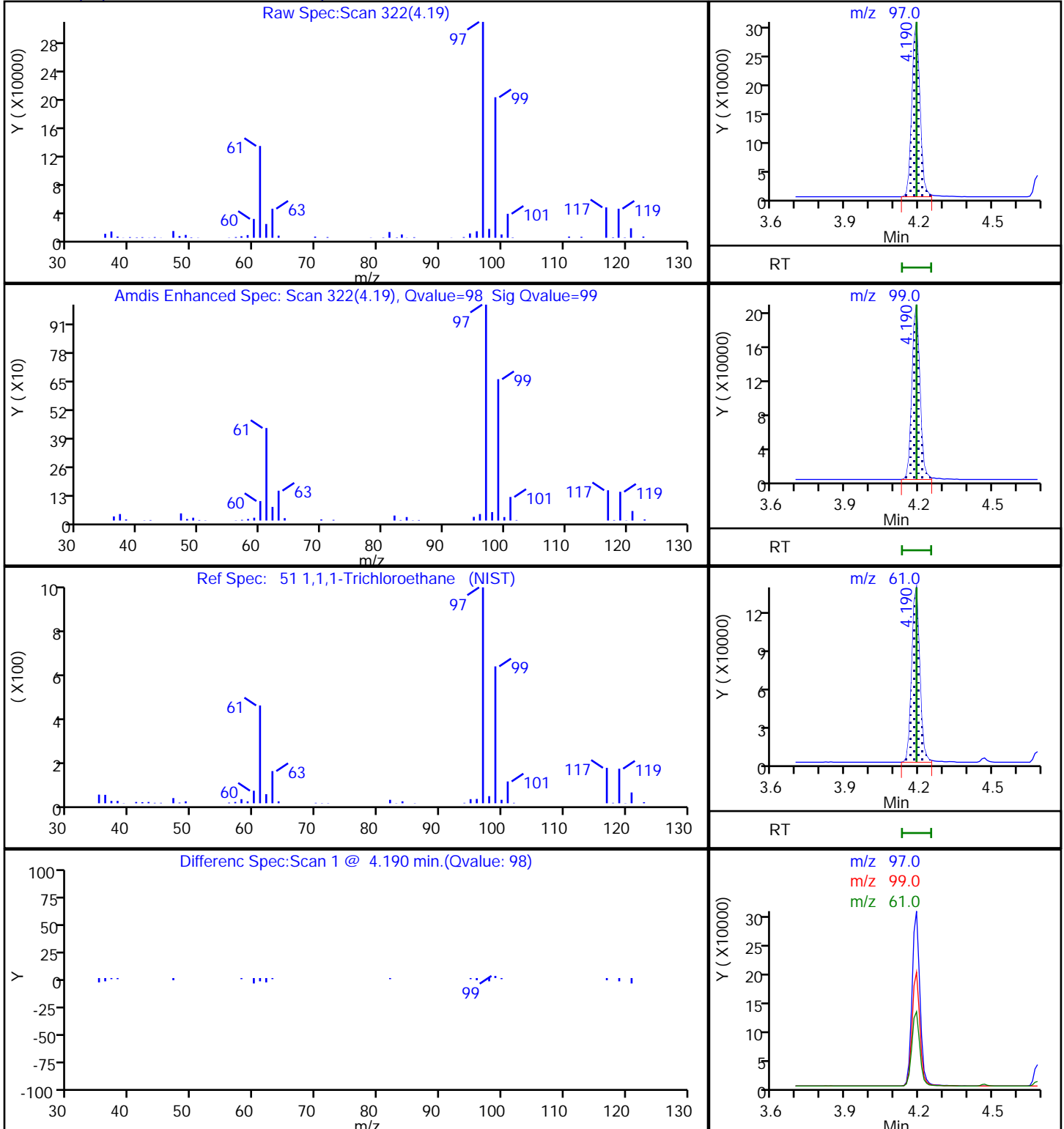
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3141.D

Injection Date: 18-Jul-2019 02:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-12

Lab Sample ID: 480-156213-12

Client ID: 356023-ERT4

Operator ID: AEM

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

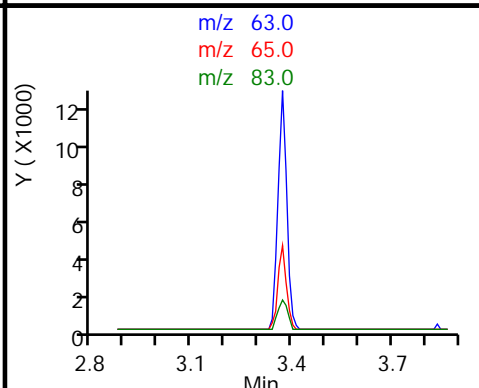
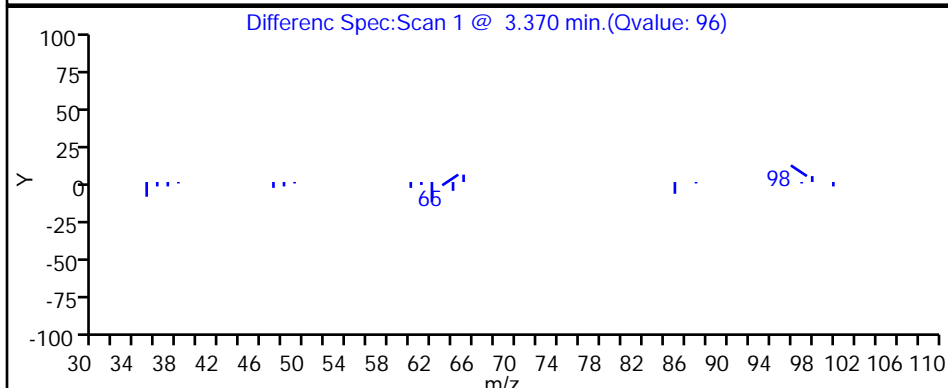
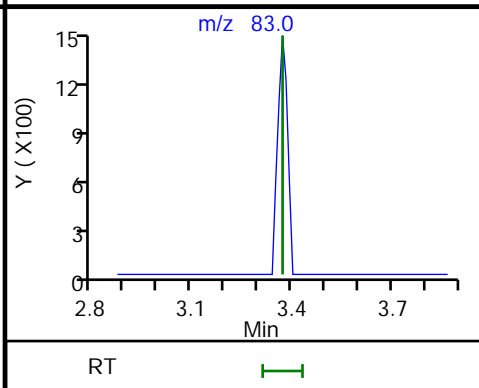
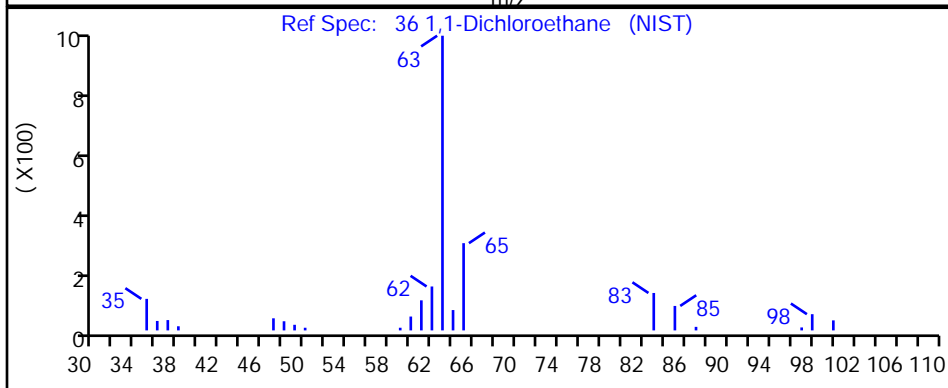
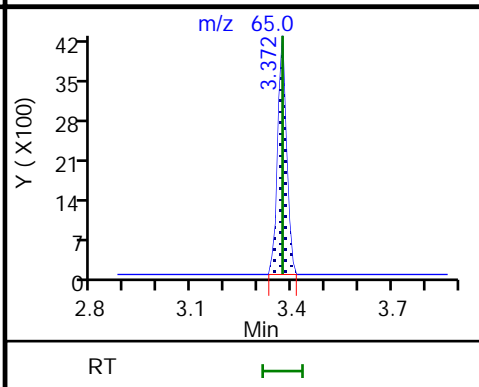
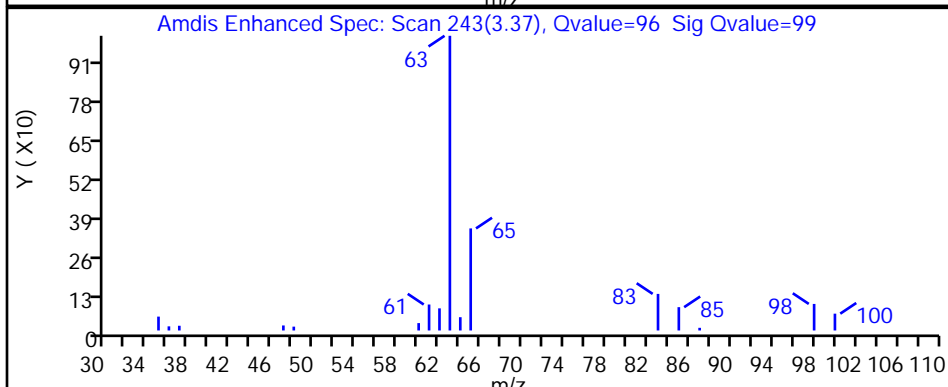
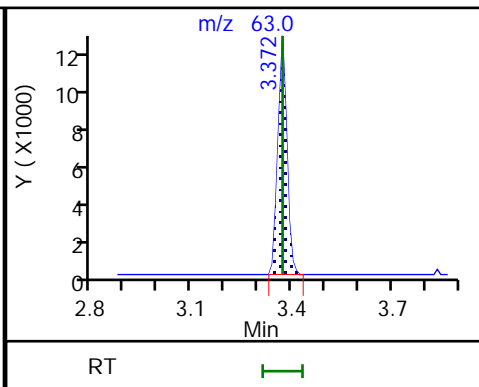
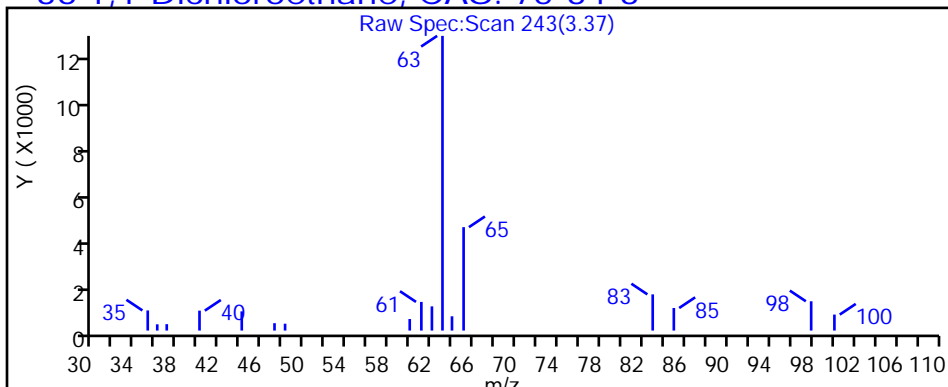
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3141.D

Injection Date: 18-Jul-2019 02:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-12

Lab Sample ID: 480-156213-12

Client ID: 356023-ERT4

Operator ID: AEM

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

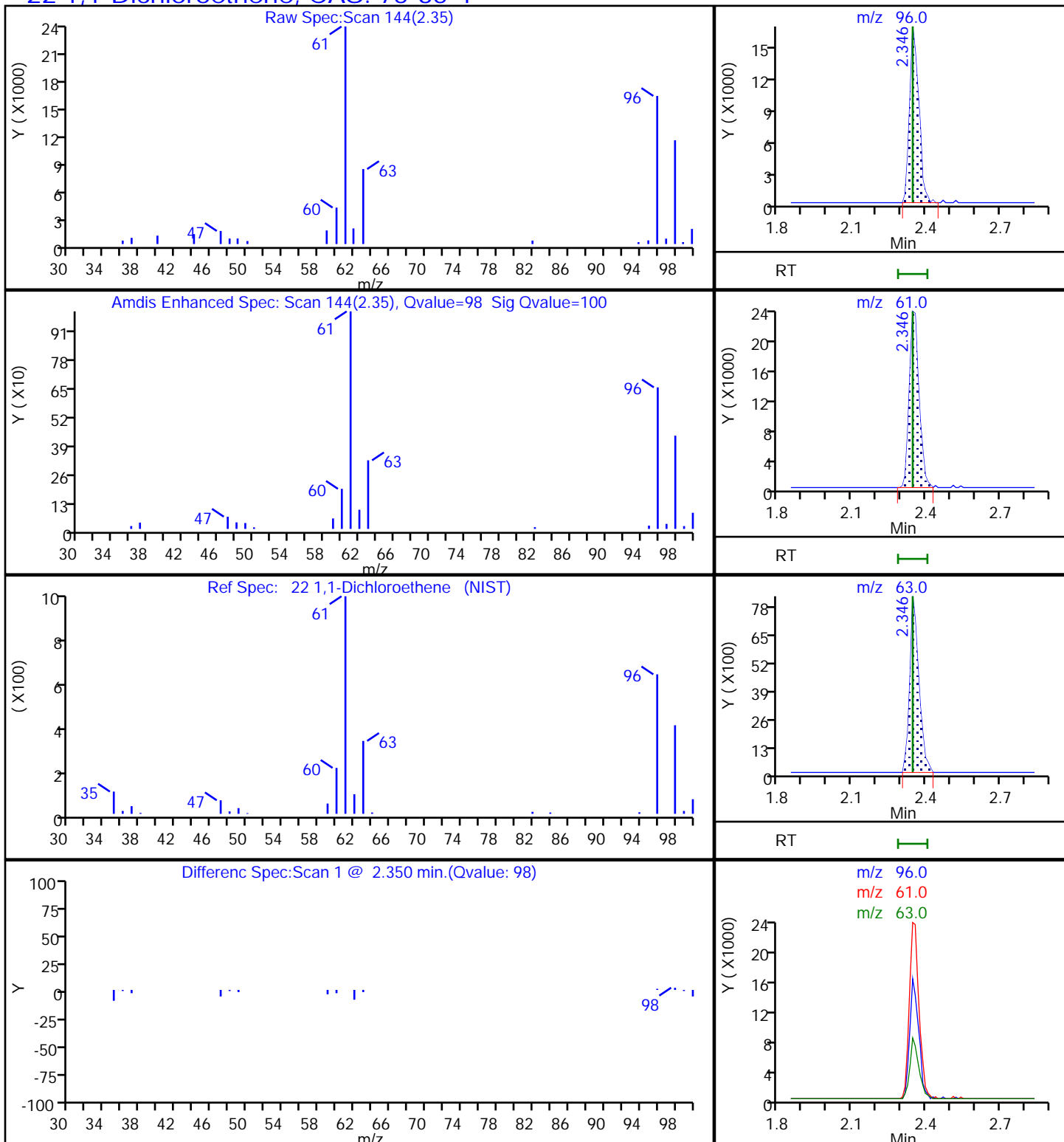
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3141.D

Injection Date: 18-Jul-2019 02:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-12

Lab Sample ID: 480-156213-12

Client ID: 356023-ERT4

Operator ID: AEM

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

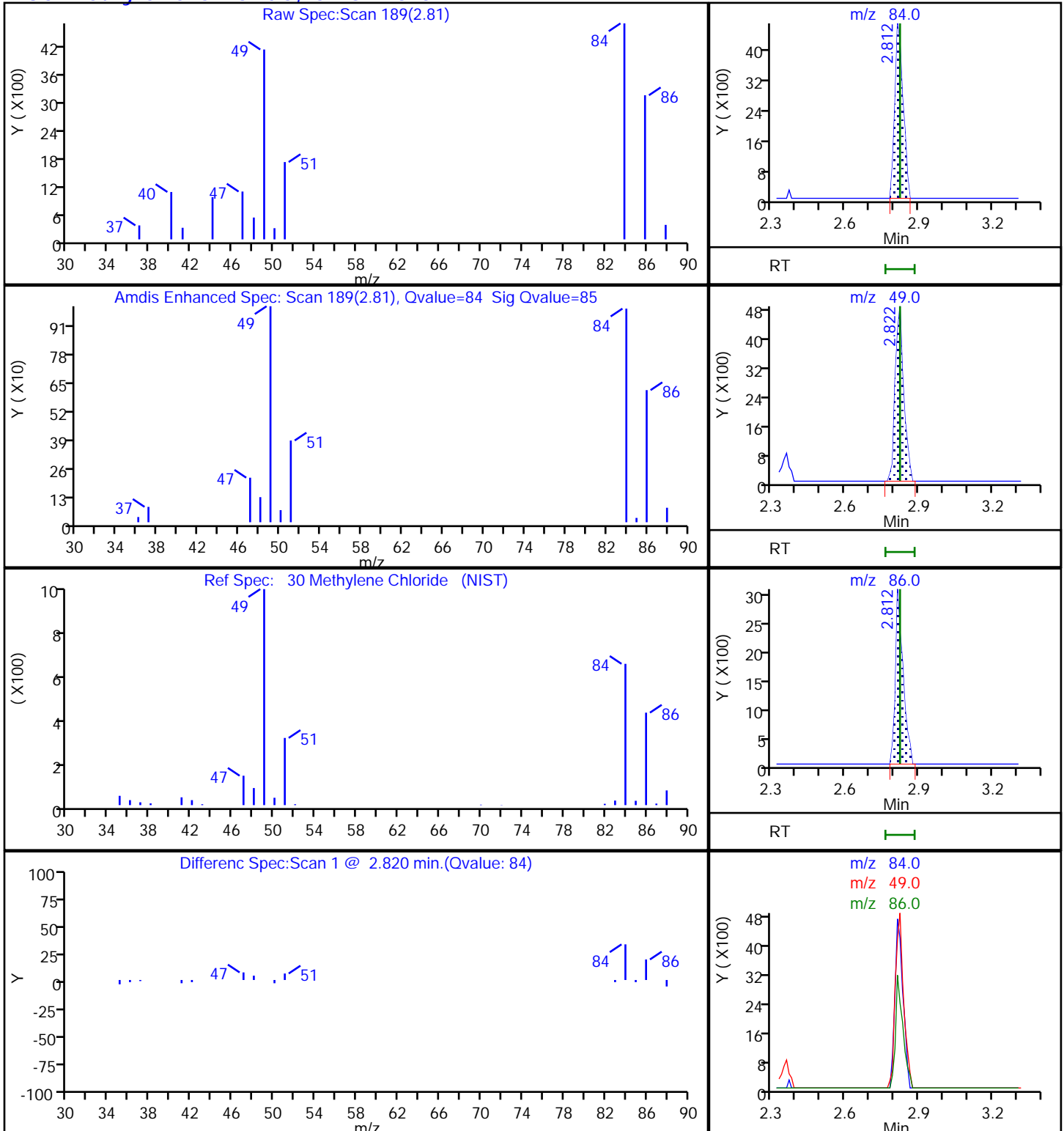
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

30 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3141.D

Injection Date: 18-Jul-2019 02:47:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-12

Lab Sample ID: 480-156213-12

Client ID: 356023-ERT4

Operator ID: AEM

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

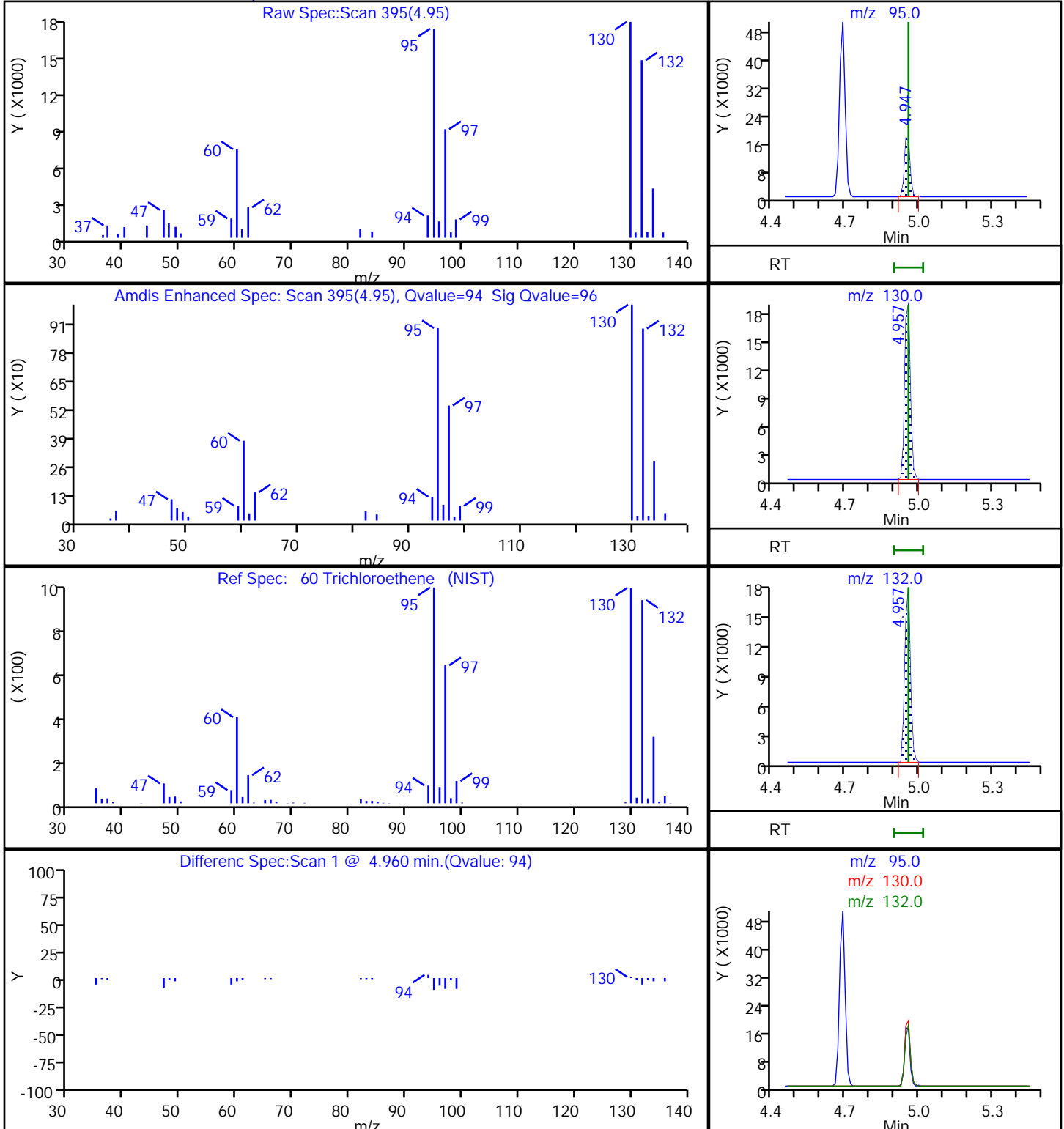
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW4 Lab Sample ID: 480-156213-13
 Matrix: Water Lab File ID: T3142.D
 Analysis Method: 8260C Date Collected: 07/11/2019 14:47
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 03:11
 Soil Aliquot Vol: _____ Dilution Factor: 20
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1100		20	16
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	4.2
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2
79-00-5	1,1,2-Trichloroethane	ND		20	4.6
75-34-3	1,1-Dichloroethane	23		20	7.6
75-35-4	1,1-Dichloroethene	130		20	5.8
87-61-6	1,2,3-Trichlorobenzene	ND		20	8.2
120-82-1	1,2,4-Trichlorobenzene	ND		20	8.2
96-12-8	1,2-Dibromo-3-Chloropropane	ND		20	7.8
106-93-4	1,2-Dibromoethane	ND		20	15
95-50-1	1,2-Dichlorobenzene	ND		20	16
107-06-2	1,2-Dichloroethane	ND		20	4.2
78-87-5	1,2-Dichloropropane	ND		20	14
541-73-1	1,3-Dichlorobenzene	ND		20	16
106-46-7	1,4-Dichlorobenzene	ND		20	17
123-91-1	1,4-Dioxane	ND		800	190
78-93-3	2-Butanone (MEK)	ND		200	26
591-78-6	2-Hexanone	ND		100	25
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		100	42
67-64-1	Acetone	ND		200	60
71-43-2	Benzene	ND		20	8.2
74-97-5	Bromochloromethane	ND		20	17
75-27-4	Bromodichloromethane	ND		20	7.8
75-25-2	Bromoform	ND	*	20	5.2
74-83-9	Bromomethane	ND		20	14
75-15-0	Carbon disulfide	ND		20	3.8
56-23-5	Carbon tetrachloride	ND		20	5.4
108-90-7	Chlorobenzene	ND		20	15
75-00-3	Chloroethane	ND		20	6.4
67-66-3	Chloroform	ND		20	6.8
74-87-3	Chloromethane	ND		20	7.0
156-59-2	cis-1,2-Dichloroethene	ND		20	16
10061-01-5	cis-1,3-Dichloropropene	ND		20	7.2
110-82-7	Cyclohexane	ND		20	3.6
124-48-1	Dibromochloromethane	ND	*	20	6.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW4 Lab Sample ID: 480-156213-13
 Matrix: Water Lab File ID: T3142.D
 Analysis Method: 8260C Date Collected: 07/11/2019 14:47
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 03:11
 Soil Aliquot Vol: _____ Dilution Factor: 20
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		20	14
100-41-4	Ethylbenzene	ND		20	15
98-82-8	Isopropylbenzene	ND		20	16
79-20-9	Methyl acetate	ND		50	26
1634-04-4	Methyl tert-butyl ether	ND		20	3.2
108-87-2	Methylcyclohexane	ND		20	3.2
75-09-2	Methylene Chloride	14	J	20	8.8
100-42-5	Styrene	ND		20	15
127-18-4	Tetrachloroethene	ND		20	7.2
108-88-3	Toluene	ND		20	10
156-60-5	trans-1,2-Dichloroethene	ND		20	18
10061-02-6	trans-1,3-Dichloropropene	ND		20	7.4
79-01-6	Trichloroethene	390		20	9.2
75-69-4	Trichlorofluoromethane	ND		20	18
75-01-4	Vinyl chloride	ND		20	18
1330-20-7	Xylenes, Total	ND		40	13

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3142.D
 Lims ID: 480-156213-D-13
 Client ID: 356023-MW4
 Sample Type: Client
 Inject. Date: 18-Jul-2019 03:11:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 20.0000
 Sample Info: 480-156213-D-13
 Misc. Info.: 480-0082700-021
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:31:48 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 13:31:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.678	4.688	-0.010	99	169040	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	735683	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	433348	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	93	244008	26.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	272818	25.4	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	879484	24.4	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	316729	26.2	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	97	48727	6.29	
23 Acetone	43		2.460				ND	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	87	10826	0.6897	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	95	16879	1.14	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	78	3657	0.3570	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83	4.087	4.076	-0.010	88	2511	0.1589	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	98	630556	54.9	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	Ua

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	95	183091	19.3	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3142.D

Injection Date: 18-Jul-2019 03:11:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-13

Lab Sample ID: 480-156213-13

Worklist Smp#: 21

Client ID: 356023-MW4

Purge Vol: 5.000 mL

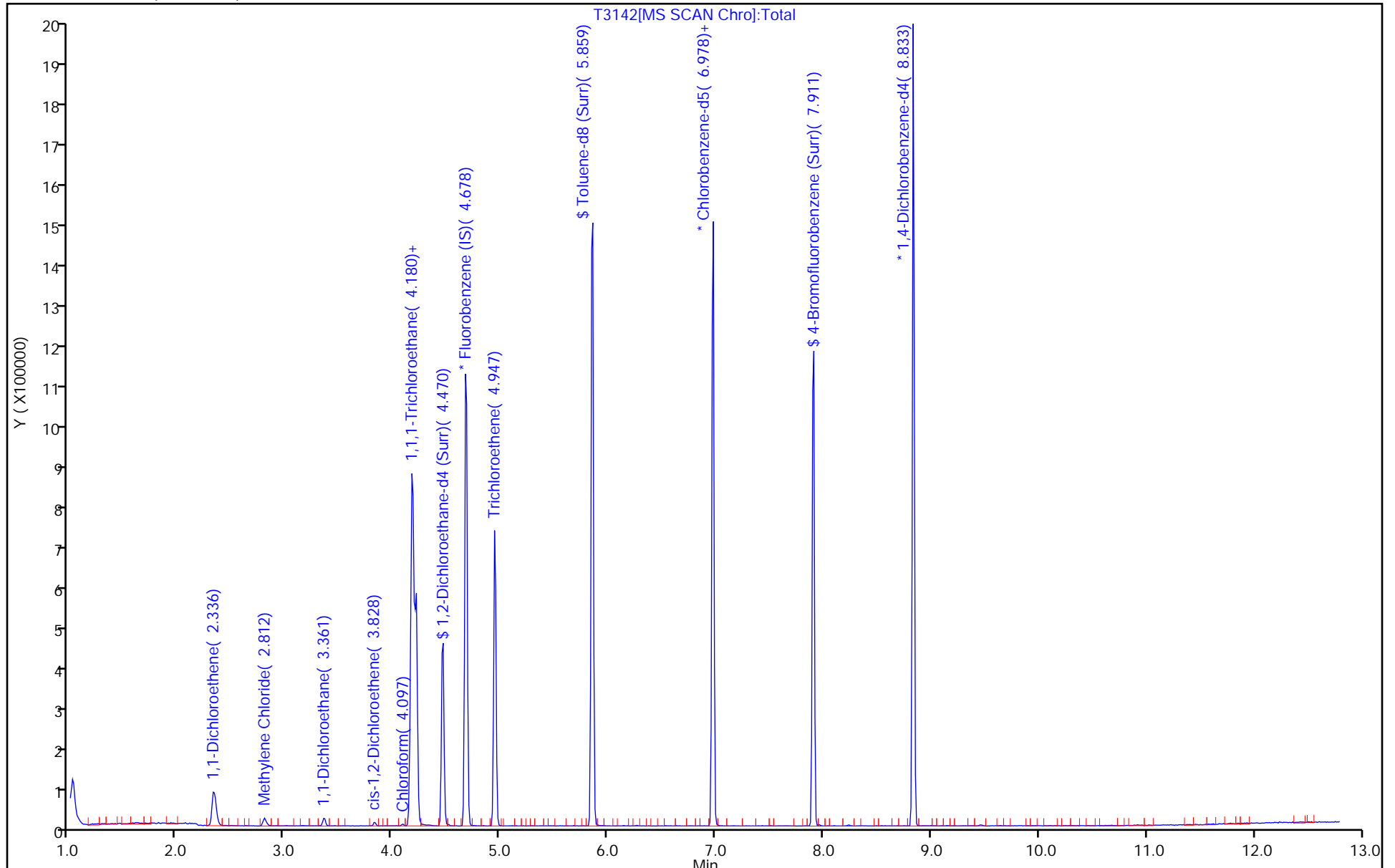
Dil. Factor: 20.0000

ALS Bottle#: 20

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3142.D

Injection Date: 18-Jul-2019 03:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-13

Lab Sample ID: 480-156213-13

Client ID: 356023-MW4

Operator ID: AEM

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

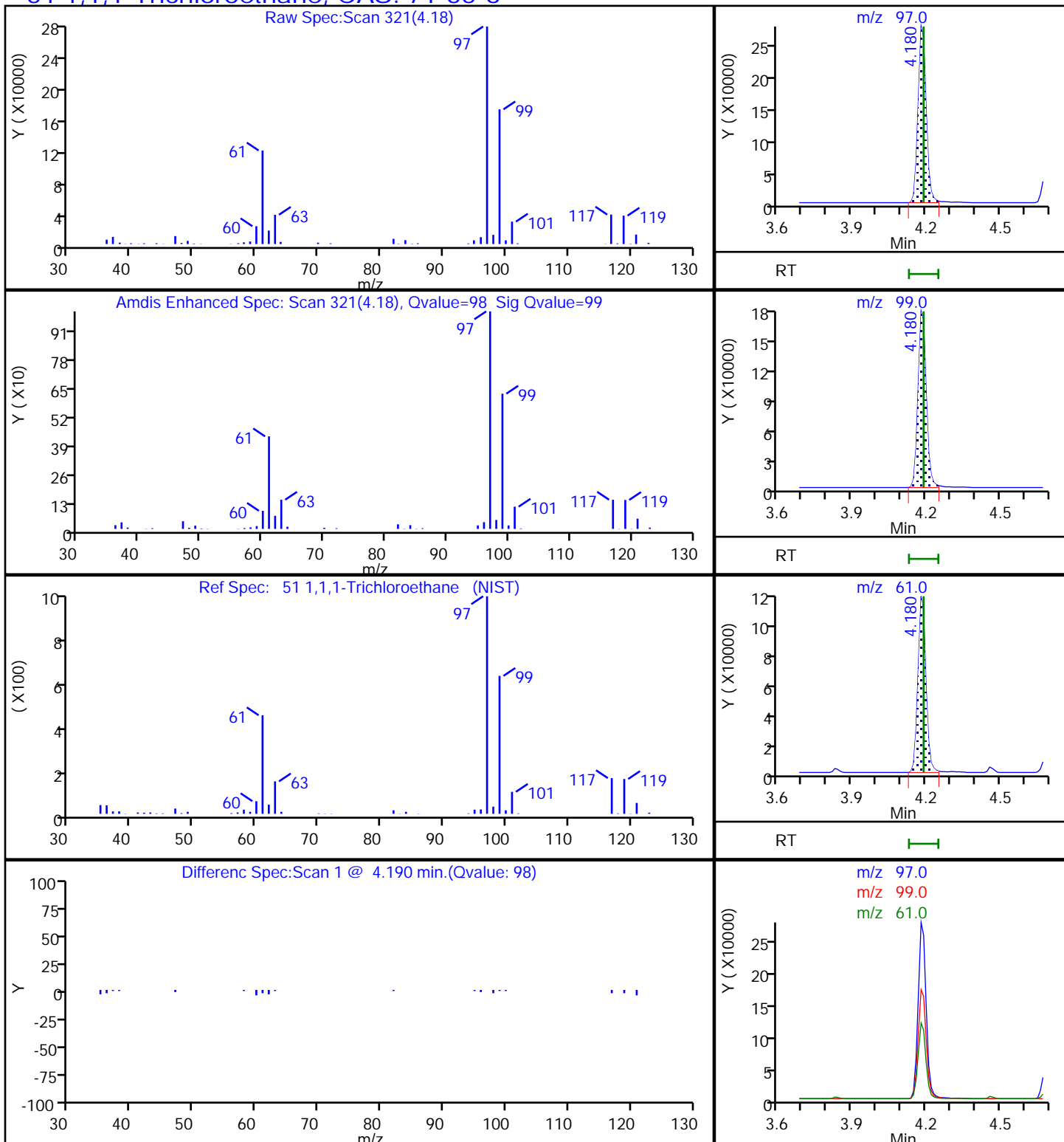
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3142.D

Injection Date: 18-Jul-2019 03:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-13

Lab Sample ID: 480-156213-13

Client ID: 356023-MW4

Operator ID: AEM

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

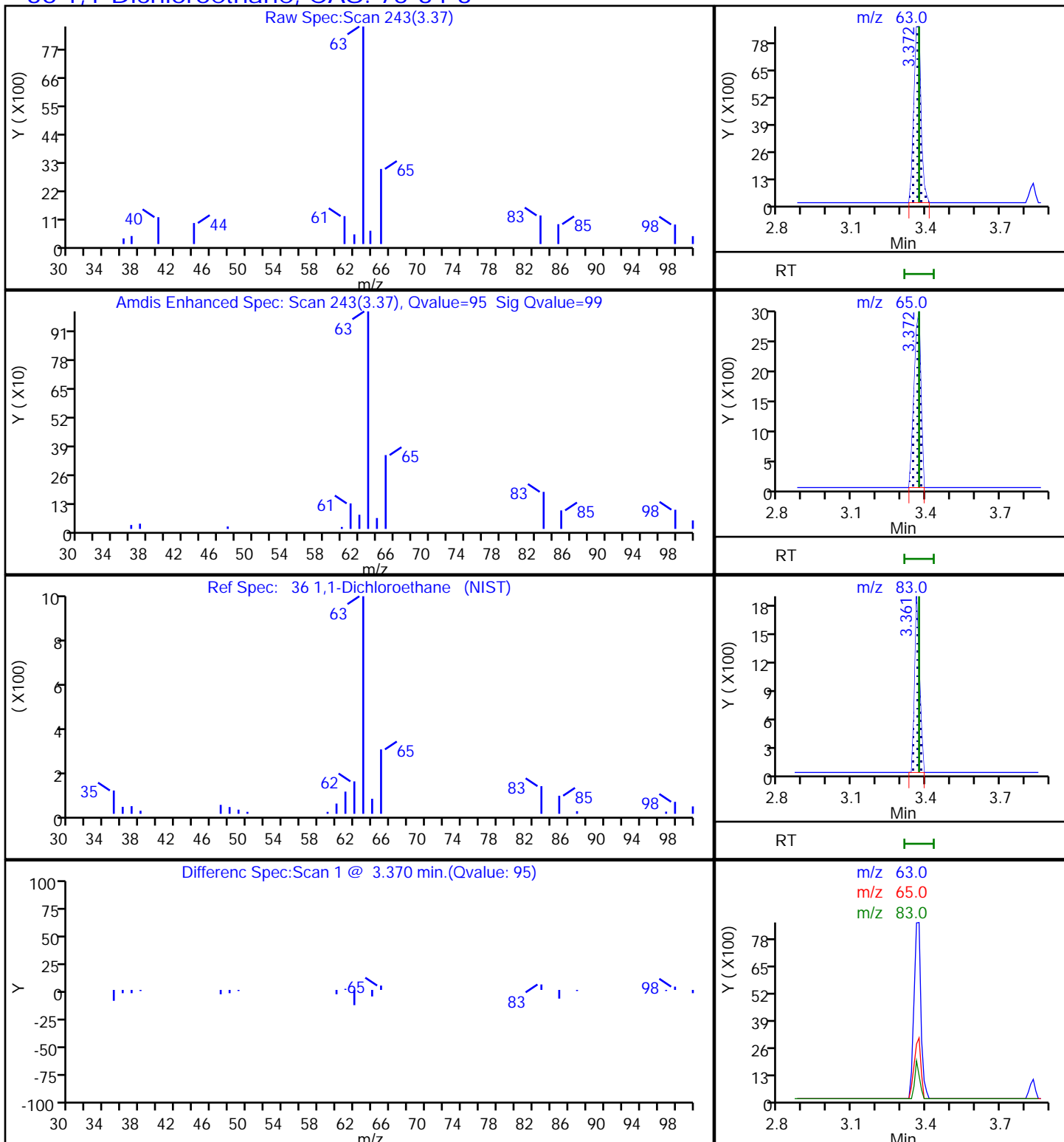
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3142.D

Injection Date: 18-Jul-2019 03:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-13

Lab Sample ID: 480-156213-13

Client ID: 356023-MW4

Operator ID: AEM

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

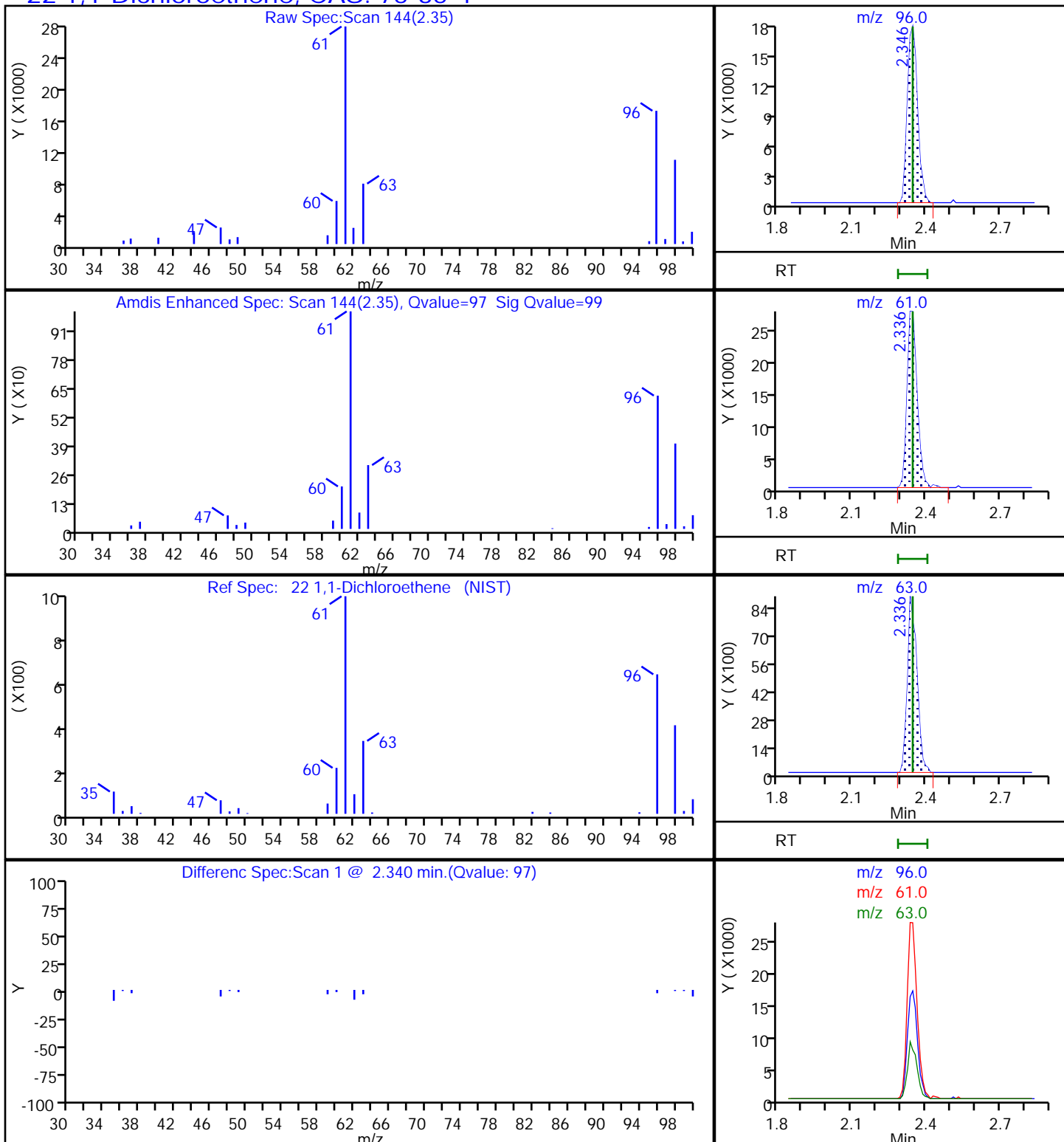
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3142.D

Injection Date: 18-Jul-2019 03:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-13

Lab Sample ID: 480-156213-13

Client ID: 356023-MW4

Operator ID: AEM

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

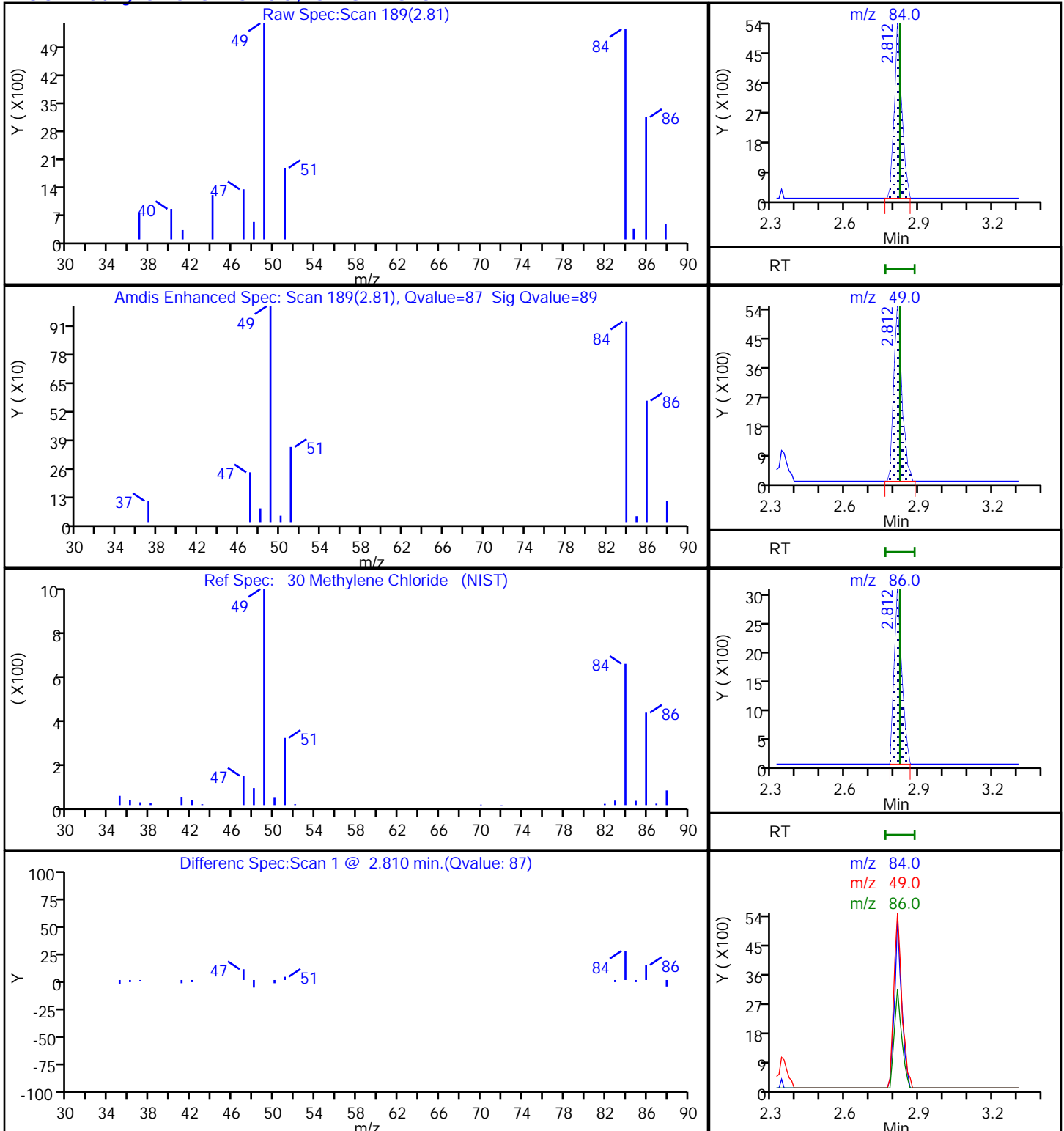
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

30 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3142.D

Injection Date: 18-Jul-2019 03:11:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-13

Lab Sample ID: 480-156213-13

Client ID: 356023-MW4

Operator ID: AEM

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 20.0000

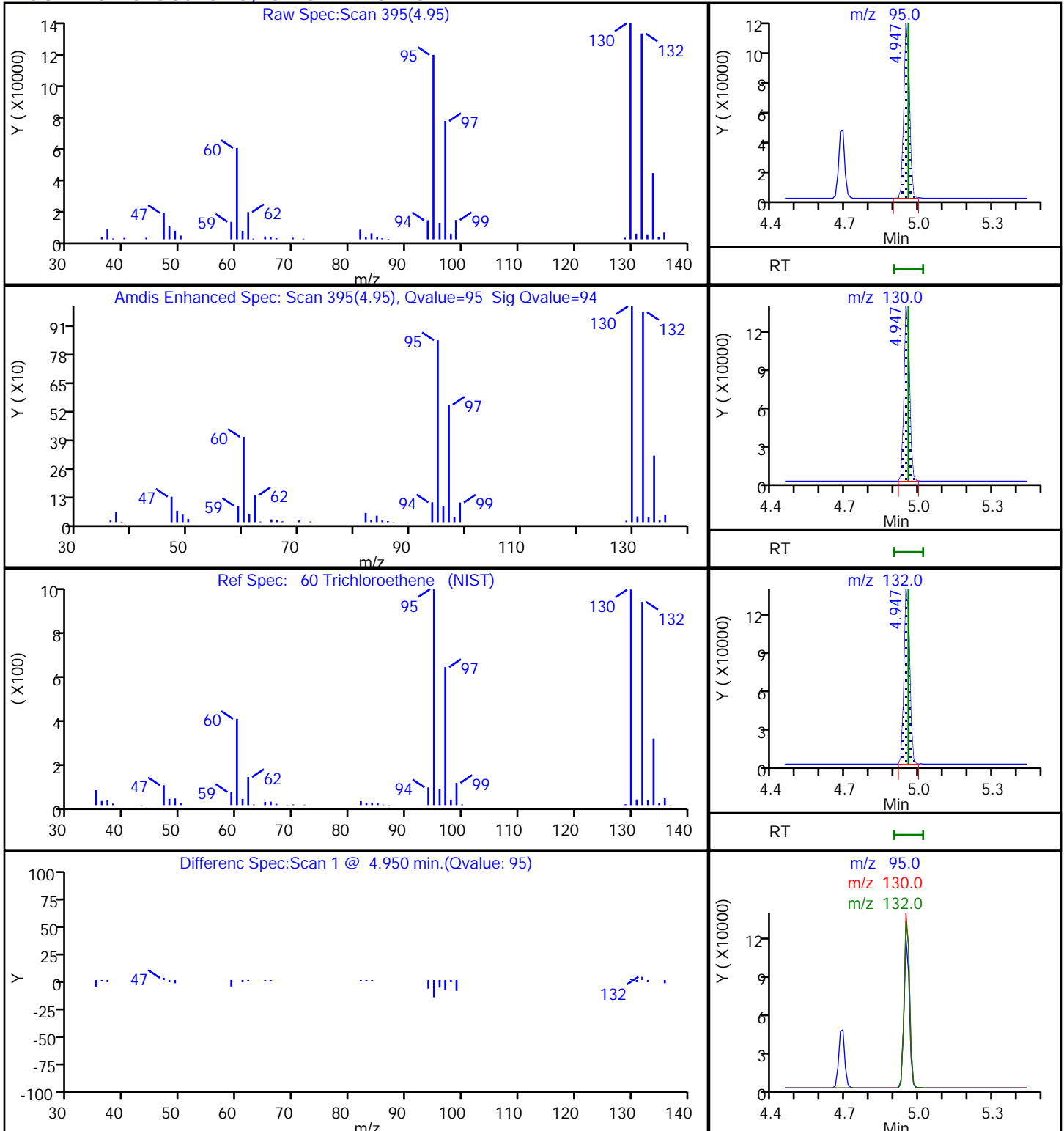
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B Lab Sample ID: 480-156213-14
 Matrix: Water Lab File ID: T3143.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 03:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	8.2	F1	1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	1.8		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND	F1	1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND	F1	1.0	0.39
75-25-2	Bromoform	ND	* F1	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	* F1	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B Lab Sample ID: 480-156213-14
 Matrix: Water Lab File ID: T3143.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 03:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND	F1	1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3143.D
 Lims ID: 480-156213-D-14
 Client ID: 356023-MW6B
 Sample Type: Client
 Inject. Date: 18-Jul-2019 03:34:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-14
 Misc. Info.: 480-0082700-022
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:32:50 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:32:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	169140	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	740637	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	431582	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	93	243598	26.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	269702	25.1	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	876840	24.1	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	319948	26.3	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.335	2.335	-0.011	98	13891	1.79	
23 Acetone	43	2.460	2.460	0.000	29	3021	1.16	a
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	80	6926	0.2604	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	92	4067	0.2745	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	97	94450	8.22	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3143.D

Injection Date: 18-Jul-2019 03:34:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-14

Lab Sample ID: 480-156213-14

Worklist Smp#: 22

Client ID: 356023-MW6B

Purge Vol: 5.000 mL

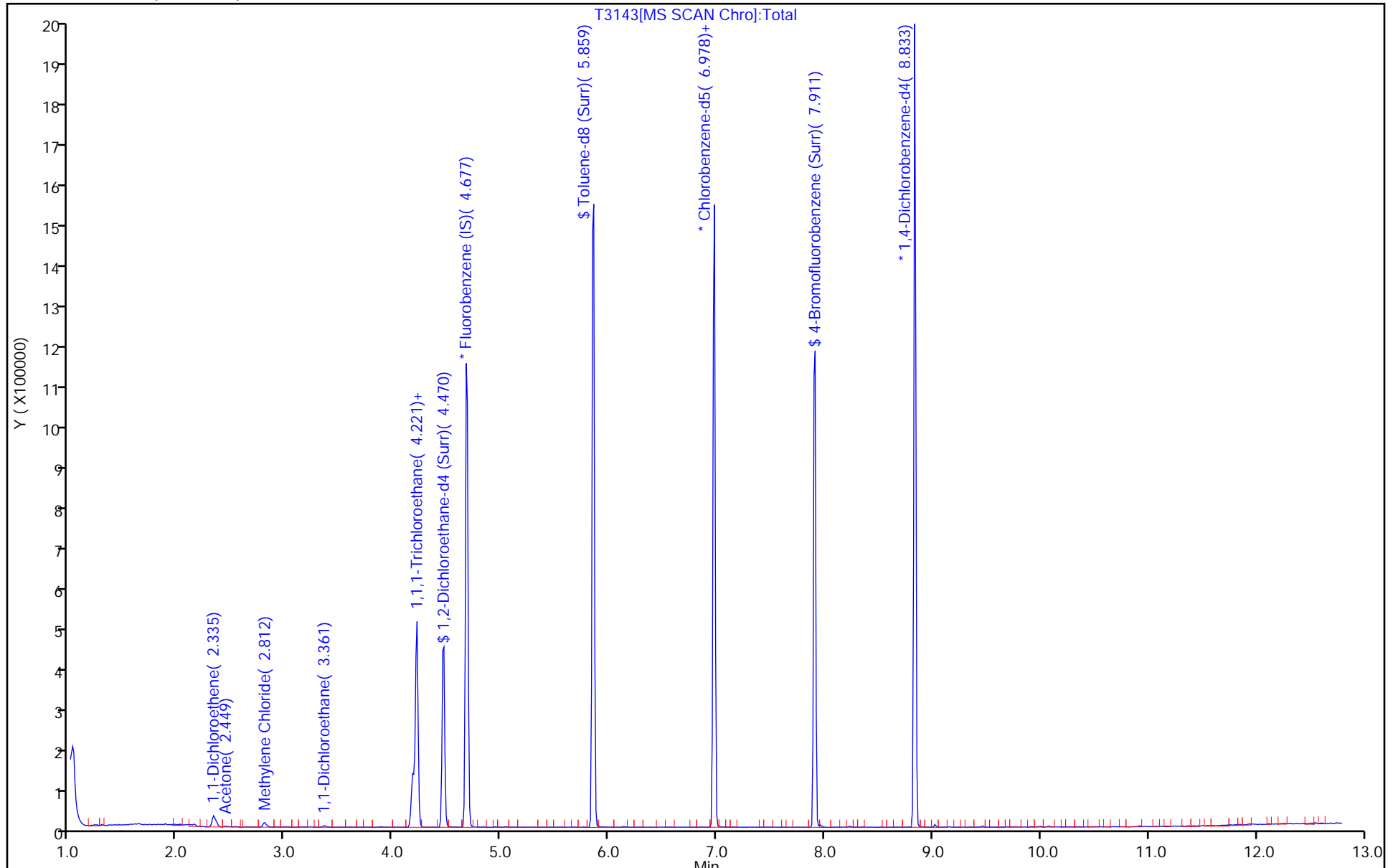
Dil. Factor: 1.0000

ALS Bottle#: 21

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3143.D

Injection Date: 18-Jul-2019 03:34:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-14

Lab Sample ID: 480-156213-14

Client ID: 356023-MW6B

Operator ID: AEM

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

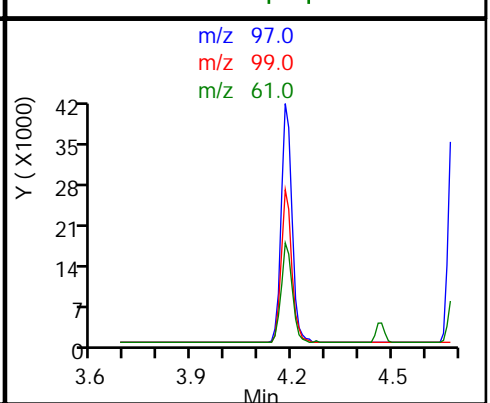
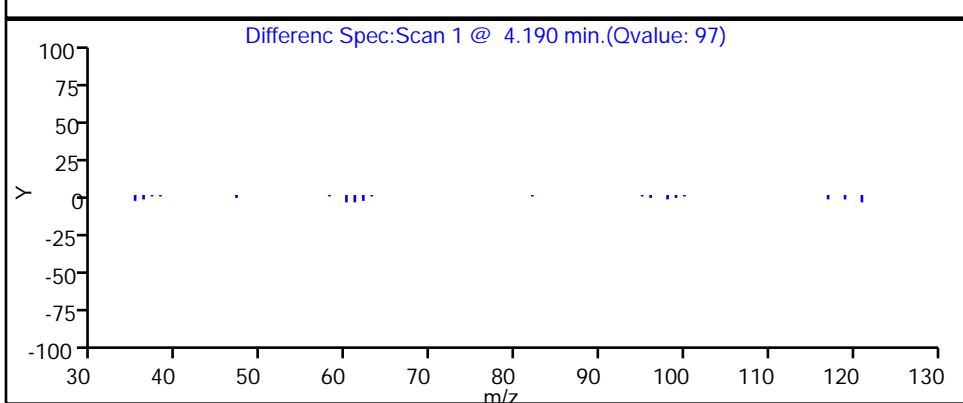
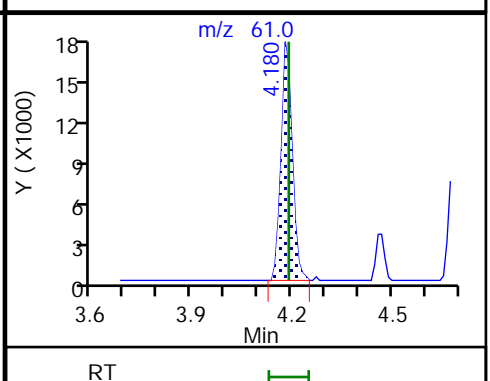
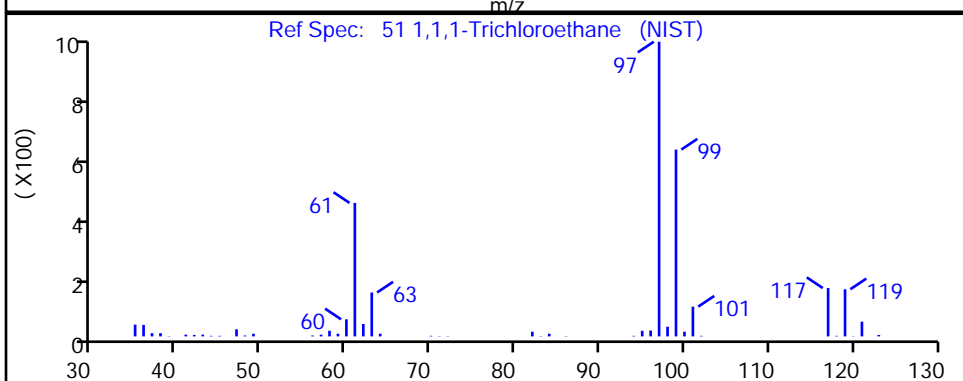
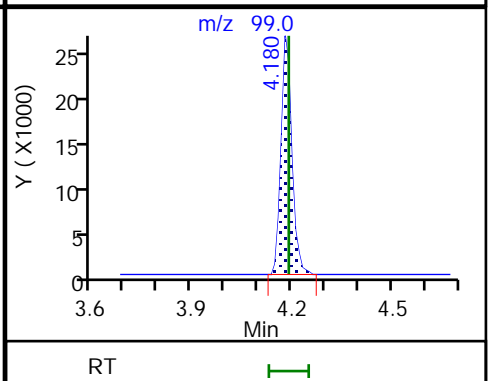
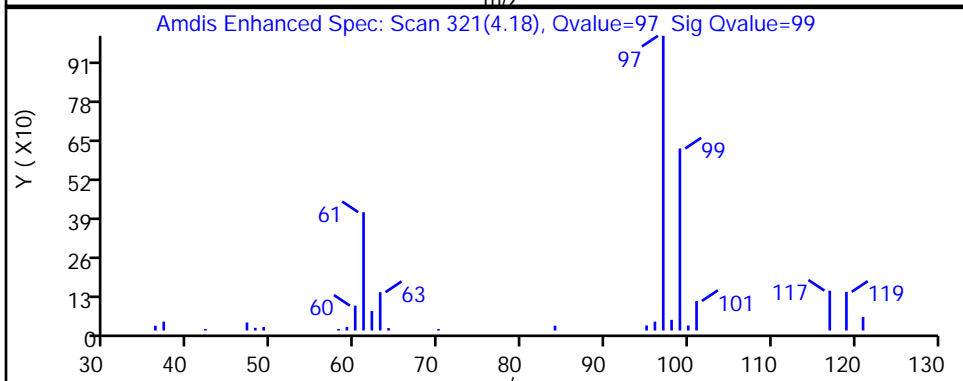
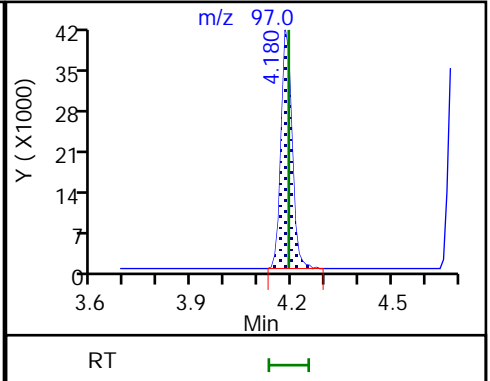
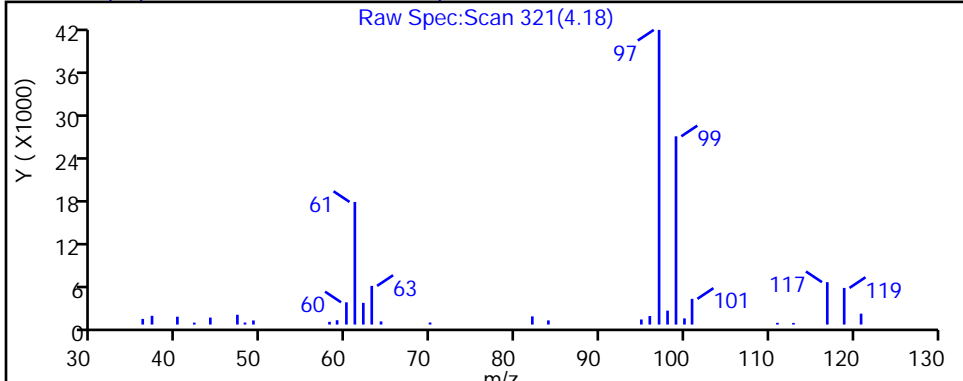
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3143.D

Injection Date: 18-Jul-2019 03:34:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-14

Lab Sample ID: 480-156213-14

Client ID: 356023-MW6B

Operator ID: AEM

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

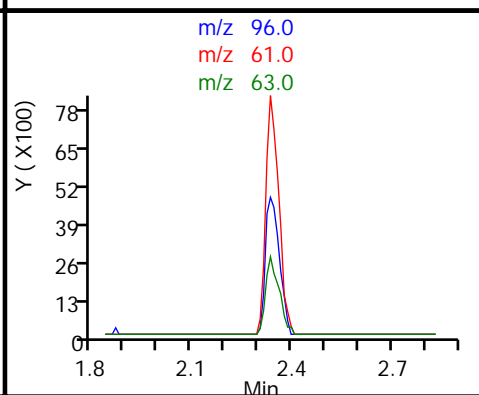
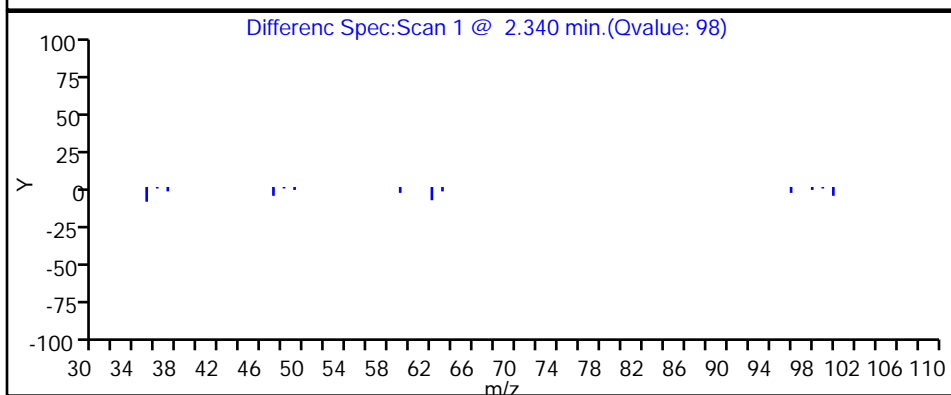
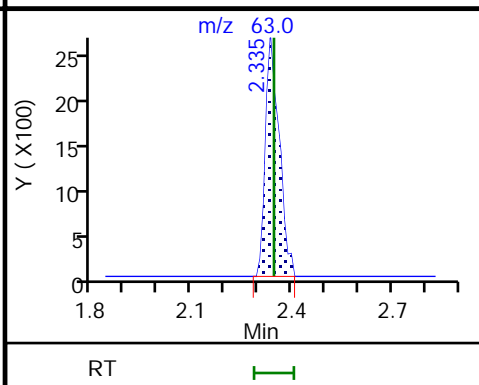
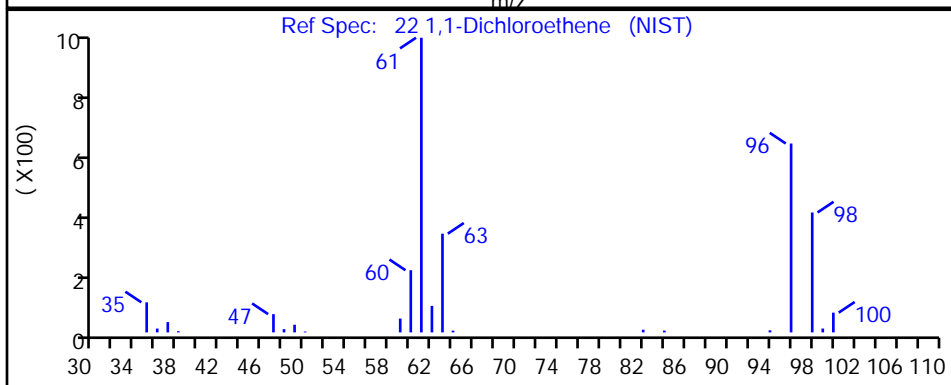
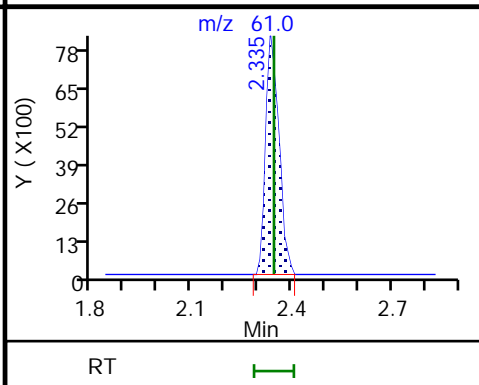
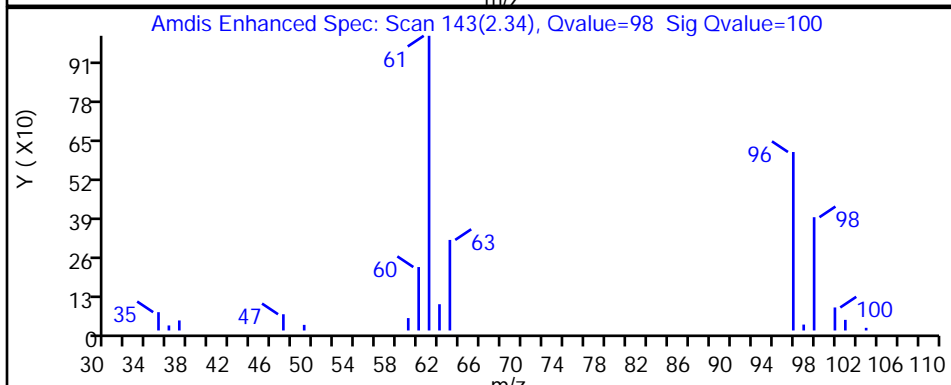
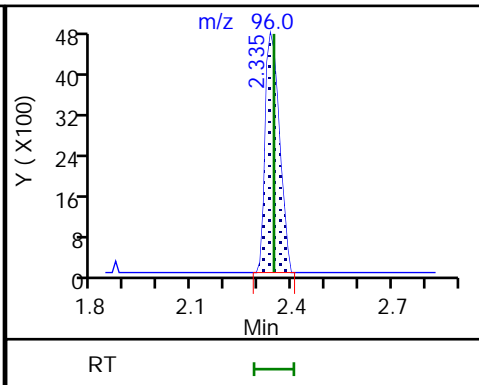
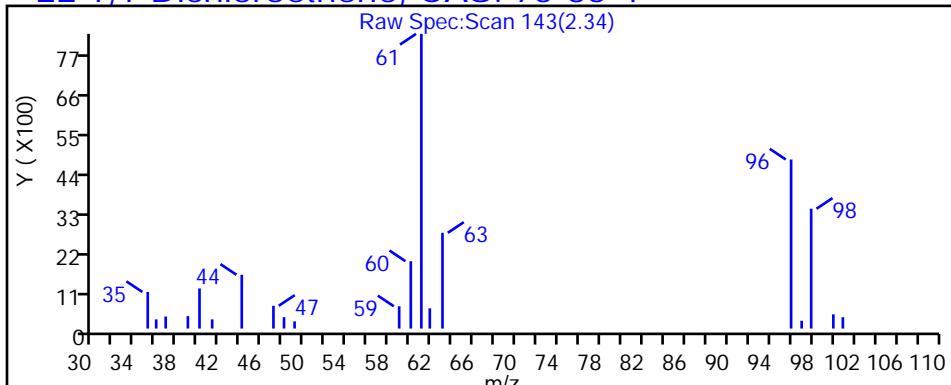
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

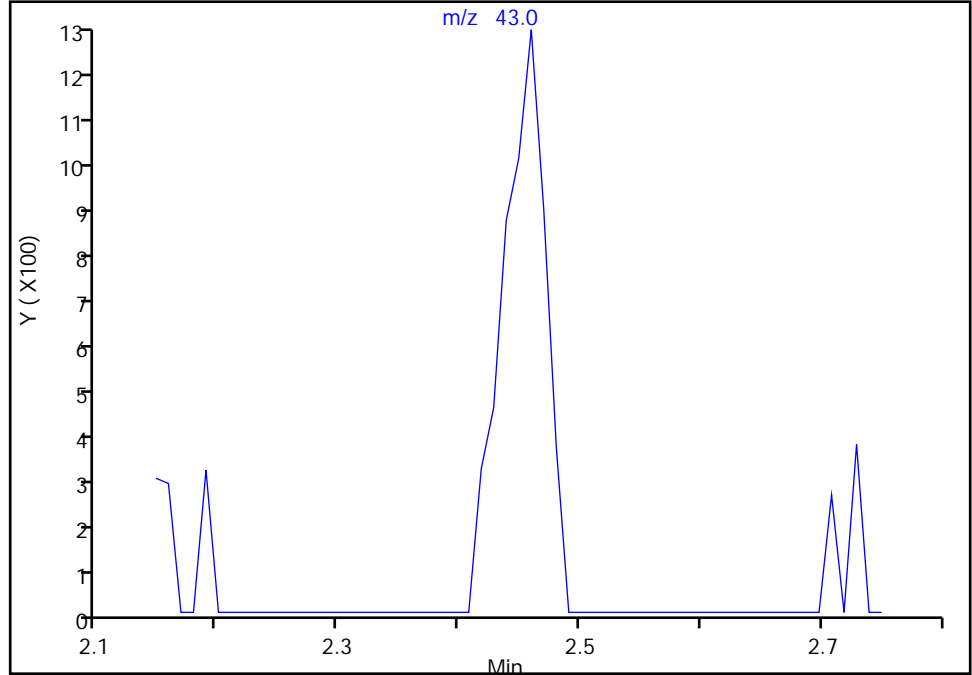
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3143.D
Injection Date: 18-Jul-2019 03:34:30 Instrument ID: HP5975T
Lims ID: 480-156213-D-14 Lab Sample ID: 480-156213-14
Client ID: 356023-MW6B
Operator ID: AEM ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

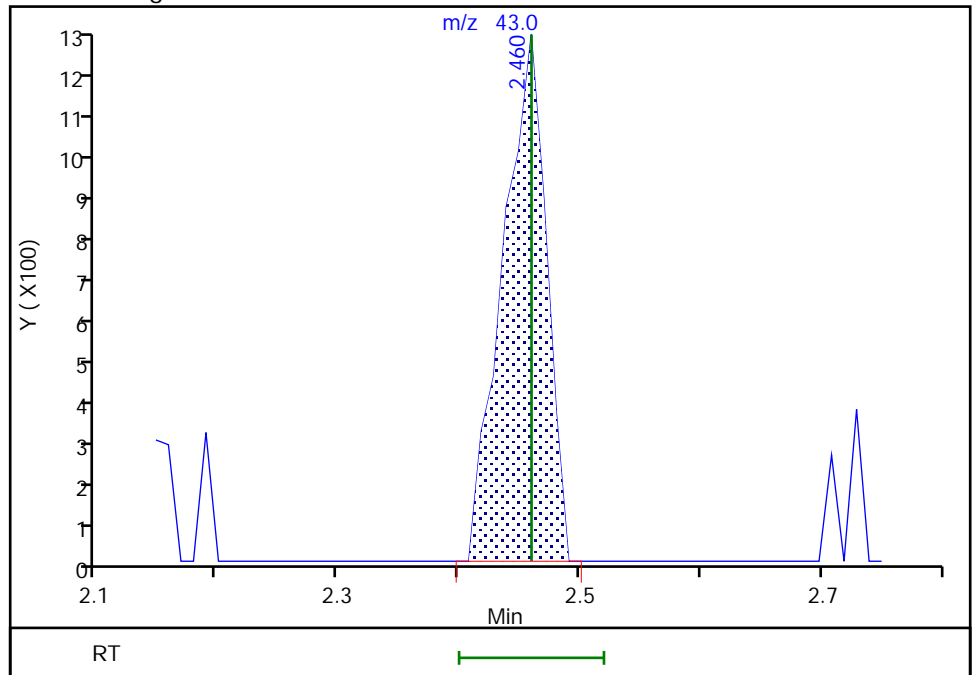
Not Detected
Expected RT: 2.46

Processing Integration Results



Manual Integration Results

RT: 2.46
Area: 3021
Amount: 1.155892
Amount Units: ug/L



Reviewer: farrellr, 18-Jul-2019 13:32:23
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW15B Lab Sample ID: 480-156213-15
 Matrix: Water Lab File ID: T3144.D
 Analysis Method: 8260C Date Collected: 07/12/2019 09:30
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 03:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	26		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	8.3		1.0	0.38
75-35-4	1,1-Dichloroethene	19		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW15B Lab Sample ID: 480-156213-15
 Matrix: Water Lab File ID: T3144.D
 Analysis Method: 8260C Date Collected: 07/12/2019 09:30
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 03:58
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	1.2		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	105		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3144.D
 Lims ID: 480-156213-D-15
 Client ID: 356023-MW15B
 Sample Type: Client
 Inject. Date: 18-Jul-2019 03:58:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-15
 Misc. Info.: 480-0082700-023
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:32:50 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:38:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	165617	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	742540	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	431417	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	93	239735	26.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	270454	25.7	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	864497	23.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	316544	25.9	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	98	141553	18.6	
23 Acetone	43	2.460	2.460	0.000	99	5386	2.10	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	93	7470	0.3376	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	120999	8.34	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.190	4.190	0.000	98	290506	25.8	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	93	10985	1.18	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3144.D

Injection Date: 18-Jul-2019 03:58:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-15

Lab Sample ID: 480-156213-15

Worklist Smp#: 23

Client ID: 356023-MW15B

Purge Vol: 5.000 mL

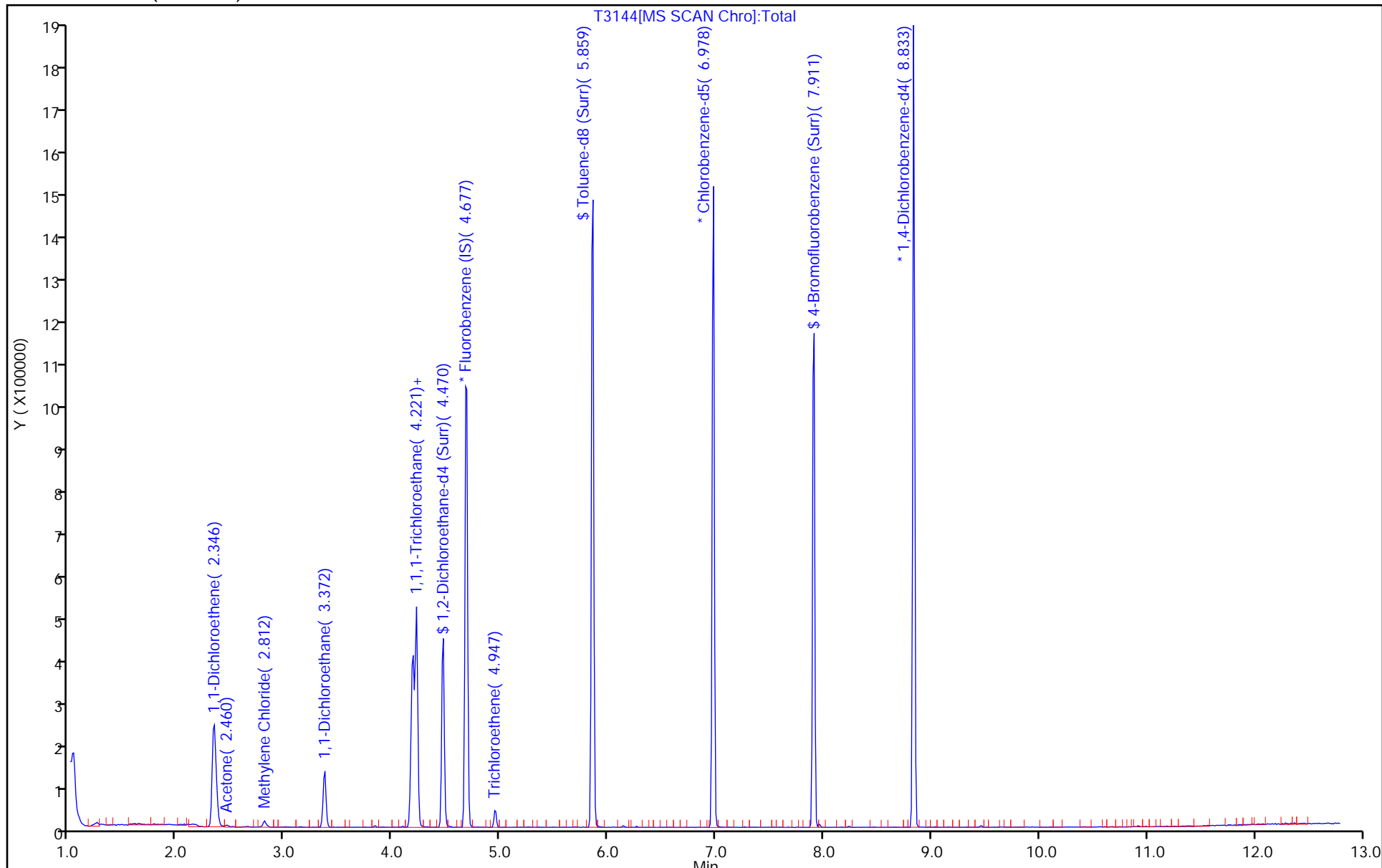
Dil. Factor: 1.0000

ALS Bottle#: 22

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3144.D

Injection Date: 18-Jul-2019 03:58:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-15

Lab Sample ID: 480-156213-15

Client ID: 356023-MW15B

Operator ID: AEM

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

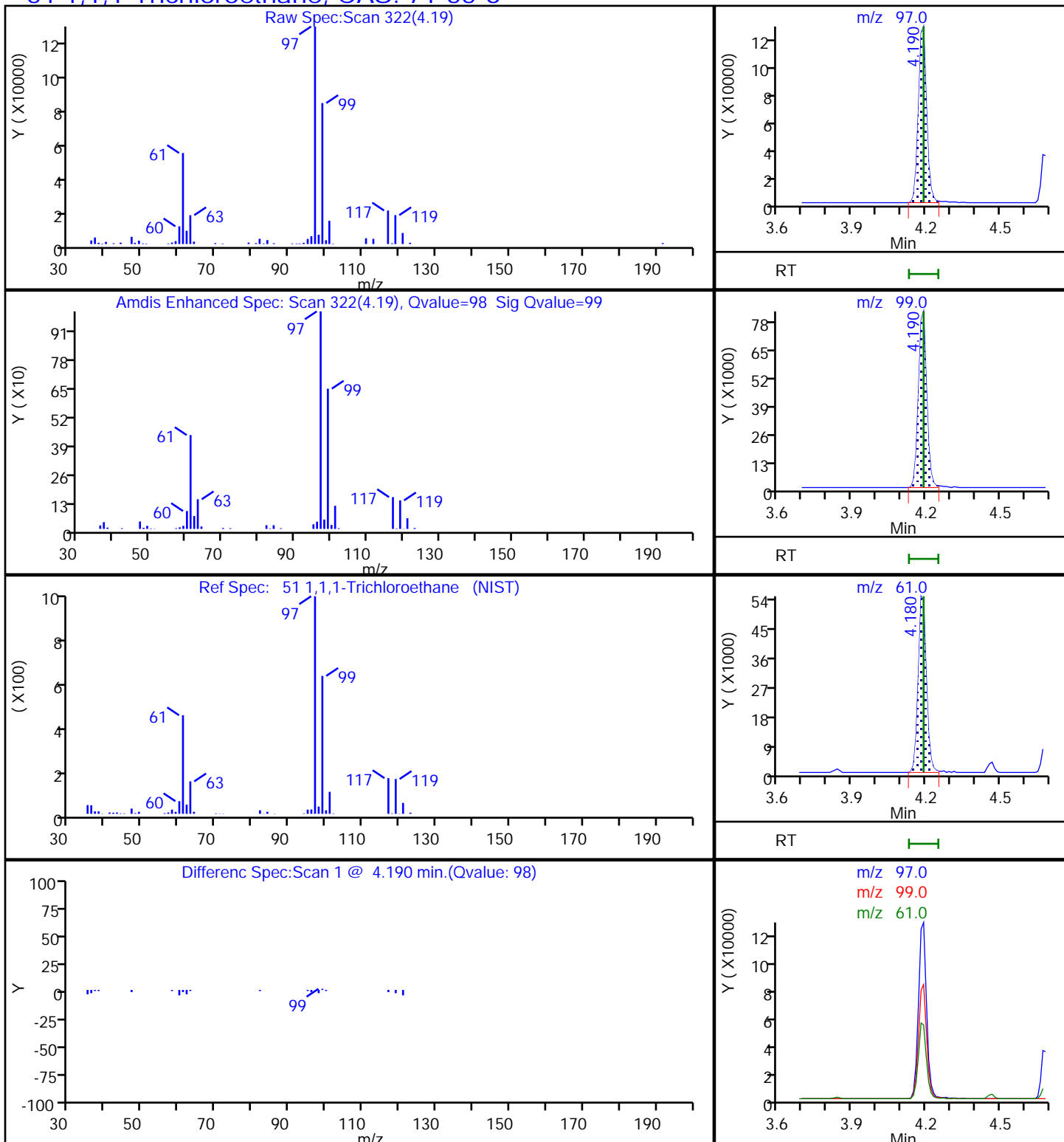
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3144.D

Injection Date: 18-Jul-2019 03:58:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-15

Lab Sample ID: 480-156213-15

Client ID: 356023-MW15B

Operator ID: AEM

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

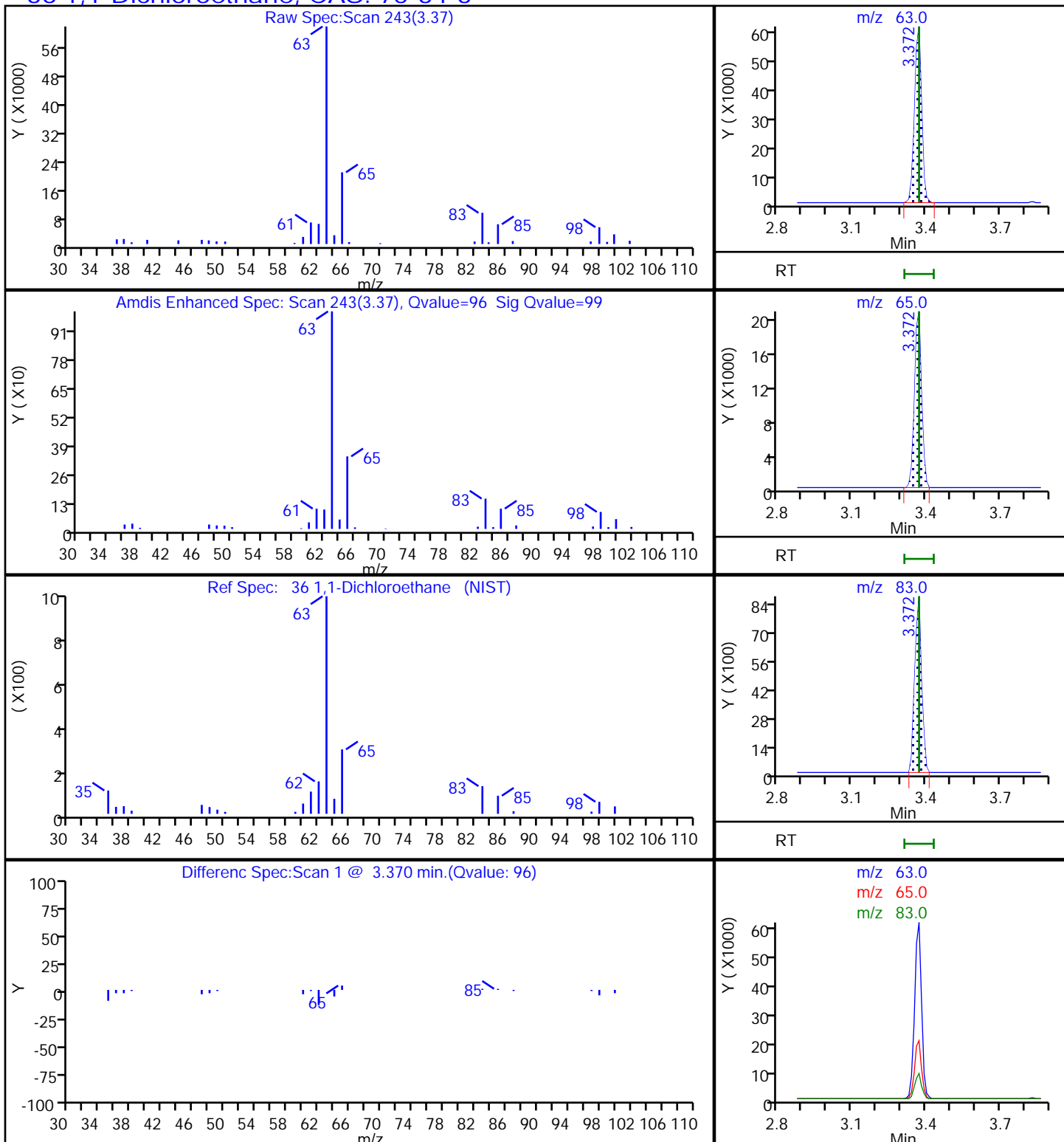
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3144.D

Injection Date: 18-Jul-2019 03:58:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-15

Lab Sample ID: 480-156213-15

Client ID: 356023-MW15B

Operator ID: AEM

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

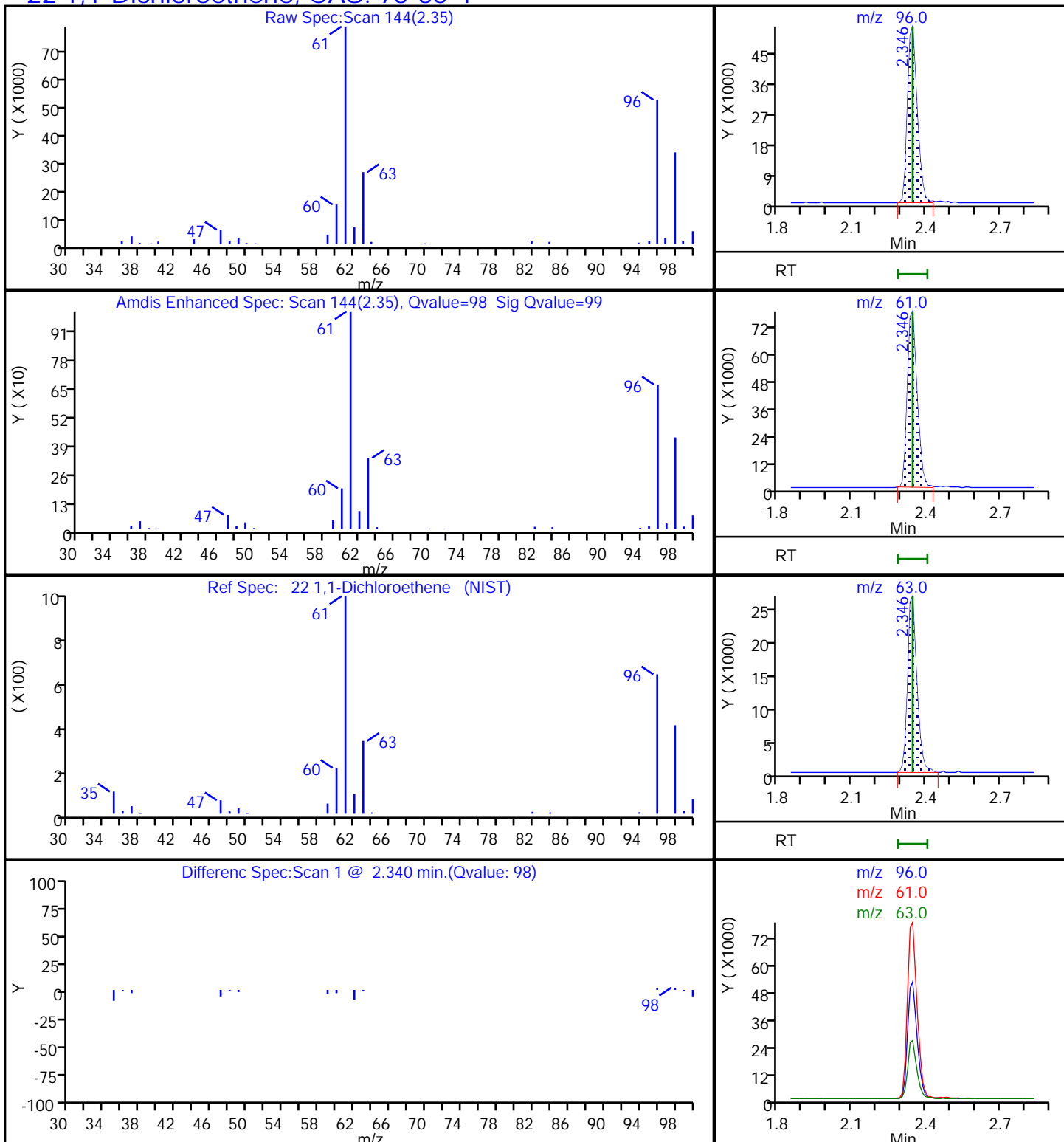
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3144.D

Injection Date: 18-Jul-2019 03:58:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-15

Lab Sample ID: 480-156213-15

Client ID: 356023-MW15B

Operator ID: AEM

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

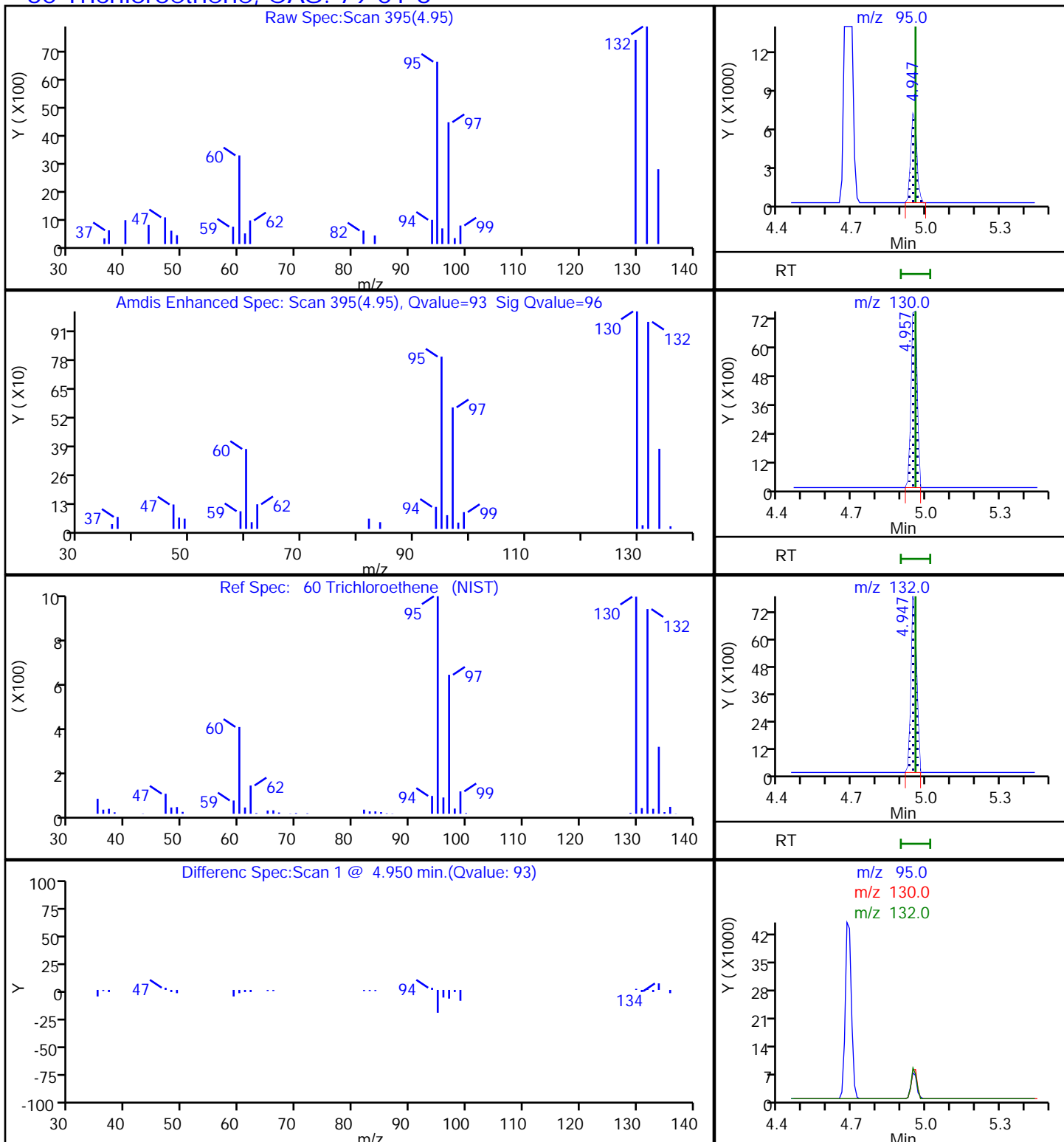
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-EB1 Lab Sample ID: 480-156213-16
 Matrix: Water Lab File ID: T3145.D
 Analysis Method: 8260C Date Collected: 07/12/2019 09:45
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 04:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	10		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-EB1 Lab Sample ID: 480-156213-16
 Matrix: Water Lab File ID: T3145.D
 Analysis Method: 8260C Date Collected: 07/12/2019 09:45
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 04:22
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	0.60	J	1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3145.D
 Lims ID: 480-156213-C-16
 Client ID: 356023-EB1
 Sample Type: Client
 Inject. Date: 18-Jul-2019 04:22:30 ALS Bottle#: 23 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-C-16
 Misc. Info.: 480-0082700-024
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:39:37 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 13:39:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	169585	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	743325	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	432244	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	94	242012	25.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	276079	25.6	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	879106	24.1	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	328007	26.8	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96		2.346				ND	
23 Acetone	43	2.449	2.460	-0.011	97	26888	10.3	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	68	10018	0.5973	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63		3.372				ND	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	MU
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92	5.900	5.911	-0.011	95	2654	0.1103	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3145.D

Injection Date: 18-Jul-2019 04:22:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-C-16

Lab Sample ID: 480-156213-16

Worklist Smp#: 24

Client ID: 356023-EB1

Purge Vol: 5.000 mL

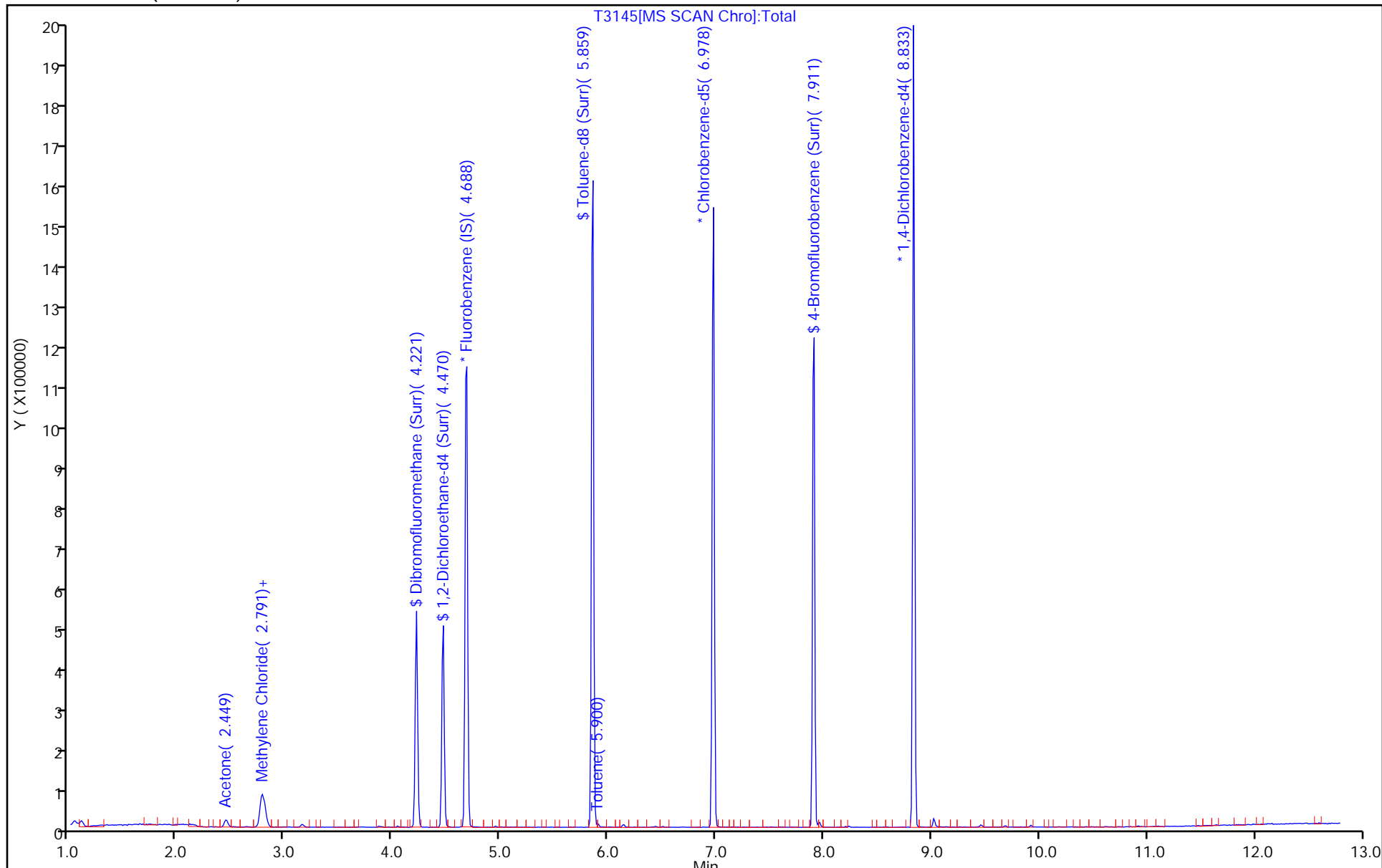
Dil. Factor: 1.0000

ALS Bottle#: 23

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3145.D

Injection Date: 18-Jul-2019 04:22:30

Instrument ID: HP5975T

Lims ID: 480-156213-C-16

Lab Sample ID: 480-156213-16

Client ID: 356023-EB1

Operator ID: AEM

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

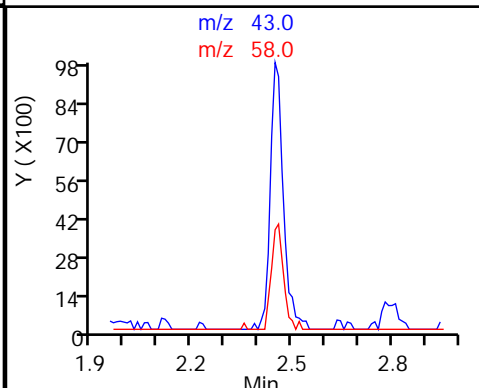
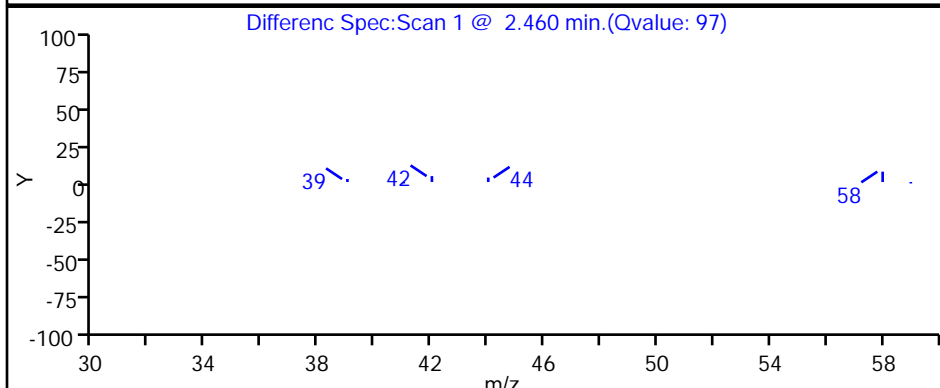
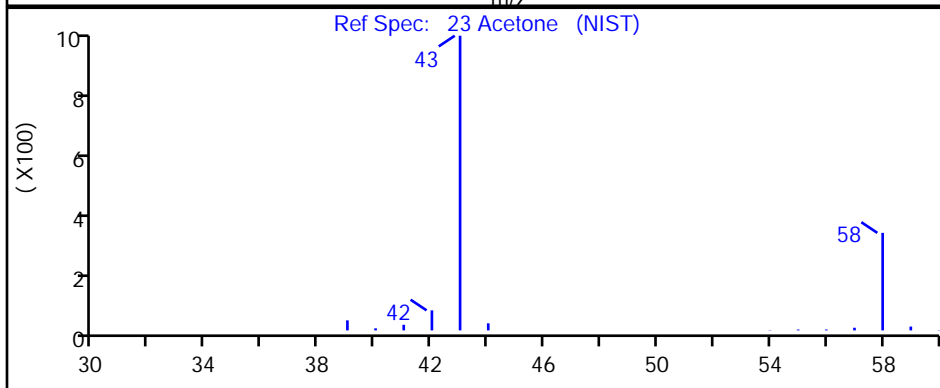
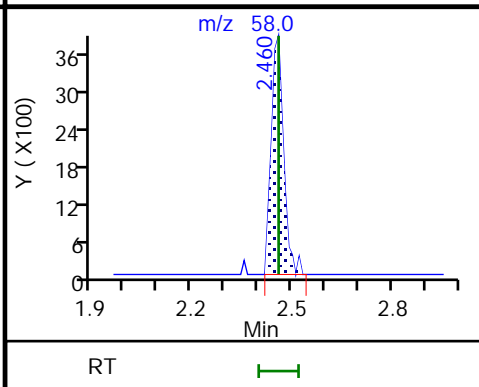
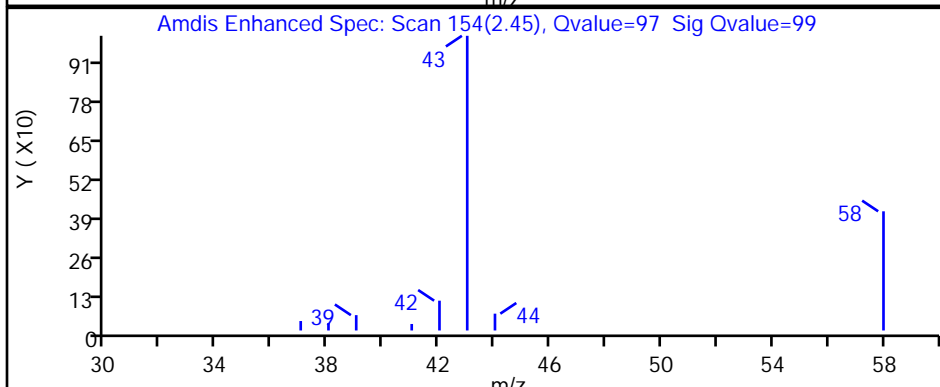
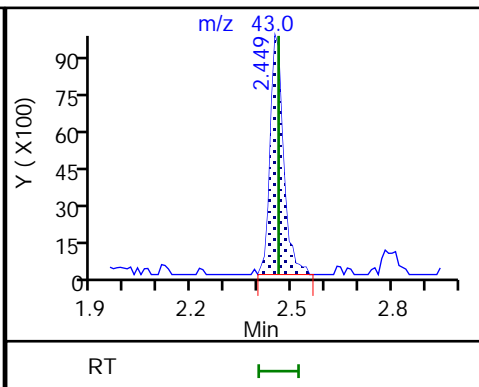
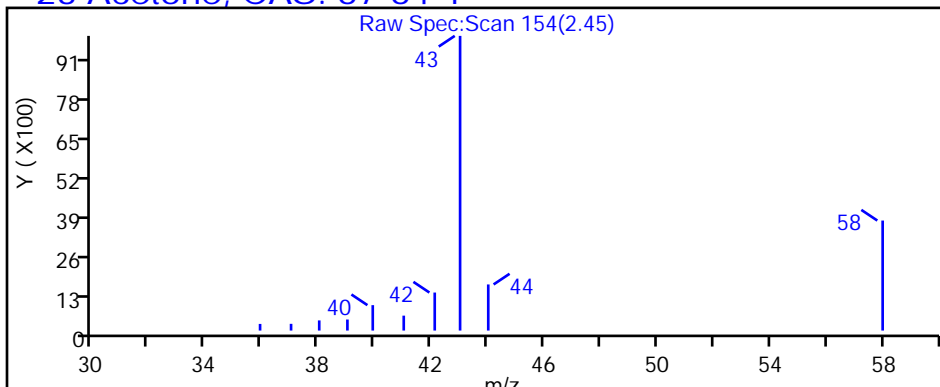
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

23 Acetone, CAS: 67-64-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3145.D

Injection Date: 18-Jul-2019 04:22:30

Instrument ID: HP5975T

Lims ID: 480-156213-C-16

Lab Sample ID: 480-156213-16

Client ID: 356023-EB1

Operator ID: AEM

ALS Bottle#: 23

Worklist Smp#: 24

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

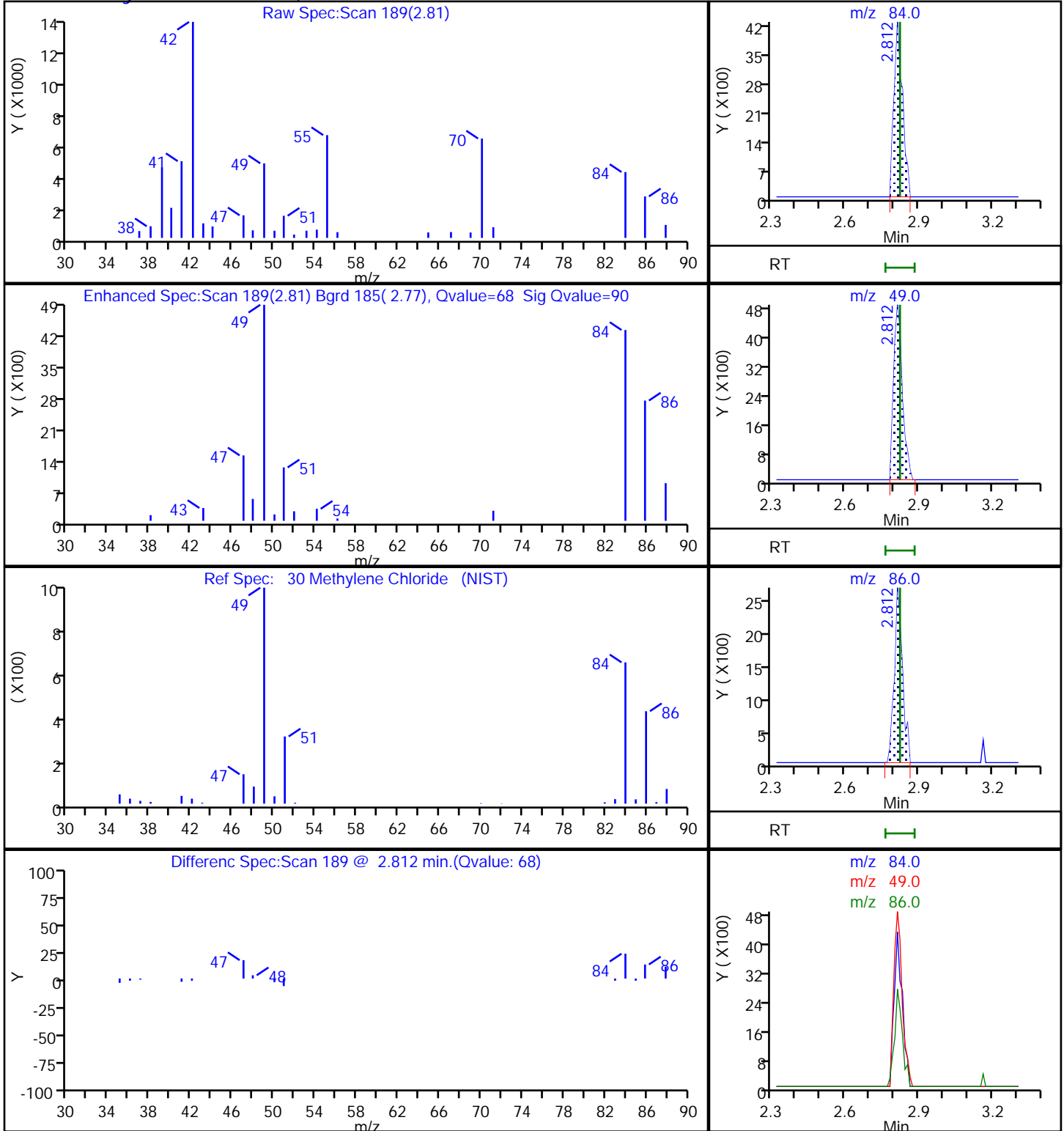
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

30 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1B Lab Sample ID: 480-156213-17
 Matrix: Water Lab File ID: T3146.D
 Analysis Method: 8260C Date Collected: 07/12/2019 11:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 04:46
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	6.1	J	10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1B Lab Sample ID: 480-156213-17
 Matrix: Water Lab File ID: T3146.D
 Analysis Method: 8260C Date Collected: 07/12/2019 11:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 04:46
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3146.D
 Lims ID: 480-156213-D-17
 Client ID: 356023-MW1B
 Sample Type: Client
 Inject. Date: 18-Jul-2019 04:46:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-17
 Misc. Info.: 480-0082700-025
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:42:17 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:42:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	168574	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	741778	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	438143	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	93	243397	26.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	272519	25.5	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	92	876475	24.1	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	314463	25.8	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96		2.346				ND	
23 Acetone	43	2.449	2.460	-0.011	99	15931	6.12	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	92	6619	0.2291	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63		3.372				ND	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	U
73 Toluene	92		5.911				ND	Ua
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3146.D

Injection Date: 18-Jul-2019 04:46:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-17

Lab Sample ID: 480-156213-17

Worklist Smp#: 25

Client ID: 356023-MW1B

Purge Vol: 5.000 mL

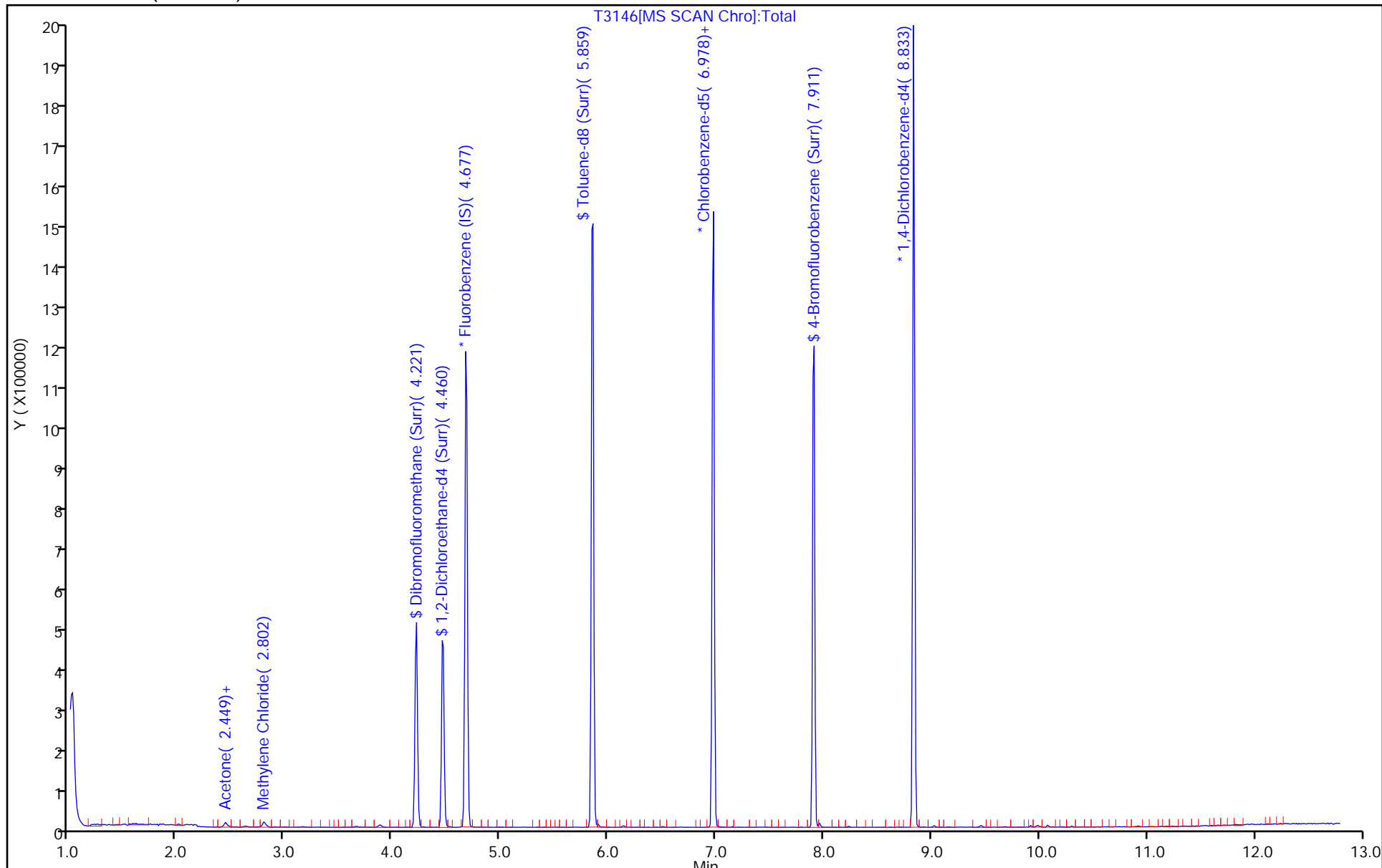
Dil. Factor: 1.0000

ALS Bottle#: 24

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3146.D

Injection Date: 18-Jul-2019 04:46:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-17

Lab Sample ID: 480-156213-17

Client ID: 356023-MW1B

Operator ID: AEM

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

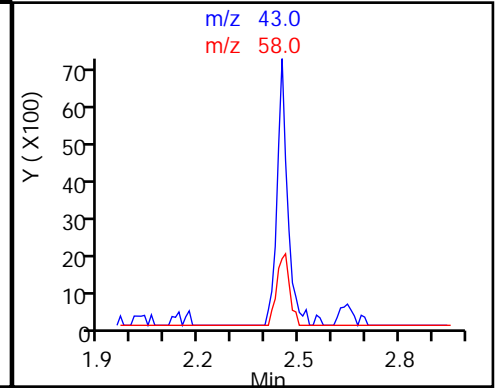
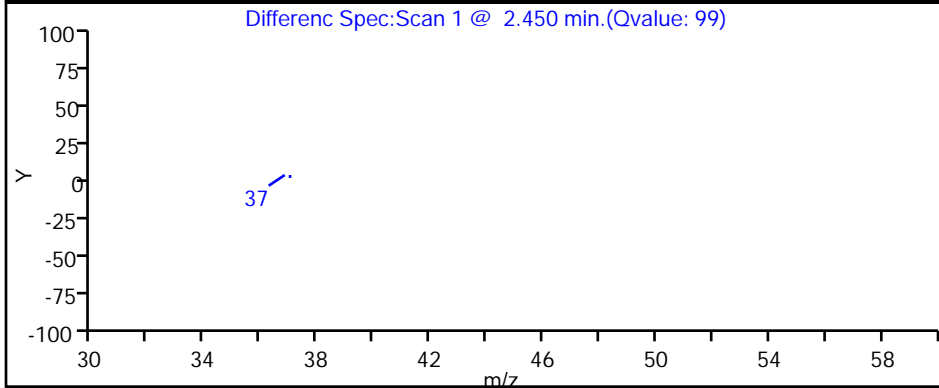
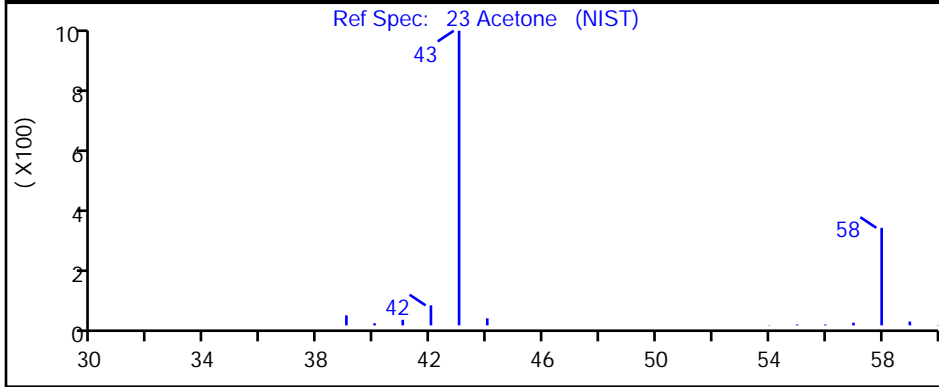
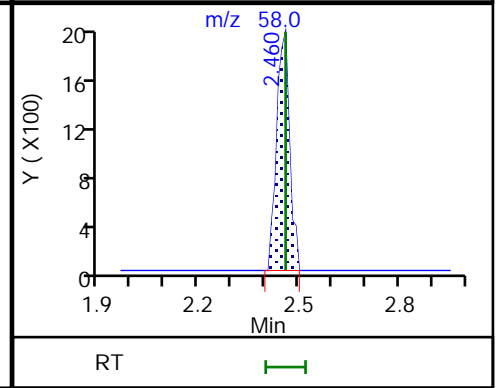
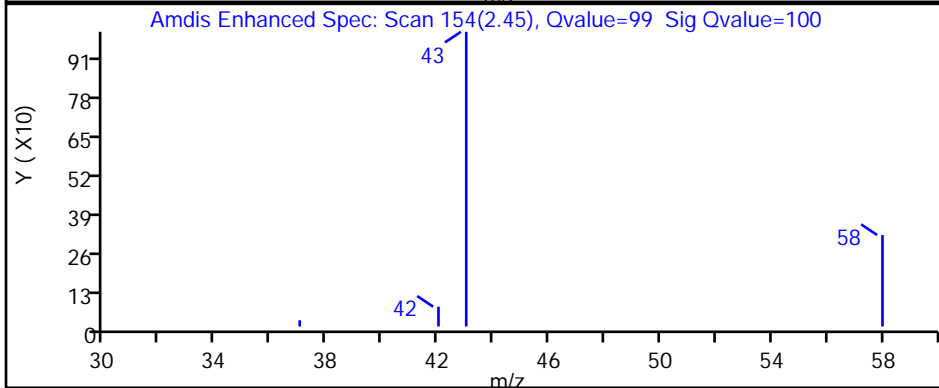
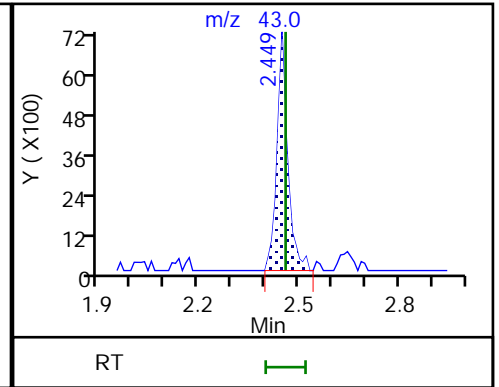
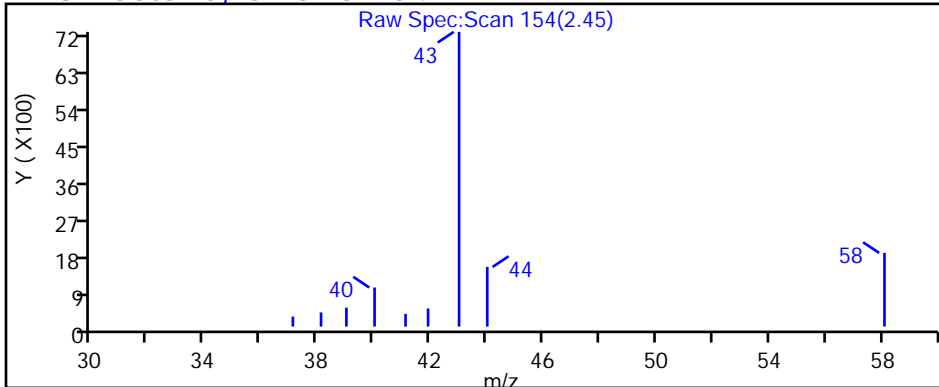
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

23 Acetone, CAS: 67-64-1

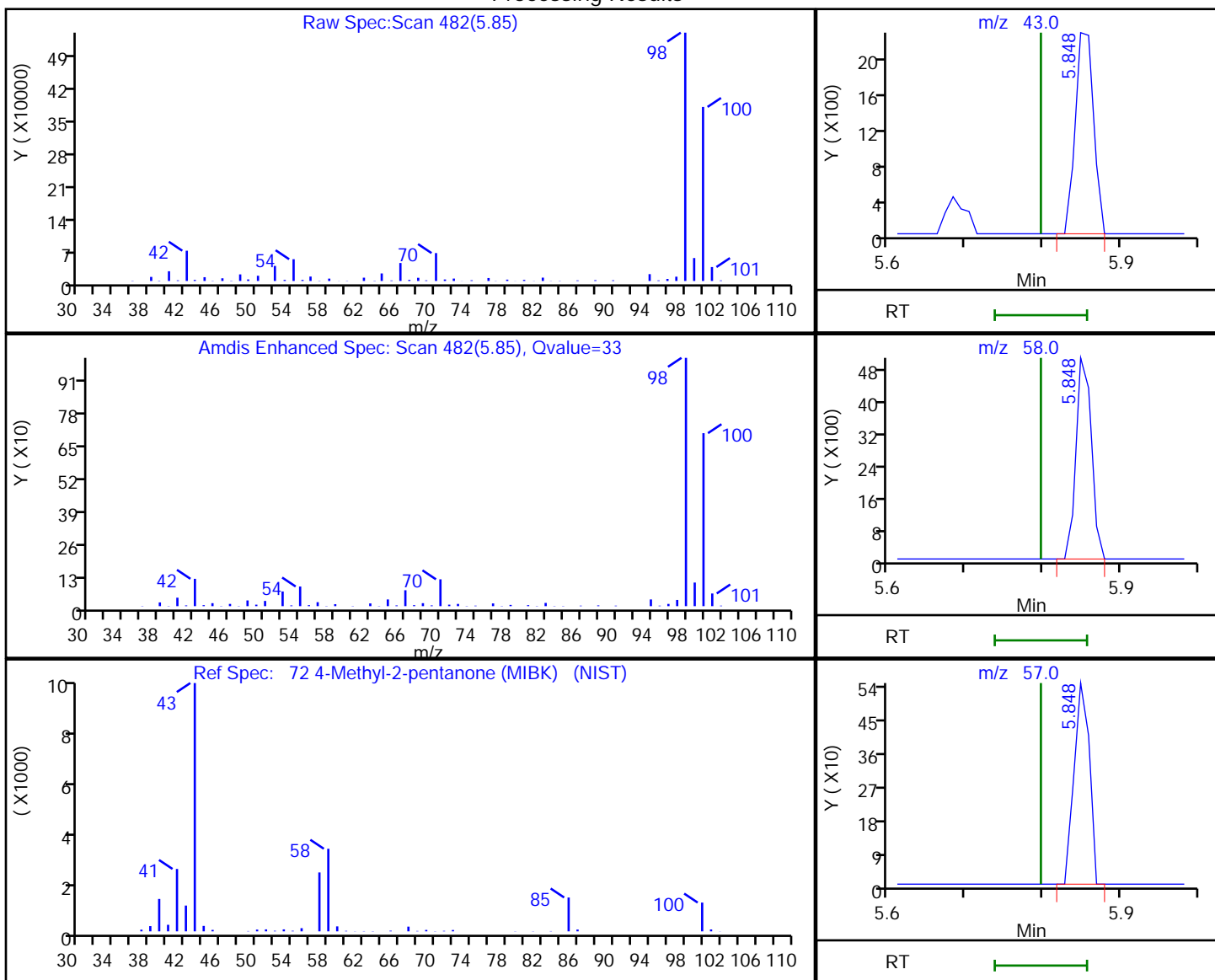


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3146.D
 Injection Date: 18-Jul-2019 04:46:30 Instrument ID: HP5975T
 Lims ID: 480-156213-D-17 Lab Sample ID: 480-156213-17
 Client ID: 356023-MW1B
 Operator ID: AEM ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

72 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results



RT	Mass	Response	Amount
5.85	43.00	3691	0.378561
5.85	58.00	7055	
5.85	57.00	752	

Reviewer: farrellr, 18-Jul-2019 13:41:46

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5R Lab Sample ID: 480-156213-18
 Matrix: Water Lab File ID: T3147.D
 Analysis Method: 8260C Date Collected: 07/12/2019 11:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 05:09
 Soil Aliquot Vol: _____ Dilution Factor: 2
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	110		2.0	1.6
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	0.42
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62
79-00-5	1,1,2-Trichloroethane	ND		2.0	0.46
75-34-3	1,1-Dichloroethane	6.7		2.0	0.76
75-35-4	1,1-Dichloroethene	24		2.0	0.58
87-61-6	1,2,3-Trichlorobenzene	ND		2.0	0.82
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.82
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	0.78
106-93-4	1,2-Dibromoethane	ND		2.0	1.5
95-50-1	1,2-Dichlorobenzene	ND		2.0	1.6
107-06-2	1,2-Dichloroethane	ND		2.0	0.42
78-87-5	1,2-Dichloropropane	ND		2.0	1.4
541-73-1	1,3-Dichlorobenzene	ND		2.0	1.6
106-46-7	1,4-Dichlorobenzene	ND		2.0	1.7
123-91-1	1,4-Dioxane	ND		80	19
78-93-3	2-Butanone (MEK)	ND		20	2.6
591-78-6	2-Hexanone	ND		10	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	4.2
67-64-1	Acetone	ND		20	6.0
71-43-2	Benzene	ND		2.0	0.82
74-97-5	Bromochloromethane	ND		2.0	1.7
75-27-4	Bromodichloromethane	ND		2.0	0.78
75-25-2	Bromoform	ND	*	2.0	0.52
74-83-9	Bromomethane	ND		2.0	1.4
75-15-0	Carbon disulfide	ND		2.0	0.38
56-23-5	Carbon tetrachloride	ND		2.0	0.54
108-90-7	Chlorobenzene	ND		2.0	1.5
75-00-3	Chloroethane	ND		2.0	0.64
67-66-3	Chloroform	ND		2.0	0.68
74-87-3	Chloromethane	ND		2.0	0.70
156-59-2	cis-1,2-Dichloroethene	ND		2.0	1.6
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	0.72
110-82-7	Cyclohexane	ND		2.0	0.36
124-48-1	Dibromochloromethane	ND	*	2.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5R Lab Sample ID: 480-156213-18
 Matrix: Water Lab File ID: T3147.D
 Analysis Method: 8260C Date Collected: 07/12/2019 11:10
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 05:09
 Soil Aliquot Vol: _____ Dilution Factor: 2
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		2.0	1.4
100-41-4	Ethylbenzene	ND		2.0	1.5
98-82-8	Isopropylbenzene	ND		2.0	1.6
79-20-9	Methyl acetate	ND		5.0	2.6
1634-04-4	Methyl tert-butyl ether	ND		2.0	0.32
108-87-2	Methylcyclohexane	ND		2.0	0.32
75-09-2	Methylene Chloride	1.2	J	2.0	0.88
100-42-5	Styrene	ND		2.0	1.5
127-18-4	Tetrachloroethene	ND		2.0	0.72
108-88-3	Toluene	ND		2.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		2.0	1.8
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	0.74
79-01-6	Trichloroethene	7.6		2.0	0.92
75-69-4	Trichlorofluoromethane	ND		2.0	1.8
75-01-4	Vinyl chloride	ND		2.0	1.8
1330-20-7	Xylenes, Total	ND		4.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3147.D
 Lims ID: 480-156213-D-18
 Client ID: 356023-MW5R
 Sample Type: Client
 Inject. Date: 18-Jul-2019 05:09:30 ALS Bottle#: 25 Worklist Smp#: 26
 Purge Vol: 5.000 mL Dil. Factor: 2.0000
 Sample Info: 480-156213-D-18
 Misc. Info.: 480-0082700-026
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:44:16 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr Date: 18-Jul-2019 13:44:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.678	4.688	-0.010	99	164880	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	741272	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	432045	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	94	237707	26.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	272064	26.0	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	92	861569	23.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	317652	26.0	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.336	2.335	-0.010	98	92300	12.2	
23 Acetone	43		2.460				ND	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	91	9668	0.5892	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	96	48304	3.34	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83	4.087	4.076	-0.010	86	2095	0.1360	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	99	589767	52.7	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	Ua

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	94	34986	3.79	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3147.D

Injection Date: 18-Jul-2019 05:09:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-18

Lab Sample ID: 480-156213-18

Worklist Smp#: 26

Client ID: 356023-MW5R

Purge Vol: 5.000 mL

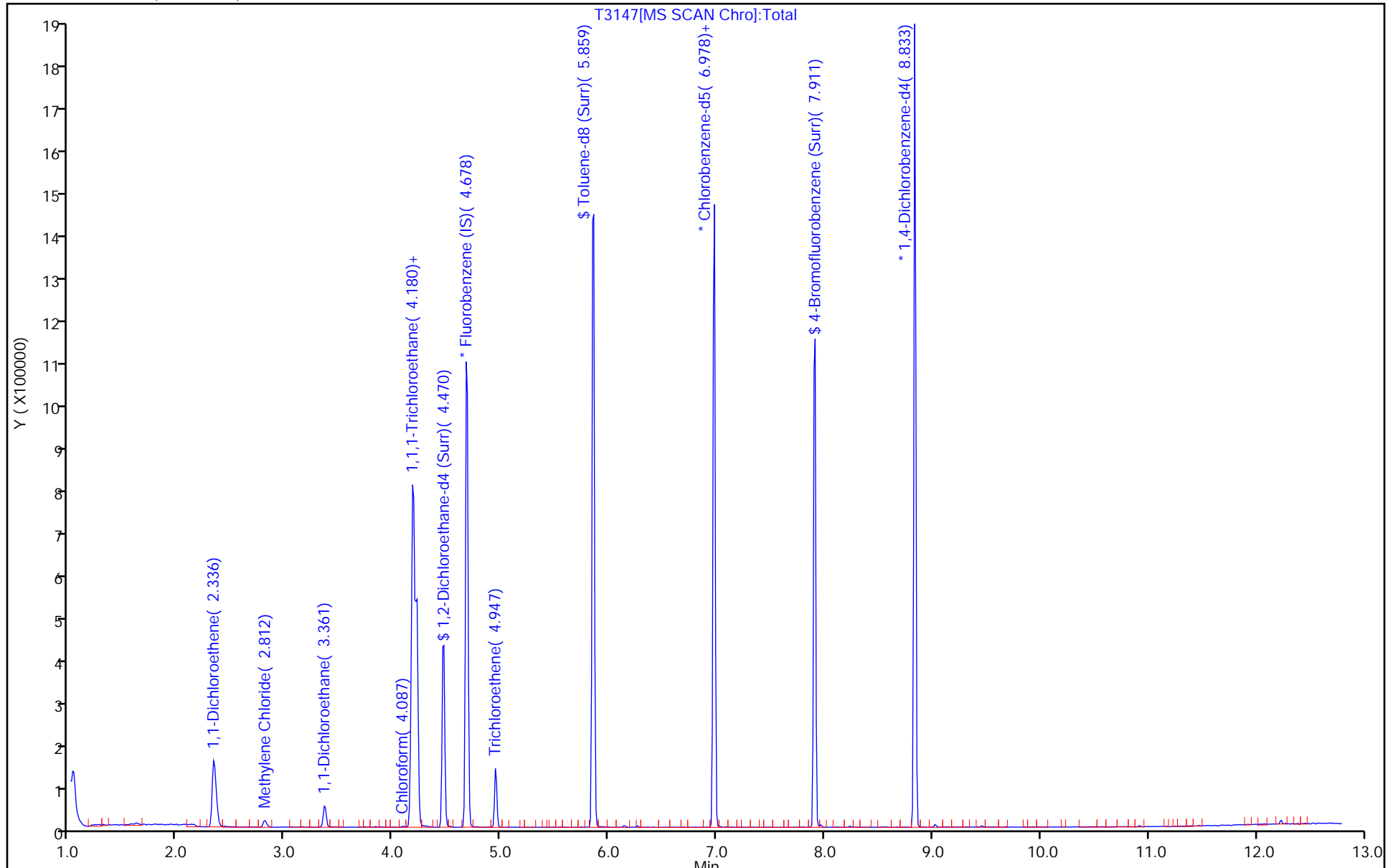
Dil. Factor: 2.0000

ALS Bottle#: 25

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3147.D

Injection Date: 18-Jul-2019 05:09:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-18

Lab Sample ID: 480-156213-18

Client ID: 356023-MW5R

Operator ID: AEM

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

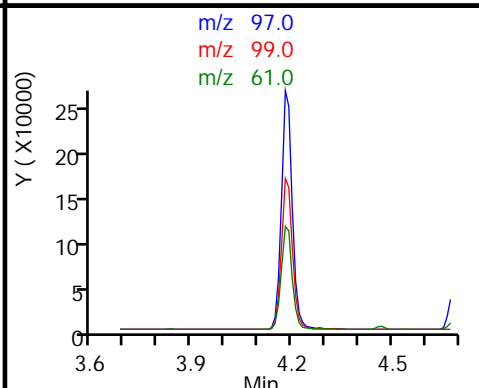
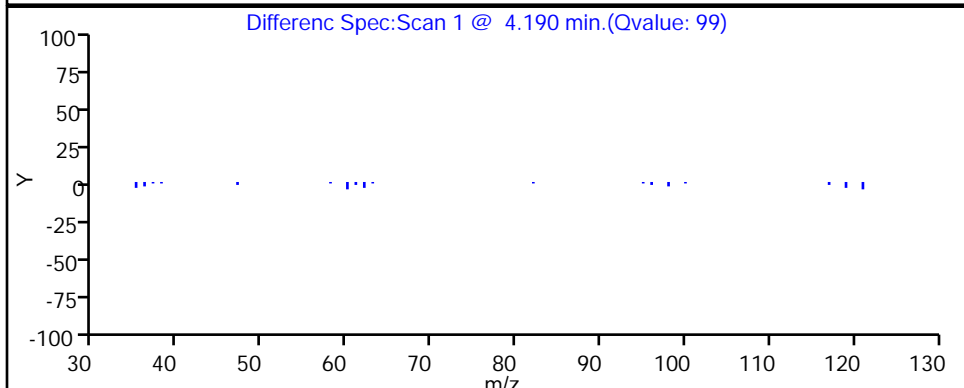
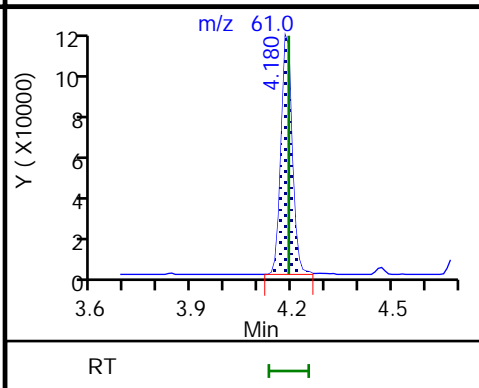
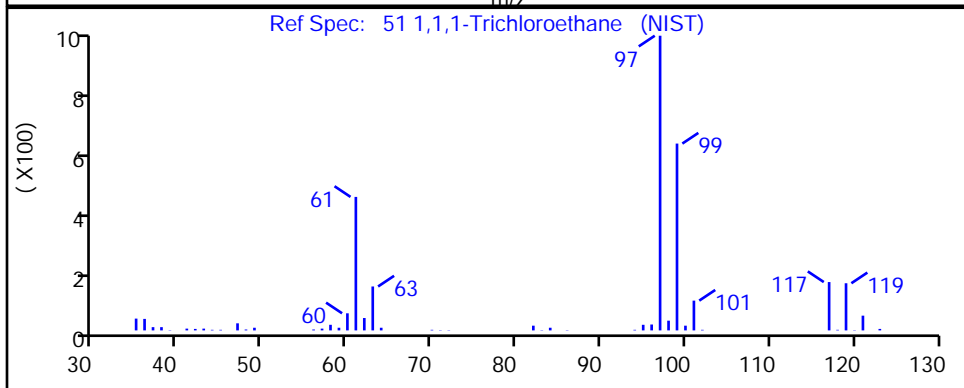
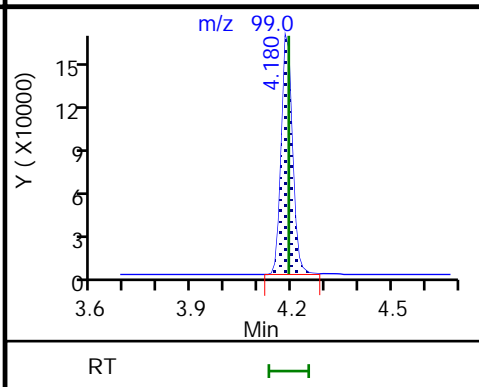
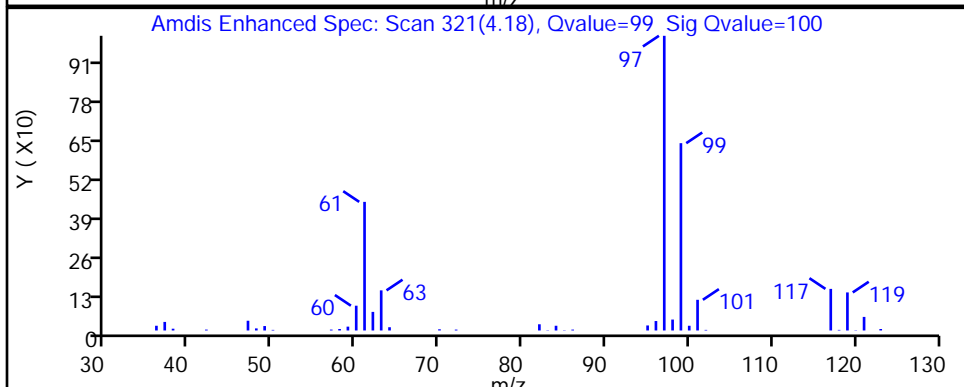
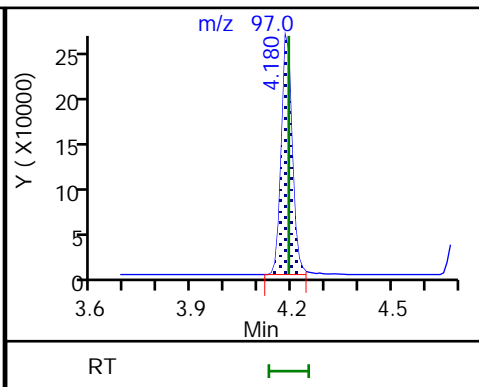
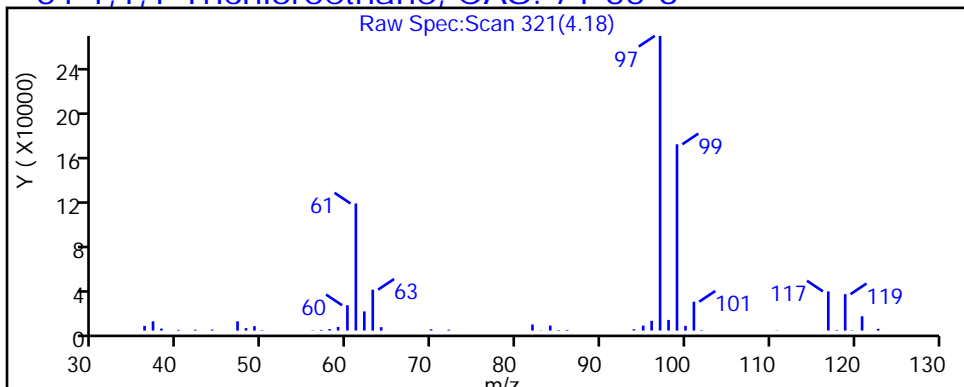
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3147.D

Injection Date: 18-Jul-2019 05:09:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-18

Lab Sample ID: 480-156213-18

Client ID: 356023-MW5R

Operator ID: AEM

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

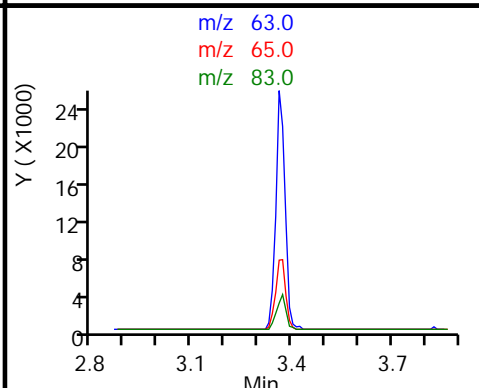
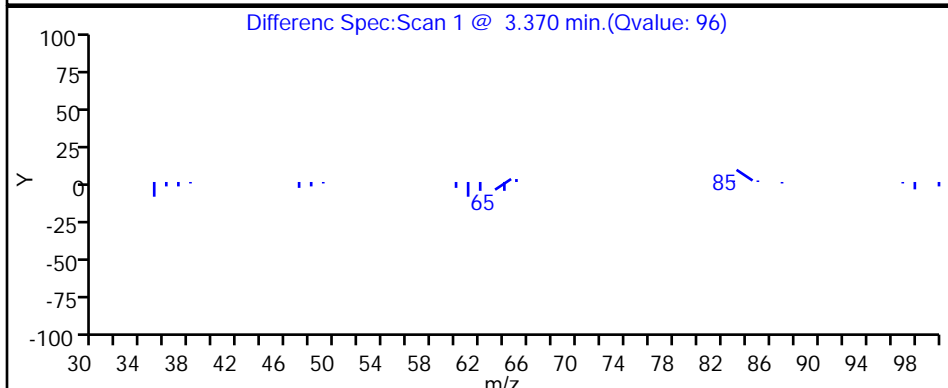
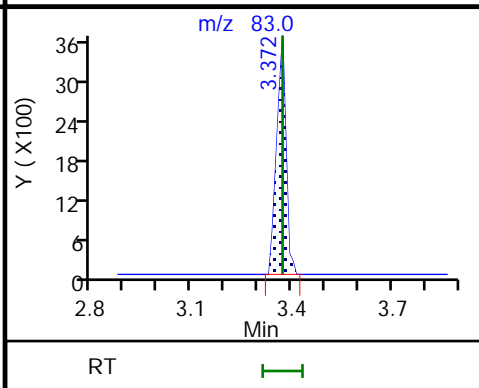
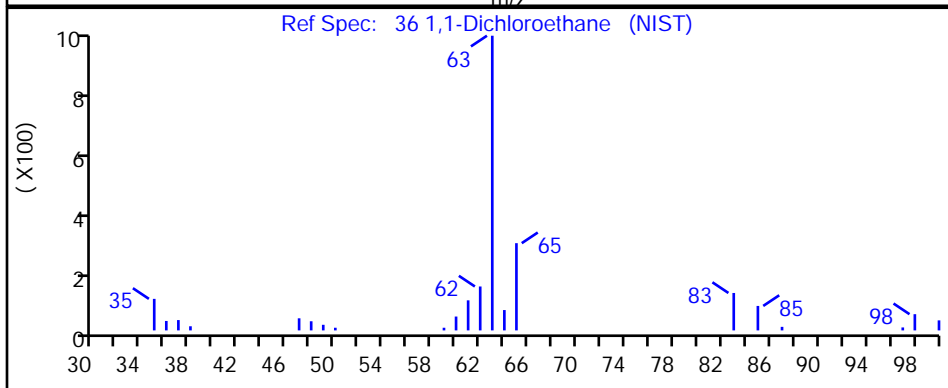
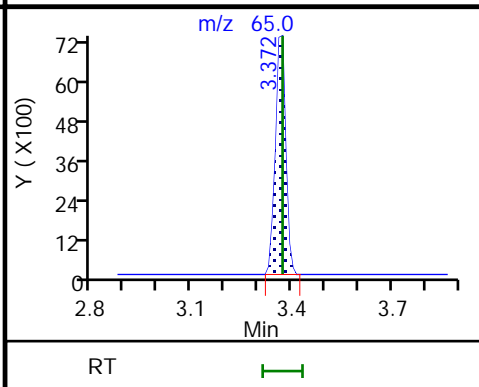
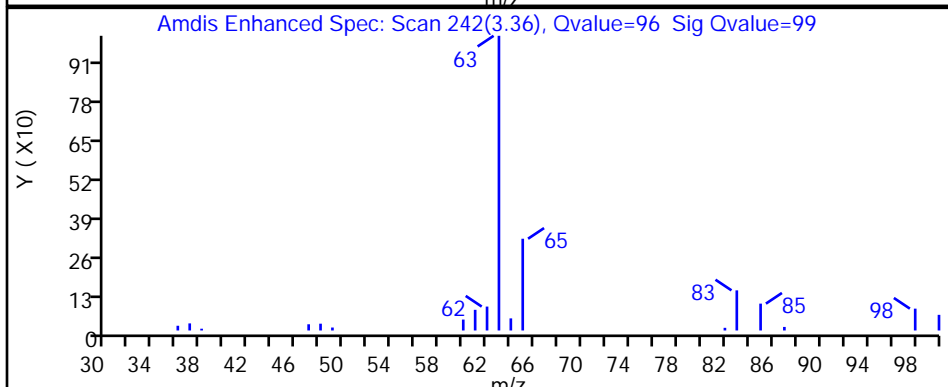
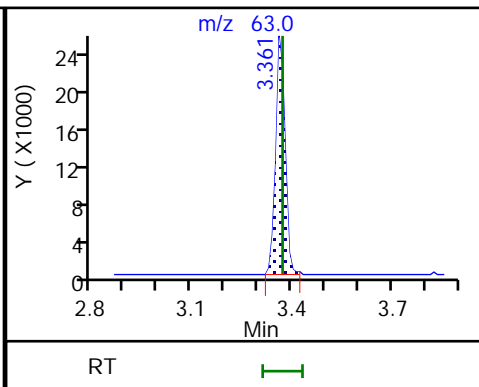
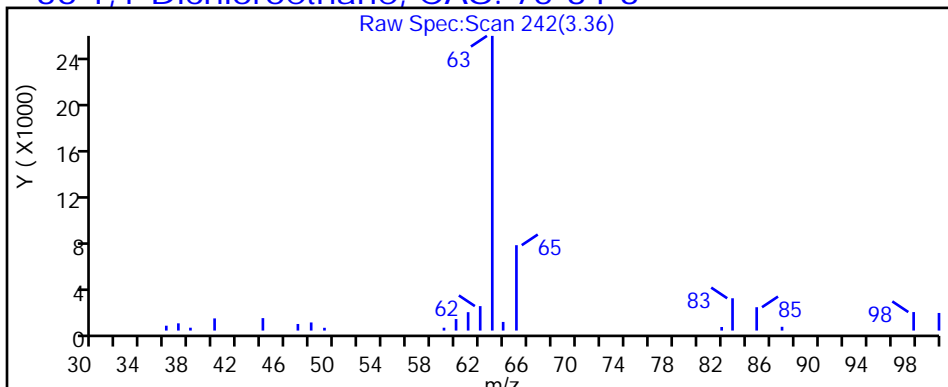
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3147.D

Injection Date: 18-Jul-2019 05:09:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-18

Lab Sample ID: 480-156213-18

Client ID: 356023-MW5R

Operator ID: AEM

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

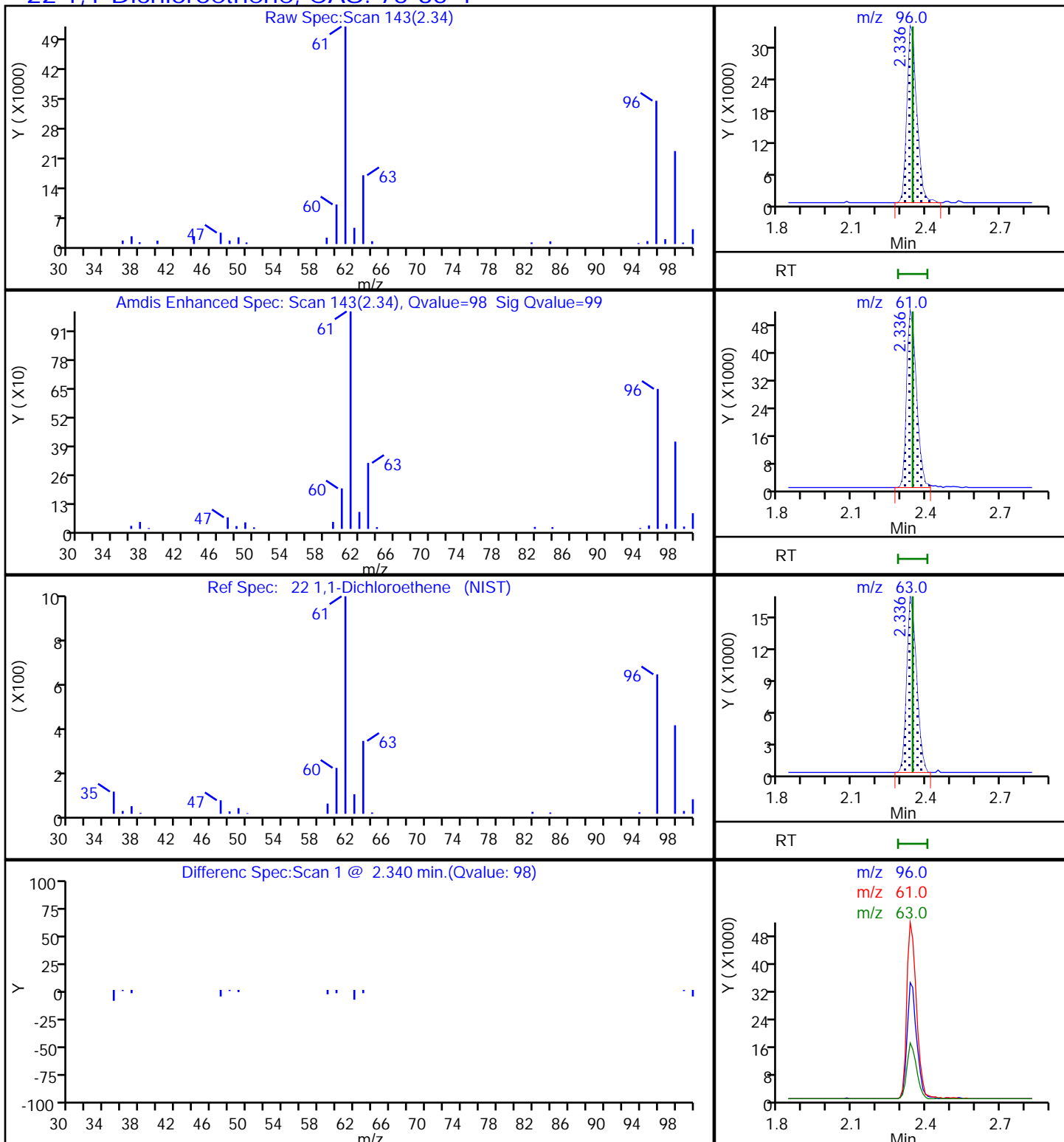
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3147.D

Injection Date: 18-Jul-2019 05:09:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-18

Lab Sample ID: 480-156213-18

Client ID: 356023-MW5R

Operator ID: AEM

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

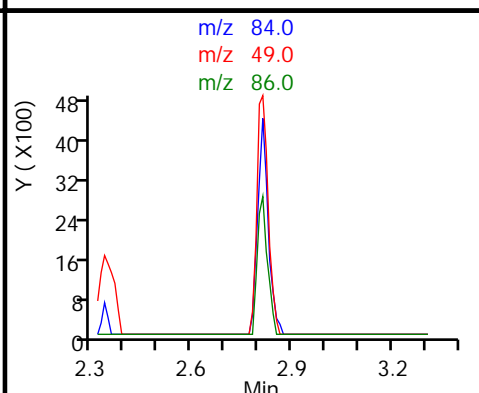
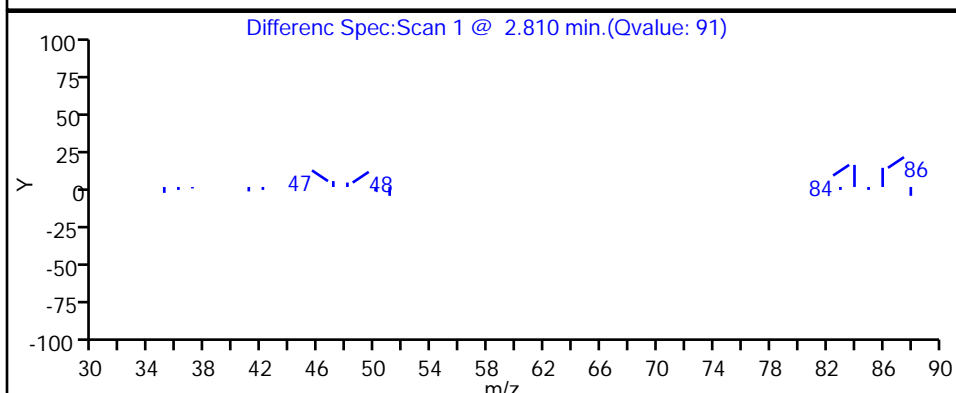
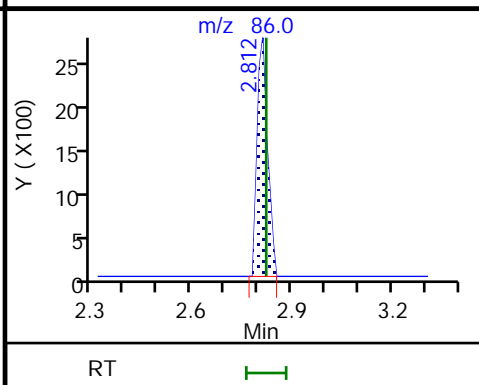
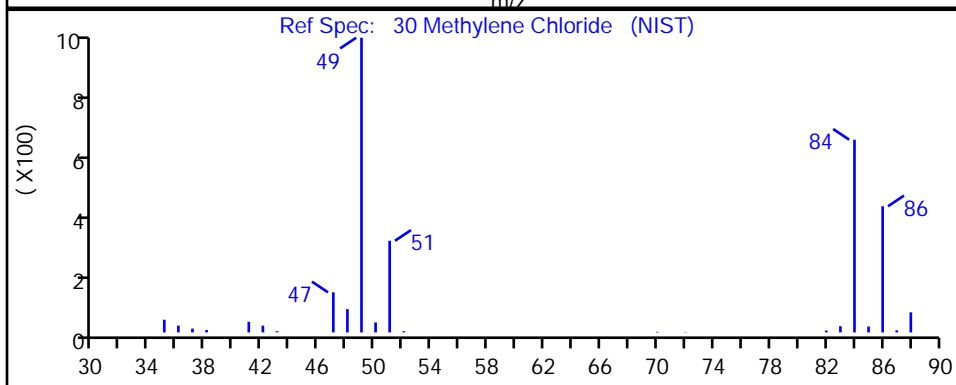
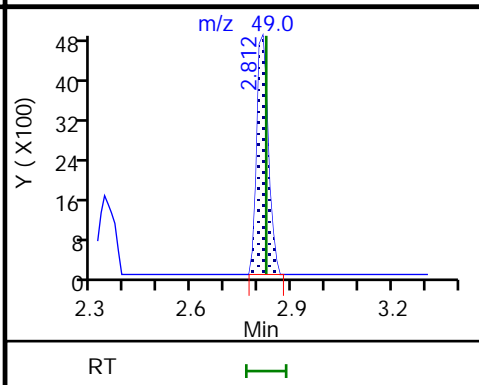
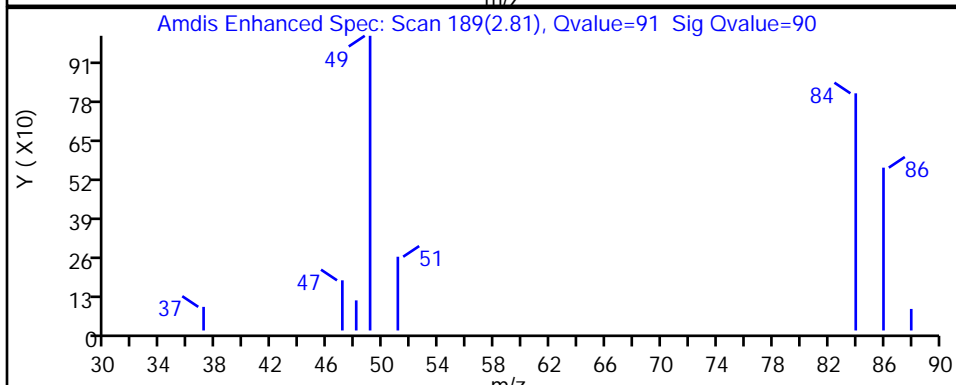
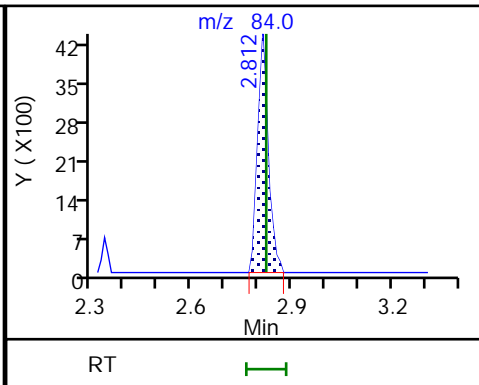
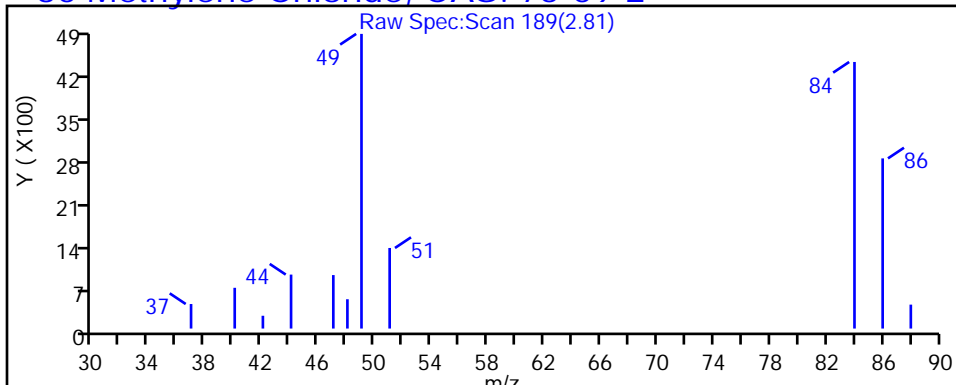
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

30 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3147.D

Injection Date: 18-Jul-2019 05:09:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-18

Lab Sample ID: 480-156213-18

Client ID: 356023-MW5R

Operator ID: AEM

ALS Bottle#: 25

Worklist Smp#: 26

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

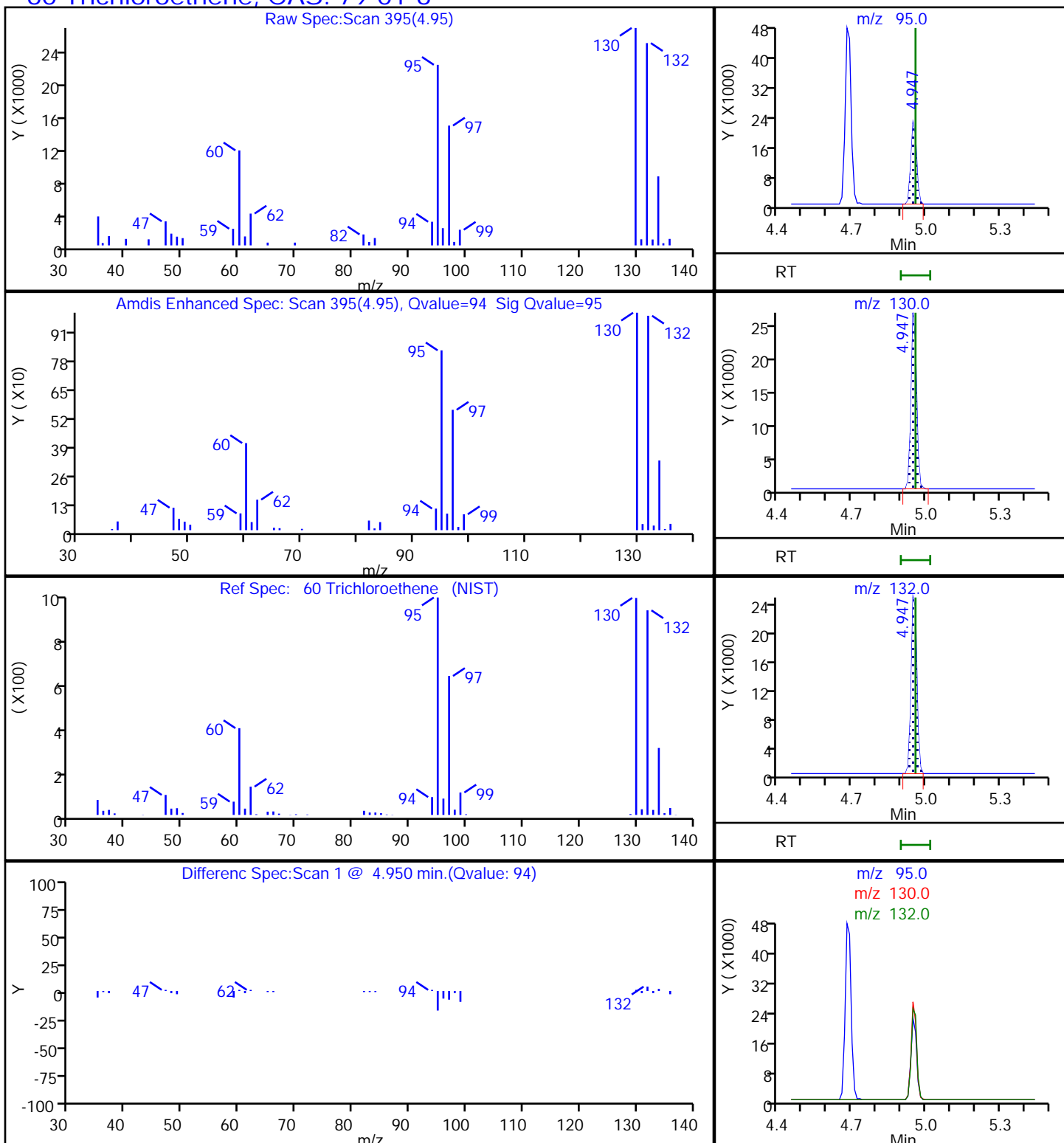
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW7R Lab Sample ID: 480-156213-19
 Matrix: Water Lab File ID: T3148.D
 Analysis Method: 8260C Date Collected: 07/12/2019 11:30
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 05:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	41		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	14		1.0	0.38
75-35-4	1,1-Dichloroethene	5.7		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW7R Lab Sample ID: 480-156213-19
 Matrix: Water Lab File ID: T3148.D
 Analysis Method: 8260C Date Collected: 07/12/2019 11:30
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 05:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	0.94	J	1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	107		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3148.D
 Lims ID: 480-156213-D-19
 Client ID: 356023-MW7R
 Sample Type: Client
 Inject. Date: 18-Jul-2019 05:34:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-D-19
 Misc. Info.: 480-0082700-027
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:44:16 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:45:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	166429	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	737594	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	428698	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	94	245267	26.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	275893	26.1	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	880204	24.3	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	323981	26.7	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96	2.335	2.335	-0.011	99	43310	5.67	
23 Acetone	43	2.449	2.460	-0.011	95	3776	1.47	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	92	6091	0.1795	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	96	210522	14.4	
43 cis-1,2-Dichloroethene	96	3.828	3.838	-0.010	79	6994	0.6935	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83	4.097	4.076	0.000	83	1993	0.1281	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	98	463232	41.0	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	91	8769	0.9400	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3148.D

Injection Date: 18-Jul-2019 05:34:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-D-19

Lab Sample ID: 480-156213-19

Worklist Smp#: 27

Client ID: 356023-MW7R

Purge Vol: 5.000 mL

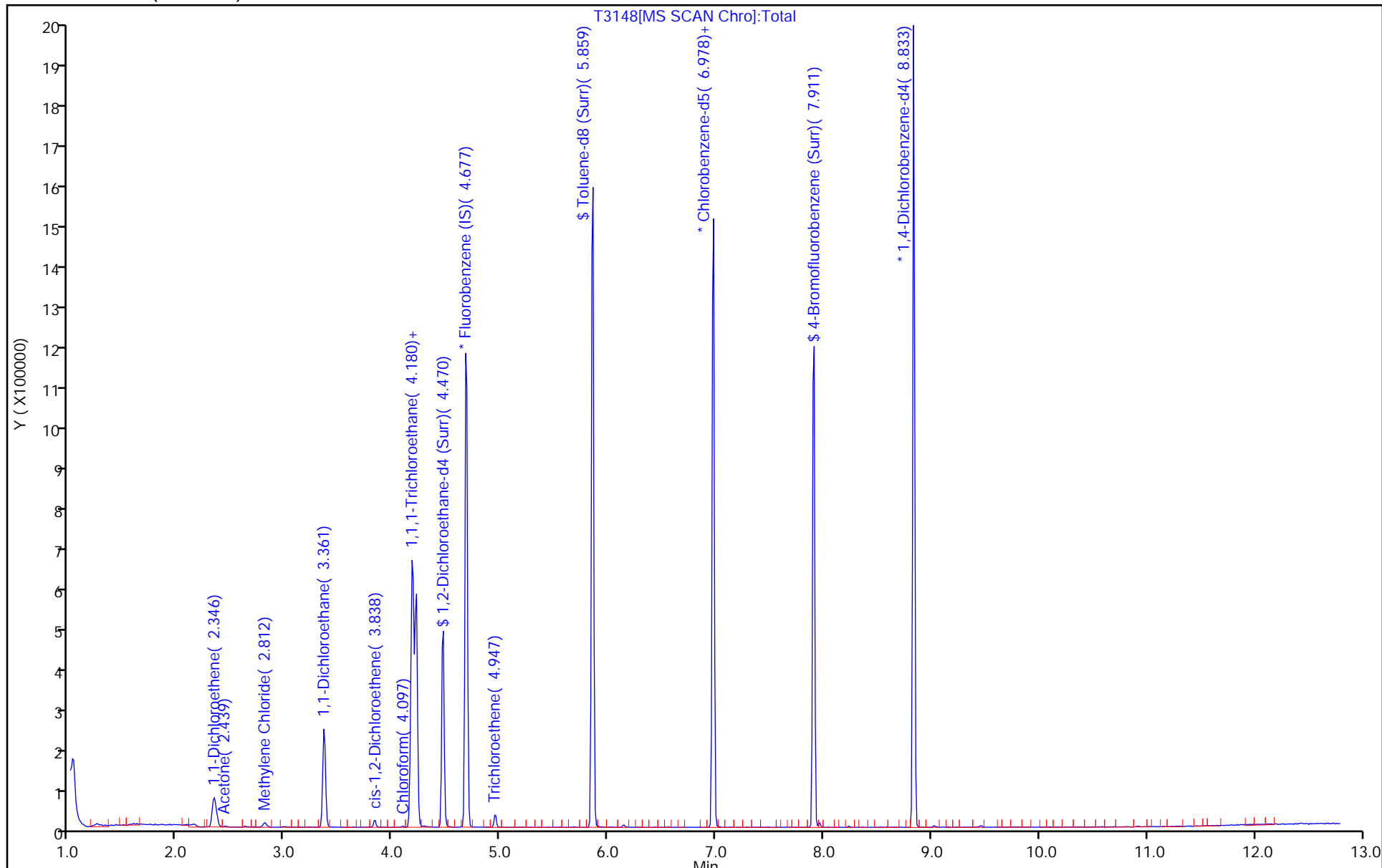
Dil. Factor: 1.0000

ALS Bottle#: 26

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3148.D

Injection Date: 18-Jul-2019 05:34:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-19

Lab Sample ID: 480-156213-19

Client ID: 356023-MW7R

Operator ID: AEM

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

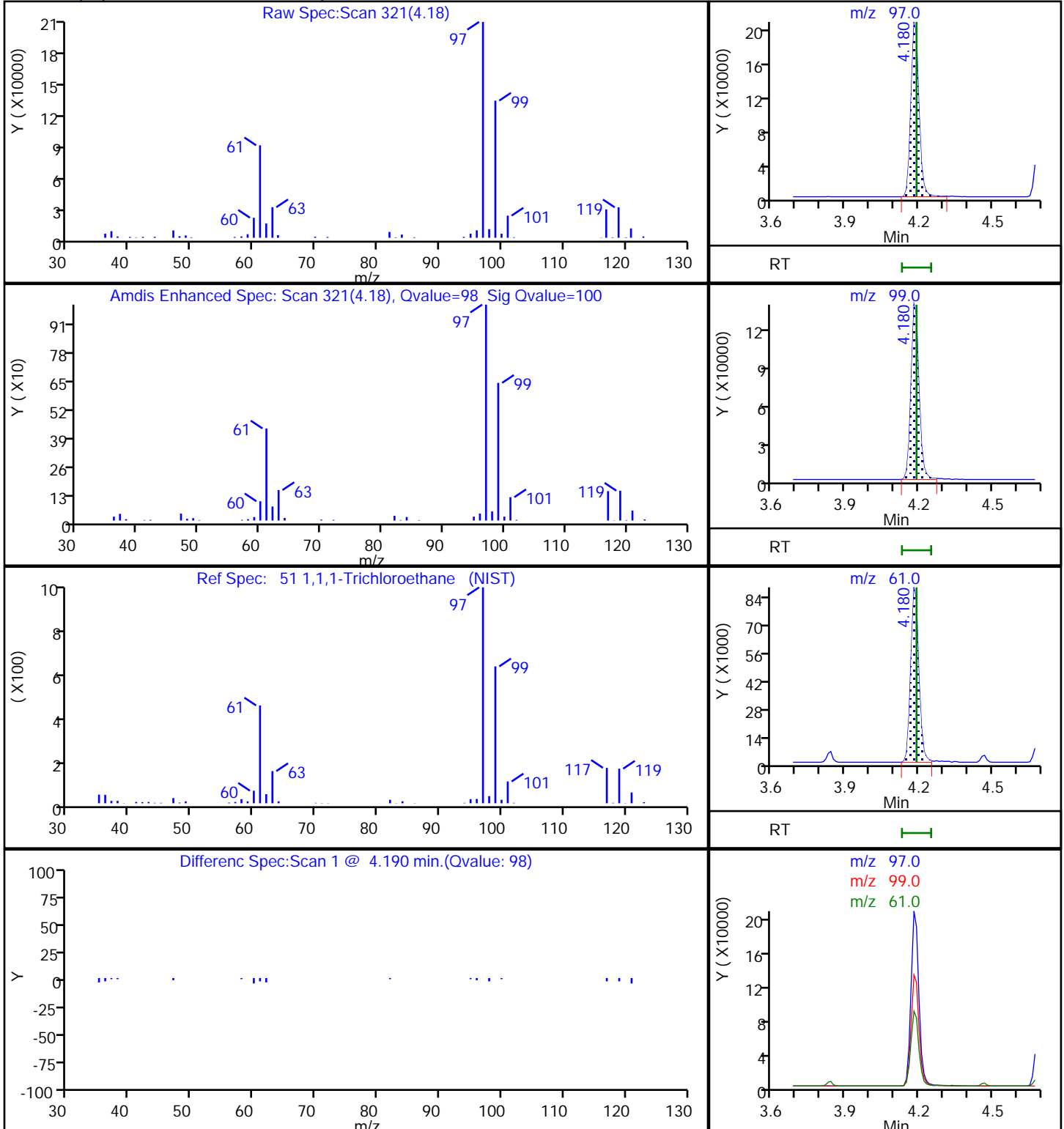
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3148.D

Injection Date: 18-Jul-2019 05:34:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-19

Lab Sample ID: 480-156213-19

Client ID: 356023-MW7R

Operator ID: AEM

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

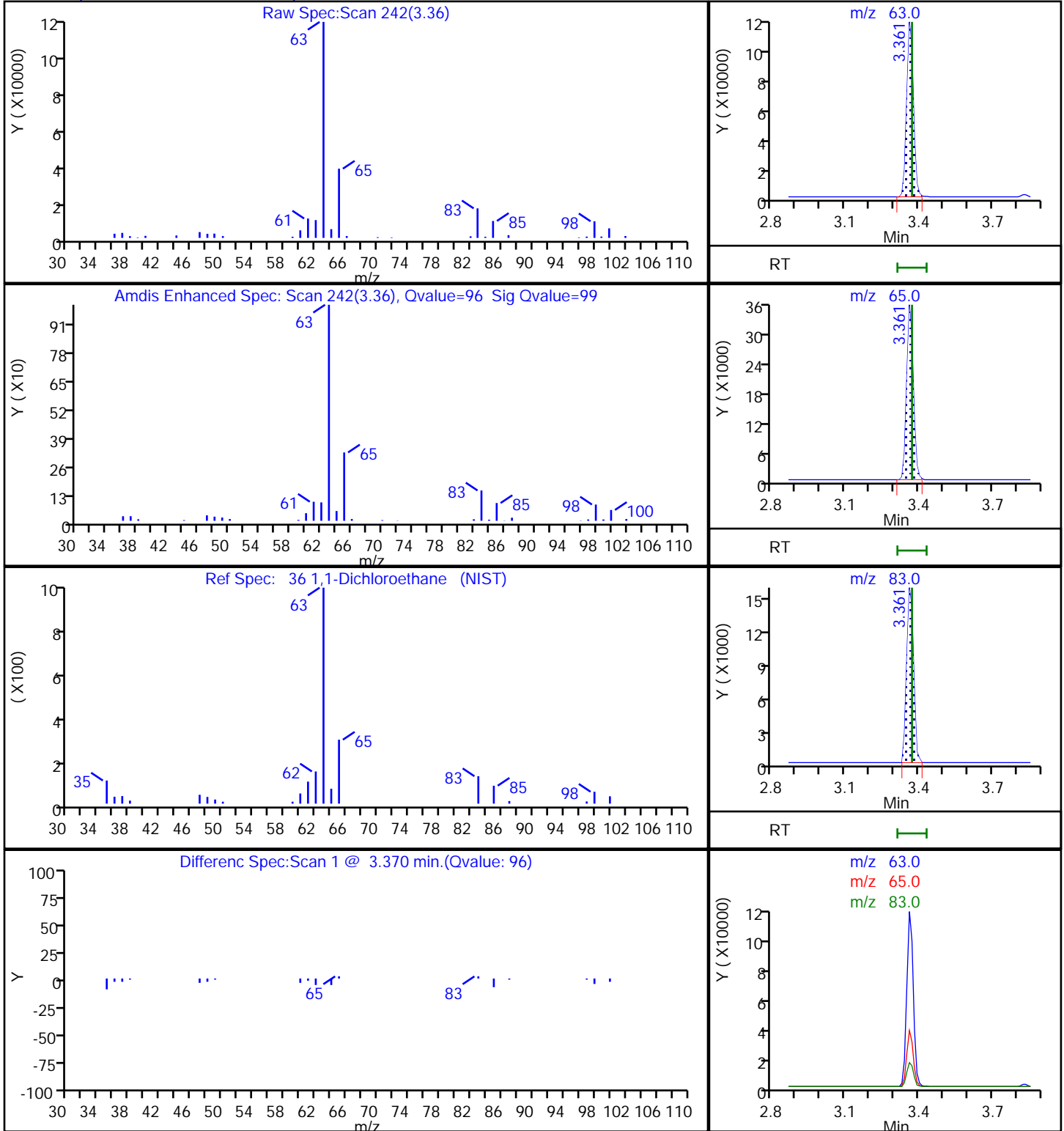
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3148.D

Injection Date: 18-Jul-2019 05:34:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-19

Lab Sample ID: 480-156213-19

Client ID: 356023-MW7R

Operator ID: AEM

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

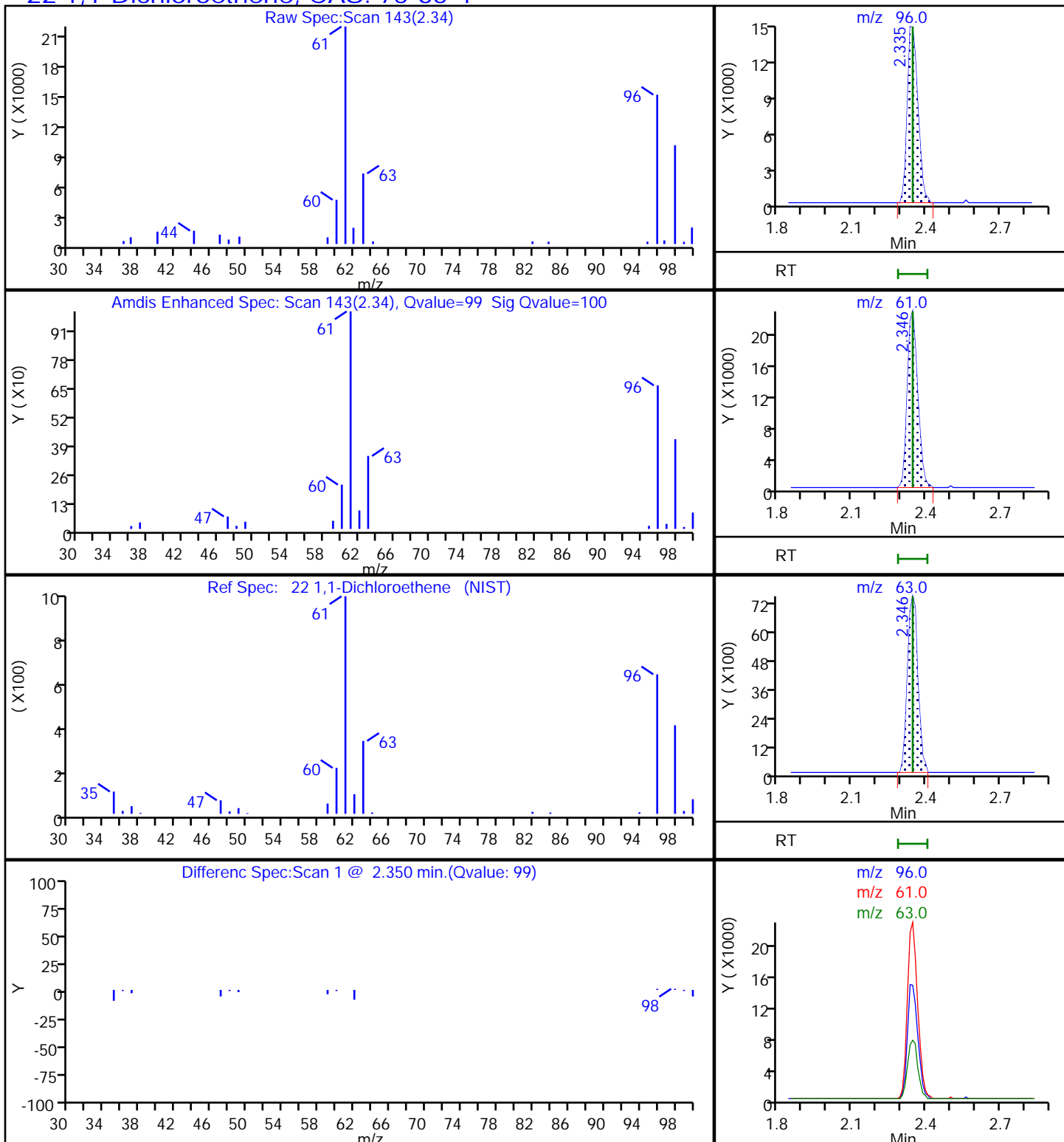
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3148.D

Injection Date: 18-Jul-2019 05:34:30

Instrument ID: HP5975T

Lims ID: 480-156213-D-19

Lab Sample ID: 480-156213-19

Client ID: 356023-MW7R

Operator ID: AEM

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

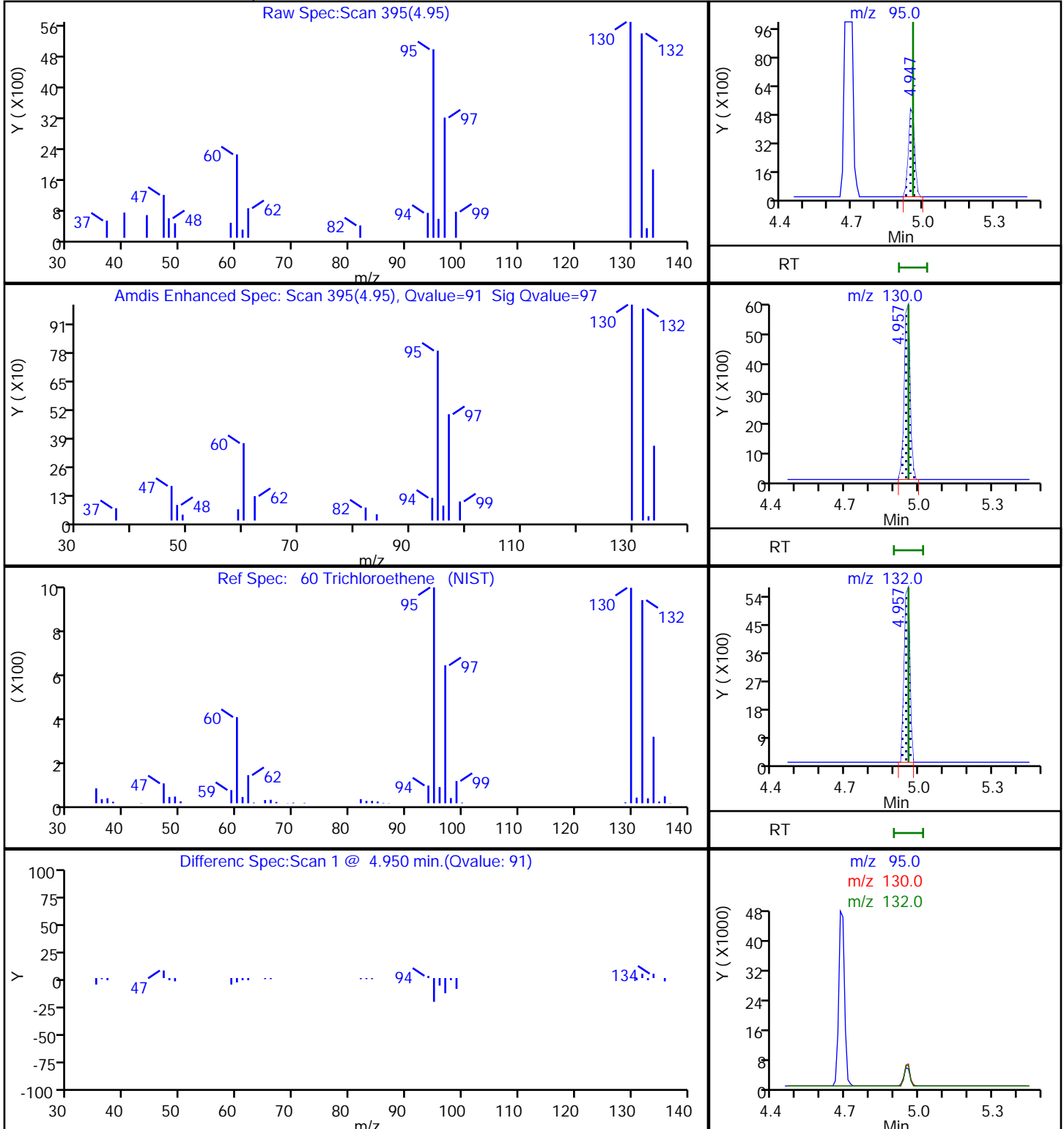
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

60 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-TB1 Lab Sample ID: 480-156213-20
 Matrix: Water Lab File ID: T3149.D
 Analysis Method: 8260C Date Collected: 07/09/2019 12:00
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 05:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	4.1	J	10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND	*	1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND	*	1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-TB1 Lab Sample ID: 480-156213-20
 Matrix: Water Lab File ID: T3149.D
 Analysis Method: 8260C Date Collected: 07/09/2019 12:00
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 05:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3149.D
 Lims ID: 480-156213-A-20
 Client ID: 356023-TB1
 Sample Type: Client
 Inject. Date: 18-Jul-2019 05:57:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-A-20
 Misc. Info.: 480-0082700-028
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:44:16 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:46:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.678	4.688	-0.010	99	168946	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	745831	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	435357	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.212	0.000	93	238540	25.5	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	272192	25.4	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	92	875394	23.9	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	321098	26.2	
11 Dichlorodifluoromethane	85		1.164				ND	
13 Chloromethane	50		1.320				ND	
14 Vinyl chloride	62		1.403				ND	
15 Bromomethane	94		1.641				ND	
16 Chloroethane	64		1.703				ND	
17 Trichlorofluoromethane	101		1.921				ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346				ND	
22 1,1-Dichloroethene	96		2.346				ND	
23 Acetone	43	2.449	2.460	-0.011	99	10672	4.09	
25 Carbon disulfide	76		2.532				ND	
28 Methyl acetate	43		2.719				ND	
30 Methylene Chloride	84	2.812	2.823	-0.011	86	6569	0.2220	
33 Methyl tert-butyl ether	73		3.009				ND	
32 trans-1,2-Dichloroethene	96		3.009				ND	
36 1,1-Dichloroethane	63		3.372				ND	
43 cis-1,2-Dichloroethene	96		3.838				ND	
44 2-Butanone (MEK)	43		3.869				ND	
47 Chlorobromomethane	128		4.035				ND	
50 Chloroform	83		4.097				ND	
52 Cyclohexane	56		4.190				ND	
51 1,1,1-Trichloroethane	97		4.190				ND	
53 Carbon tetrachloride	117		4.304				ND	
55 Benzene	78		4.470				ND	
57 1,2-Dichloroethane	62		4.532				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
60 Trichloroethene	95		4.957				ND	
62 Methylcyclohexane	83		5.051				ND	
63 1,2-Dichloropropane	63		5.144				ND	
66 1,4-Dioxane	88		5.258				ND	
67 Dichlorobromomethane	83		5.372				ND	
71 cis-1,3-Dichloropropene	75		5.693				ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797				ND	
73 Toluene	92		5.911				ND	
75 trans-1,3-Dichloropropene	75		6.118				ND	
78 1,1,2-Trichloroethane	83		6.263				ND	
79 Tetrachloroethene	166		6.305				ND	
81 2-Hexanone	43		6.429				ND	
82 Chlorodibromomethane	129		6.564				ND	
83 Ethylene Dibromide	107		6.647				ND	
86 Chlorobenzene	112		6.999				ND	
88 Ethylbenzene	91		7.061				ND	
90 m-Xylene & p-Xylene	106		7.154				ND	
91 o-Xylene	106		7.465				ND	
92 Styrene	104		7.496				ND	
93 Bromoform	173		7.683				ND	
95 Isopropylbenzene	105		7.755				ND	
98 1,1,2,2-Tetrachloroethane	83		8.066				ND	
110 1,3-Dichlorobenzene	146		8.781				ND	
113 1,4-Dichlorobenzene	146		8.854				ND	
116 1,2-Dichlorobenzene	146		9.165				ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838				ND	
119 1,2,4-Trichlorobenzene	180		10.481				ND	
122 1,2,3-Trichlorobenzene	180		10.885				ND	
S 126 Xylenes, Total	1		30.000				ND	

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3149.D

Injection Date: 18-Jul-2019 05:57:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-A-20

Lab Sample ID: 480-156213-20

Worklist Smp#: 28

Client ID: 356023-TB1

Purge Vol: 5.000 mL

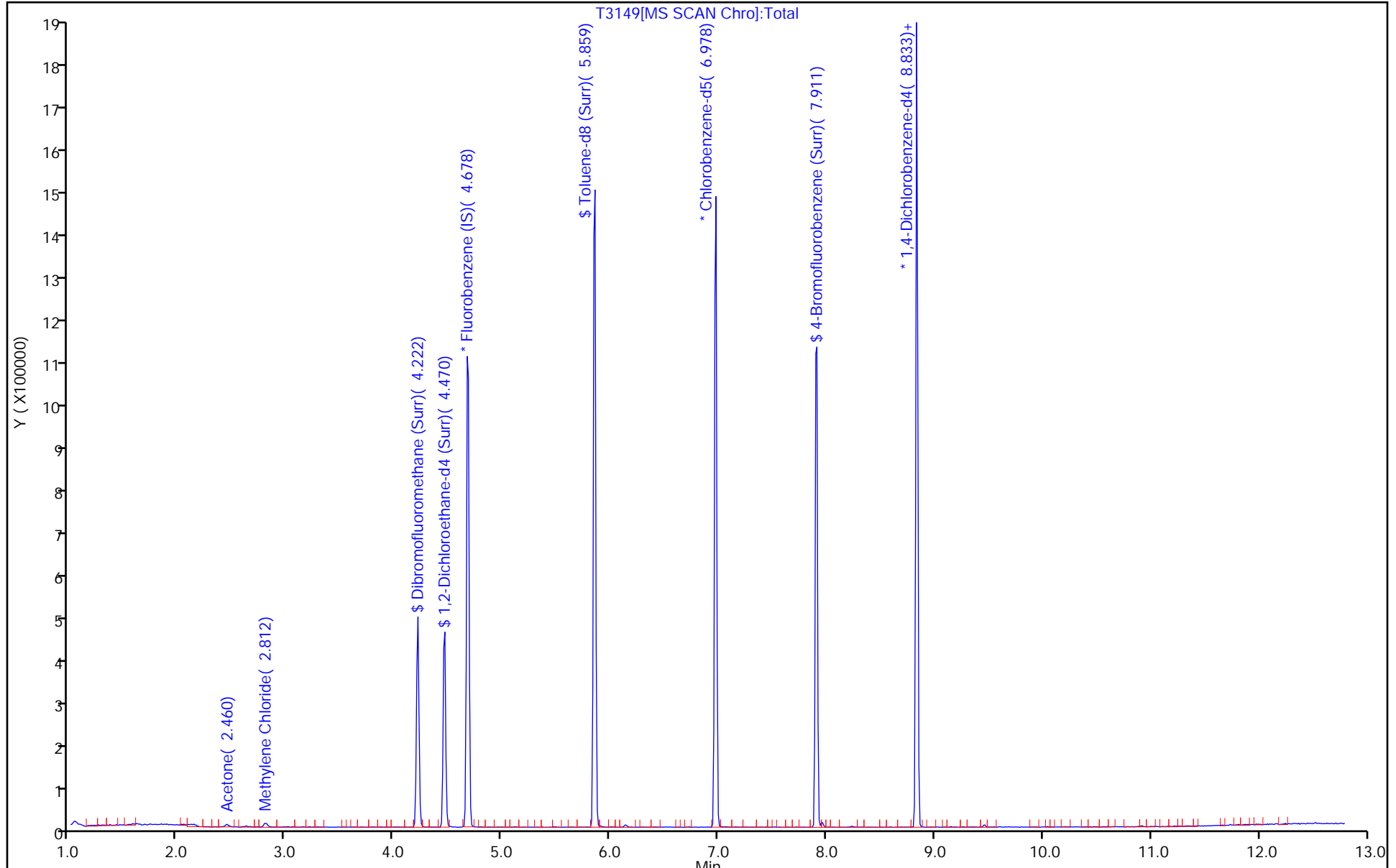
Dil. Factor: 1.0000

ALS Bottle#: 27

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3149.D

Injection Date: 18-Jul-2019 05:57:30

Instrument ID: HP5975T

Lims ID: 480-156213-A-20

Lab Sample ID: 480-156213-20

Client ID: 356023-TB1

Operator ID: AEM

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

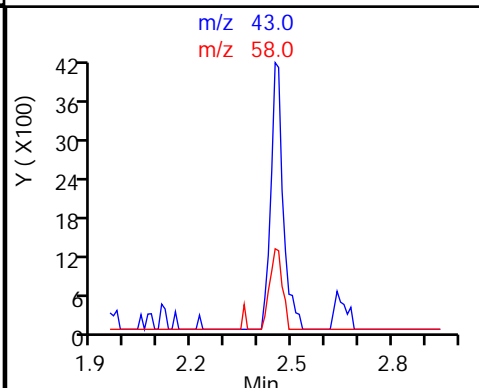
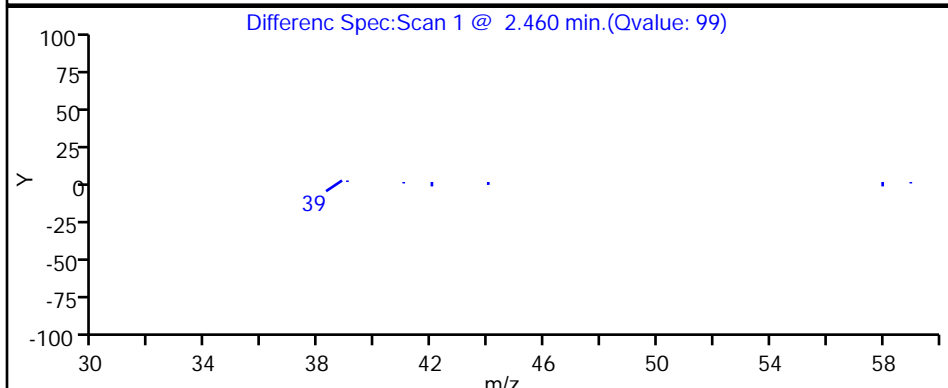
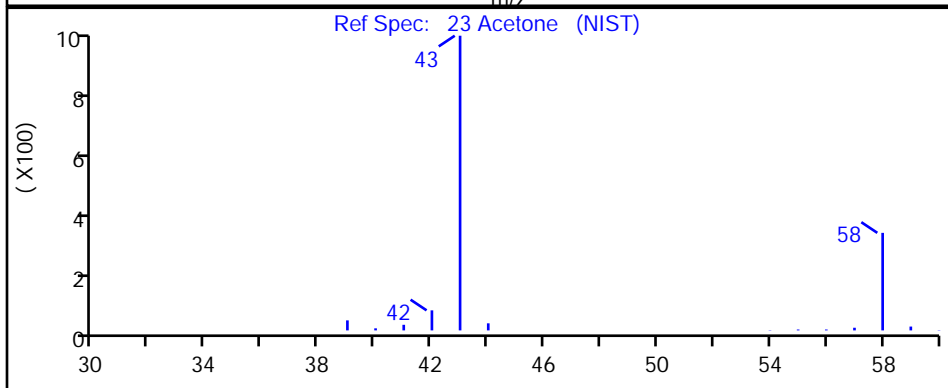
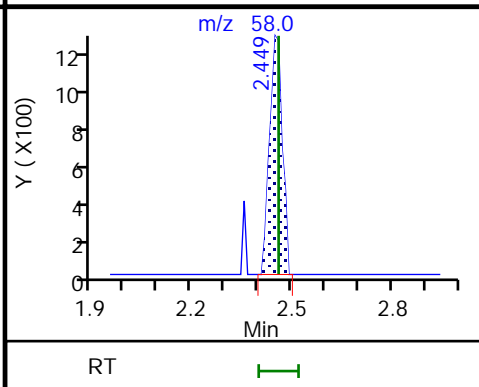
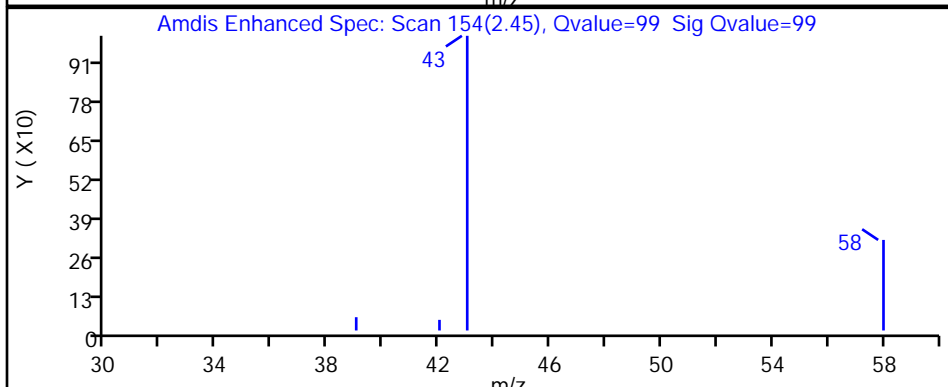
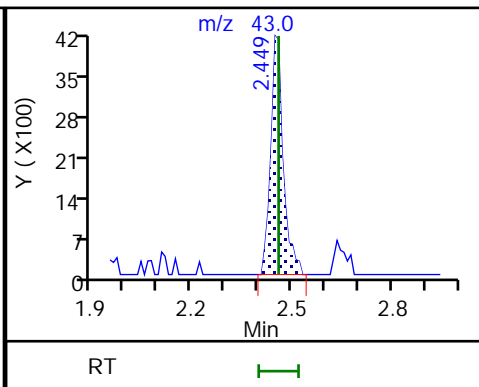
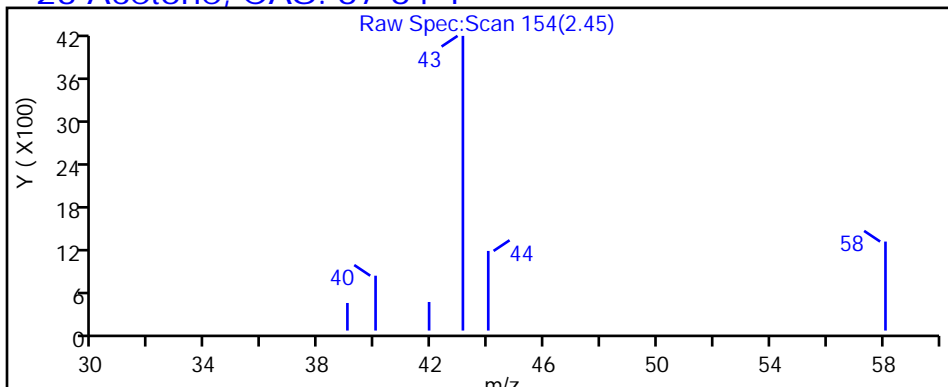
Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

Detector: MS SCAN

23 Acetone, CAS: 67-64-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1 Analy Batch No.: 481153

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2019 14:46 Calibration End Date: 07/08/2019 17:35 Calibration ID: 37204

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-481153/5	T2787.D
Level 2	IC 480-481153/6	T2788.D
Level 3	IC 480-481153/7	T2789.D
Level 4	IC 480-481153/8	T2790.D
Level 5	IC 480-481153/9	T2791.D
Level 6	ICIS 480-481153/10	T2792.D
Level 7	IC 480-481153/11	T2793.D
Level 8	IC 480-481153/12	T2794.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Dichlorodifluoromethane	1.8081 1.4161	1.8177 1.8169	1.7068 1.7789	1.4354	1.5683	Ave		1.6685			0.1000	10.3		20.0			
Chloromethane	++++ 1.4276	1.8061 1.5573	1.6744 1.5356	1.3331	1.4667	Ave		1.5430			0.1000	10.2		20.0			
Butadiene	1.4507 1.1451	1.4211 1.4560	1.4767 1.4130	1.2236	1.2683	Ave		1.3568				9.3		20.0			
Vinyl chloride	1.6626 1.4067	1.8047 1.6722	1.7008 1.6155	1.3680	1.4358	Ave		1.5833			0.1000	10.1		20.0			
Bromomethane	++++ 1.2910	1.2788 1.3521	1.4331 1.3329	1.2948	1.2169	Ave		1.3142			0.1000	5.2		20.0			
Chloroethane	++++ 0.9717	0.9234 1.1202	1.1196 1.0878	1.1565	1.0292	Ave		1.0583			0.1000	8.2		20.0			
Dichlorofluoromethane	++++ 2.4388	2.9461 2.6256	2.8028 2.4257	2.5882	2.5539	Ave		2.6259				7.2		20.0			
Trichlorofluoromethane	++++ 2.3194	2.9716 2.8457	2.8909 2.6299	2.4336	2.5841	Ave		2.6679			0.1000	9.2		20.0			
Ethyl ether	++++ 1.1683	1.5264 1.1091	1.3694 1.1369	1.1733	1.1636	Ave		1.2353				12.4		20.0			
Acrolein	++++ 0.2138	0.2675 0.1962	0.2553 0.2093	0.2035	0.1908	Ave		0.2195				13.6		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.9696 0.9794	1.5854 1.1751	1.4003 1.3499	1.2328	1.0616	Ave		1.2193			0.1000	17.8		20.0			
1,1-Dichloroethene	1.2894 0.9918	1.3819 1.0669	1.2200 1.1917	1.0481	0.9828	Ave		1.1466			0.1000	12.8		20.0			
Acetone	++++ 0.3967	0.3971 0.3659	0.4225 0.3950	0.3534	0.3735	Ave		0.3863			0.1000	6.0		20.0			
Iodomethane	2.8747 2.2764	2.7691 2.3420	2.6941 2.5610	2.3372	2.2348	Ave		2.5112				9.8		20.0			

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, Buffalo Job No.: 480-156213-1 Analy Batch No.: 481153
 SDG No.: _____
 Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 07/08/2019 14:46 Calibration End Date: 07/08/2019 17:35 Calibration ID: 37204

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Carbon disulfide	++++ 3.3205	4.4339 3.6792	4.1395 4.1061	3.5523	3.2779	Ave		3.7871		0.1000	11.8		20.0				
Allyl chloride	++++ 1.4753	1.8548 1.5185	1.6809 1.6865	1.4460	1.3697	Ave		1.5760			10.8		20.0				
Methyl acetate	++++ 0.9871	1.2417 0.9553	1.1388 1.0167	0.9311	0.9631	Ave		1.0334		0.1000	11.1		20.0				
Methylene Chloride	2.9495 1.3486	2.2472 1.3005	1.7273 1.3964	1.4218	1.3109	Lin1	0.6736	1.3448		0.1000				0.9980		0.9900	
2-Methyl-2-propanol	0.1424 0.1749	0.1666 0.1807	0.1680 0.2130	0.1428	0.1477	Ave		0.1670			14.2		20.0				
Methyl tert-butyl ether	4.3440 3.8026	4.2790 3.6492	3.9946 3.8592	3.5362	3.5972	Ave		3.8827		0.1000	7.8		20.0				
trans-1,2-Dichloroethene	++++ 1.2331	1.5960 1.3095	1.4091 1.4089	1.2606	1.2055	Ave		1.3461		0.1000	10.1		20.0				
Acrylonitrile	0.6186 0.5541	0.6028 0.5319	0.5846 0.5609	0.5110	0.5370	Ave		0.5626			6.6		20.0				
Hexane	2.0568 1.5032	2.2411 1.6905	2.0961 1.8973	1.8045	1.5289	Ave		1.8523			14.6		20.0				
1,1-Dichloroethane	++++ 2.0616	2.3299 2.1506	2.4481 2.2865	2.0490	2.0032	Ave		2.1899		0.2000	7.6		20.0				
Vinyl acetate	2.1429 2.1350	1.9857 2.2530	2.0158 2.5222	1.6997	1.8901	Ave		2.0806			11.9		20.0				
2,2-Dichloropropane	++++ 1.5742	2.1018 1.7225	1.8559 1.9067	1.6710	1.5309	Ave		1.7662			11.4		20.0				
cis-1,2-Dichloroethene	1.6213 1.4224	1.7381 1.4698	1.5688 1.5726	1.3679	1.3578	Ave		1.5149		0.1000	8.8		20.0				
2-Butanone (MEK)	0.6870 0.6415	0.6950 0.6235	0.6858 0.6625	0.5843	0.6117	Ave		0.6489		0.1000	6.2		20.0				
Bromochloromethane	0.8968 0.8269	0.8847 0.8108	0.9117 0.8670	0.7698	0.7431	Ave		0.8388			7.3		20.0				
Tetrahydrofuran	0.6067 0.4730	0.5119 0.4300	0.5067 0.4606	0.4144	0.4590	Ave		0.4828			12.5		20.0				
Chloroform	++++ 2.1854	2.7281 2.2012	2.6025 2.3653	2.1564	2.1161	Ave		2.3364		0.2000	10.3		20.0				
1,1,1-Trichloroethane	1.5267 1.5794	1.7802 1.7958	1.7759 2.0818	1.5517	1.4952	Ave		1.6983		0.1000	11.7		20.0				
Cyclohexane	2.0471 1.7037	2.3541 2.0500	2.2737 2.2836	1.9568	1.8103	Ave		2.0599		0.1000	11.3		20.0				
Carbon tetrachloride	1.2166 1.1198	1.4716 1.3851	1.3577 1.7277	1.0610	1.0261	Ave		1.2957		0.1000	18.3		20.0				

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, Buffalo Job No.: 480-156213-1 Analy Batch No.: 481153
 SDG No.: _____
 Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 07/08/2019 14:46 Calibration End Date: 07/08/2019 17:35 Calibration ID: 37204

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
1,1-Dichloropropene	1.7281 1.5002	1.8824 1.6503	1.9210 1.8151	1.5489	1.4874	Ave		1.6917			10.1		20.0				
Benzene	5.9912 4.7881	5.7369 4.9285	5.7379 5.2431	4.8219	4.6425	Ave		5.2363		0.5000	9.9		20.0				
Isobutyl alcohol	0.0473 0.0513	0.0393 0.0559	0.0402 ++++	0.0365	0.0413	Ave		0.0446			16.0		20.0				
1,2-Dichloroethane	++++ 1.8053	2.0133 1.7786	2.1023 1.8449	1.7000	1.7087	Ave		1.8505		0.1000	8.3		20.0				
n-Heptane	1.8392 1.5421	2.2961 1.7449	2.0950 1.9514	1.8833	1.5171	Ave		1.8586			14.2		20.0				
Trichloroethene	1.6690 1.2661	1.5456 1.3285	1.5002 1.4366	1.2397	1.2251	Ave		1.4014		0.2000	11.6		20.0				
Methylcyclohexane	2.0871 1.8692	2.5866 2.1574	2.5282 2.4752	2.1925	1.9259	Ave		2.2278		0.1000	12.3		20.0				
1,2-Dichloropropane	1.3278 1.2217	1.3427 1.2432	1.3987 1.3146	1.1456	1.1912	Ave		1.2732		0.1000	6.8		20.0				
Dibromomethane	0.8972 0.8839	0.9000 0.8711	0.8673 0.9453	0.8298	0.8162	Ave		0.8764		0.1000	4.7		20.0				
1,4-Dioxane	++++ 0.0057	0.0043 0.0053	0.0060 0.0056	0.0049	0.0055	Ave		0.0053			10.8		20.0				
Bromodichloromethane	1.3092 1.2655	1.2086 1.3834	1.1947 1.6142	1.1102	1.1059	Ave		1.2740		0.2000	13.1		20.0				
2-Chloroethyl vinyl ether	0.9311 0.9511	1.0012 0.9467	1.0089 0.9994	0.8589	0.9222	Ave		0.9524			5.3		20.0				
cis-1,3-Dichloropropene	1.8684 1.9565	1.9135 1.9891	1.8224 2.1945	1.6794	1.7536	Ave		1.8972		0.2000	8.3		20.0				
4-Methyl-2-pentanone (MIBK)	0.3250 0.3460	0.3293 0.3291	0.3381 0.3343	0.2943	0.3328	Ave		0.3286		0.1000	4.6		20.0				
Toluene	0.9183 0.7469	0.9361 0.7609	0.8637 0.7947	0.7408	0.7123	Ave		0.8092		0.4000	10.6		20.0				
trans-1,3-Dichloropropene	0.3838 0.4137	0.4127 0.4299	0.3853 0.4663	0.3521	0.3807	Ave		0.4031		0.1000	8.8		20.0				
Ethyl methacrylate	0.3711 0.3955	0.3349 0.4009	0.3744 0.4281	0.3067	0.3506	Ave		0.3703			10.5		20.0				
1,1,2-Trichloroethane	0.2592 0.2376	0.2650 0.2354	0.2592 0.2411	0.2202	0.2295	Ave		0.2434		0.1000	6.6		20.0				
Tetrachloroethene	0.3671 0.3233	0.3733 0.3501	0.3850 0.3823	0.3253	0.3246	Ave		0.3539		0.2000	7.5		20.0				
1,3-Dichloropropane	0.5525 0.4923	0.5278 0.4756	0.5637 0.4898	0.4409	0.4761	Ave		0.5024			8.4		20.0				

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, Buffalo Job No.: 480-156213-1 Analy Batch No.: 481153

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2019 14:46 Calibration End Date: 07/08/2019 17:35 Calibration ID: 37204

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
2-Hexanone	0.2220 0.2426	0.2120 0.2322	0.2296 0.2375	0.2044	0.2289	Ave	0.2261			0.1000	5.7		20.0				
Dibromochloromethane	0.1990 0.2109	0.1963 0.2381	0.1887 ++++	0.1590	0.1768	Ave	0.1955			0.1000	12.9		20.0				
1,2-Dibromoethane	++++ 0.3133	0.2919 0.3099	0.3050 0.3304	0.2699	0.2874	Ave	0.3011				6.6		20.0				
Chlorobenzene	1.0510 0.8797	1.0142 0.8743	0.9940 0.9074	0.8266	0.8692	Ave	0.9270			0.5000	8.8		20.0				
Ethylbenzene	1.5931 1.4125	1.6513 1.4297	1.6307 1.4946	1.3890	1.3614	Ave	1.4953			0.1000	7.7		20.0				
1,1,1,2-Tetrachloroethane	0.1874 0.2476	0.2345 0.2760	0.2190 0.3166	0.1873	0.2040	Ave	0.2341				19.3		20.0				
m,p-Xylene	0.6729 0.5754	0.6047 0.5856	0.6729 0.6208	0.5465	0.5449	Ave	0.6030			0.1000	8.3		20.0				
o-Xylene	0.7057 0.5692	0.6255 0.5785	0.6489 0.6179	0.5340	0.5582	Ave	0.6047			0.3000	9.2		20.0				
Styrene	1.0986 0.9863	1.0520 1.0057	1.0662 1.0470	0.9424	0.9505	Ave	1.0186			0.3000	5.5		20.0				
Bromoform	0.1031 0.1249	0.1085 0.1424	0.1090 ++++	0.0932	0.0983	Ave	0.1113			0.1000	15.2		20.0				
Isopropylbenzene	2.8501 2.5816	3.0471 2.5472	2.9108 2.6762	2.5414	2.4496	Ave	2.7005			0.1000	7.8		20.0				
Bromobenzene	0.8870 0.7464	0.7623 0.7118	0.7920 0.7483	0.6553	0.6810	Ave	0.7480				9.6		20.0				
1,1,2,2-Tetrachloroethane	0.7362 0.7408	0.7043 0.6821	0.6994 0.7159	0.6279	0.6552	Ave	0.6952			0.3000	5.6		20.0				
N-Propylbenzene	3.4164 3.0006	3.6446 2.9447	3.3228 3.0630	2.8468	2.8523	Ave	3.1364				9.3		20.0				
1,2,3-Trichloropropane	0.2208 0.2629	0.2263 0.2421	0.2596 0.2461	0.2359	0.2396	Ave	0.2417				6.1		20.0				
trans-1,4-Dichloro-2-butene	0.1851 0.2151	0.2100 0.2019	0.2061 0.2181	0.1869	0.2027	Ave	0.2032				5.9		20.0				
2-Chlorotoluene	0.7480 0.6695	0.7833 0.6454	0.6930 0.6659	0.6240	0.6400	Ave	0.6837				8.1		20.0				
1,3,5-Trimethylbenzene	2.3771 2.2512	2.6126 2.2033	2.4316 2.2677	2.0613	2.1466	Ave	2.2939				7.6		20.0				
4-Chlorotoluene	2.2974 2.1519	2.4551 2.0571	2.3082 2.1433	2.0499	2.0129	Ave	2.1845				7.1		20.0				
tert-Butylbenzene	0.6253 0.5146	0.5967 0.5183	0.5555 0.5565	0.4877	0.4944	Ave	0.5436				9.0		20.0				

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, Buffalo Job No.: 480-156213-1 Analy Batch No.: 481153
 SDG No.: _____
 Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N
 Calibration Start Date: 07/08/2019 14:46 Calibration End Date: 07/08/2019 17:35 Calibration ID: 37204

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
1,2,4-Trimethylbenzene	2.7556 2.3401	2.6251 2.2596	2.4413 2.3394	2.1890	2.1616	Ave		2.3890			8.8		20.0				
sec-Butylbenzene	3.0500 2.8083	3.3379 2.8042	3.1531 2.9944	2.7575	2.6420	Ave		2.9434			7.9		20.0				
4-Isopropyltoluene	2.5854 2.5561	2.7789 2.5339	2.7667 2.6637	2.4643	2.3826	Ave		2.5915			5.4		20.0				
1,3-Dichlorobenzene	1.6213 1.4526	1.5655 1.3904	1.5047 1.4501	1.3472	1.3394	Ave		1.4589		0.6000	6.9		20.0				
1,4-Dichlorobenzene	1.6519 1.4778	1.6171 1.3956	1.5580 1.4611	1.3349	1.4141	Ave		1.4888		0.5000	7.5		20.0				
n-Butylbenzene	2.1706 2.2475	2.5242 2.1936	2.4408 2.3250	2.1567	2.0622	Ave		2.2651			6.9		20.0				
1,2-Dichlorobenzene	1.4574 1.4664	1.6056 1.3870	1.4940 1.4522	1.3474	1.3562	Ave		1.4458		0.4000	5.8		20.0				
1,2-Dibromo-3-Chloropropane	++++ 0.1007	0.0722 0.1008	0.0764 ++++	0.0690	0.0803	Ave		0.0833		0.0500	17.0		20.0				
1,2,4-Trichlorobenzene	1.2100 1.0832	1.0938 0.9959	1.0438 1.0672	0.9766	0.9837	Ave		1.0568		0.2000	7.3		20.0				
Hexachlorobutadiene	0.4874 0.4318	0.5464 0.4312	0.4350 0.4778	0.4027	0.3713	Ave		0.4480			12.2		20.0				
Naphthalene	3.0914 3.1210	3.2788 2.8469	3.0739 2.9095	2.6789	2.8947	Ave		2.9869			6.3		20.0				
1,2,3-Trichlorobenzene	1.1596 1.0679	1.1690 0.9885	1.0890 1.0527	0.9670	0.9832	Ave		1.0596			7.3		20.0				
Dibromofluoromethane (Surr)	1.3931 1.3694	1.3436 1.3862	1.3460 1.4657	1.3815	1.3693	Ave		1.3818			2.8		20.0				
1,2-Dichloroethane-d4 (Surr)	1.6223 1.5838	1.5602 1.5538	1.6133 1.5591	1.6083	1.6009	Ave		1.5877			1.7		20.0				
Toluene-d8 (Surr)	1.2257 1.2216	1.2276 1.2198	1.2421 1.2109	1.2354	1.2236	Ave		1.2259			0.8		20.0				
4-Bromofluorobenzene (Surr)	0.3952 0.4105	0.4030 0.4223	0.4144 0.4364	0.4022	0.4061	Ave		0.4113			3.2		20.0				

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, Buffalo Job No.: 480-156213-1 Analy Batch No.: 481153

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2019 14:46 Calibration End Date: 07/08/2019 17:35 Calibration ID: 37204

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-481153/5	T2787.D
Level 2	IC 480-481153/6	T2788.D
Level 3	IC 480-481153/7	T2789.D
Level 4	IC 480-481153/8	T2790.D
Level 5	IC 480-481153/9	T2791.D
Level 6	ICIS 480-481153/10	T2792.D
Level 7	IC 480-481153/11	T2793.D
Level 8	IC 480-481153/12	T2794.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	4472 236609	11650 612339	22034 1197542	45292	104169	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	++++ 238540	11576 524869	21616 1033721	42064	97420	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	3588 191339	9108 490724	19063 951227	38610	84239	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	4112 235036	11567 563575	21956 1087503	43167	95365	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	++++ 215717	8196 455687	18500 897279	40856	80826	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	++++ 162356	5918 377532	14454 732302	36491	68361	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	++++ 407494	18882 884894	36183 1632941	81667	169635	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	++++ 387536	19046 959075	37320 1770401	76788	171641	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	++++ 195214	9783 373781	17678 765358	37021	77290	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	++++ 178645	8573 330600	16482 704326	32112	63357	++++ 125	5.00 250	10.0 500	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	2398 163652	10161 396057	18077 908698	38901	70515	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	3189 165725	8857 359580	15749 802235	33073	65277	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	++++ 331440	12724 616658	27274 1329552	55750	124037	++++ 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	7110 380358	17748 789324	34779 1724012	73748	148440	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	++++ 554806	28418 1239998	53439 2764187	112088	217721	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo

Job No.: 480-156213-1

Analy Batch No.: 481153

SDG No.: _____

Instrument ID: HP5975T

GC Column: ZB-624 (20) ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2019 14:46

Calibration End Date: 07/08/2019 17:35

Calibration ID: 37204

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	++++ 246505	11888 511773	21700 1135356	45627	90974	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	++++ 329871	15917 643899	29403 1368808	58757	127937	++++ 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	7295 225332	14403 438297	22298 940046	44863	87069	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	3521 292227	10677 609048	21689 1433789	45064	98107	4.00 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	10744 635360	27425 1229890	51568 2597944	111581	238931	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	++++ 206036	10229 441340	18191 948455	39777	80069	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	15301 925757	38634 1792660	75471 3775665	161230	356703	4.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	5087 251172	14364 569729	27059 1277208	56940	101549	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	++++ 344471	14933 724812	31604 1539243	64653	133056	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	10600 713461	25454 1518680	52046 3395759	107263	251084	0.800 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	++++ 263036	13471 580535	23959 1283580	52727	101681	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	4010 237669	11140 495363	20252 1058651	43164	90188	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	8496 535969	22273 1050691	44266 2229969	92190	203133	2.00 125	5.00 250	10.0 500	25.0	50.0
Bromochloromethane	FB	Ave	2218 138170	5670 273259	11769 583667	24291	49357	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	3001 158054	6562 289824	13083 620107	26151	60971	0.800 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	++++ 365160	17485 741863	33597 1592266	68044	140555	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	3776 263896	11410 605234	22926 1401427	48963	99313	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	5063 284672	15088 690911	29352 1537272	61745	120239	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	3009 187102	9432 466812	17527 1163086	33480	68157	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	4274 250666	12065 556202	24799 1221870	48873	98793	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	14818 800030	36769 1661056	74074 3529551	152148	308357	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo

Job No.: 480-156213-1

Analy Batch No.: 481153

SDG No.: _____

Instrument ID: HP5975T

GC Column: ZB-624 (20) ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2019 14:46

Calibration End Date: 07/08/2019 17:35

Calibration ID: 37204

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	2927 214116	6296 471334	12990 ++++	28795	68618	10.0 625	25.0 1250	50.0 ++++	125	250
1,2-Dichloroethane	FB	Ave	++++ 301640	12904 599428	27140 1241969	53643	113492	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	4549 257664	14716 588080	27046 1313631	59425	100767	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	4128 211557	9906 447749	19367 967106	39116	81372	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	5162 312314	16578 727107	32638 1666272	69182	127919	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	3284 204134	8606 419009	18056 884950	36149	79121	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	2219 147693	5768 293590	11197 636346	26183	54215	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	++++ 81783	2395 155220	6678 335894	13411	31184	++++ 500	20.0 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	3238 211443	7746 466260	15423 1086684	35030	73457	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	2303 158912	6417 319052	13024 672763	27103	61255	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	4621 326906	12264 670384	23526 1477330	52991	116476	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	17703 1244531	46230 2414093	93988 5043250	200454	472510	2.00 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	10005 537324	26281 1116345	48019 2398006	100905	202279	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	4181 297618	11585 630686	21424 1406962	47959	108127	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	4043 284531	9402 588205	20815 1291873	41783	99559	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	2824 170958	7439 345409	14413 727576	29998	65179	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	4000 232563	10481 513622	21406 1153520	44314	92176	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	6020 354184	14818 697755	31342 1478046	60054	135211	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	12095 872593	29757 1703575	63818 3583258	139201	325016	2.00 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	2168 151702	5510 349351	10490 ++++	21654	50221	0.400 25.0	1.00 50.0	2.00 ++++	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	++++ 225407	8195 454613	16957 997039	36771	81629	++++ 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo

Job No.: 480-156213-1

Analy Batch No.: 481153

SDG No.: _____

Instrument ID: HP5975T

GC Column: ZB-624 (20) ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2019 14:46

Calibration End Date: 07/08/2019 17:35

Calibration ID: 37204

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	11451 632848	28473 1282735	55264 2737983	112591	246846	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	17357 1016165	46359 2097532	90664 4509828	189208	386643	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2042 178111	6584 404989	12179 955241	25516	57948	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	7331 413928	16977 859192	37413 1873225	74448	154738	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	7689 409520	17559 848766	36076 1864579	72735	158540	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	11969 709564	29534 1475521	59279 3159227	128374	269928	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	1123 89835	3047 208851	6062 +++++	12691	27923	0.400 25.0	1.00 50.0	2.00 +++++	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	17553 1037097	47477 2188031	92240 4778097	194566	394143	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	5463 299844	11878 611443	25099 1336108	50165	109573	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	4534 297579	10974 585940	22162 1278192	48069	105416	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	21041 1205412	56787 2529434	105296 5468841	217948	458939	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1360 105624	3526 207921	8227 439355	18061	38558	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1140 86408	3272 173398	6530 389475	14312	32617	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	4607 268964	12204 554430	21961 1188913	47775	102984	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	14640 904358	40708 1892594	77053 4048757	157813	345392	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	14149 864493	38253 1766990	73144 3826652	156940	323874	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	3851 206718	9297 445227	17604 993535	37339	79547	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	16971 940070	40902 1940977	77363 4176757	167584	347809	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	18784 1128181	52008 2408733	99919 5346269	211110	425099	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	15923 1026850	43298 2176582	87673 4755916	188665	383357	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	9985 583546	24392 1194306	47683 2589092	103141	215514	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1 Analy Batch No.: 481153

SDG No.: _____

Instrument ID: HP5975T GC Column: ZB-624 (20) ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2019 14:46 Calibration End Date: 07/08/2019 17:35 Calibration ID: 37204

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	10174 593656	25197 1198792	49372 2608714	102196	227537	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	13368 902889	39330 1884251	77346 4151072	165116	331808	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	8976 589101	25017 1191423	47343 2592868	103158	218219	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	++++ 40469	1125 86612	2422 ++++	5280	12928	++++ 25.0	1.00 50.0	2.00 ++++	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	7452 435151	17042 855481	33076 1905428	74765	158279	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	3002 173458	8514 370391	13785 853128	30831	59744	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	19039 1253792	51087 2445422	97407 5194726	205090	465755	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7142 428986	18214 849108	34508 1879474	74031	158191	0.400 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	215347 228807	215285 233600	217195 246679	217954	227369	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	250783 264627	249990 261834	260344 262388	253743	265836	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	834621 878845	861593 894809	863284 913408	841439	868762	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	269129 295296	282864 309784	287989 329192	273939	288304	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
 Lims ID: IC 0.4
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 08-Jul-2019 14:46:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 0.4
 Misc. Info.: 480-0082467-005
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:49:55 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:35:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	154581	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	680944	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	384924	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.222	-0.001	93	215347	25.0	25.2	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.460	0.000	0	250783	25.0	25.5	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.849	0.010	93	834621	25.0	25.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	269129	25.0	24.0	
11 Dichlorodifluoromethane	85	1.144	1.144	0.000	52	4472	0.4000	0.4335	
13 Chloromethane	50	1.299	1.289	0.010	61	4741	0.4000	0.4969	
151 Butadiene	54	1.351	1.361	-0.010	84	3588	0.4000	0.4277	
14 Vinyl chloride	62	1.372	1.382	-0.010	91	4112	0.4000	0.4200	
15 Bromomethane	94	1.610	1.620	-0.010	82	4651	0.4000	0.5724	M
16 Chloroethane	64	1.672	1.672	0.000	85	3002	0.4000	0.4587	M
18 Dichlorofluoromethane	67	1.879	1.890	-0.011	88	7345	0.4000	0.4524	M
17 Trichlorofluoromethane	101	1.890	1.890	0.000	72	7670	0.4000	0.4650	
19 Ethyl ether	59	2.138	2.128	0.010	59	3783	0.4000	0.4953	
21 Acrolein	56	2.304	2.304	0.000	92	4193	2.00	3.09	
22 1,1-Dichloroethene	96	2.325	2.335	-0.010	93	3189	0.4000	0.4498	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.335	0.000	57	2398	0.4000	0.3181	
23 Acetone	43	2.460	2.449	0.011	99	7145	2.00	2.99	
24 Iodomethane	142	2.480	2.481	-0.001	95	7110	0.4000	0.4579	
25 Carbon disulfide	76	2.512	2.512	0.000	78	11774	0.4000	0.5028	
27 3-Chloro-1-propene	41	2.667	2.667	0.000	82	6655	0.4000	0.6829	
28 Methyl acetate	43		2.709				ND	ND	Ua
30 Methylene Chloride	84	2.812	2.802	0.010	93	7295	0.4000	0.3764	
31 2-Methyl-2-propanol	59	2.999	2.978	0.021	48	3521	4.00	3.41	
33 Methyl tert-butyl ether	73	2.999	2.988	0.011	91	10744	0.4000	0.4475	
32 trans-1,2-Dichloroethene	96	2.999	2.999	0.000	95	4077	0.4000	0.4898	
34 Acrylonitrile	53	3.061	3.061	0.000	100	15301	4.00	4.40	
35 Hexane	57	3.164	3.165	-0.001	91	5087	0.4000	0.4442	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.361	3.361	0.000	94	6393	0.4000	0.4721	
39 Vinyl acetate	43	3.403	3.403	0.000	94	10600	0.8000	0.8240	
42 2,2-Dichloropropane	77	3.807	3.807	0.000	66	4993	0.4000	0.4572	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	80	4010	0.4000	0.4281	
44 2-Butanone (MEK)	43	3.869	3.859	0.010	97	8496	2.00	2.12	
47 Chlorobromomethane	128	4.025	4.025	0.000	83	2218	0.4000	0.4276	
48 Tetrahydrofuran	42	4.035	4.035	0.000	92	3001	0.8000	1.01	a
50 Chloroform	83	4.097	4.097	0.000	91	8477	0.4000	0.5868	
51 1,1,1-Trichloroethane	97	4.180	4.180	0.000	44	3776	0.4000	0.3596	
52 Cyclohexane	56	4.180	4.180	0.000	54	5063	0.4000	0.3975	
54 1,1-Dichloropropene	75	4.294	4.294	0.000	93	4274	0.4000	0.4086	
53 Carbon tetrachloride	117	4.294	4.294	0.000	66	3009	0.4000	0.3756	
55 Benzene	78	4.460	4.470	-0.010	43	14818	0.4000	0.4577	
56 Isobutyl alcohol	43	4.501	4.491	0.010	28	2927	10.0	10.6	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	2	6150	0.4000	0.5375	a
59 n-Heptane	43	4.594	4.605	-0.011	84	4549	0.4000	0.3958	
60 Trichloroethene	95	4.947	4.947	0.000	93	4128	0.4000	0.4764	
62 Methylcyclohexane	83	5.040	5.040	0.000	85	5162	0.4000	0.3747	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	90	3284	0.4000	0.4171	
65 Dibromomethane	93	5.247	5.247	0.000	94	2219	0.4000	0.4095	
66 1,4-Dioxane	88	5.268	5.258	0.010	0	518	8.00	3.58	M
67 Dichlorobromomethane	83	5.372	5.372	0.000	97	3238	0.4000	0.4111	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	0	2303	0.4000	0.3911	M
71 cis-1,3-Dichloropropene	75	5.683	5.683	0.000	94	4621	0.4000	0.3939	a
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	17703	2.00	1.98	
73 Toluene	92	5.900	5.900	0.000	98	10005	0.4000	0.4539	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	91	4181	0.4000	0.3808	
77 Ethyl methacrylate	69	6.149	6.149	0.000	0	4043	0.4000	0.4009	M
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	88	2824	0.4000	0.4259	
79 Tetrachloroethene	166	6.304	6.305	-0.001	0	4000	0.4000	0.4150	M
80 1,3-Dichloropropane	76	6.387	6.387	0.000	88	6020	0.4000	0.4400	a
81 2-Hexanone	43	6.429	6.429	0.000	94	12095	2.00	1.96	
82 Chlorodibromomethane	129	6.563	6.564	-0.001	80	2168	0.4000	0.4071	Ma
83 Ethylene Dibromide	107		6.647				ND	ND	
86 Chlorobenzene	112	6.999	6.999	0.000	94	11451	0.4000	0.4535	a
88 Ethylbenzene	91	7.061	7.061	0.000	98	17357	0.4000	0.4262	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	0	2042	0.4000	0.3203	M
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	7331	0.4000	0.4464	
91 o-Xylene	106	7.465	7.465	0.000	93	7689	0.4000	0.4668	
92 Styrene	104	7.486	7.486	0.000	93	11969	0.4000	0.4314	
93 Bromoform	173	7.683	7.683	0.000	0	1123	0.4000	0.3703	M
95 Isopropylbenzene	105	7.755	7.755	0.000	94	17553	0.4000	0.4222	
97 Bromobenzene	156	8.025	8.025	0.000	87	5463	0.4000	0.4743	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	93	4534	0.4000	0.4236	
99 N-Propylbenzene	91	8.076	8.077	-0.001	99	21041	0.4000	0.4357	a
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	0	1360	0.4000	0.3655	M
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	0	1140	0.4000	0.3643	M
105 2-Chlorotoluene	126	8.170	8.170	0.000	0	4607	0.4000	0.4377	M
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	91	14640	0.4000	0.4145	
102 4-Chlorotoluene	91	8.263	8.253	0.010	95	14149	0.4000	0.4207	M
106 tert-Butylbenzene	134	8.481	8.481	0.000	89	3851	0.4000	0.4601	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	94	16971	0.4000	0.4614	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	94	18784	0.4000	0.4145	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	15923	0.4000	0.3991	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	96	9985	0.4000	0.4445	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	93	10174	0.4000	0.4438	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	13368	0.4000	0.3833	a
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	93	8976	0.4000	0.4032	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	0	371	0.4000	0.2894	M
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	91	7452	0.4000	0.4580	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	91	3002	0.4000	0.4352	
121 Naphthalene	128	10.698	10.688	0.010	96	19039	0.4000	0.4140	a
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	92	7142	0.4000	0.4378	
S 123 1,3-Dichloropropene, Total	1				0			0.7748	
S 125 Total BTEX	1				0			2.25	
S 126 Xylenes, Total	1				0			0.9132	
S 124 1,2-Dichloroethene, Total	1				0			0.9179	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

8260 CORP mix_00159	Amount Added: 0.40	Units: uL	
GAS CORP mix_00349	Amount Added: 0.40	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00222	Amount Added: 1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D

Injection Date: 08-Jul-2019 14:46:30

Instrument ID: HP5975T

Operator ID: KN

Lims ID: IC 0.4

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

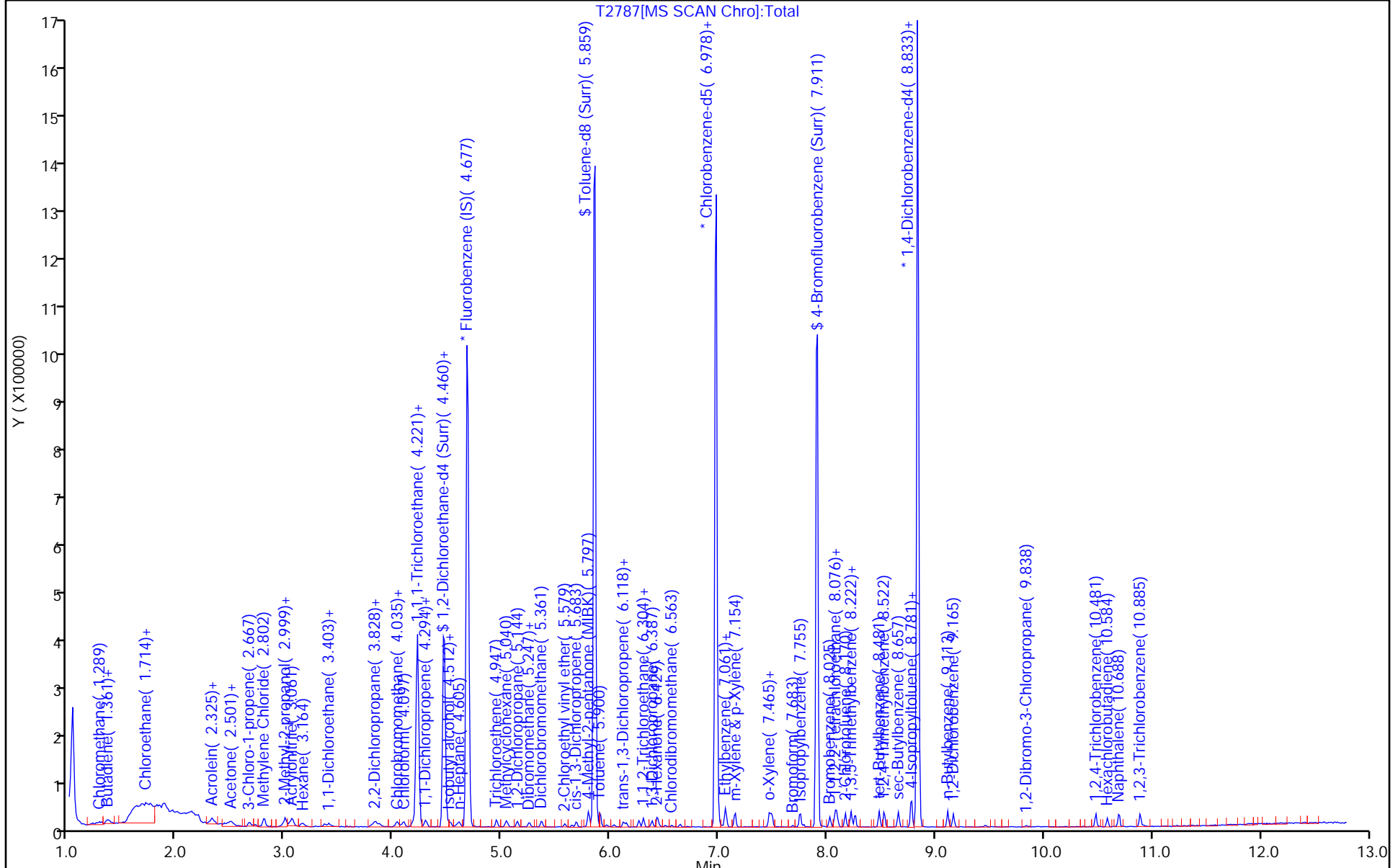
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

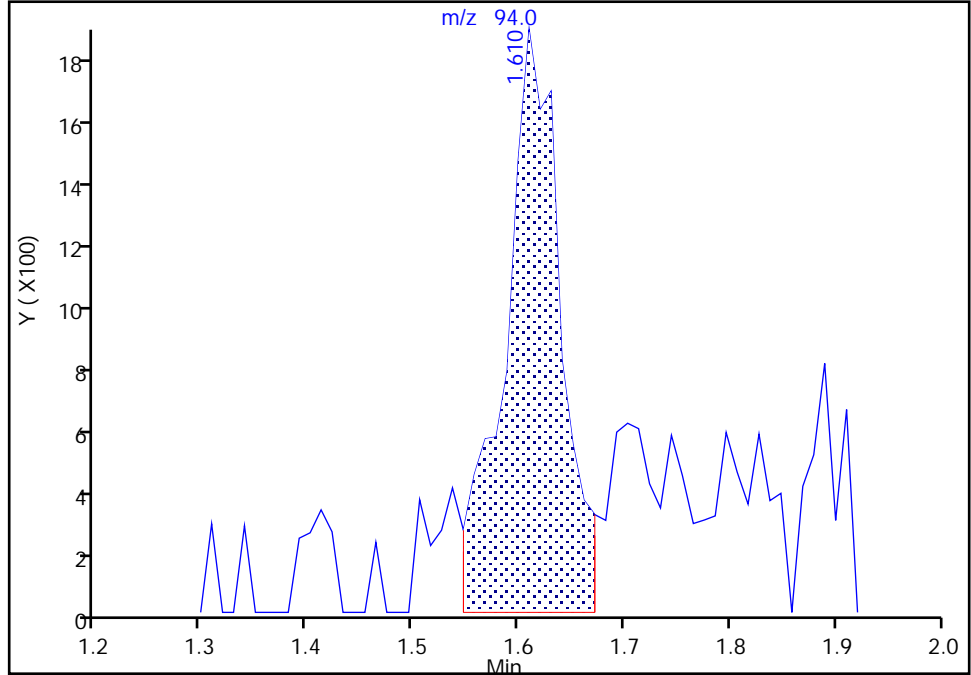
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

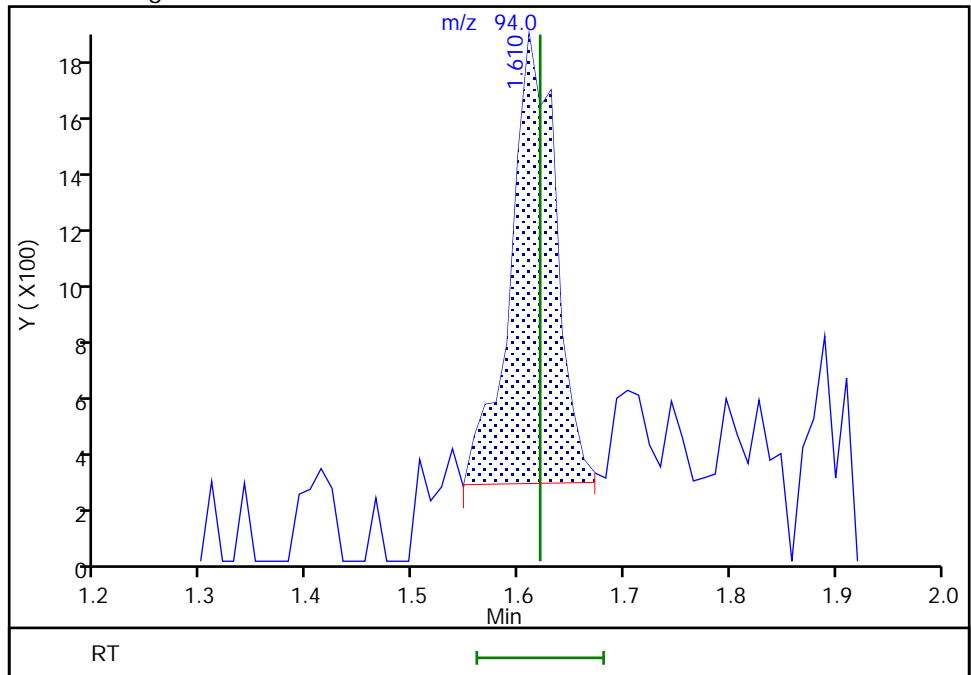
RT: 1.61
Area: 6833
Amount: 0.783204
Amount Units: ug/L

Processing Integration Results



RT: 1.61
Area: 4651
Amount: 0.572352
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:04:13
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

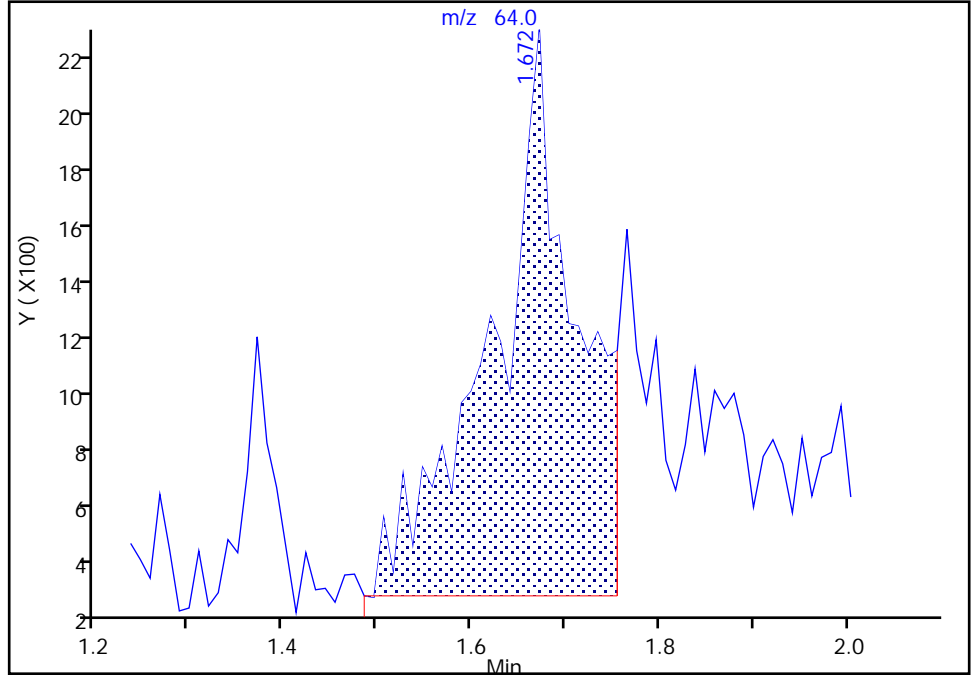
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

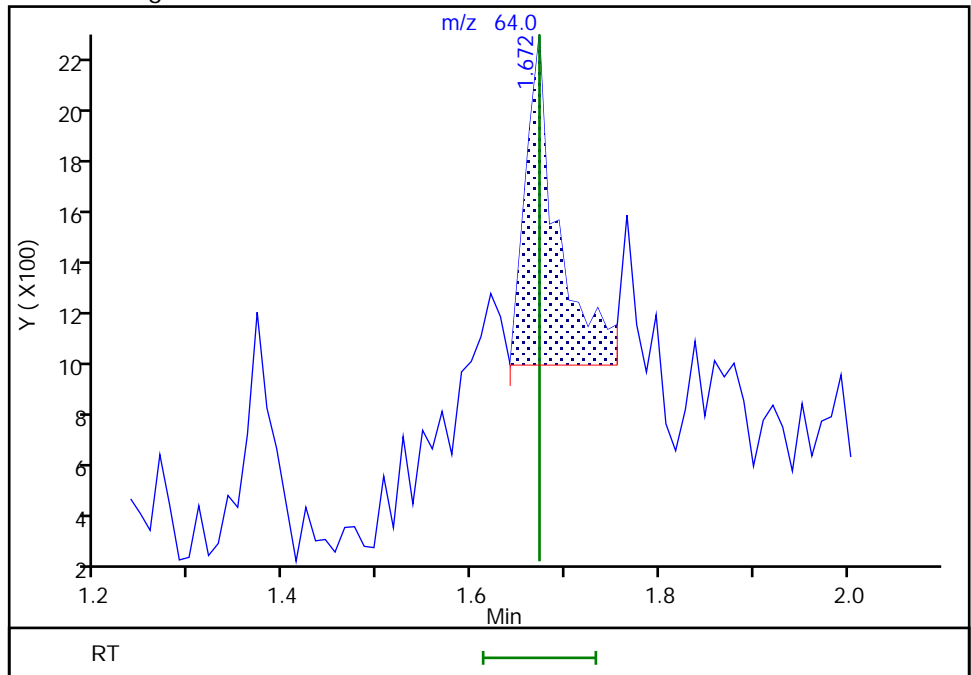
RT: 1.67
Area: 12276
Amount: 1.875931
Amount Units: ug/L

Processing Integration Results



RT: 1.67
Area: 3002
Amount: 0.458744
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:04:22
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

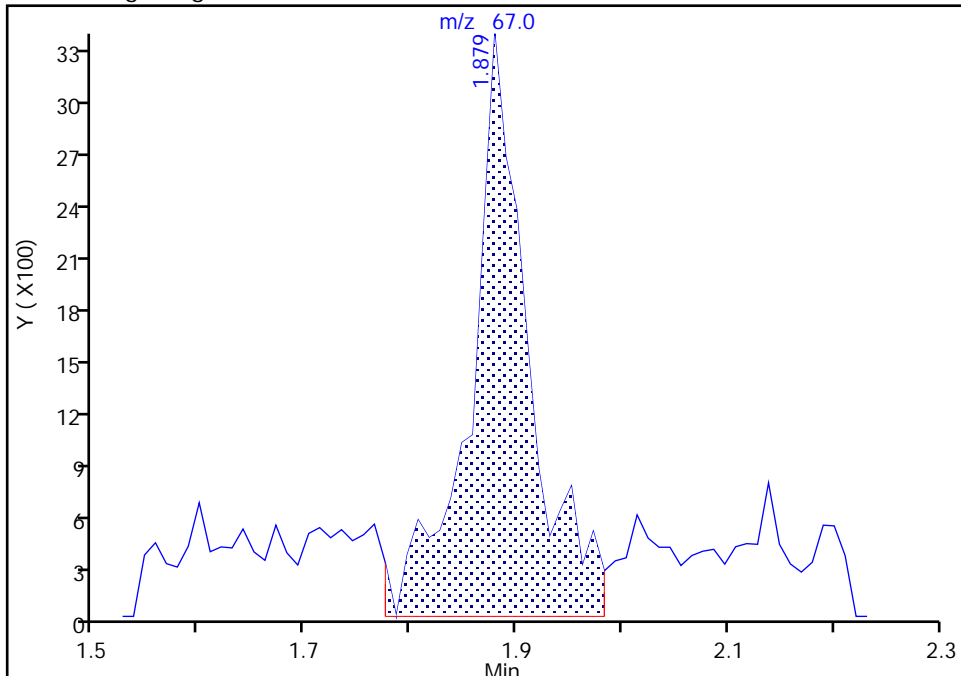
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

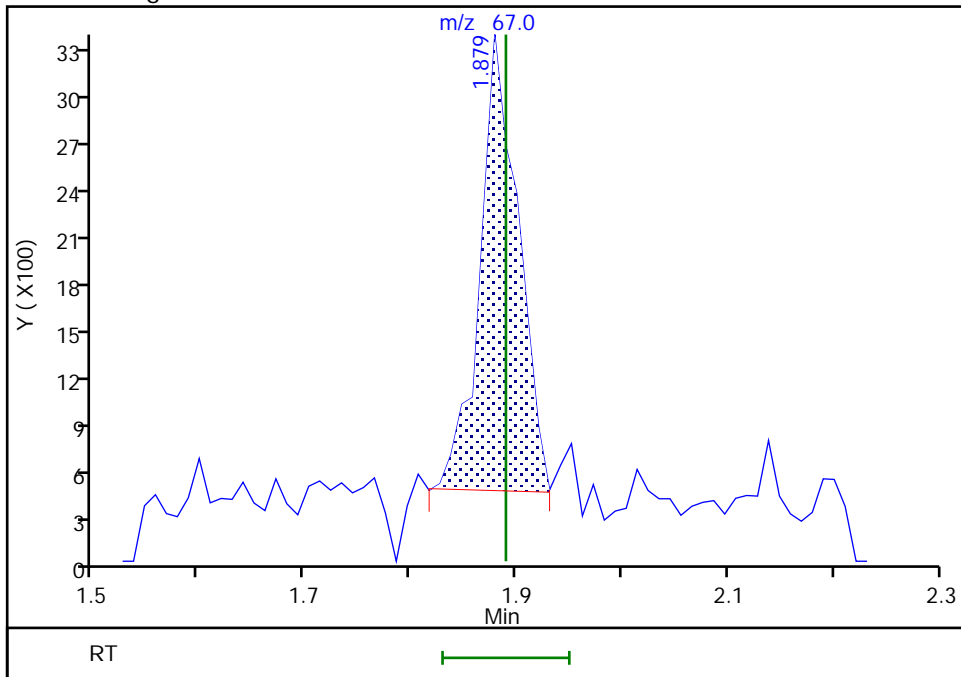
RT: 1.88
Area: 13001
Amount: 0.276589
Amount Units: ug/L

Processing Integration Results



RT: 1.88
Area: 7345
Amount: 0.452379
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:04:31
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

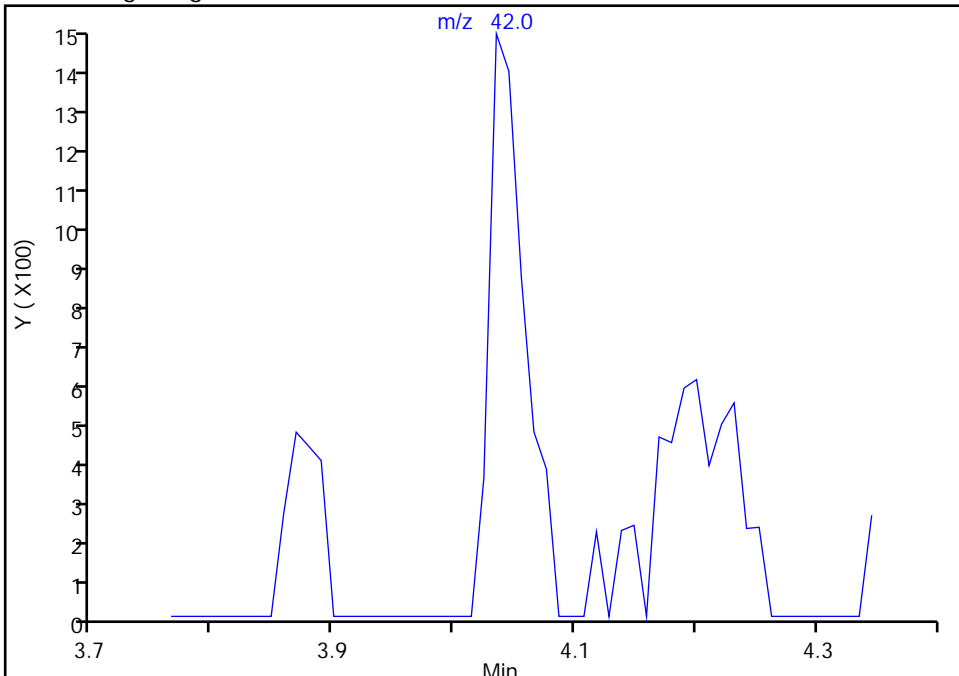
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

48 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

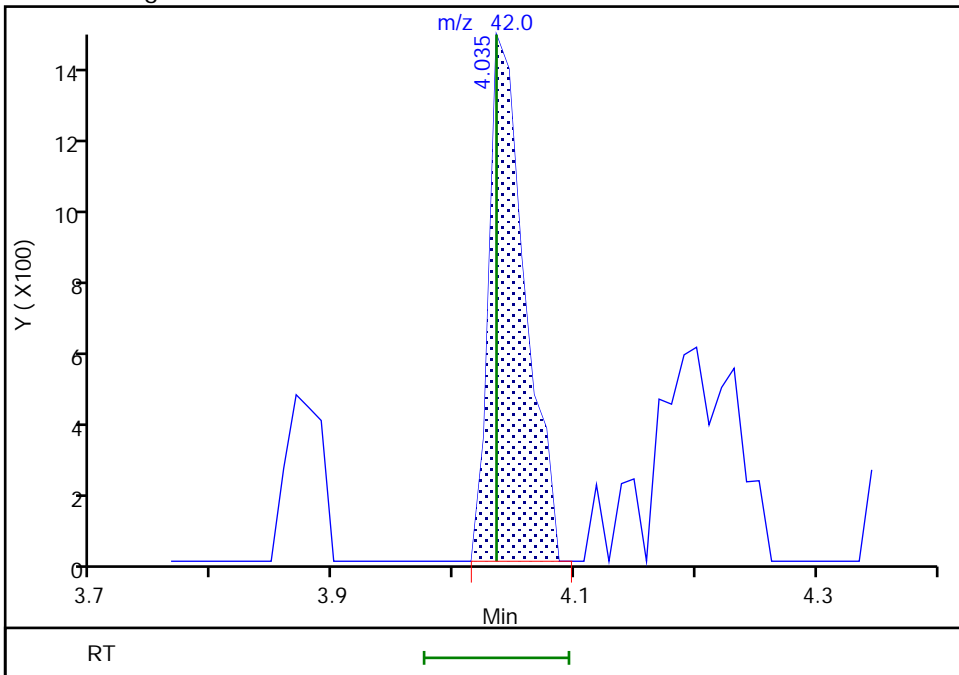
Not Detected
Expected RT: 4.04

Processing Integration Results



Manual Integration Results

RT: 4.03
Area: 3001
Amount: 1.005323
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:31:59
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo

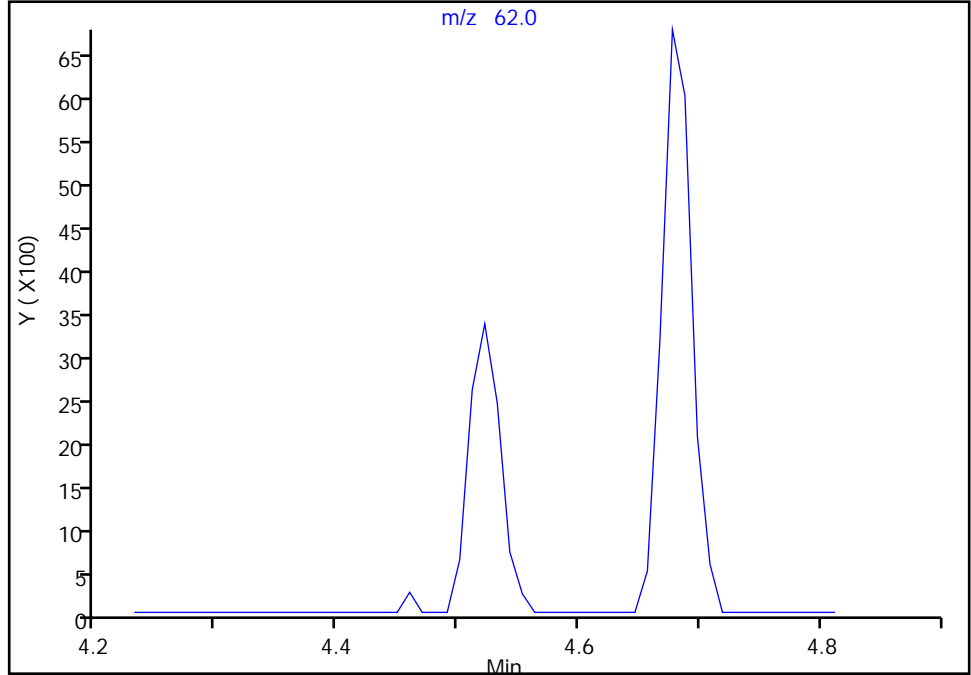
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

57 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

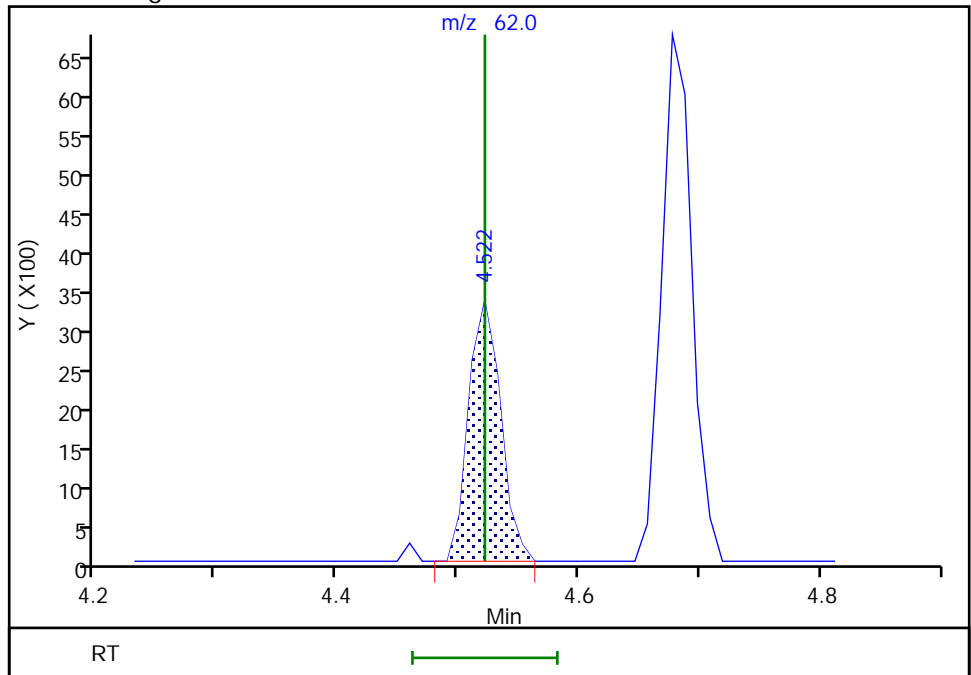
Not Detected
Expected RT: 4.52

Processing Integration Results



RT: 4.52
Area: 6150
Amount: 0.537503
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:32:26
Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo

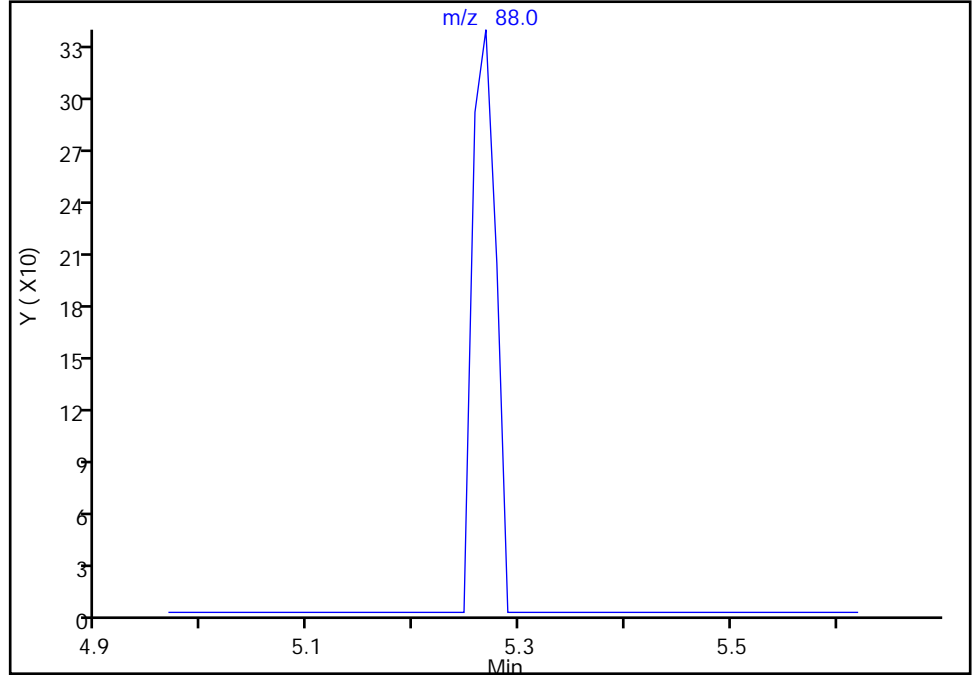
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

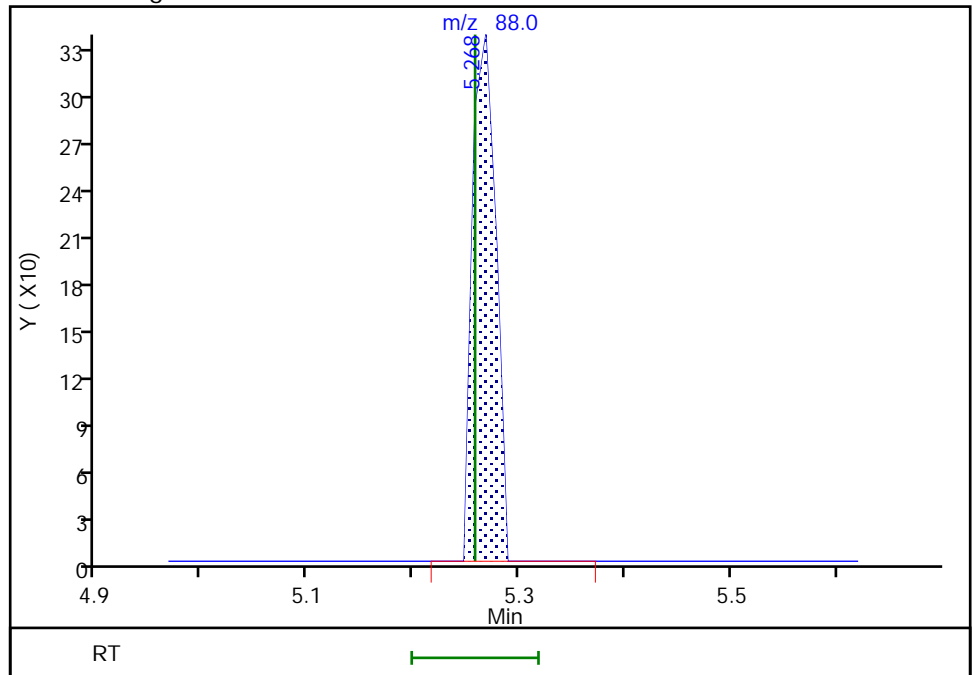
Not Detected
Expected RT: 5.26

Processing Integration Results



Manual Integration Results

RT: 5.27
Area: 518
Amount: 3.576306
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:32:52
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

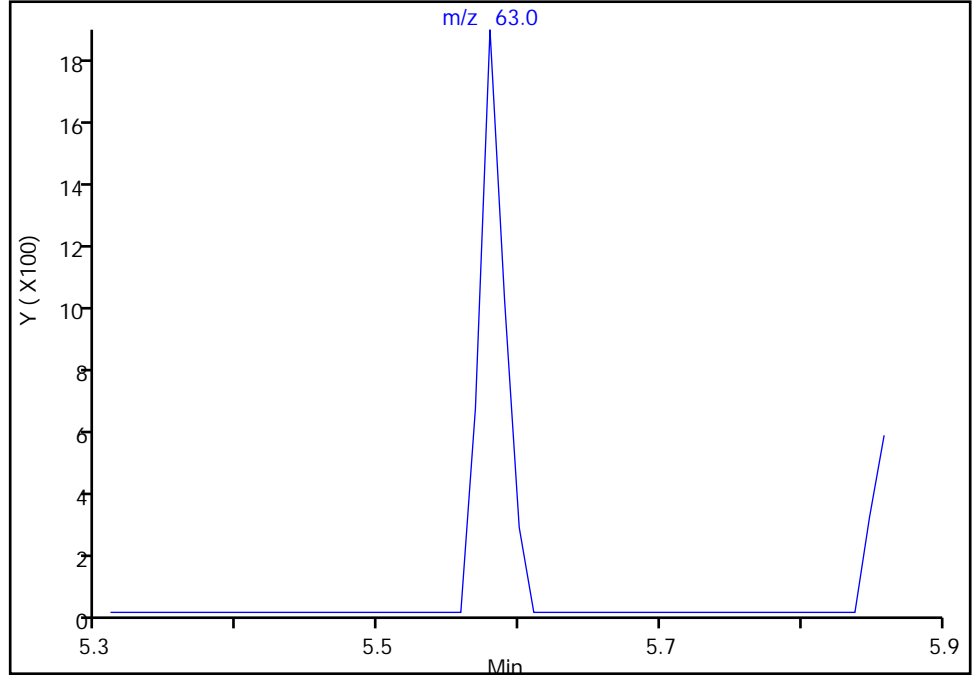
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

69 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

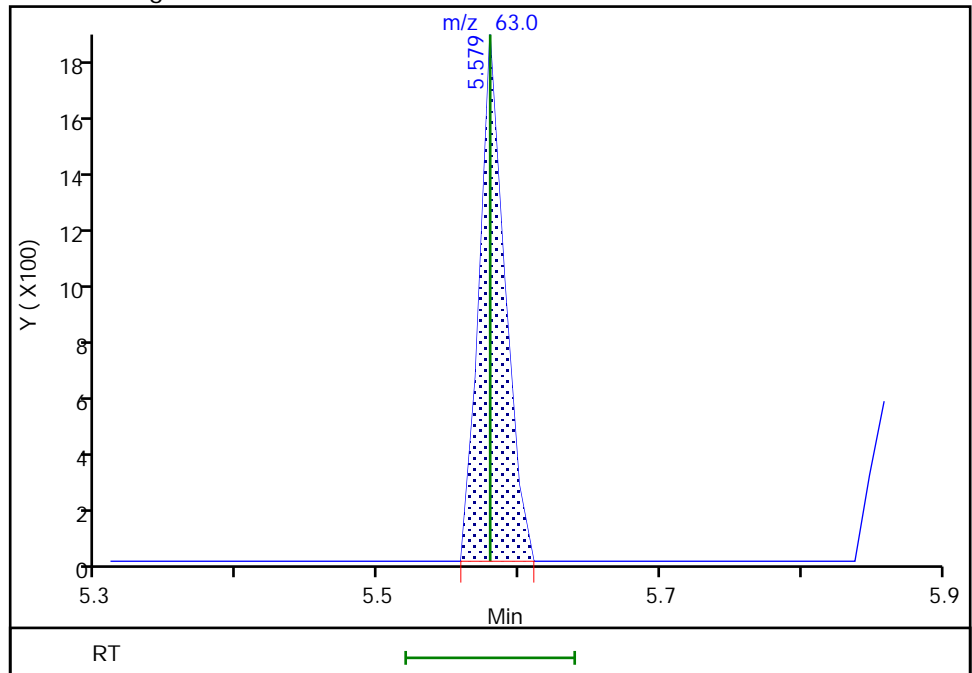
Not Detected
Expected RT: 5.58

Processing Integration Results



RT: 5.58
Area: 2303
Amount: 0.391058
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:33:07
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

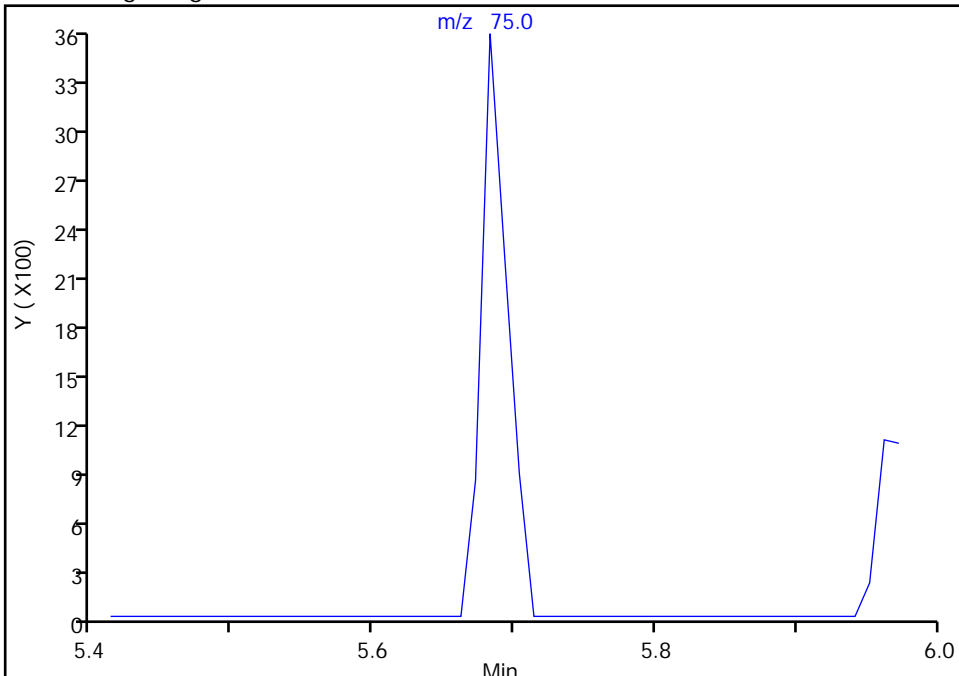
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

71 cis-1,3-Dichloropropene, CAS: 10061-01-5

Signal: 1

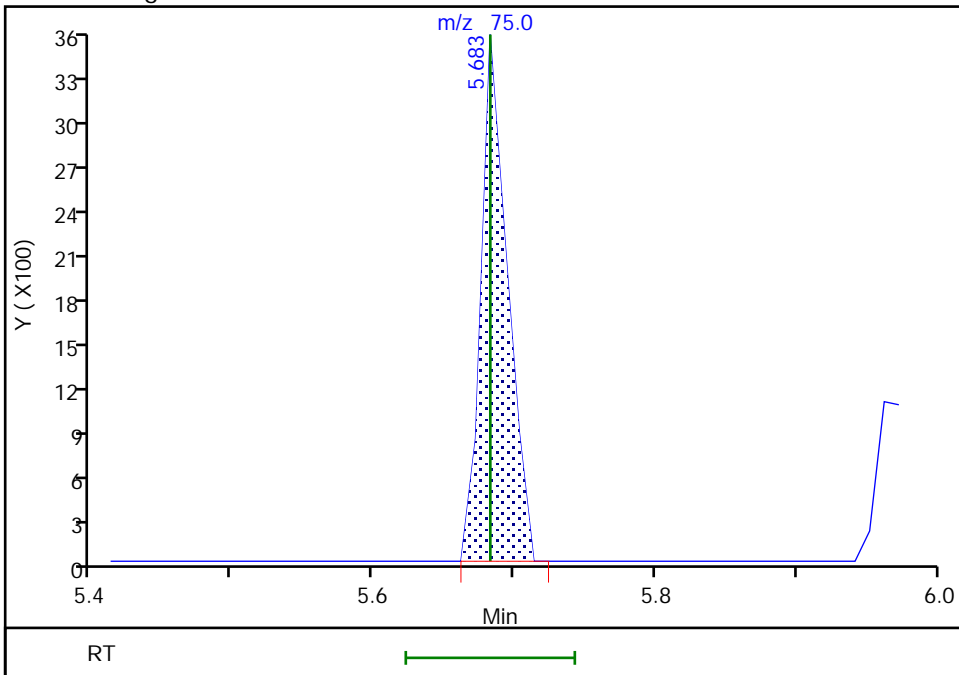
Not Detected
Expected RT: 5.68

Processing Integration Results



Manual Integration Results

RT: 5.68
Area: 4621
Amount: 0.393925
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:33:12
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

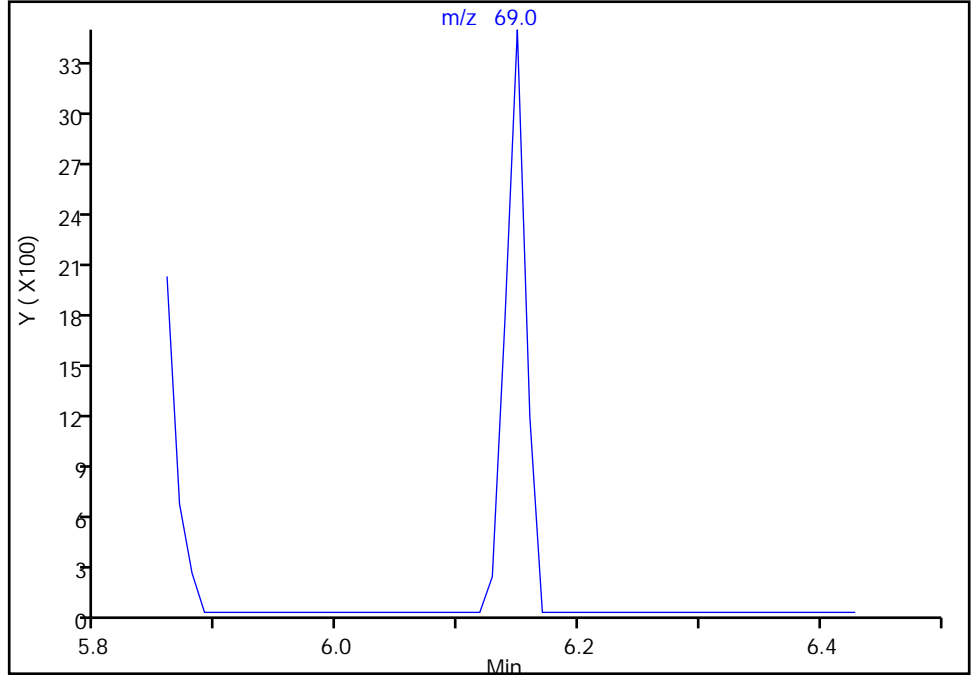
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

77 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

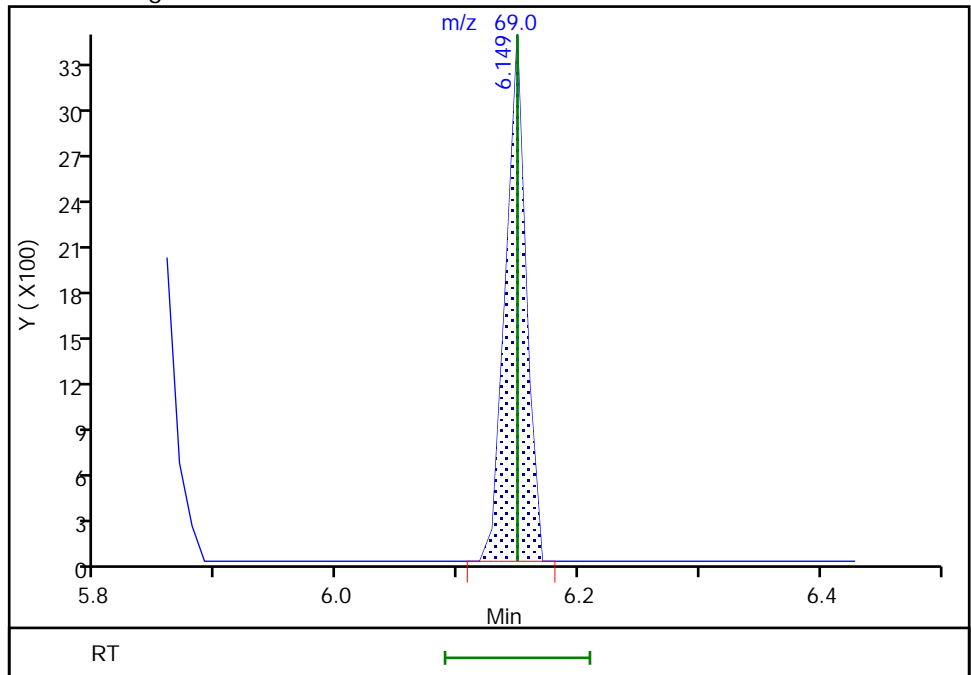
Not Detected
Expected RT: 6.15

Processing Integration Results



Manual Integration Results

RT: 6.15
Area: 4043
Amount: 0.400868
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:36:16
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

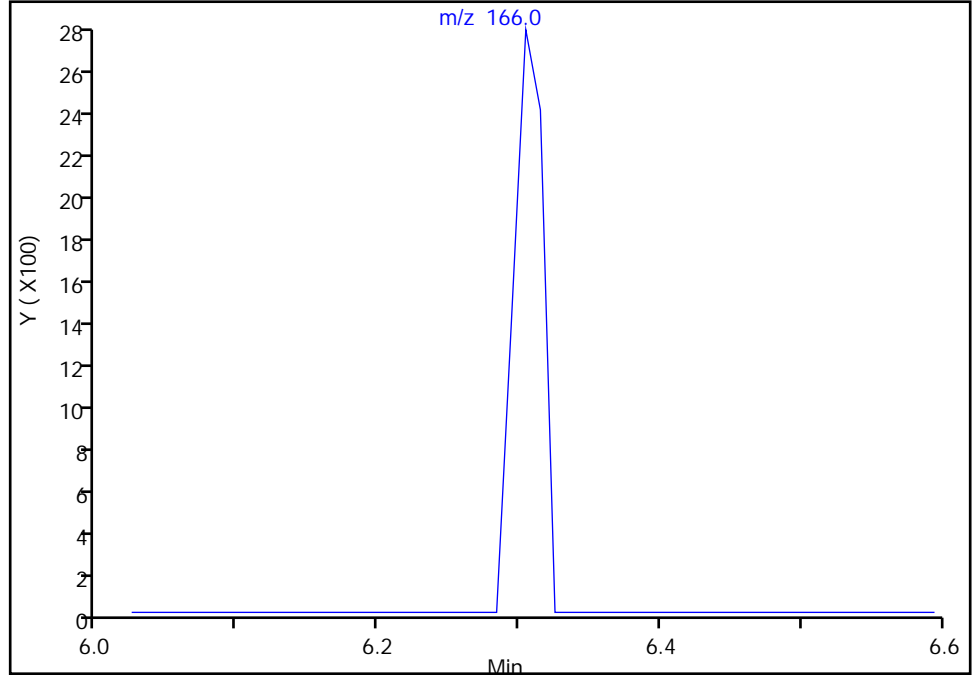
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

79 Tetrachloroethene, CAS: 127-18-4

Signal: 1

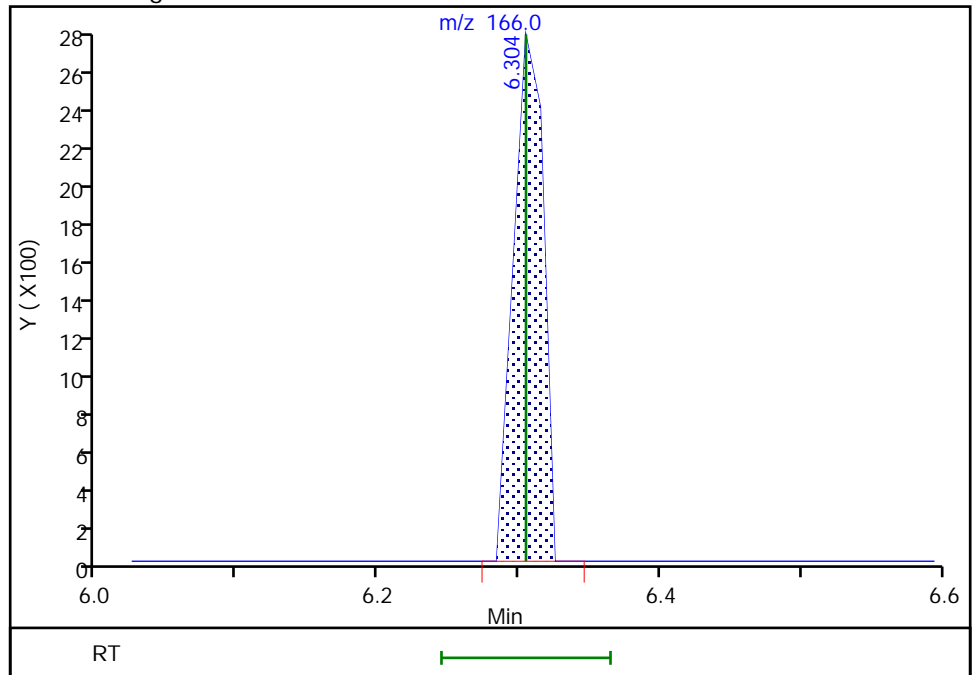
Not Detected
Expected RT: 6.30

Processing Integration Results



Manual Integration Results

RT: 6.30
Area: 4000
Amount: 0.414988
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:36:27
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

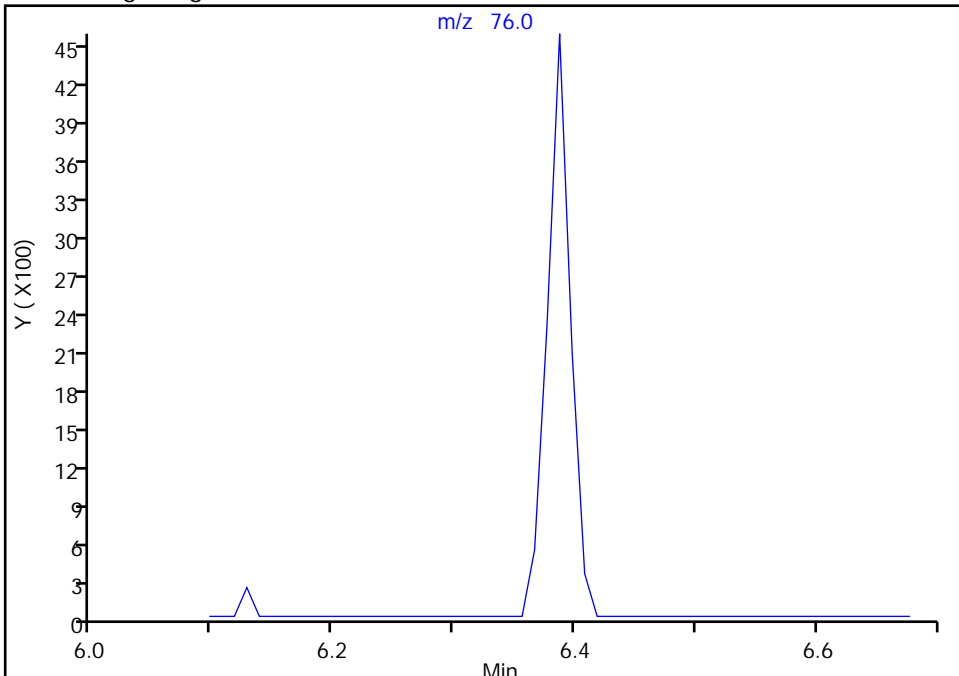
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

80 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

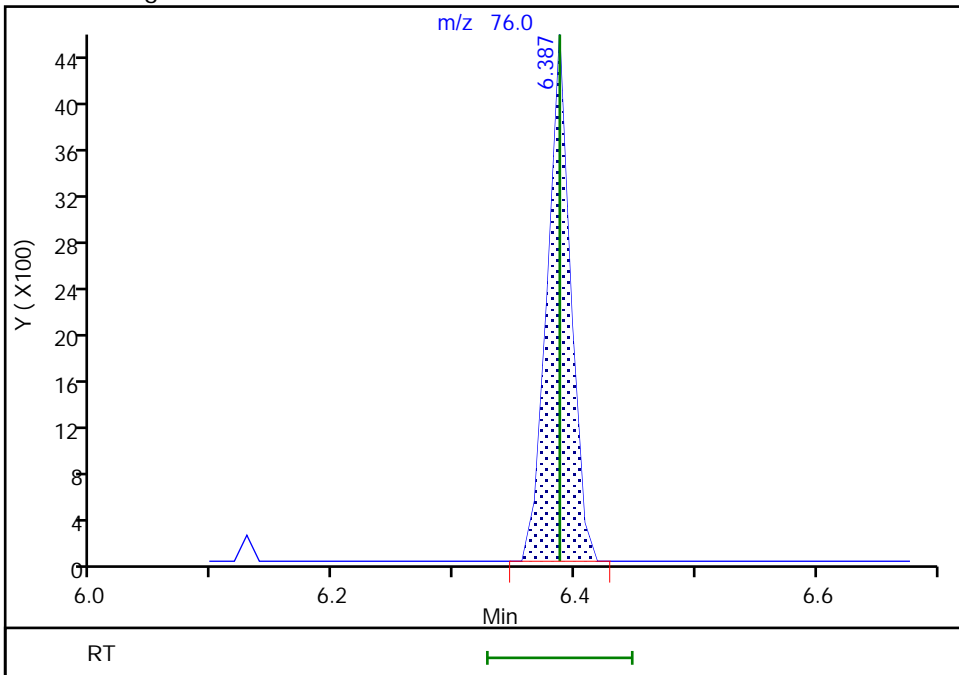
Not Detected
Expected RT: 6.39

Processing Integration Results



Manual Integration Results

RT: 6.39
Area: 6020
Amount: 0.439964
Amount Units: ug/L



Eurofins TestAmerica, Buffalo

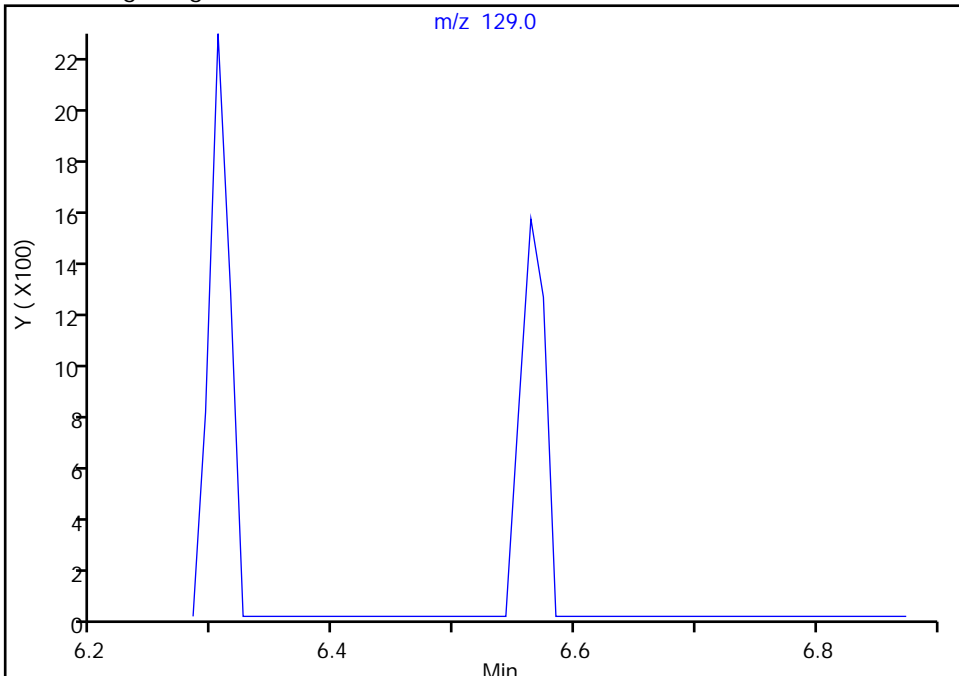
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

82 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

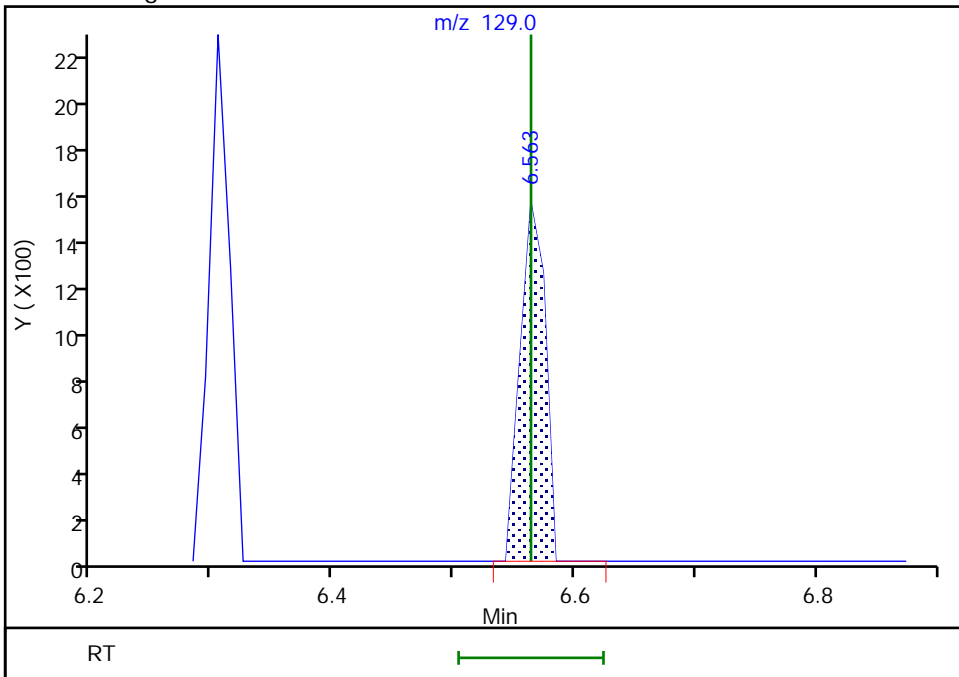
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.56
Area: 2168
Amount: 0.407071
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:37:06
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

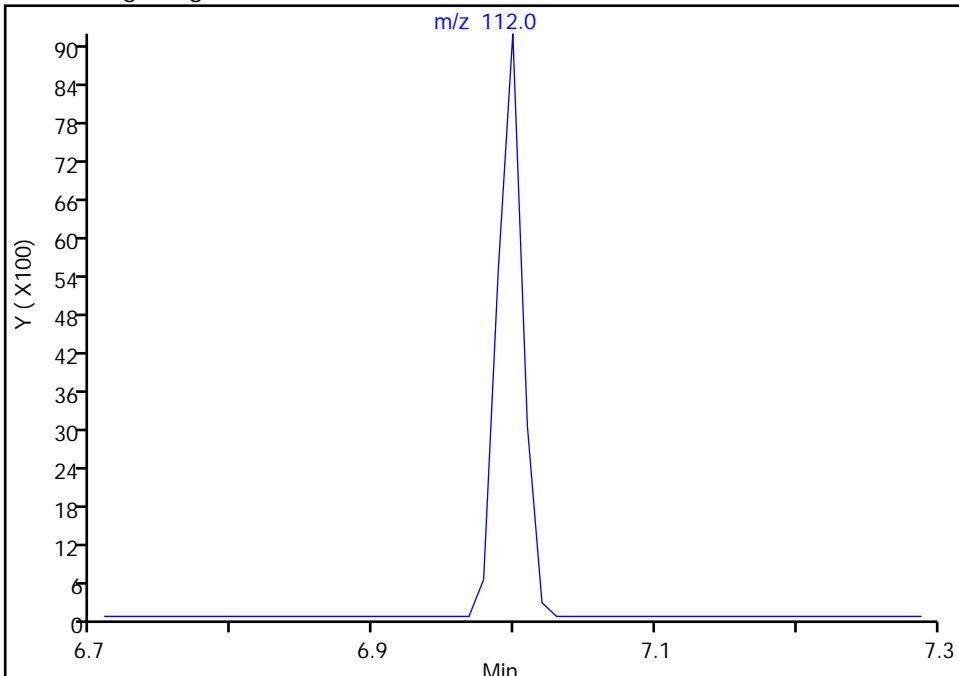
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

86 Chlorobenzene, CAS: 108-90-7

Signal: 1

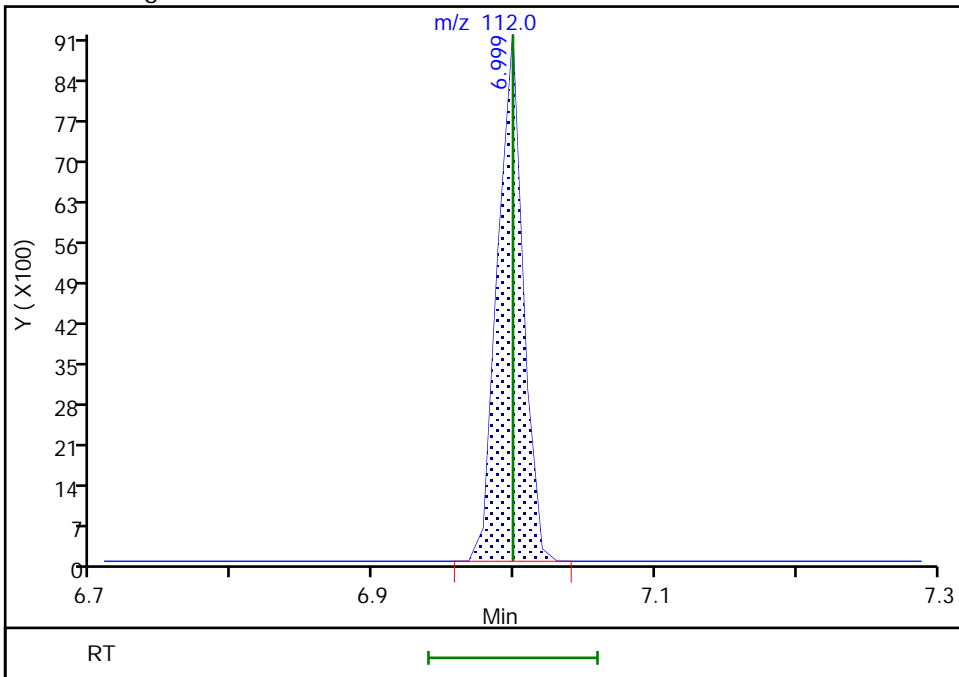
Not Detected
Expected RT: 7.00

Processing Integration Results



Manual Integration Results

RT: 7.00
Area: 11451
Amount: 0.453494
Amount Units: ug/L



Eurofins TestAmerica, Buffalo

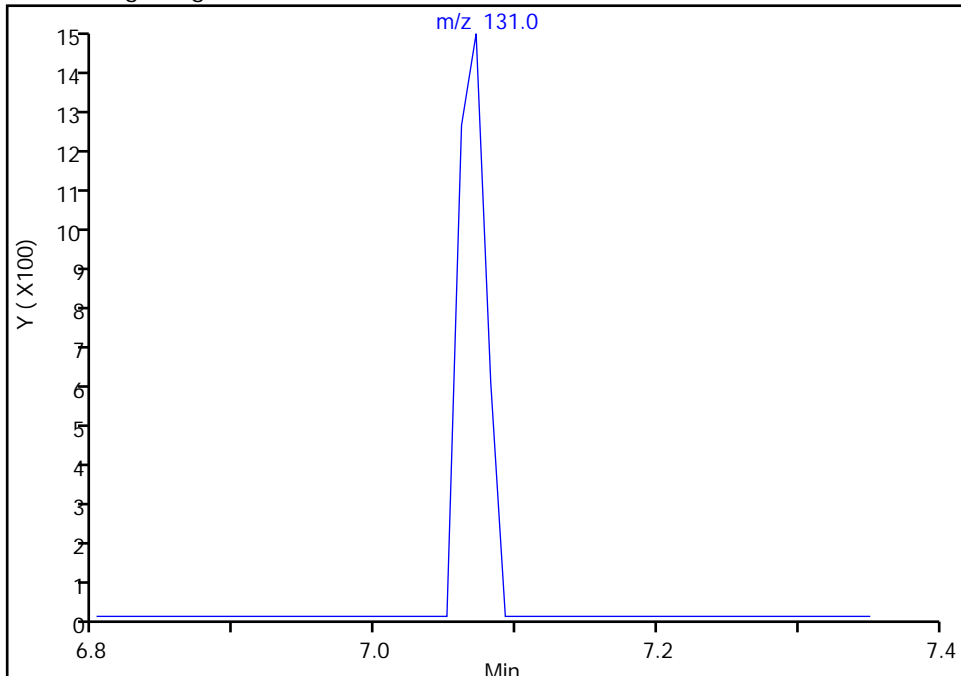
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

89 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Signal: 1

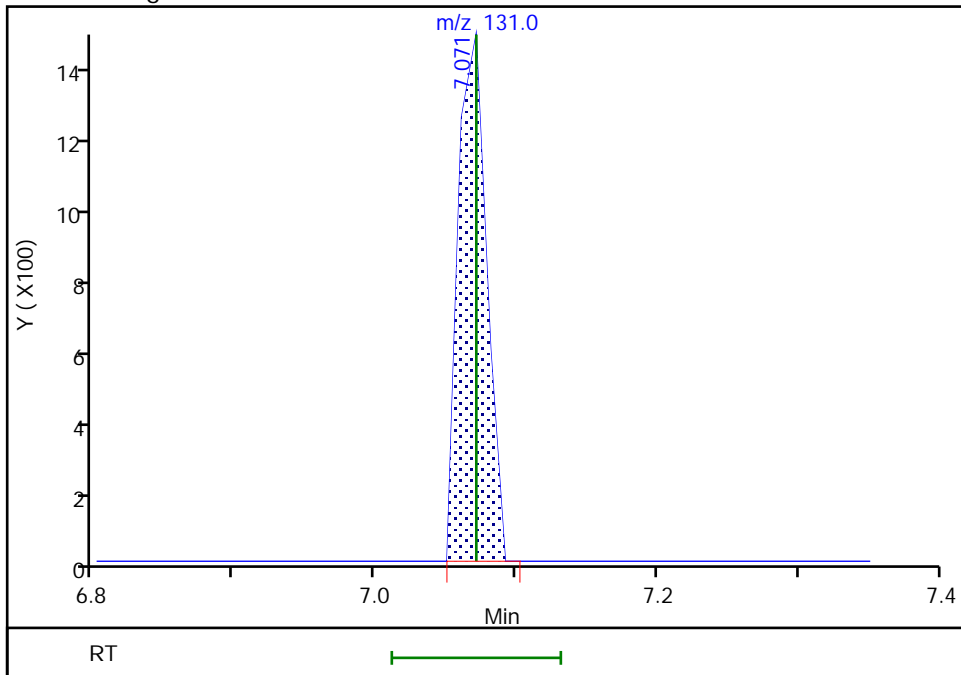
Not Detected
Expected RT: 7.07

Processing Integration Results



Manual Integration Results

RT: 7.07
Area: 2042
Amount: 0.320285
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:37:41
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

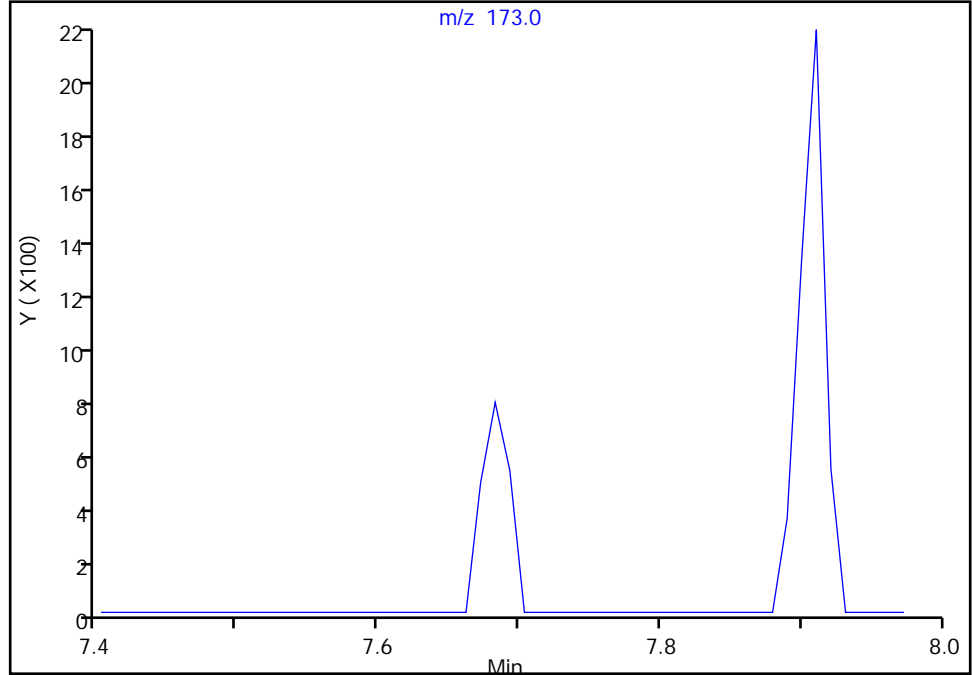
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

93 Bromoform, CAS: 75-25-2

Signal: 1

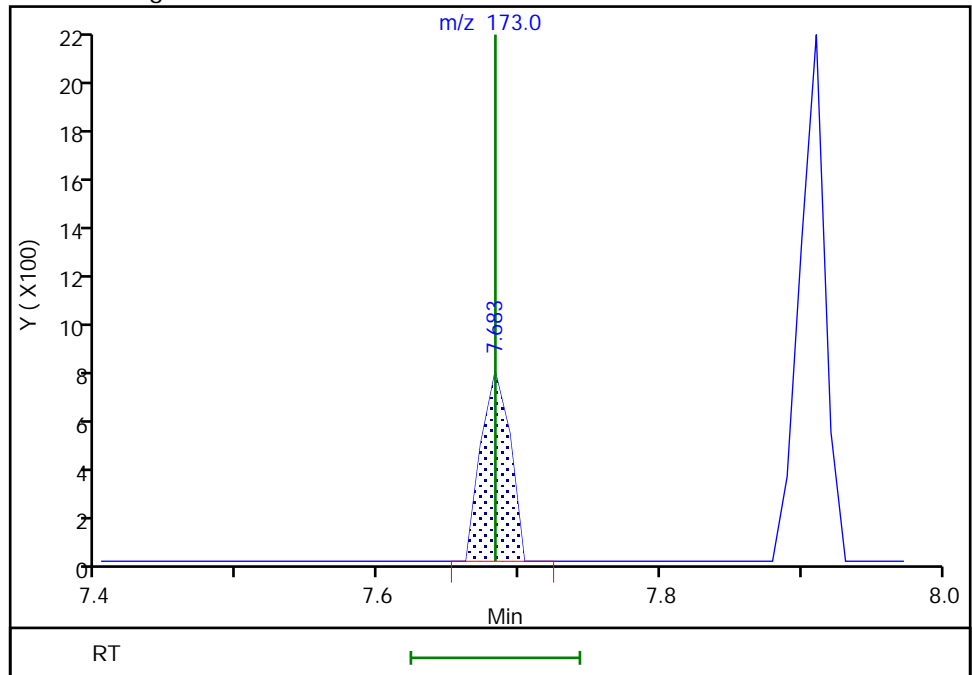
Not Detected
Expected RT: 7.68

Processing Integration Results



Manual Integration Results

RT: 7.68
Area: 1123
Amount: 0.370314
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:38:02
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

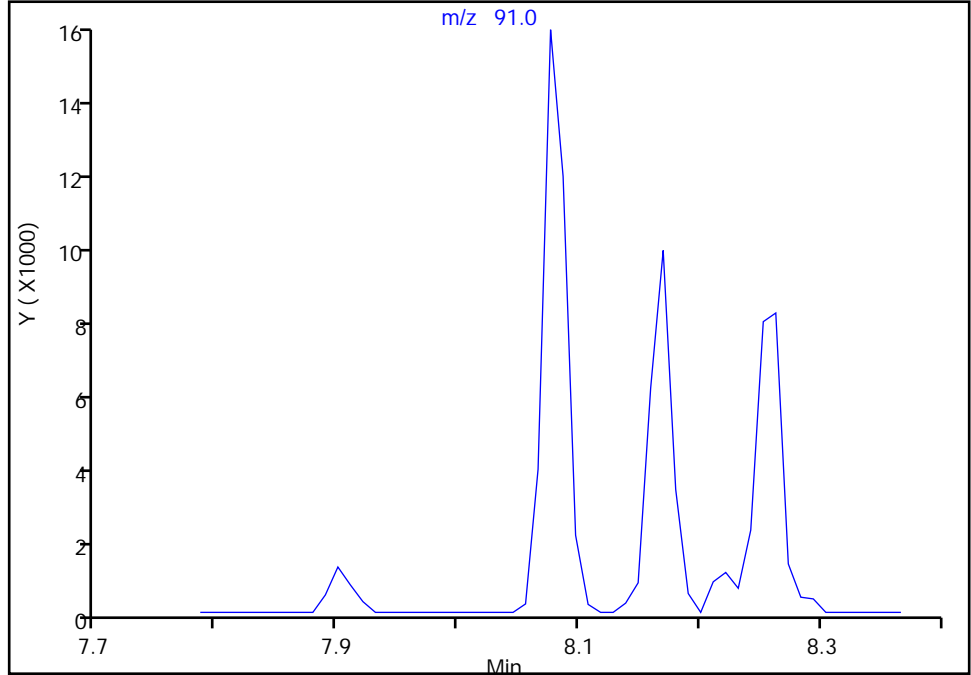
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

99 N-Propylbenzene, CAS: 103-65-1

Signal: 1

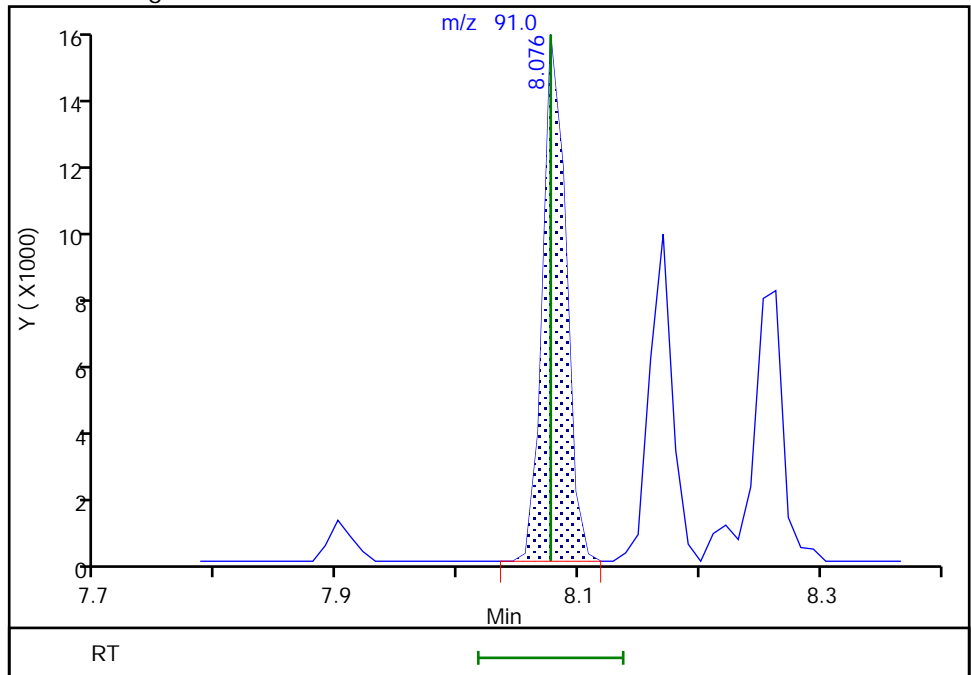
Not Detected
Expected RT: 8.08

Processing Integration Results



Manual Integration Results

RT: 8.08
Area: 21041
Amount: 0.435711
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:38:22
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

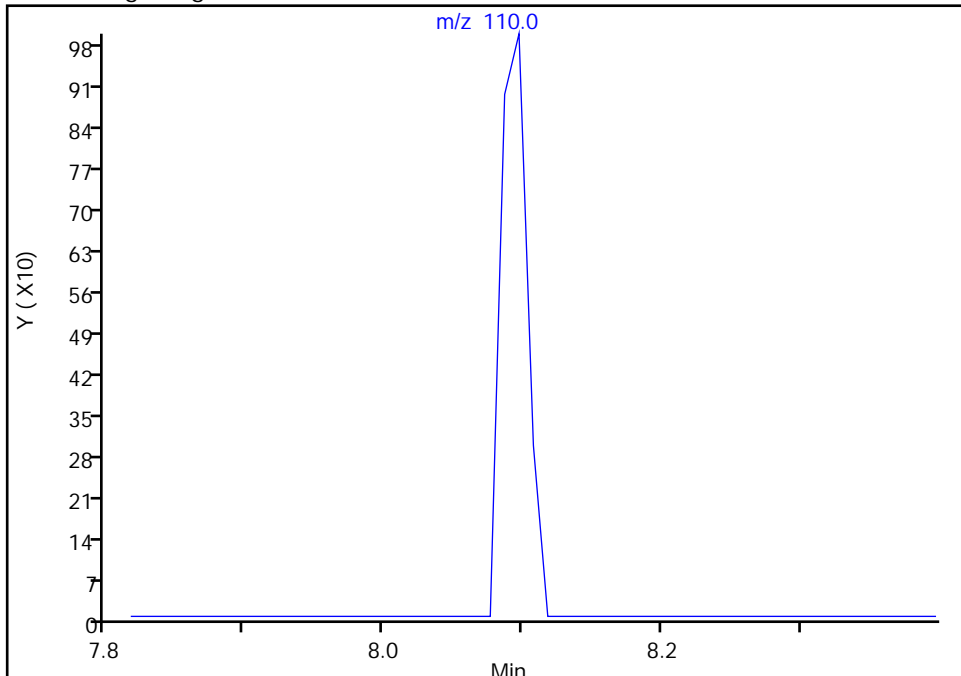
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

100 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

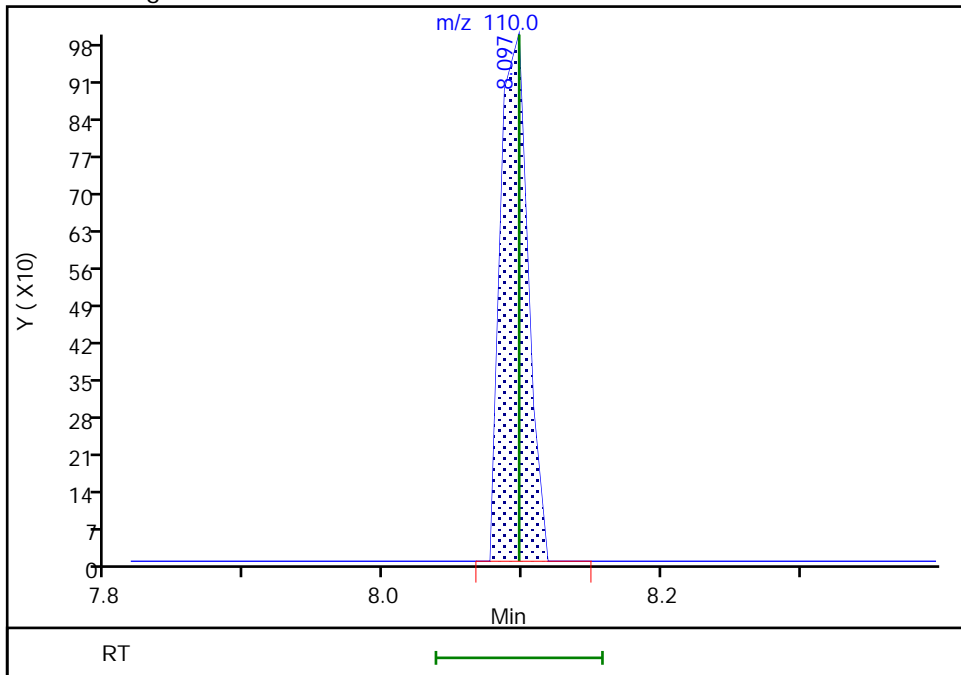
Not Detected
Expected RT: 8.10

Processing Integration Results



RT: 8.10
Area: 1360
Amount: 0.365497
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:38:38
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

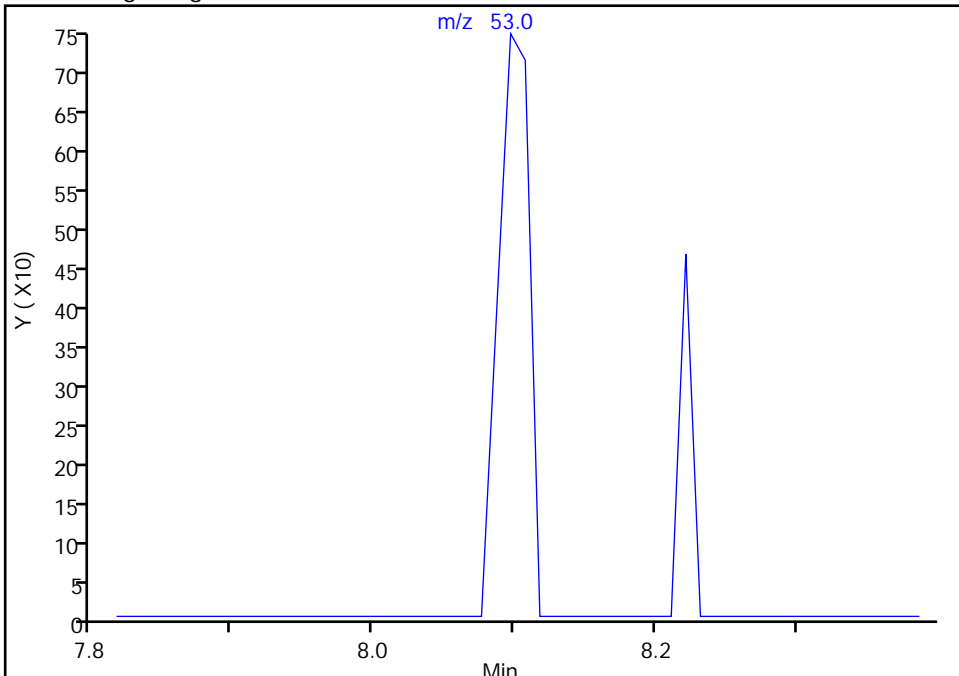
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

101 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

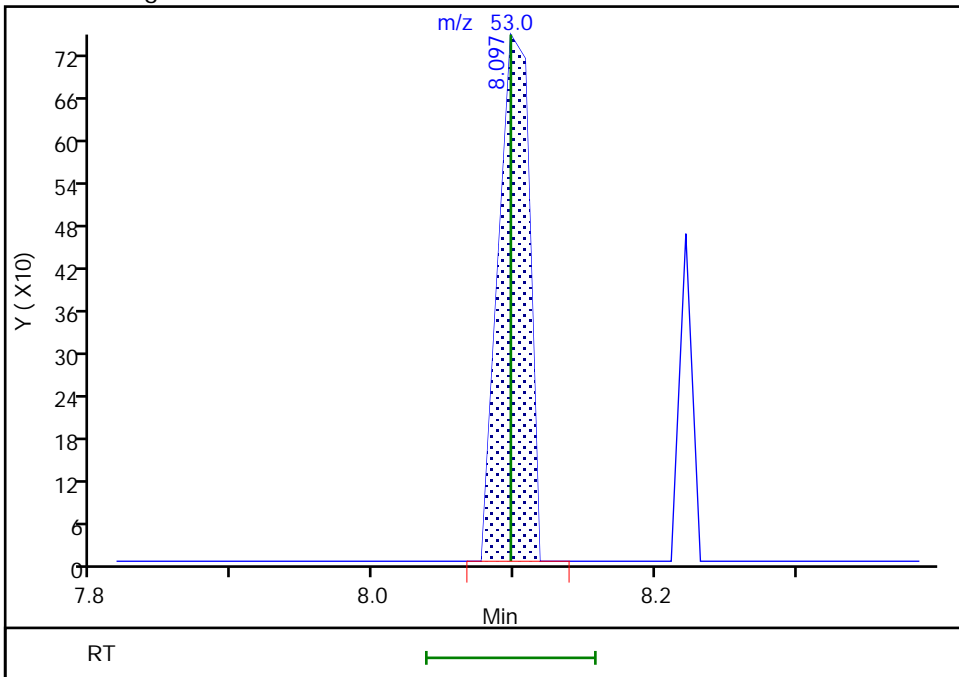
Not Detected
Expected RT: 8.10

Processing Integration Results



Manual Integration Results

RT: 8.10
Area: 1140
Amount: 0.364301
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:38:57
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

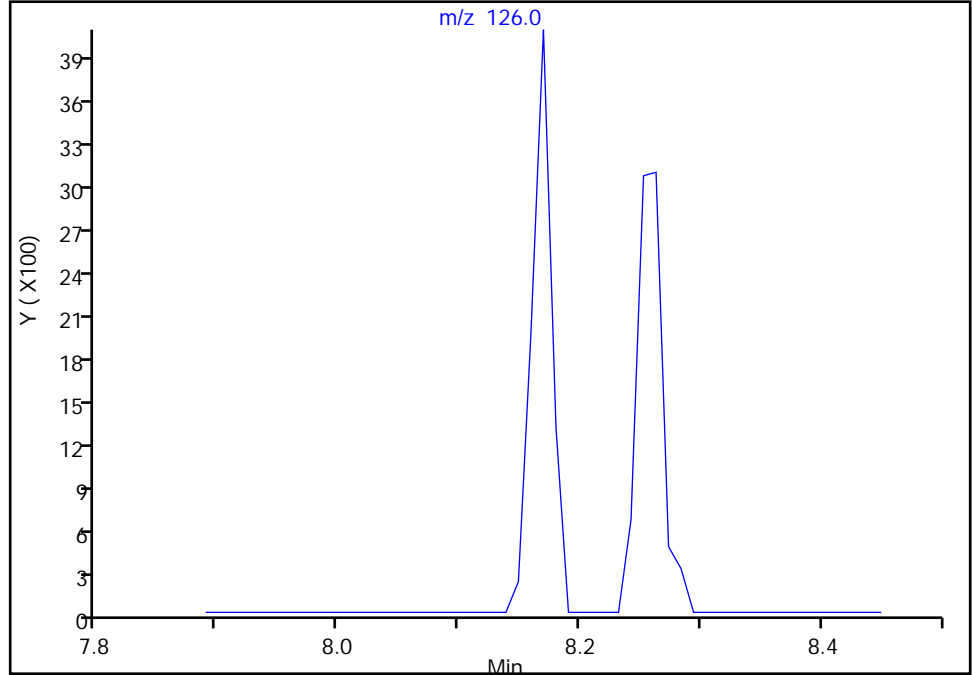
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

105 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

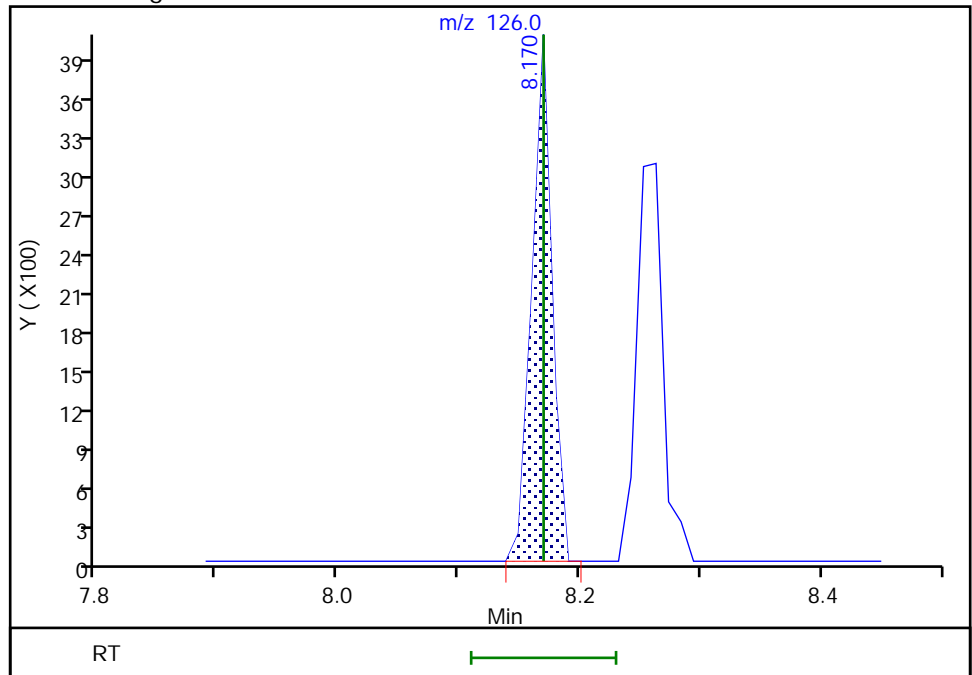
Not Detected
Expected RT: 8.17

Processing Integration Results



Manual Integration Results

RT: 8.17
Area: 4607
Amount: 0.437667
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:39:11
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Euofins TestAmerica, Buffalo

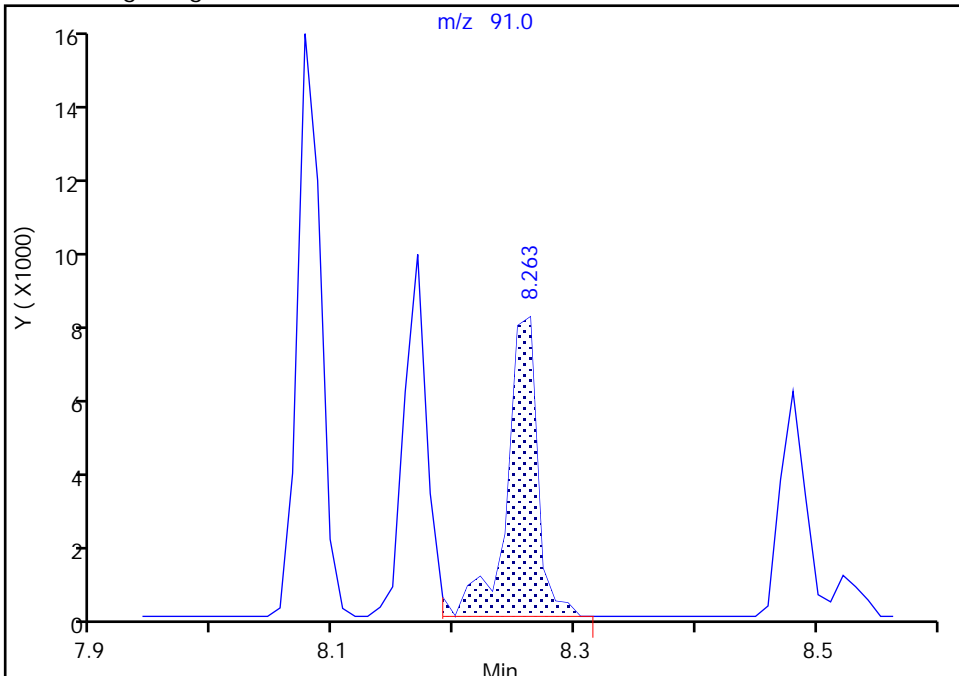
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

102 4-Chlorotoluene, CAS: 106-43-4

Signal: 1

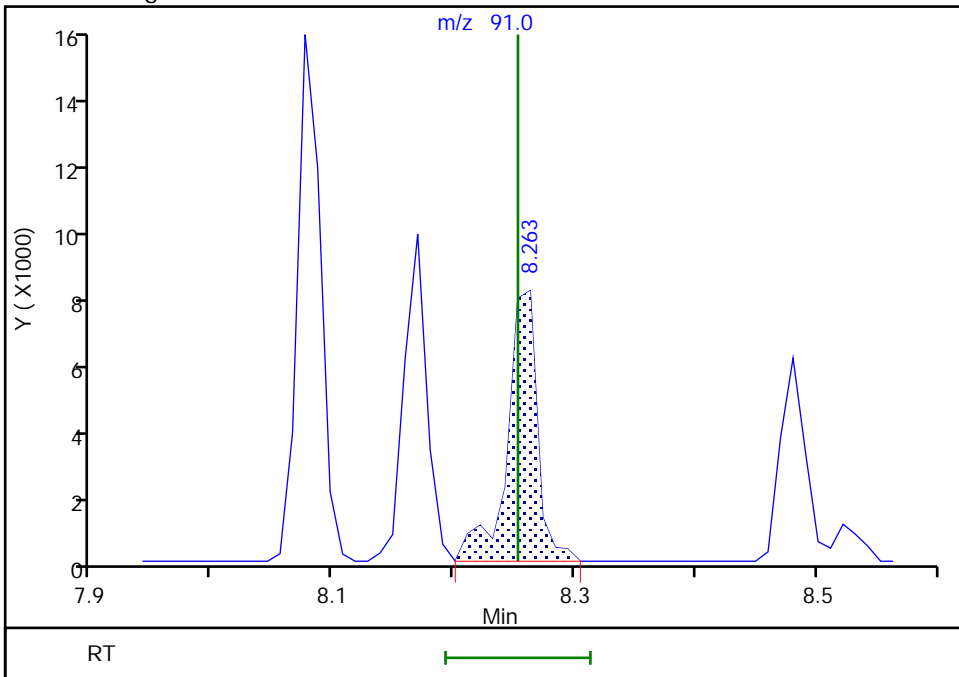
RT: 8.26
Area: 14464
Amount: 0.428783
Amount Units: ug/L

Processing Integration Results



RT: 8.26
Area: 14149
Amount: 0.420673
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:39:36
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

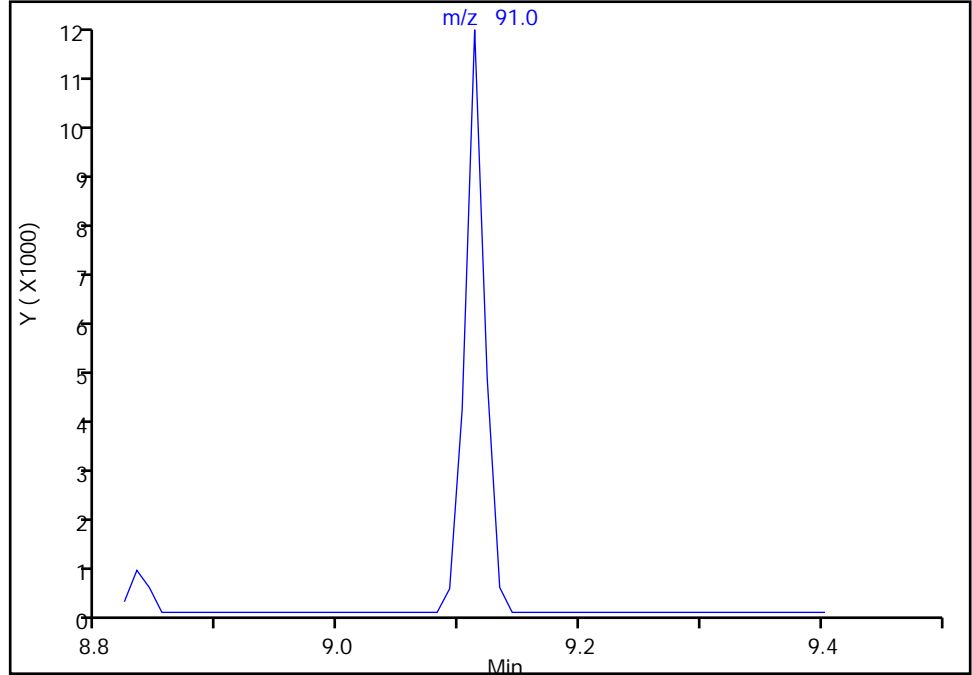
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

115 n-Butylbenzene, CAS: 104-51-8

Signal: 1

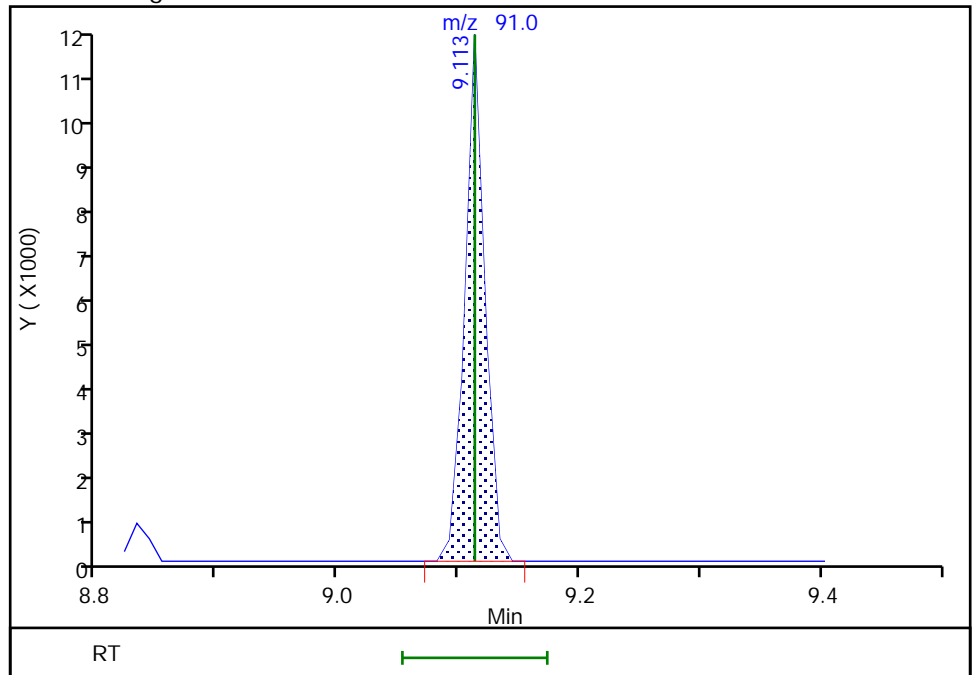
Not Detected
Expected RT: 9.11

Processing Integration Results



Manual Integration Results

RT: 9.11
Area: 13368
Amount: 0.383309
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:39:53
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

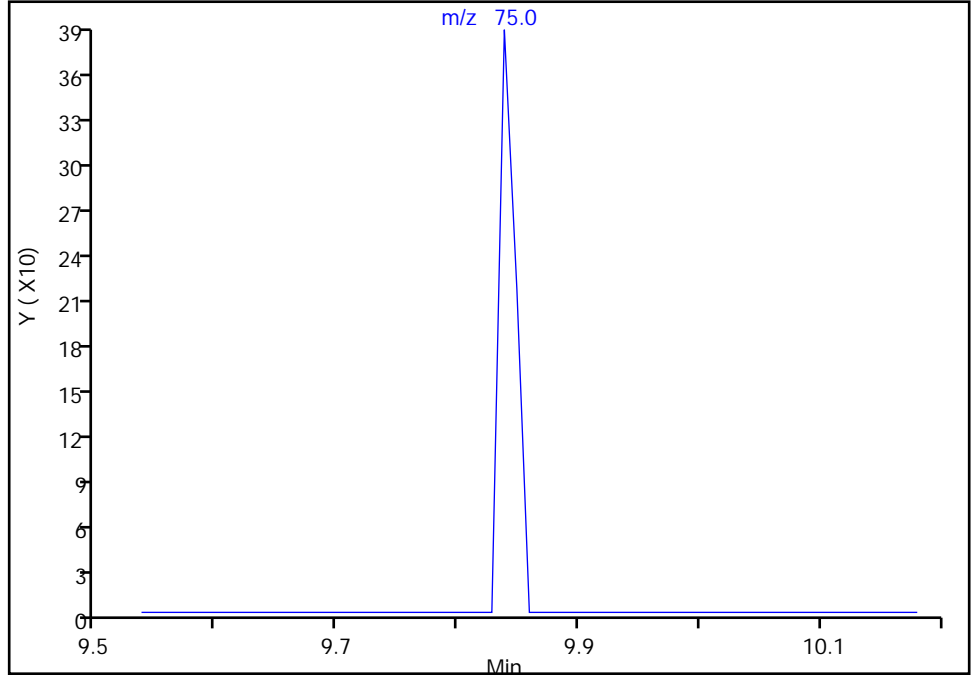
Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8
Signal: 1

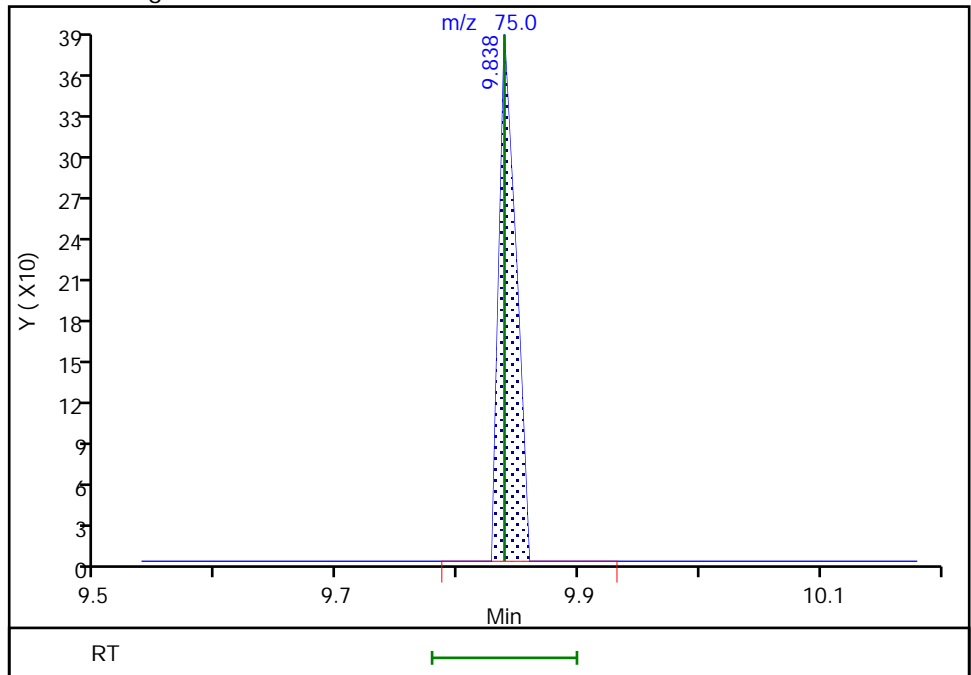
Not Detected
Expected RT: 9.84

Processing Integration Results



RT: 9.84
Area: 371
Amount: 0.289428
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:40:07
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Euofins TestAmerica, Buffalo

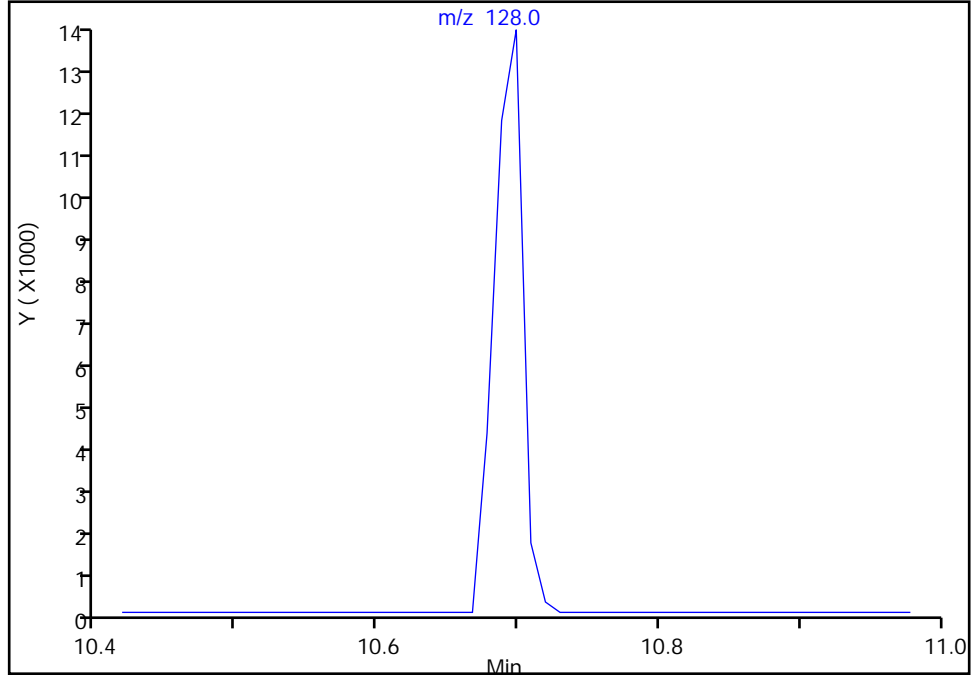
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2787.D
Injection Date: 08-Jul-2019 14:46:30 Instrument ID: HP5975T
Lims ID: IC 0.4
Client ID:
Operator ID: KN ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

121 Naphthalene, CAS: 91-20-3

Signal: 1

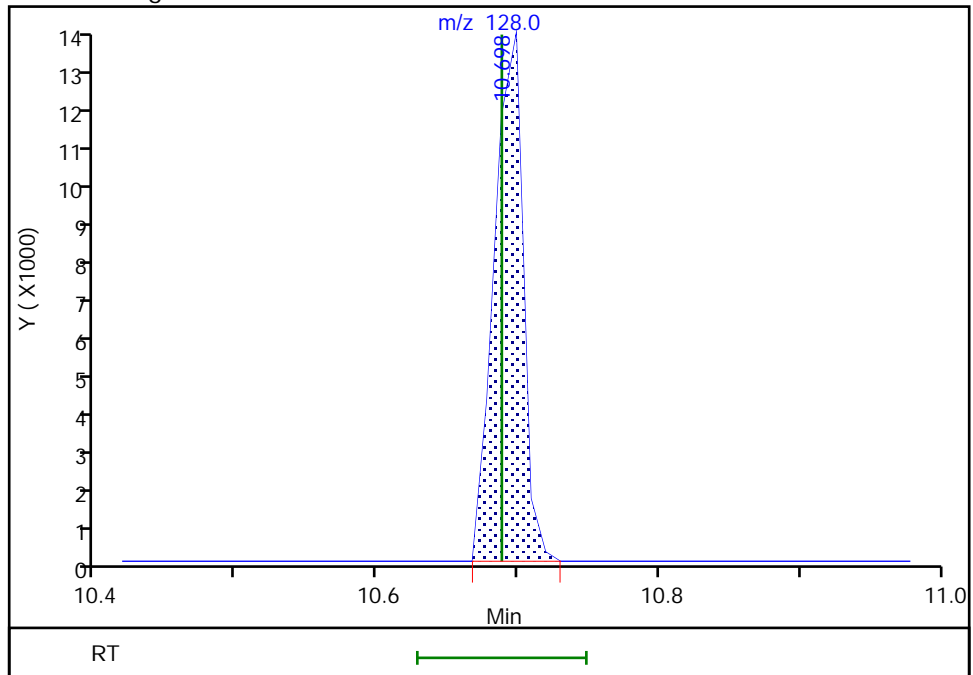
Not Detected
Expected RT: 10.69

Processing Integration Results



RT: 10.70
Area: 19039
Amount: 0.413993
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:40:17
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 08-Jul-2019 15:10:30 ALS Bottle#: 6 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic
 Misc. Info.: 480-0082467-006
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:02 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:44:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	160231	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	701850	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	389528	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.222	0.000	93	215285	25.0	24.3	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.460	0.010	0	249990	25.0	24.6	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.849	0.010	93	861593	25.0	25.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	282864	25.0	24.5	
11 Dichlorodifluoromethane	85	1.165	1.144	0.021	97	11650	1.00	1.09	
13 Chloromethane	50	1.299	1.289	0.010	98	11576	1.00	1.17	
151 Butadiene	54	1.372	1.361	0.011	84	9108	1.00	1.05	
14 Vinyl chloride	62	1.382	1.382	0.000	96	11567	1.00	1.14	
15 Bromomethane	94	1.621	1.620	0.000	91	8196	1.00	0.9730	M
16 Chloroethane	64	1.683	1.672	0.011	96	5918	1.00	0.8725	
18 Dichlorofluoromethane	67	1.890	1.890	0.000	95	18882	1.00	1.12	M
17 Trichlorofluoromethane	101	1.900	1.890	0.010	69	19046	1.00	1.11	
19 Ethyl ether	59	2.139	2.128	0.011	82	9783	1.00	1.24	
21 Acrolein	56	2.304	2.304	0.000	97	8573	5.00	6.09	
20 1,1,2-Trichloro-1,2,2-trif	101	2.336	2.335	0.001	78	10161	1.00	1.30	
22 1,1-Dichloroethene	96	2.336	2.335	0.001	97	8857	1.00	1.21	
23 Acetone	43	2.460	2.449	0.011	100	12724	5.00	5.14	M
24 Iodomethane	142	2.491	2.481	0.010	98	17748	1.00	1.10	
25 Carbon disulfide	76	2.512	2.512	0.000	98	28418	1.00	1.17	
27 3-Chloro-1-propene	41	2.667	2.667	0.000	81	11888	1.00	1.18	
28 Methyl acetate	43	2.719	2.709	0.010	95	15917	2.00	2.40	
30 Methylene Chloride	84	2.812	2.802	0.010	88	14403	1.00	1.17	
31 2-Methyl-2-propanol	59	2.999	2.978	0.021	47	10677	10.0	9.97	
33 Methyl tert-butyl ether	73	2.999	2.988	0.011	96	27425	1.00	1.10	
32 trans-1,2-Dichloroethene	96	2.999	2.999	0.000	97	10229	1.00	1.19	
34 Acrylonitrile	53	3.061	3.061	0.000	98	38634	10.0	10.7	
35 Hexane	57	3.165	3.165	0.000	90	14364	1.00	1.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.372	3.361	0.011	97	14933	1.00	1.06	
39 Vinyl acetate	43	3.413	3.403	0.010	97	25454	2.00	1.91	
42 2,2-Dichloropropane	77	3.817	3.807	0.010	85	13471	1.00	1.19	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	78	11140	1.00	1.15	
44 2-Butanone (MEK)	43	3.869	3.859	0.010	98	22273	5.00	5.36	
47 Chlorobromomethane	128	4.025	4.025	0.000	88	5670	1.00	1.05	
48 Tetrahydrofuran	42	4.045	4.035	0.010	75	6562	2.00	2.12	
50 Chloroform	83	4.097	4.097	0.000	93	17485	1.00	1.17	
51 1,1,1-Trichloroethane	97	4.191	4.180	0.011	86	11410	1.00	1.05	
52 Cyclohexane	56	4.191	4.180	0.011	84	15088	1.00	1.14	
54 1,1-Dichloropropene	75	4.305	4.294	0.011	93	12065	1.00	1.11	
53 Carbon tetrachloride	117	4.294	4.294	0.000	66	9432	1.00	1.14	
55 Benzene	78	4.470	4.470	0.000	47	36769	1.00	1.10	
56 Isobutyl alcohol	43	4.501	4.491	0.010	93	6296	25.0	22.0	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	97	12904	1.00	1.09	
59 n-Heptane	43	4.605	4.605	0.000	84	14716	1.00	1.24	
60 Trichloroethene	95	4.957	4.947	0.010	93	9906	1.00	1.10	
62 Methylcyclohexane	83	5.040	5.040	0.000	85	16578	1.00	1.16	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	90	8606	1.00	1.05	
65 Dibromomethane	93	5.248	5.247	0.001	88	5768	1.00	1.03	
66 1,4-Dioxane	88	5.258	5.258	0.000	37	2395	20.0	16.0	Ma
67 Dichlorobromomethane	83	5.372	5.372	0.000	95	7746	1.00	0.9487	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	89	6417	1.00	1.05	
71 cis-1,3-Dichloropropene	75	5.683	5.683	0.000	95	12264	1.00	1.01	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	46230	5.00	5.01	
73 Toluene	92	5.911	5.900	0.011	98	26281	1.00	1.16	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	94	11585	1.00	1.02	
77 Ethyl methacrylate	69	6.149	6.149	0.000	87	9402	1.00	0.9045	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	90	7439	1.00	1.09	
79 Tetrachloroethene	166	6.305	6.305	0.000	95	10481	1.00	1.05	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	88	14818	1.00	1.05	a
81 2-Hexanone	43	6.429	6.429	0.000	94	29757	5.00	4.69	
82 Chlorodibromomethane	129	6.564	6.564	0.000	86	5510	1.00	1.00	
83 Ethylene Dibromide	107	6.647	6.647	0.001	94	8195	1.00	0.9694	
86 Chlorobenzene	112	6.999	6.999	0.000	96	28473	1.00	1.09	
88 Ethylbenzene	91	7.061	7.061	0.000	98	46359	1.00	1.10	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	85	6584	1.00	1.00	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	16977	1.00	1.00	
91 o-Xylene	106	7.465	7.465	0.000	95	17559	1.00	1.03	
92 Styrene	104	7.496	7.486	0.010	92	29534	1.00	1.03	
93 Bromoform	173	7.683	7.683	0.000	95	3047	1.00	0.9748	a
95 Isopropylbenzene	105	7.755	7.755	0.000	95	47477	1.00	1.13	
97 Bromobenzene	156	8.025	8.025	0.000	90	11878	1.00	1.02	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	96	10974	1.00	1.01	
99 N-Propylbenzene	91	8.077	8.077	0.000	99	56787	1.00	1.16	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	0	3526	1.00	0.9364	M
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	71	3272	1.00	1.03	
105 2-Chlorotoluene	126	8.170	8.170	0.000	98	12204	1.00	1.15	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	95	40708	1.00	1.14	
102 4-Chlorotoluene	91	8.263	8.253	0.010	96	38253	1.00	1.12	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	9297	1.00	1.10	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	96	40902	1.00	1.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	93	52008	1.00	1.13	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	43298	1.00	1.07	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	94	24392	1.00	1.07	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	95	25197	1.00	1.09	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	39330	1.00	1.11	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	98	25017	1.00	1.11	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	0	1125	1.00	0.8673	M
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	17042	1.00	1.04	
120 Hexachlorobutadiene	225	10.585	10.584	0.001	93	8514	1.00	1.22	
121 Naphthalene	128	10.688	10.688	0.000	96	51087	1.00	1.10	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	96	18214	1.00	1.10	
S 123 1,3-Dichloropropene, Total	1				0			2.03	
S 125 Total BTEX	1				0			5.39	
S 126 Xylenes, Total	1				0			2.04	
S 124 1,2-Dichloroethene, Total	1				0			2.33	

QC Flag Legend

Review Flags

M - Manually Integrated
a - User Assigned ID

Reagents:

8260 CORP mix_00159	Amount Added: 1.00	Units: uL	
GAS CORP mix_00349	Amount Added: 1.00	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00222	Amount Added: 1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D

Injection Date: 08-Jul-2019 15:10:30

Instrument ID: HP5975T

Operator ID: KN

Lims ID: IC

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

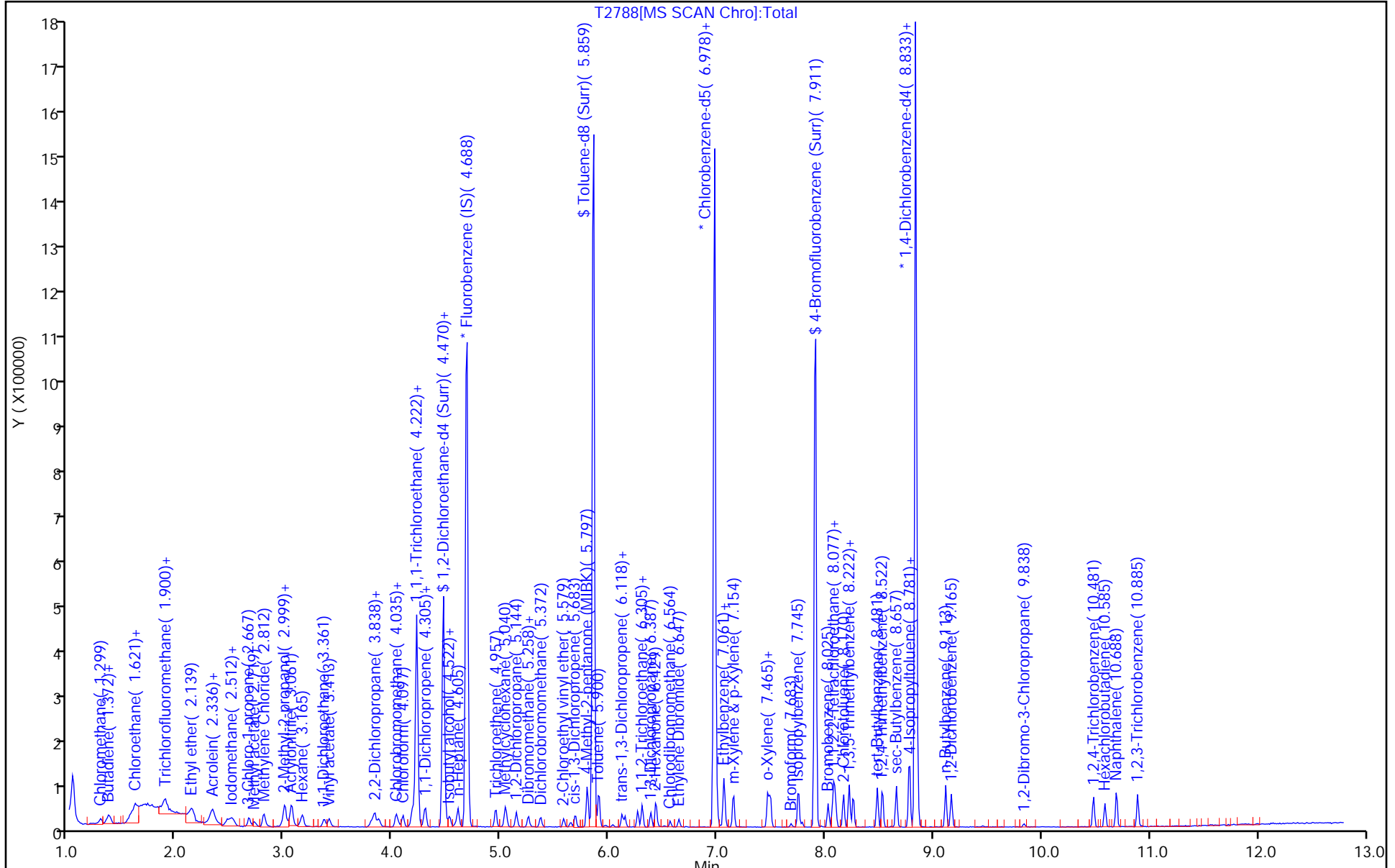
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Euofins TestAmerica, Buffalo

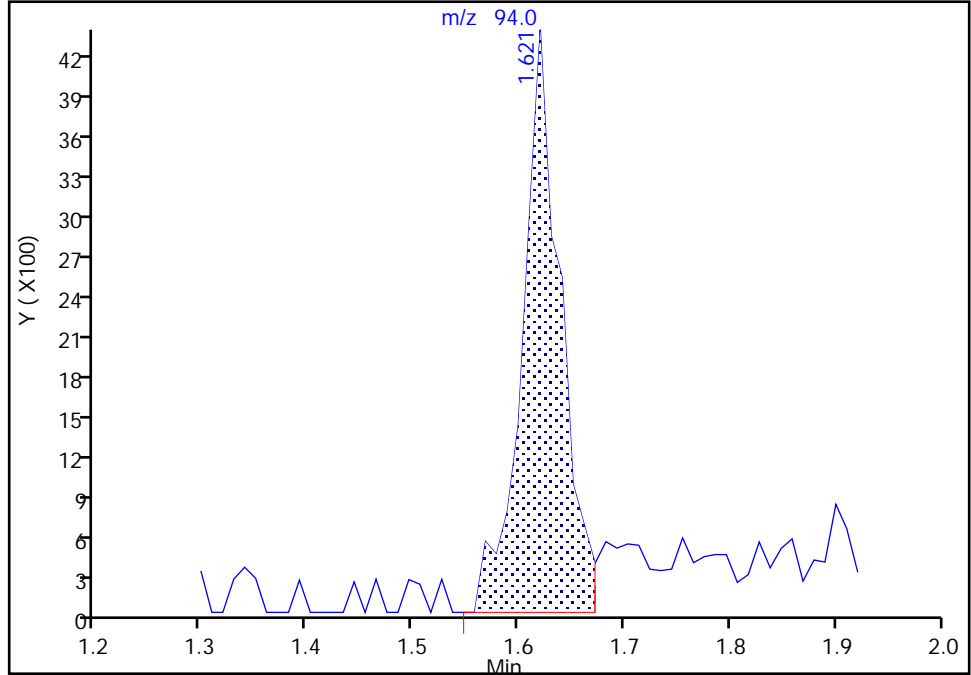
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

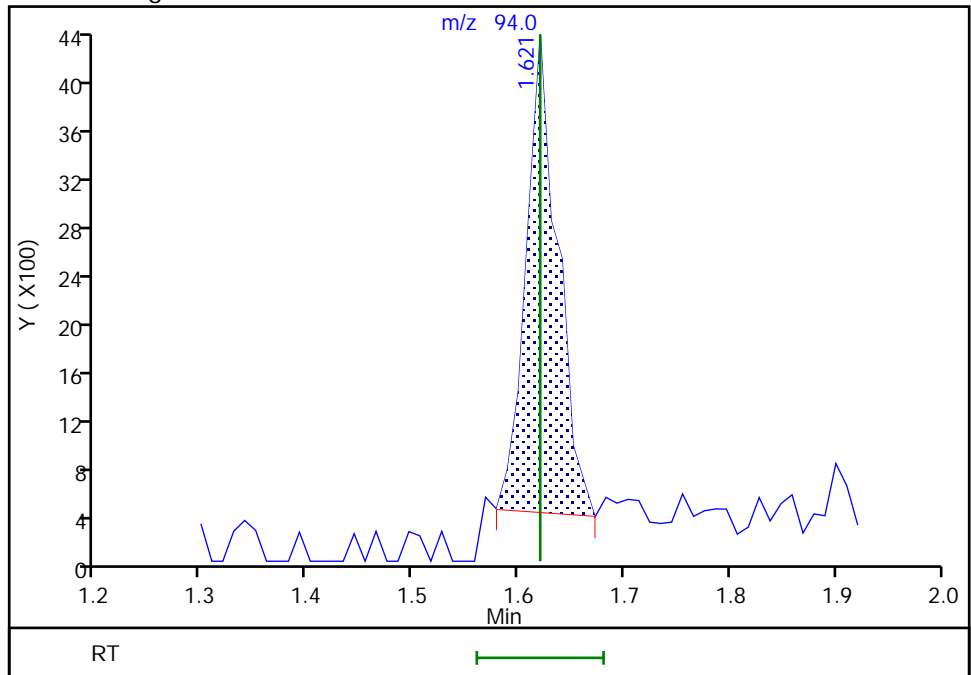
RT: 1.62
Area: 11008
Amount: 1.217255
Amount Units: ug/L

Processing Integration Results



RT: 1.62
Area: 8196
Amount: 0.973035
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:05:23
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

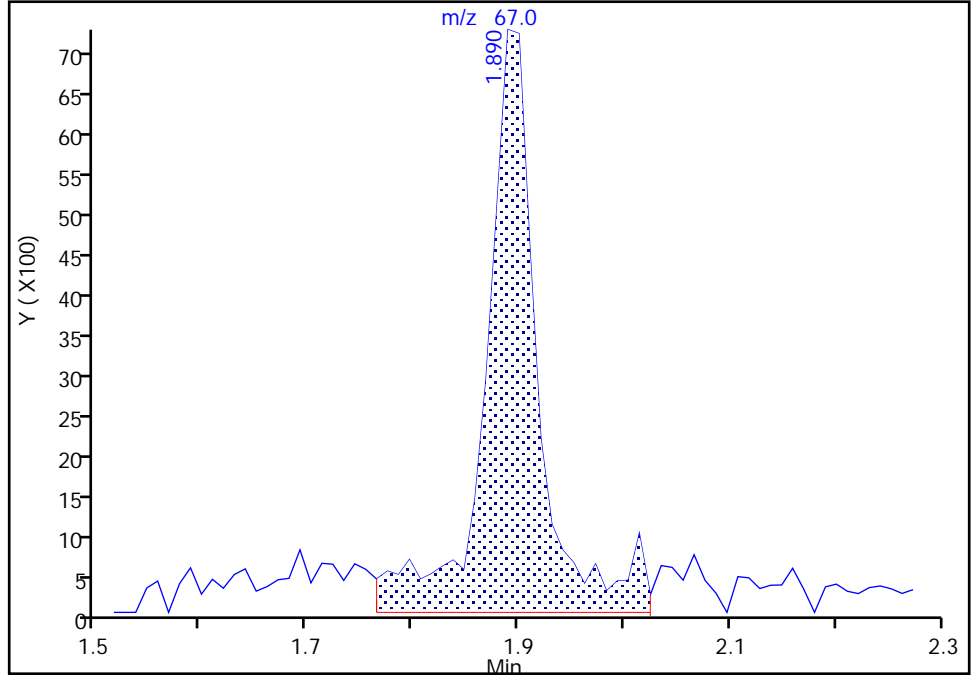
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

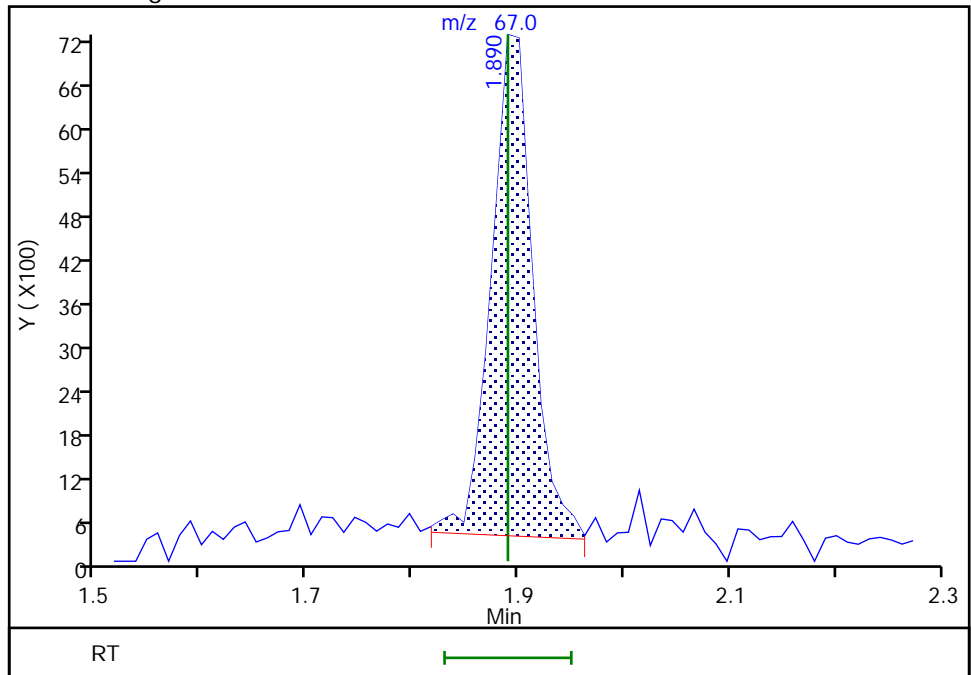
RT: 1.89
Area: 25464
Amount: 1.038502
Amount Units: ug/L

Processing Integration Results



RT: 1.89
Area: 18882
Amount: 1.121936
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:05:36
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

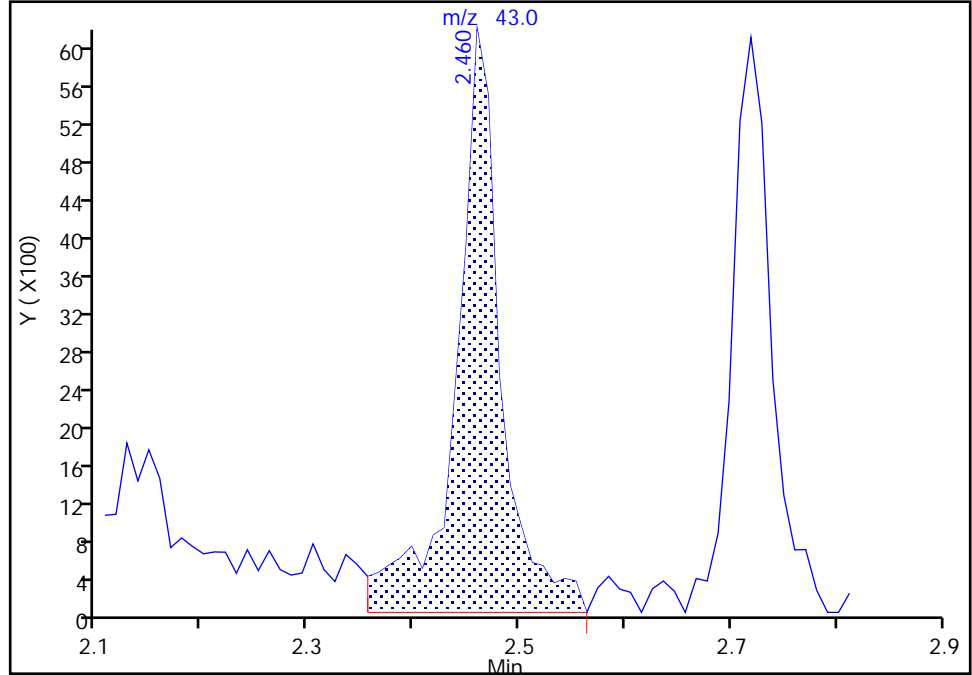
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

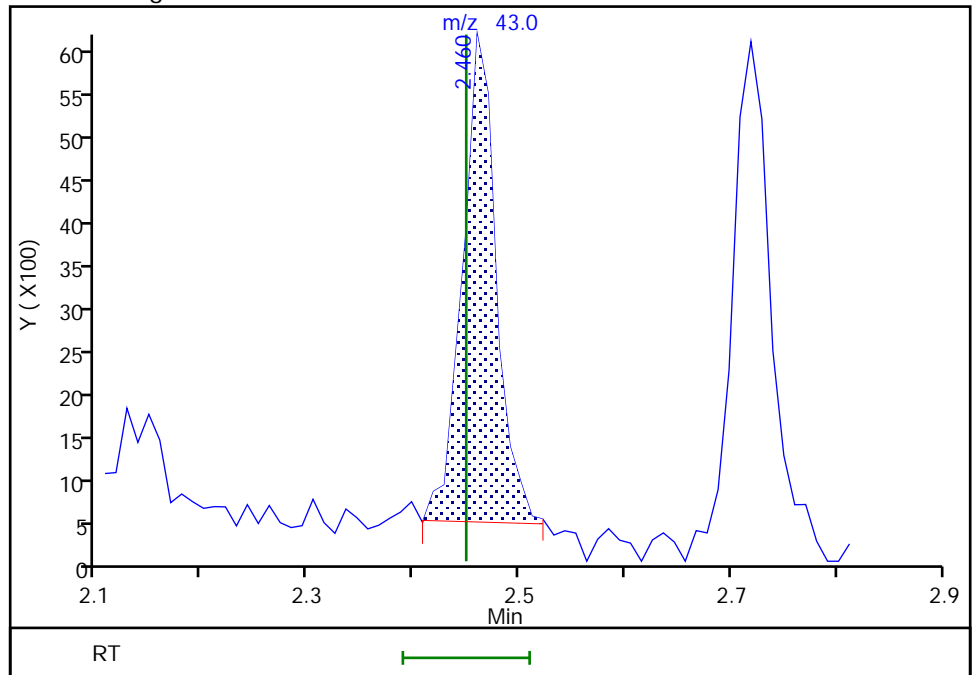
RT: 2.46
Area: 18380
Amount: 5.918741
Amount Units: ug/L

Processing Integration Results



RT: 2.46
Area: 12724
Amount: 5.139133
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:07:30
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

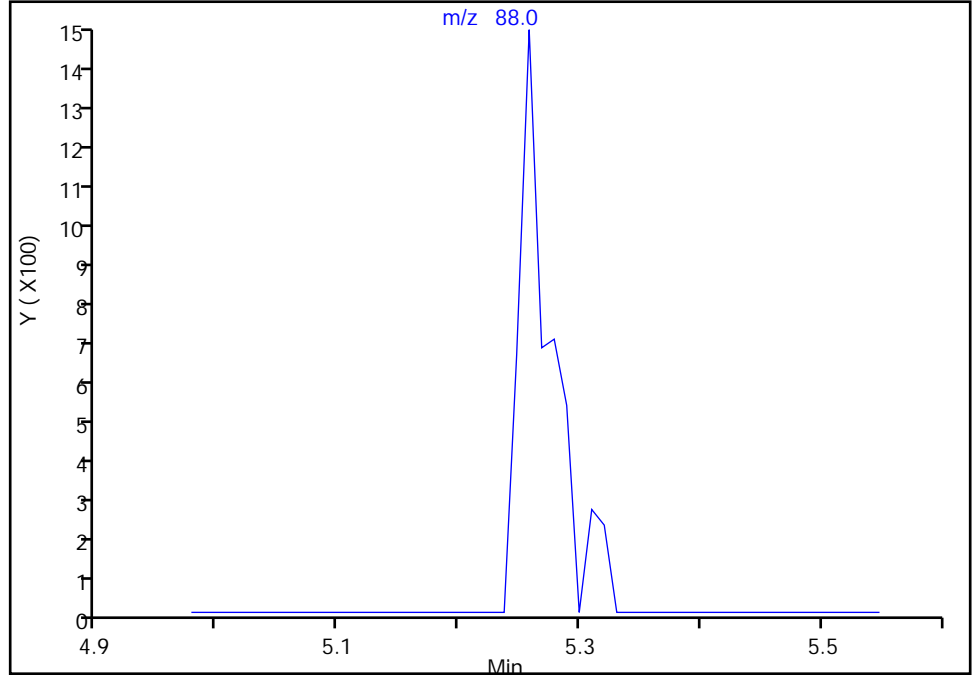
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

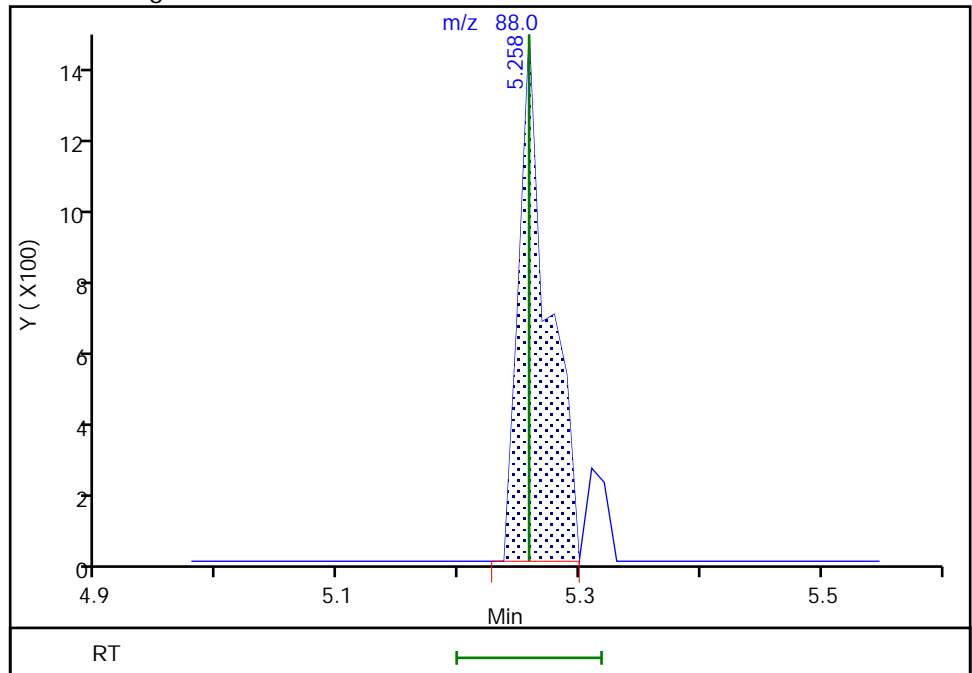
Not Detected
Expected RT: 5.26

Processing Integration Results



Manual Integration Results

RT: 5.26
Area: 2395
Amount: 16.042701
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:42:31
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

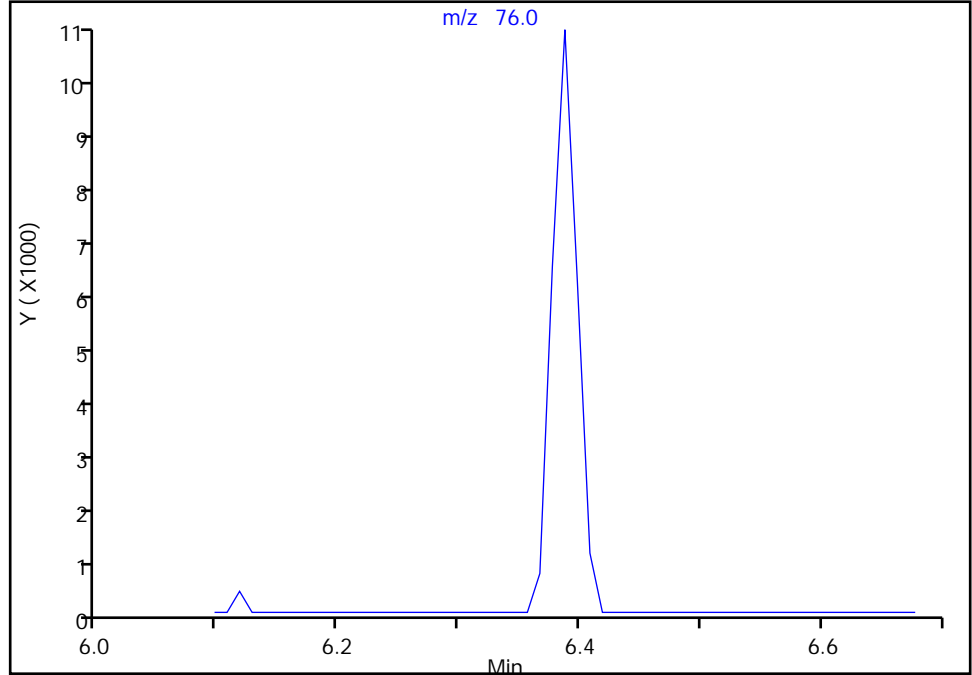
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

80 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

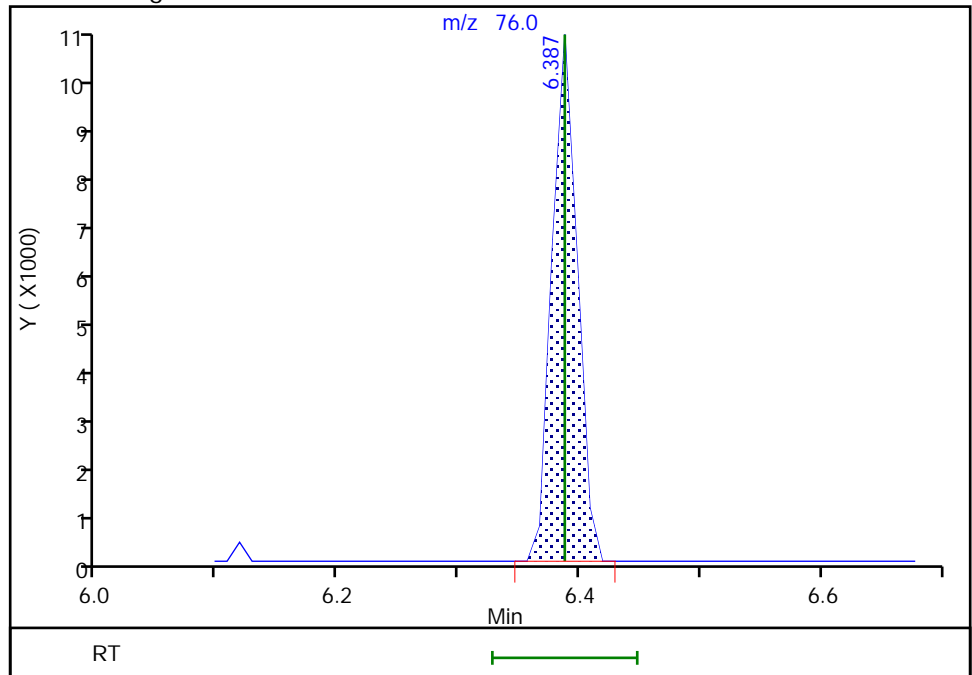
Not Detected
Expected RT: 6.39

Processing Integration Results



Manual Integration Results

RT: 6.39
Area: 14818
Amount: 1.050697
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:42:46
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

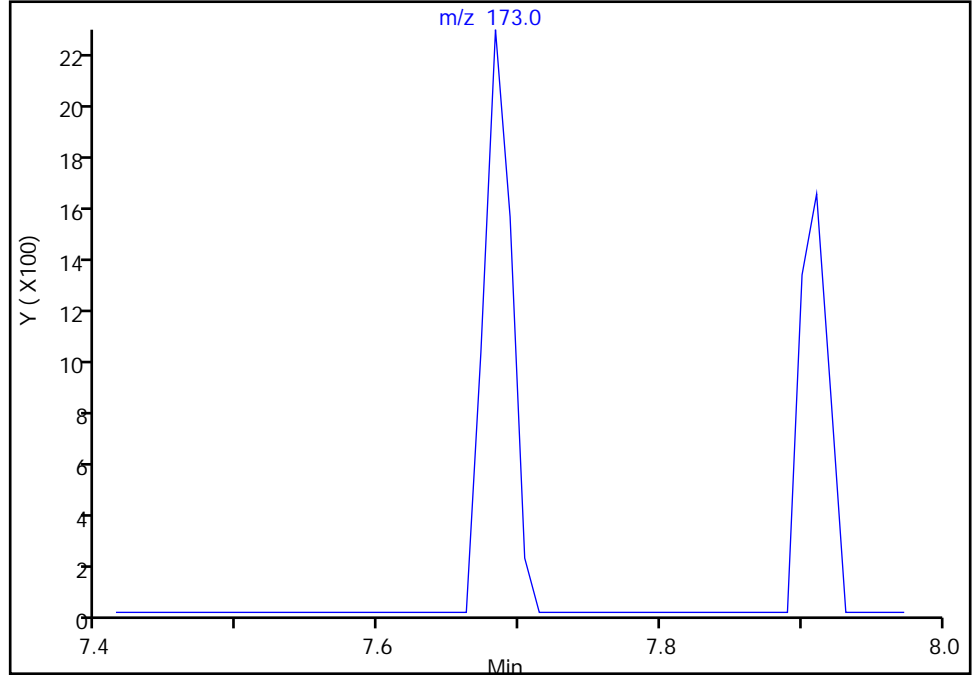
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

93 Bromoform, CAS: 75-25-2

Signal: 1

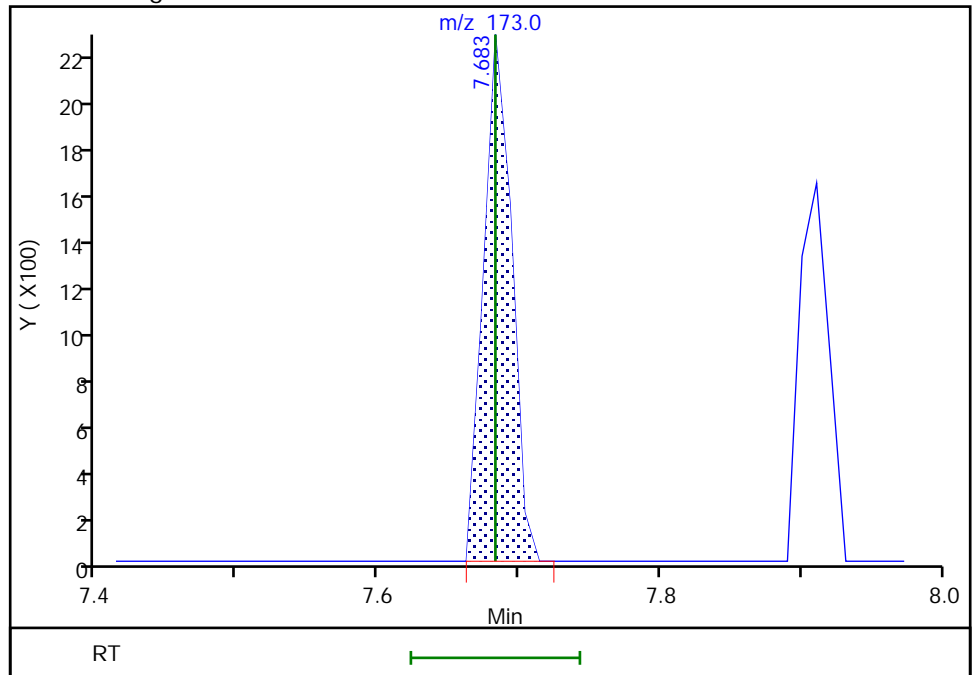
Not Detected
Expected RT: 7.68

Processing Integration Results



Manual Integration Results

RT: 7.68
Area: 3047
Amount: 0.974832
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:43:11
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

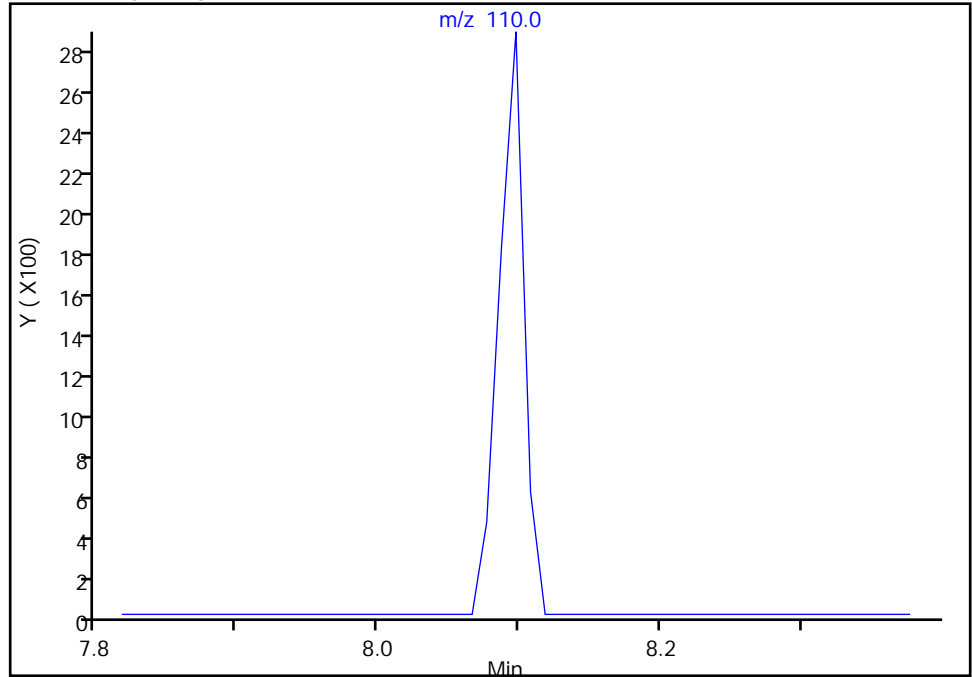
Euofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

100 1,2,3-Trichloropropane, CAS: 96-18-4
Signal: 1

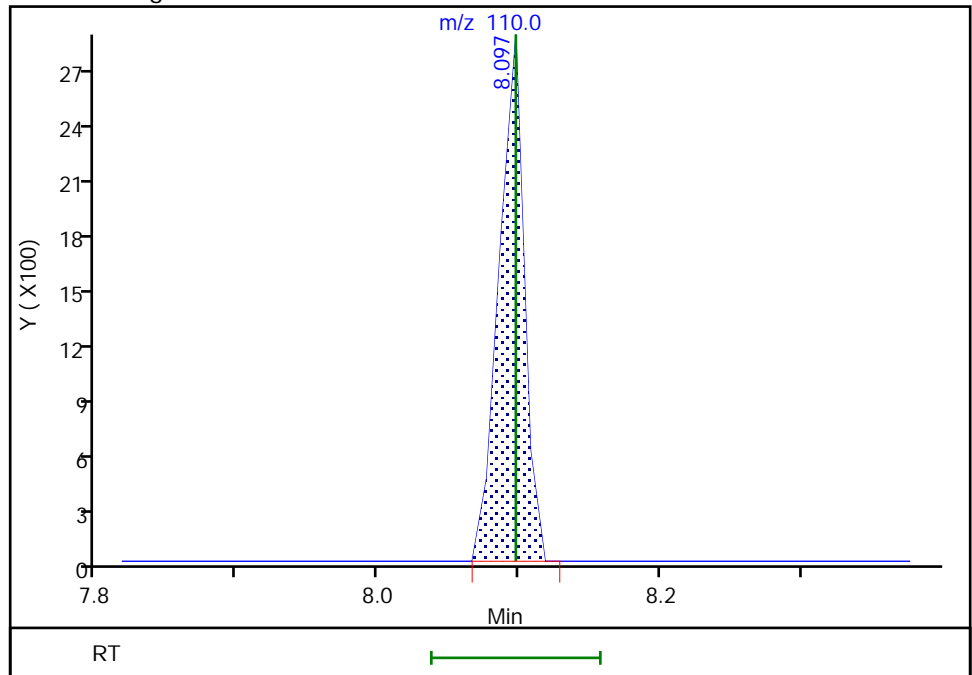
Not Detected
Expected RT: 8.10

Processing Integration Results



RT: 8.10
Area: 3526
Amount: 0.936404
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:43:36
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

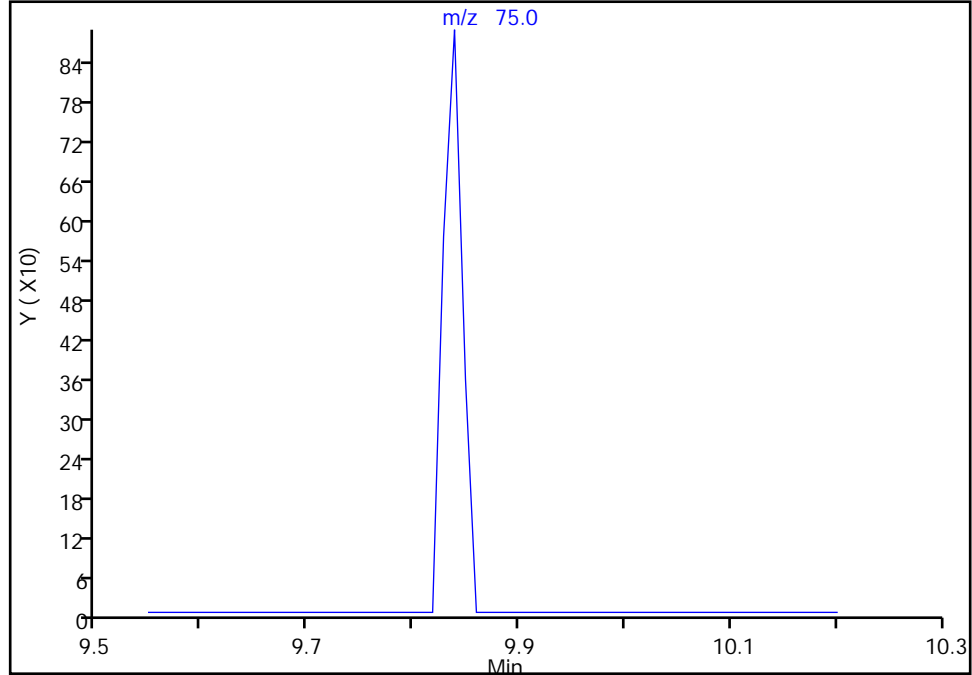
Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2788.D
Injection Date: 08-Jul-2019 15:10:30 Instrument ID: HP5975T
Lims ID: IC
Client ID:
Operator ID: KN ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8
Signal: 1

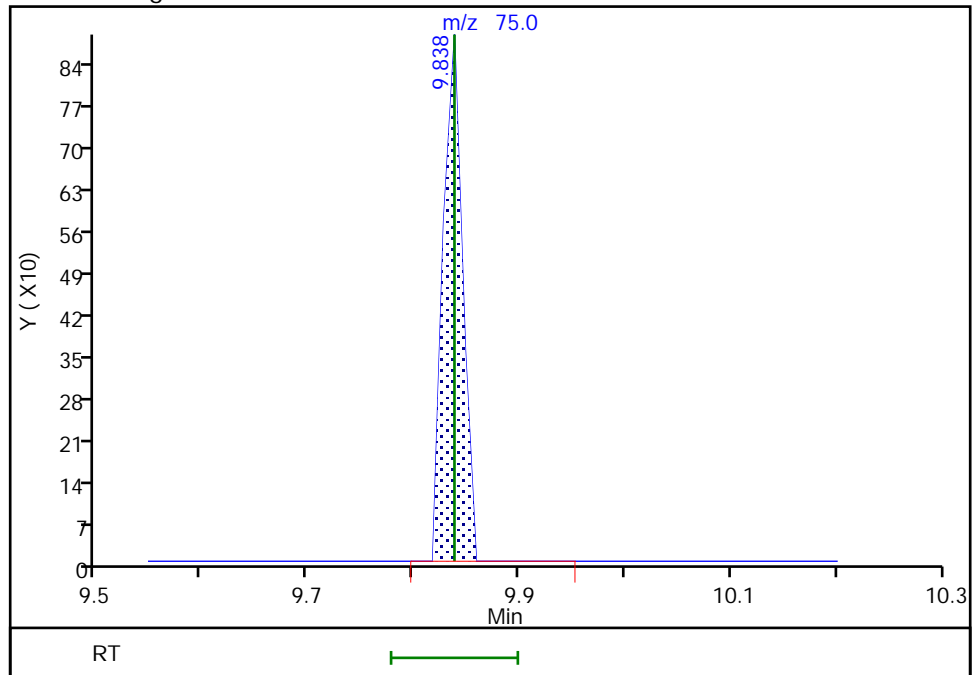
Not Detected
Expected RT: 9.84

Processing Integration Results



RT: 9.84
Area: 1125
Amount: 0.867271
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:44:30
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
 Lims ID: IC 2
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 08-Jul-2019 15:35:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 2
 Misc. Info.: 480-0082467-007
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:09 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:48:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	161369	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	694998	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	396109	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.222	0.000	93	217195	25.0	24.4	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.460	0.000	0	260344	25.0	25.4	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.849	0.010	92	863284	25.0	25.3	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	287989	25.0	25.2	
11 Dichlorodifluoromethane	85	1.154	1.144	0.010	97	22034	2.00	2.05	
13 Chloromethane	50	1.289	1.289	0.000	97	21616	2.00	2.17	
151 Butadiene	54	1.361	1.361	0.000	87	19063	2.00	2.18	
14 Vinyl chloride	62	1.372	1.382	-0.010	96	21956	2.00	2.15	
15 Bromomethane	94	1.620	1.620	0.000	94	18500	2.00	2.18	M
16 Chloroethane	64	1.672	1.672	0.000	98	14454	2.00	2.12	M
18 Dichlorofluoromethane	67	1.890	1.890	0.000	95	36183	2.00	2.13	M
17 Trichlorofluoromethane	101	1.890	1.890	0.000	76	37320	2.00	2.17	
19 Ethyl ether	59	2.128	2.128	0.000	88	17678	2.00	2.22	
21 Acrolein	56	2.304	2.304	0.000	95	16482	10.0	11.6	
22 1,1-Dichloroethene	96	2.325	2.335	-0.010	98	15749	2.00	2.13	
20 1,1,2-Trichloro-1,2,2-trif	101	2.315	2.335	-0.020	68	18077	2.00	2.30	
23 Acetone	43	2.449	2.449	0.000	20	27274	10.0	10.9	M
24 Iodomethane	142	2.481	2.481	-0.001	100	34779	2.00	2.15	
25 Carbon disulfide	76	2.512	2.512	0.000	99	53439	2.00	2.19	
27 3-Chloro-1-propene	41	2.667	2.667	0.000	85	21700	2.00	2.13	
28 Methyl acetate	43	2.708	2.709	-0.001	96	29403	4.00	4.41	M
30 Methylene Chloride	84	2.802	2.802	0.000	92	22298	2.00	2.07	
31 2-Methyl-2-propanol	59	2.988	2.978	0.010	52	21689	20.0	20.1	
33 Methyl tert-butyl ether	73	2.999	2.988	0.011	91	51568	2.00	2.06	
32 trans-1,2-Dichloroethene	96	2.999	2.999	0.000	98	18191	2.00	2.09	
34 Acrylonitrile	53	3.061	3.061	0.000	98	75471	20.0	20.8	
35 Hexane	57	3.154	3.165	-0.011	87	27059	2.00	2.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.361	3.361	0.000	96	31604	2.00	2.24	
39 Vinyl acetate	43	3.403	3.403	0.000	97	52046	4.00	3.88	
42 2,2-Dichloropropane	77	3.797	3.807	-0.010	88	23959	2.00	2.10	
43 cis-1,2-Dichloroethene	96	3.828	3.838	-0.010	80	20252	2.00	2.07	
44 2-Butanone (MEK)	43	3.859	3.859	0.000	98	44266	10.0	10.6	
47 Chlorobromomethane	128	4.025	4.025	0.000	87	11769	2.00	2.17	
48 Tetrahydrofuran	42	4.045	4.035	0.010	87	13083	4.00	4.20	
50 Chloroform	83	4.087	4.097	-0.010	94	33597	2.00	2.23	
51 1,1,1-Trichloroethane	97	4.180	4.180	0.000	90	22926	2.00	2.09	
52 Cyclohexane	56	4.180	4.180	0.000	86	29352	2.00	2.21	
54 1,1-Dichloropropene	75	4.294	4.294	0.000	94	24799	2.00	2.27	
53 Carbon tetrachloride	117	4.294	4.294	0.000	93	17527	2.00	2.10	
55 Benzene	78	4.460	4.470	-0.010	55	74074	2.00	2.19	
56 Isobutyl alcohol	43	4.491	4.491	0.000	89	12990	50.0	45.2	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	97	27140	2.00	2.27	
59 n-Heptane	43	4.605	4.605	0.000	90	27046	2.00	2.25	
60 Trichloroethene	95	4.947	4.947	0.000	90	19367	2.00	2.14	
62 Methylcyclohexane	83	5.040	5.040	0.000	88	32638	2.00	2.27	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	93	18056	2.00	2.20	
65 Dibromomethane	93	5.247	5.247	0.000	91	11197	2.00	1.98	
66 1,4-Dioxane	88	5.258	5.258	0.000	35	6678	40.0	45.2	a
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	15423	2.00	1.88	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	93	13024	2.00	2.12	
71 cis-1,3-Dichloropropene	75	5.683	5.683	0.000	95	23526	2.00	1.92	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	93988	10.0	10.3	
73 Toluene	92	5.900	5.900	0.000	98	48019	2.00	2.13	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	88	21424	2.00	1.91	
77 Ethyl methacrylate	69	6.149	6.149	0.000	87	20815	2.00	2.02	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	89	14413	2.00	2.13	
79 Tetrachloroethene	166	6.304	6.305	-0.001	95	21406	2.00	2.18	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	87	31342	2.00	2.24	
81 2-Hexanone	43	6.429	6.429	0.000	96	63818	10.0	10.2	
82 Chlorodibromomethane	129	6.564	6.564	0.000	87	10490	2.00	1.93	a
83 Ethylene Dibromide	107	6.646	6.647	0.000	100	16957	2.00	2.03	
86 Chlorobenzene	112	6.999	6.999	0.000	96	55264	2.00	2.14	
88 Ethylbenzene	91	7.061	7.061	0.000	97	90664	2.00	2.18	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	85	12179	2.00	1.87	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	37413	2.00	2.23	
91 o-Xylene	106	7.465	7.465	0.000	96	36076	2.00	2.15	
92 Styrene	104	7.486	7.486	0.000	96	59279	2.00	2.09	
93 Bromoform	173	7.683	7.683	0.000	93	6062	2.00	1.96	a
95 Isopropylbenzene	105	7.745	7.755	-0.010	95	92240	2.00	2.16	
97 Bromobenzene	156	8.025	8.025	0.000	88	25099	2.00	2.12	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	96	22162	2.00	2.01	
99 N-Propylbenzene	91	8.077	8.077	0.000	98	105296	2.00	2.12	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	88	8227	2.00	2.15	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	71	6530	2.00	2.03	
105 2-Chlorotoluene	126	8.170	8.170	0.000	97	21961	2.00	2.03	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	94	77053	2.00	2.12	
102 4-Chlorotoluene	91	8.253	8.253	0.000	95	73144	2.00	2.11	
106 tert-Butylbenzene	134	8.481	8.481	0.000	92	17604	2.00	2.04	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	95	77363	2.00	2.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	93	99919	2.00	2.14	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	96	87673	2.00	2.14	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	97	47683	2.00	2.06	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	95	49372	2.00	2.09	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	77346	2.00	2.16	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	98	47343	2.00	2.07	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	79	2422	2.00	1.84	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	93	33076	2.00	1.98	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	95	13785	2.00	1.94	
121 Naphthalene	128	10.688	10.688	0.000	96	97407	2.00	2.06	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	95	34508	2.00	2.06	
S 123 1,3-Dichloropropene, Total	1				0			3.83	
S 125 Total BTEX	1				0			10.9	
S 126 Xylenes, Total	1				0			4.38	
S 124 1,2-Dichloroethene, Total	1				0			4.16	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GAS CORP mix_00349

Amount Added: 2.00

Units: uL

8260 CORP mix_00159

Amount Added: 2.00

Units: uL

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00222

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D

Injection Date: 08-Jul-2019 15:35:30

Instrument ID: HP5975T

Operator ID: KN

Lims ID: IC 2

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

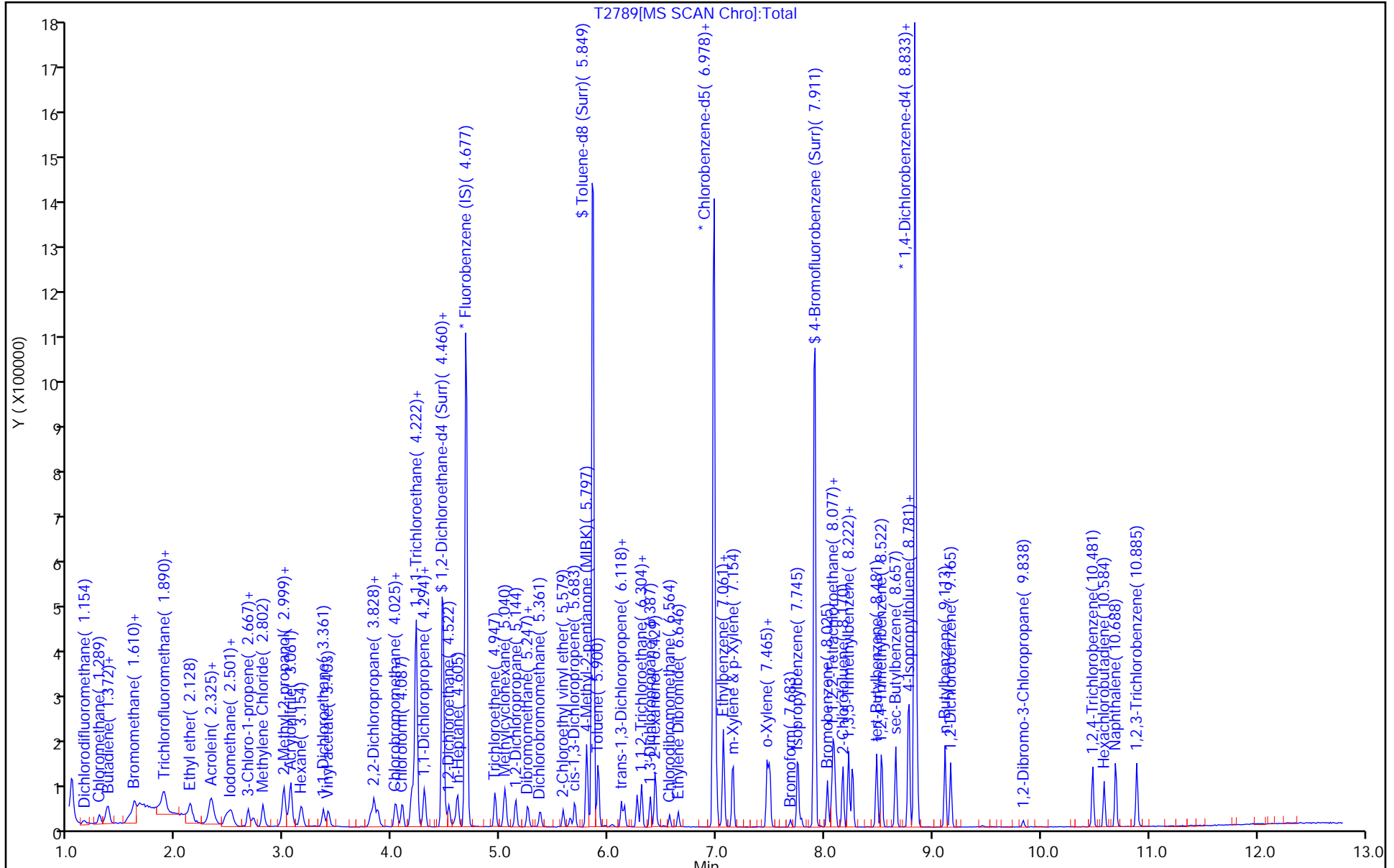
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

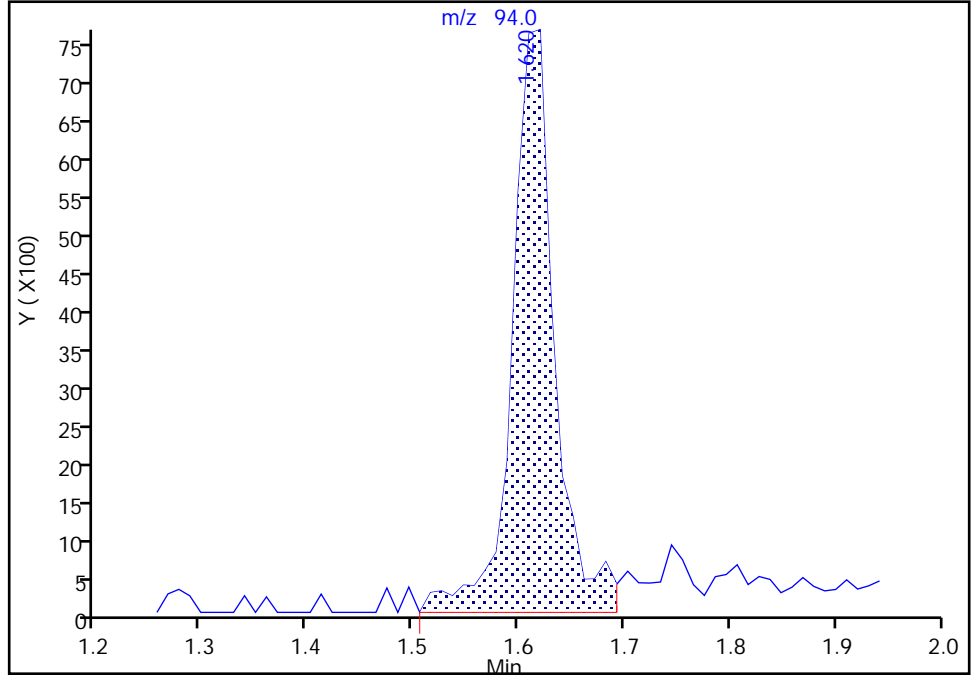
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Signal: 1

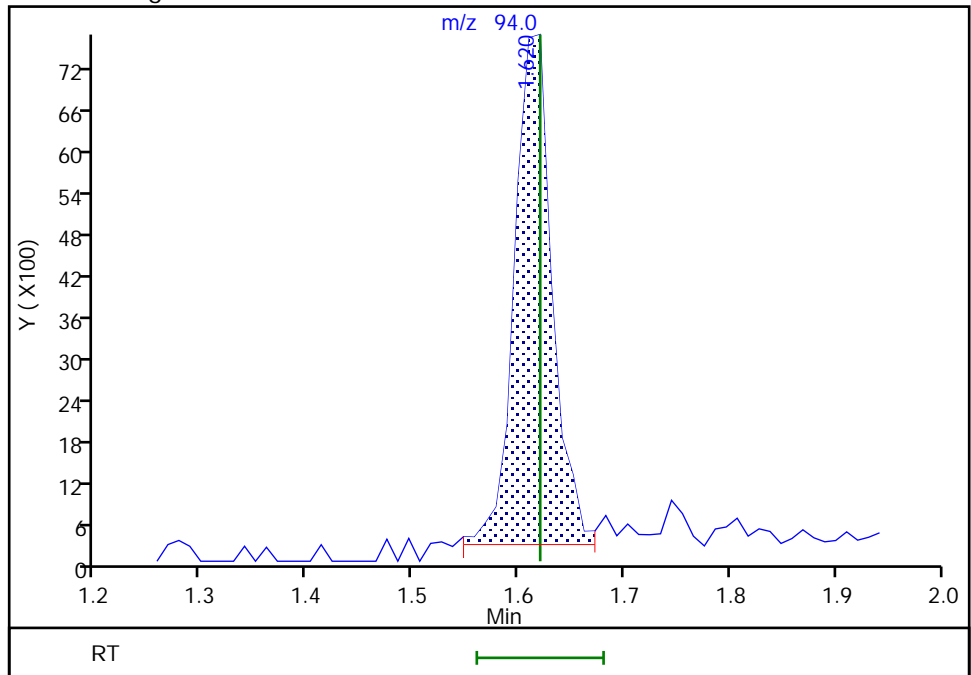
RT: 1.62
Area: 21580
Amount: 2.479617
Amount Units: ug/L

Processing Integration Results



RT: 1.62
Area: 18500
Amount: 2.180843
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:06:04
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

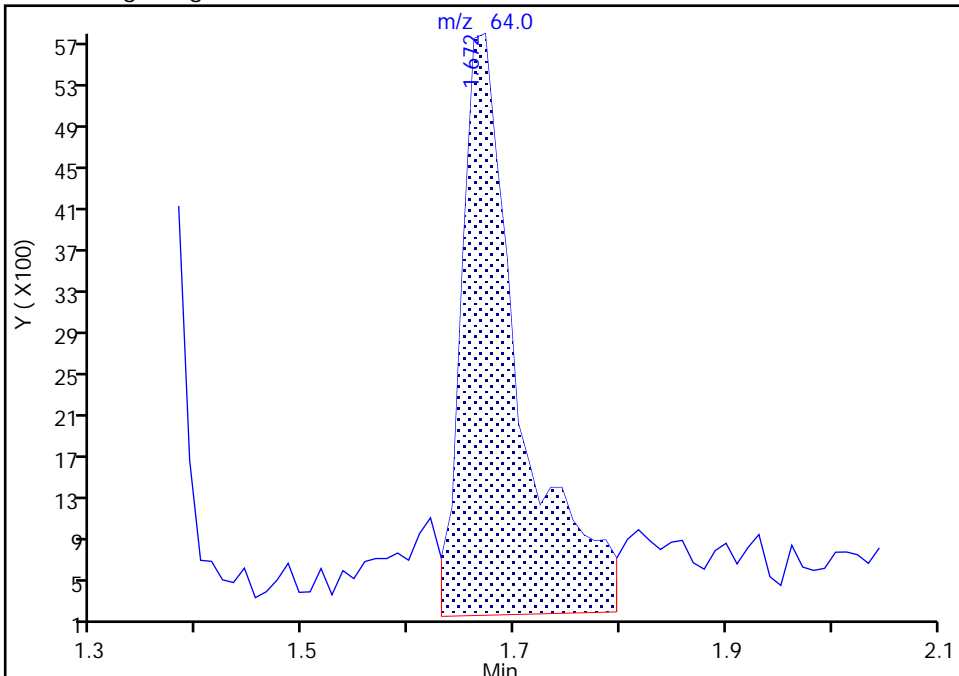
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

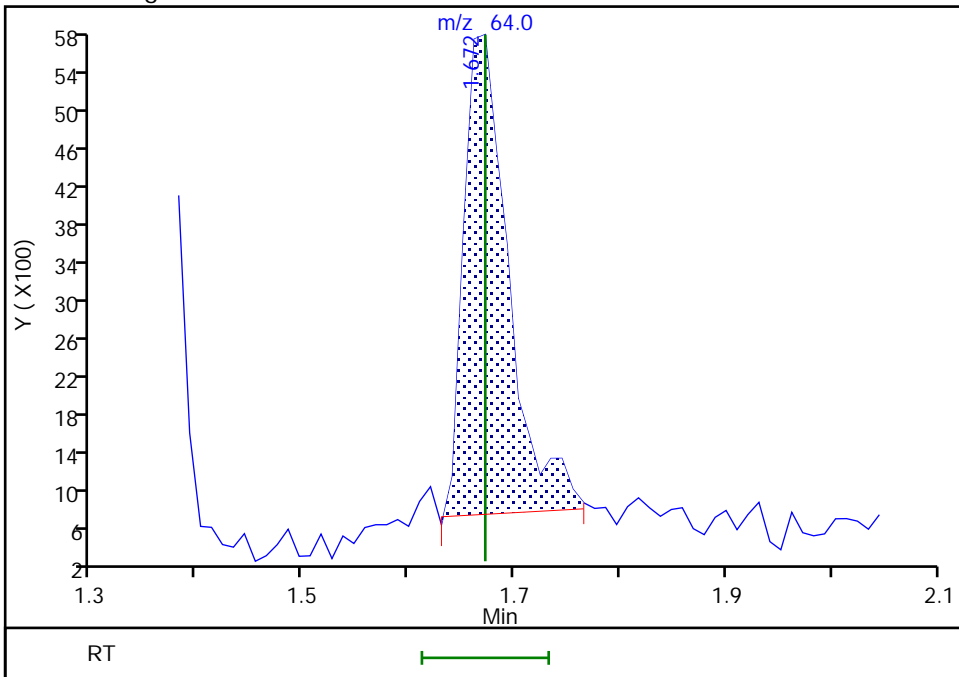
RT: 1.67
Area: 21393
Amount: 2.919768
Amount Units: ug/L

Processing Integration Results



RT: 1.67
Area: 14454
Amount: 2.115846
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:03:06
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

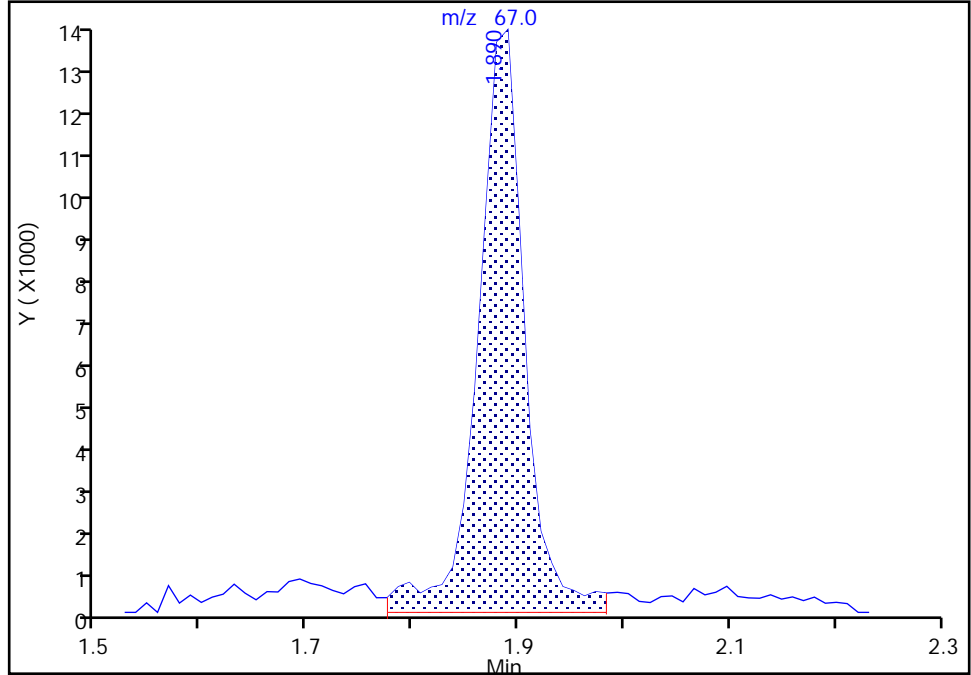
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

18 Dichlorofluoromethane, CAS: 75-43-4

Signal: 1

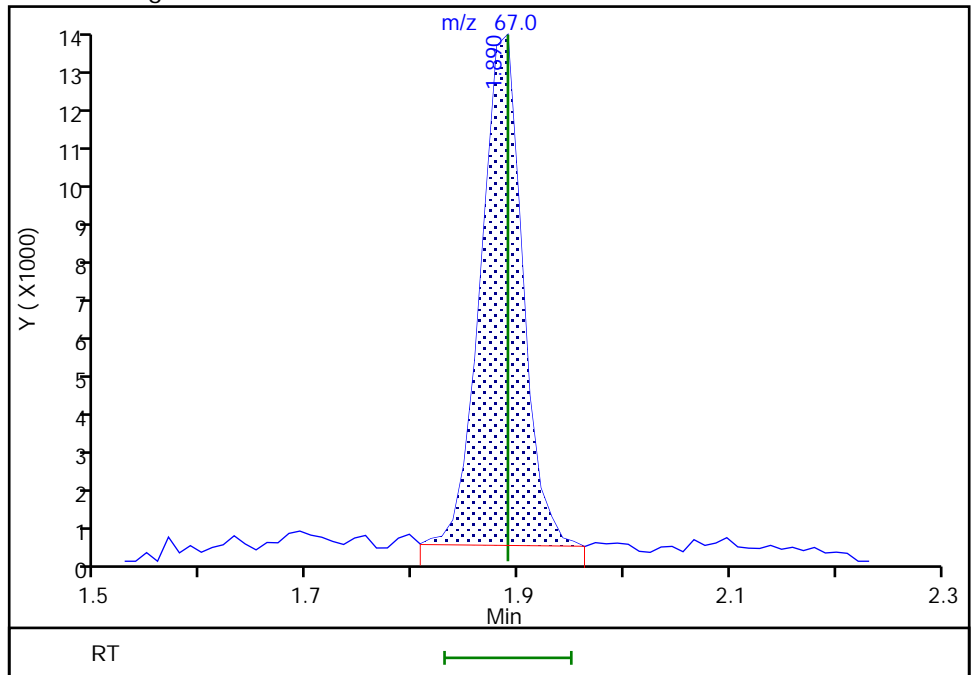
RT: 1.89
Area: 41840
Amount: 2.411050
Amount Units: ug/L

Processing Integration Results



RT: 1.89
Area: 36183
Amount: 2.134771
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:06:25
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

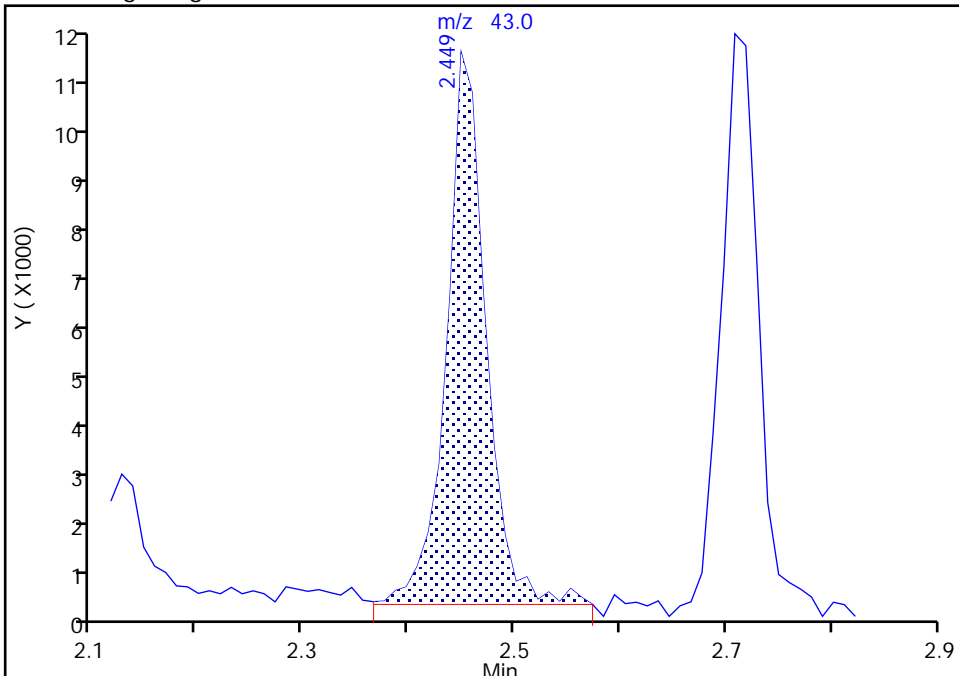
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

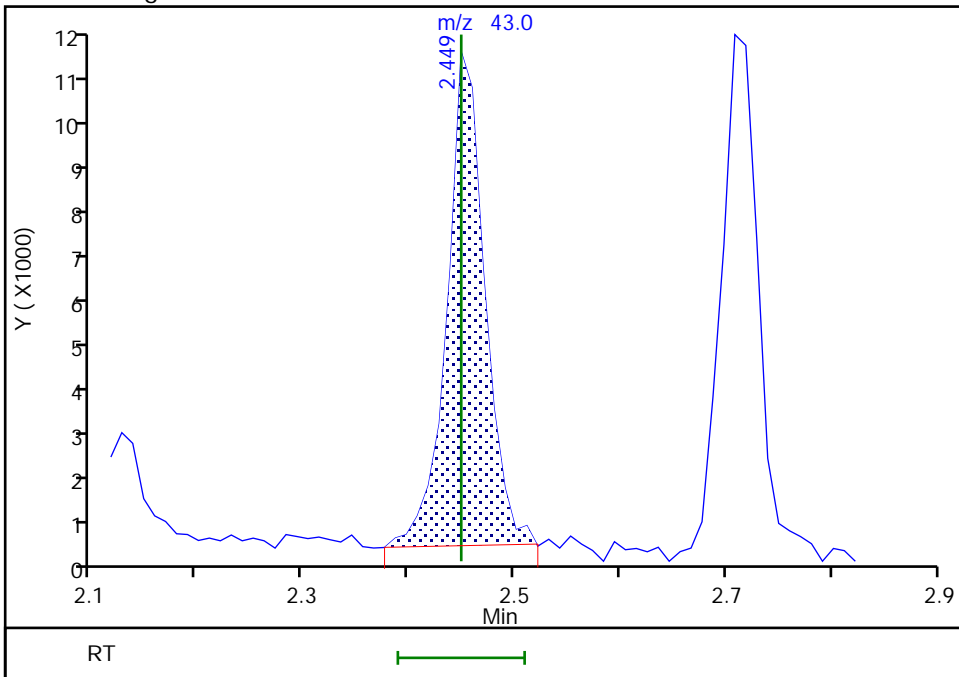
RT: 2.45
Area: 28764
Amount: 11.438005
Amount Units: ug/L

Processing Integration Results



RT: 2.45
Area: 27274
Amount: 10.938089
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 10:08:01
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Euofins TestAmerica, Buffalo

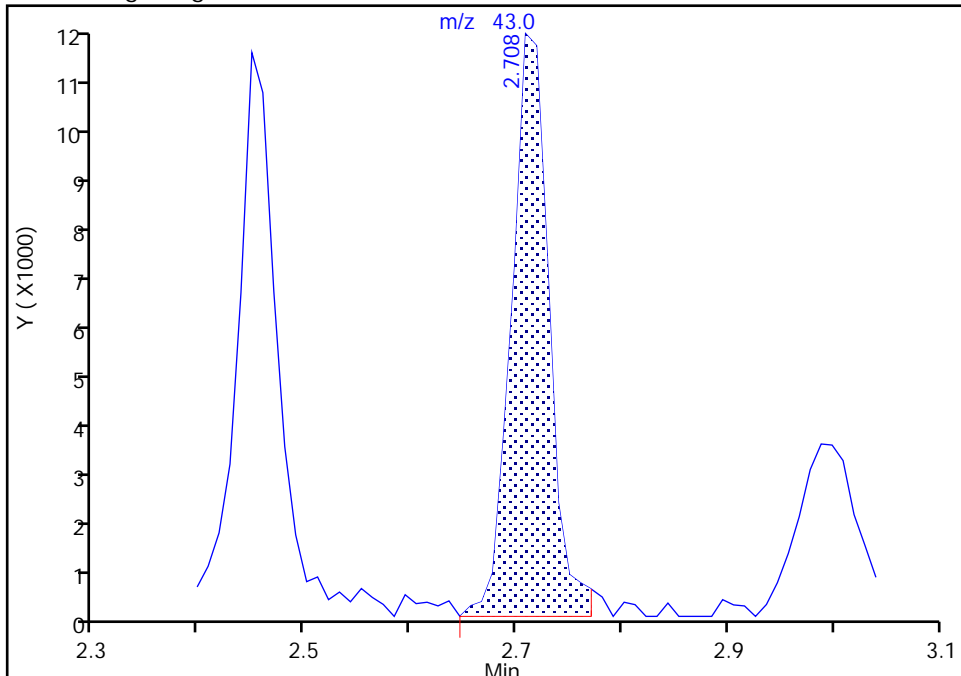
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

28 Methyl acetate, CAS: 79-20-9

Signal: 1

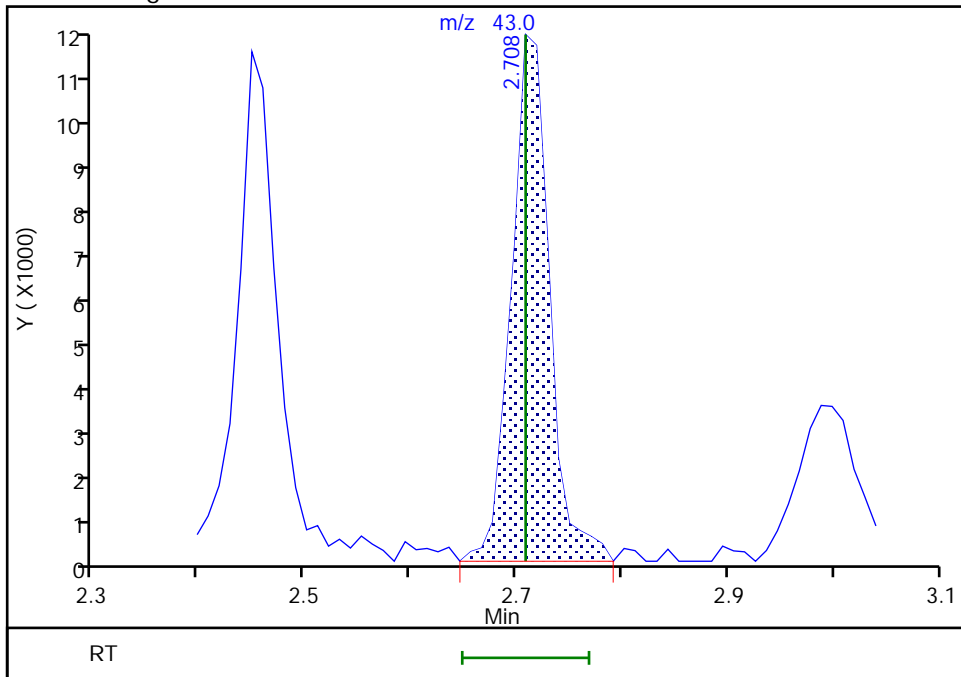
RT: 2.71
Area: 29159
Amount: 4.377200
Amount Units: ug/L

Processing Integration Results



RT: 2.71
Area: 29403
Amount: 4.408061
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:45:33
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

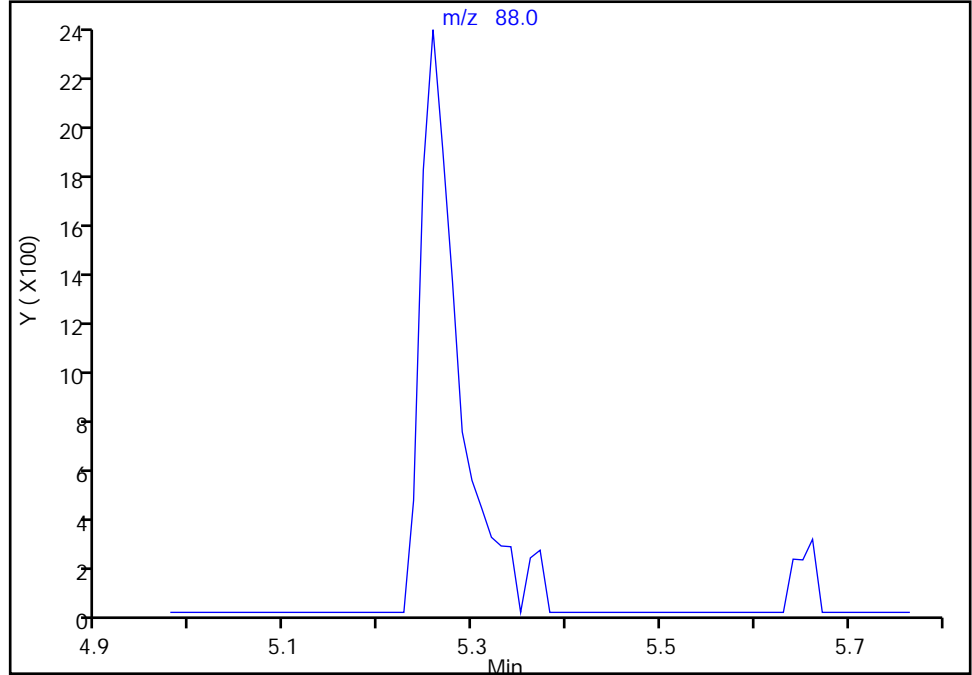
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

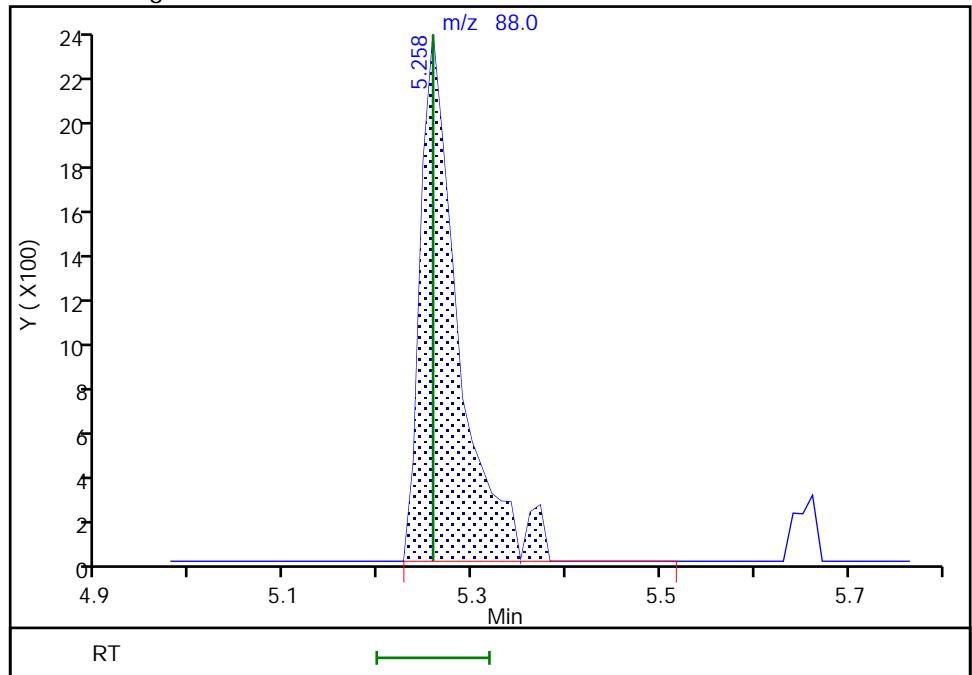
Not Detected
Expected RT: 5.26

Processing Integration Results



Manual Integration Results

RT: 5.26
Area: 6678
Amount: 45.173020
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:46:02
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

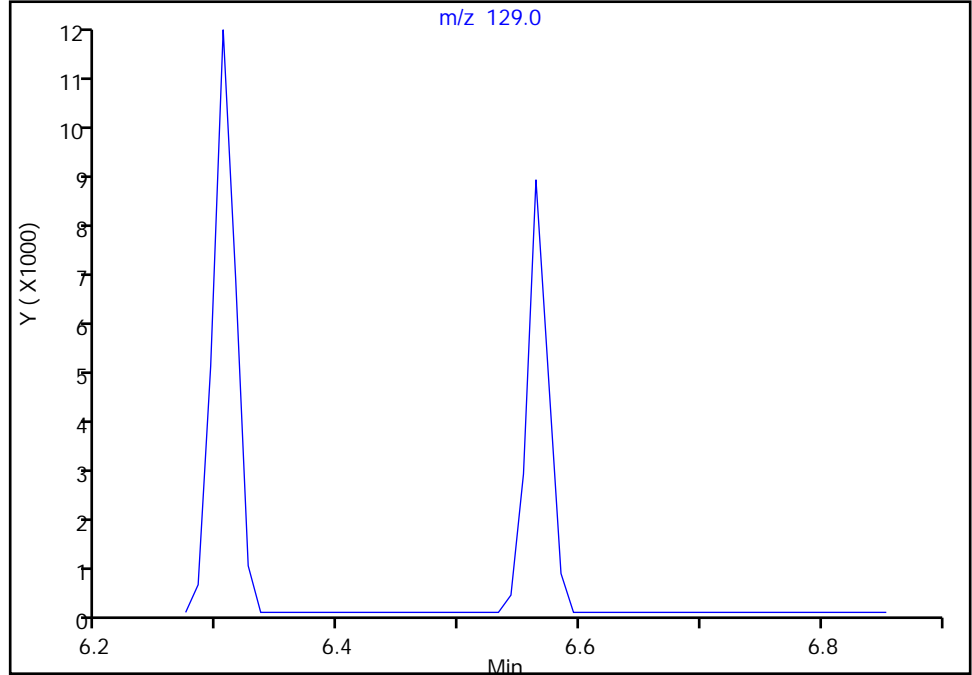
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

82 Chlorodibromomethane, CAS: 124-48-1

Signal: 1

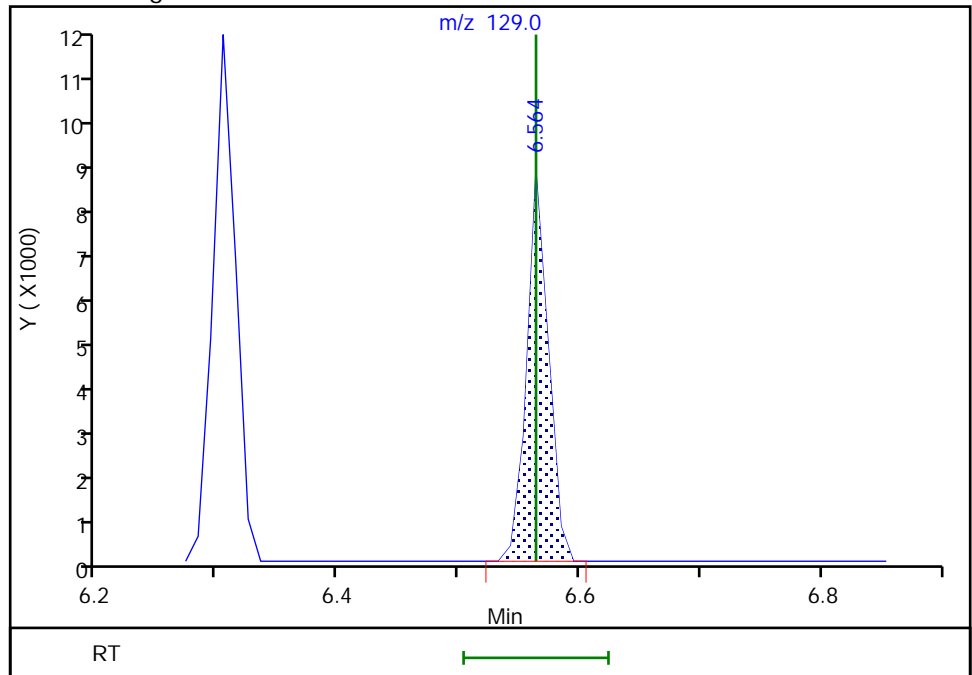
Not Detected
Expected RT: 6.56

Processing Integration Results



RT: 6.56
Area: 10490
Amount: 1.929808
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:46:14
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

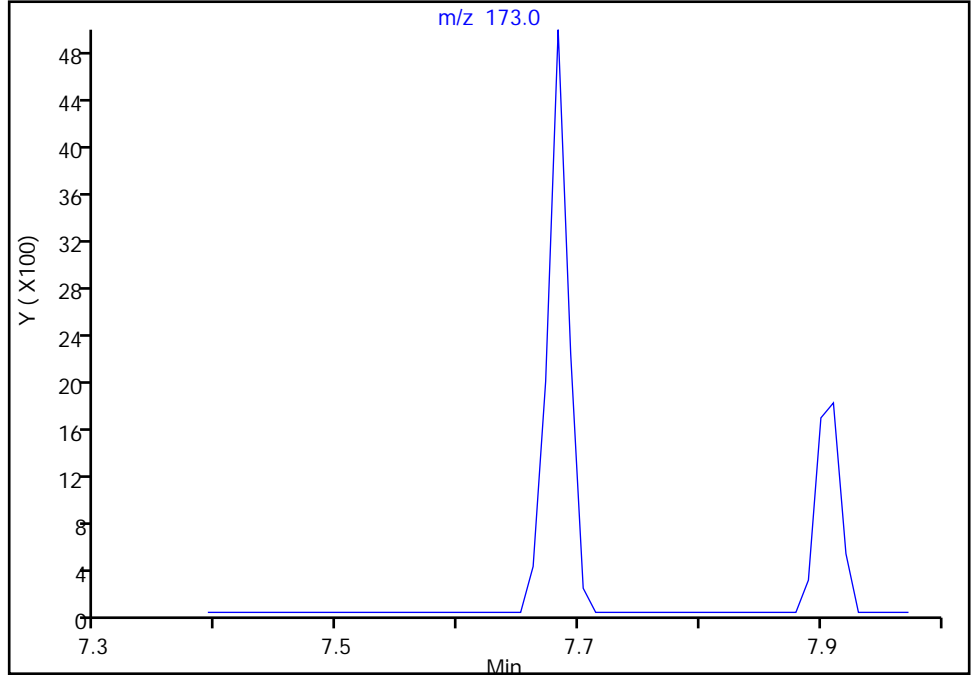
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2789.D
Injection Date: 08-Jul-2019 15:35:30 Instrument ID: HP5975T
Lims ID: IC 2
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

93 Bromoform, CAS: 75-25-2

Signal: 1

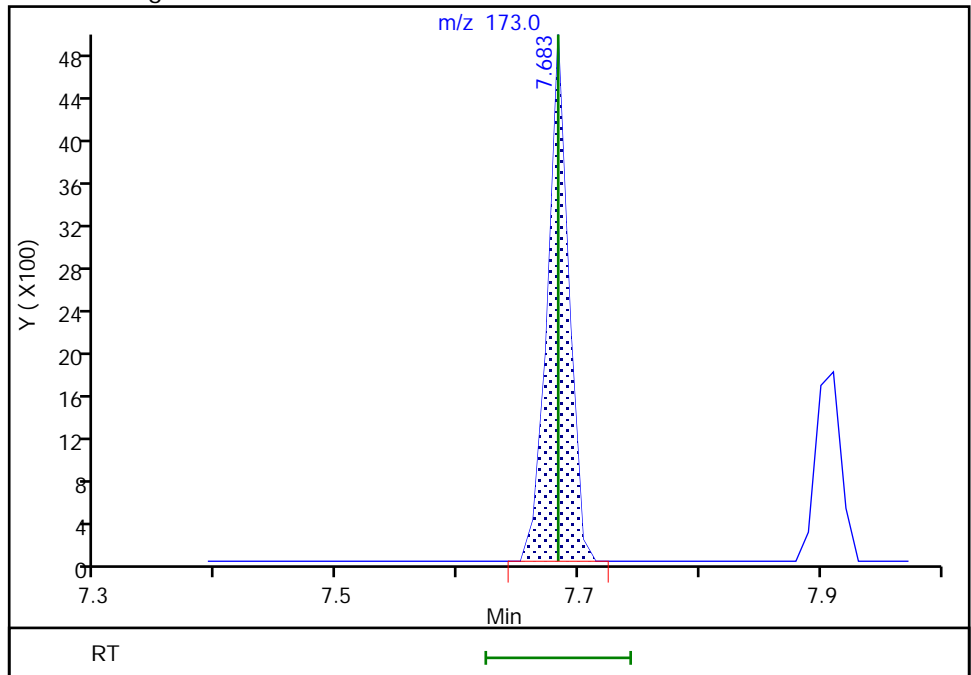
Not Detected
Expected RT: 7.68

Processing Integration Results



Manual Integration Results

RT: 7.68
Area: 6062
Amount: 1.958546
Amount Units: ug/L



Reviewer: farrellr, 09-Jul-2019 08:46:37
Audit Action: Assigned Compound ID

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2790.D
 Lims ID: IC 3
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 08-Jul-2019 15:59:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 3
 Misc. Info.: 480-0082467-008
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:17 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:52:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	157769	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	85	681080	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	382792	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.222	0.000	94	217954	25.0	25.0	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.460	0.010	0	253743	25.0	25.3	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.849	0.010	93	841439	25.0	25.2	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	273939	25.0	24.5	
11 Dichlorodifluoromethane	85	1.164	1.144	0.020	99	45292	5.00	4.30	
13 Chloromethane	50	1.299	1.289	0.010	99	42064	5.00	4.32	
151 Butadiene	54	1.361	1.361	0.000	87	38610	5.00	4.51	
14 Vinyl chloride	62	1.382	1.382	0.000	97	43167	5.00	4.32	
15 Bromomethane	94	1.620	1.620	0.000	93	40856	5.00	4.93	
16 Chloroethane	64	1.683	1.672	0.011	98	36491	5.00	5.46	
18 Dichlorofluoromethane	67	1.890	1.890	0.000	96	81667	5.00	4.93	
17 Trichlorofluoromethane	101	1.900	1.890	0.010	73	76788	5.00	4.56	
19 Ethyl ether	59	2.139	2.128	0.011	89	37021	5.00	4.75	
21 Acrolein	56	2.315	2.304	0.011	99	32112	25.0	23.2	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.335	0.000	64	38901	5.00	5.06	M
22 1,1-Dichloroethene	96	2.335	2.335	0.000	98	33073	5.00	4.57	
23 Acetone	43	2.460	2.449	0.011	100	55750	25.0	22.9	
24 Iodomethane	142	2.481	2.481	-0.001	98	73748	5.00	4.65	
25 Carbon disulfide	76	2.522	2.512	0.010	99	112088	5.00	4.69	
27 3-Chloro-1-propene	41	2.677	2.667	0.010	85	45627	5.00	4.59	
28 Methyl acetate	43	2.719	2.709	0.010	97	58757	10.0	9.01	
30 Methylene Chloride	84	2.812	2.802	0.010	87	44863	5.00	4.79	
31 2-Methyl-2-propanol	59	2.988	2.978	0.010	50	45064	50.0	42.8	
33 Methyl tert-butyl ether	73	2.999	2.988	0.011	96	111581	5.00	4.55	
32 trans-1,2-Dichloroethene	96	2.999	2.999	0.000	97	39777	5.00	4.68	
34 Acrylonitrile	53	3.061	3.061	0.000	98	161230	50.0	45.4	
35 Hexane	57	3.164	3.165	-0.001	90	56940	5.00	4.87	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.372	3.361	0.011	96	64653	5.00	4.68	
39 Vinyl acetate	43	3.403	3.403	0.000	97	107263	10.0	8.17	
42 2,2-Dichloropropane	77	3.807	3.807	0.000	89	52727	5.00	4.73	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	81	43164	5.00	4.52	
44 2-Butanone (MEK)	43	3.869	3.859	0.010	99	92190	25.0	22.5	
47 Chlorobromomethane	128	4.035	4.025	0.010	88	24291	5.00	4.59	
48 Tetrahydrofuran	42	4.045	4.035	0.010	86	26151	10.0	8.58	M
50 Chloroform	83	4.097	4.097	0.000	94	68044	5.00	4.61	
51 1,1,1-Trichloroethane	97	4.190	4.180	0.010	87	48963	5.00	4.57	
52 Cyclohexane	56	4.190	4.180	0.010	89	61745	5.00	4.75	
54 1,1-Dichloropropene	75	4.304	4.294	0.010	94	48873	5.00	4.58	
53 Carbon tetrachloride	117	4.294	4.294	0.000	96	33480	5.00	4.09	
55 Benzene	78	4.470	4.470	0.000	70	152148	5.00	4.60	
56 Isobutyl alcohol	43	4.491	4.491	0.000	90	28795	125.0	102.4	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	97	53643	5.00	4.59	
59 n-Heptane	43	4.605	4.605	0.000	89	59425	5.00	5.07	
60 Trichloroethene	95	4.947	4.947	0.000	94	39116	5.00	4.42	
62 Methylcyclohexane	83	5.040	5.040	0.000	87	69182	5.00	4.92	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	92	36149	5.00	4.50	
65 Dibromomethane	93	5.247	5.247	0.000	92	26183	5.00	4.73	
66 1,4-Dioxane	88	5.258	5.258	0.000	45	13411	100.0	92.6	
67 Dichlorobromomethane	83	5.372	5.372	0.000	99	35030	5.00	4.36	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	92	27103	5.00	4.51	
71 cis-1,3-Dichloropropene	75	5.683	5.683	0.000	96	52991	5.00	4.43	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	200454	25.0	22.4	
73 Toluene	92	5.900	5.900	0.000	98	100905	5.00	4.58	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	90	47959	5.00	4.37	
77 Ethyl methacrylate	69	6.149	6.149	0.000	89	41783	5.00	4.14	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	91	29998	5.00	4.52	
79 Tetrachloroethene	166	6.304	6.305	-0.001	96	44314	5.00	4.60	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	89	60054	5.00	4.39	
81 2-Hexanone	43	6.429	6.429	0.000	95	139201	25.0	22.6	
82 Chlorodibromomethane	129	6.564	6.564	0.000	90	21654	5.00	4.07	
83 Ethylene Dibromide	107	6.646	6.647	0.000	99	36771	5.00	4.48	
86 Chlorobenzene	112	6.999	6.999	0.000	96	112591	5.00	4.46	
88 Ethylbenzene	91	7.061	7.061	0.000	98	189208	5.00	4.64	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	89	25516	5.00	4.00	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	74448	5.00	4.53	
91 o-Xylene	106	7.465	7.465	0.000	97	72735	5.00	4.41	
92 Styrene	104	7.496	7.486	0.010	95	128374	5.00	4.63	
93 Bromoform	173	7.683	7.683	0.000	96	12691	5.00	4.18	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	194566	5.00	4.71	
97 Bromobenzene	156	8.025	8.025	0.000	90	50165	5.00	4.38	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	95	48069	5.00	4.52	
99 N-Propylbenzene	91	8.077	8.077	0.000	99	217948	5.00	4.54	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	87	18061	5.00	4.88	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	71	14312	5.00	4.60	
105 2-Chlorotoluene	126	8.170	8.170	0.000	97	47775	5.00	4.56	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	95	157813	5.00	4.49	
102 4-Chlorotoluene	91	8.253	8.253	0.000	97	156940	5.00	4.69	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	37339	5.00	4.49	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	96	167584	5.00	4.58	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	93	211110	5.00	4.68	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	188665	5.00	4.75	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	97	103141	5.00	4.62	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	96	102196	5.00	4.48	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	165116	5.00	4.76	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	98	103158	5.00	4.66	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	81	5280	5.00	4.14	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	74765	5.00	4.62	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	97	30831	5.00	4.49	
121 Naphthalene	128	10.688	10.688	0.000	97	205090	5.00	4.48	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	97	74031	5.00	4.56	
S 123 1,3-Dichloropropene, Total	1				0			8.79	
S 125 Total BTEX	1				0			22.8	
S 126 Xylenes, Total	1				0			8.95	
S 124 1,2-Dichloroethene, Total	1				0			9.20	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00159

Amount Added: 5.00

Units: uL

GAS CORP mix_00349

Amount Added: 5.00

Units: uL

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00222

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2790.D

Injection Date: 08-Jul-2019 15:59:30

Instrument ID: HP5975T

Operator ID: KN

Lims ID: IC 3

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

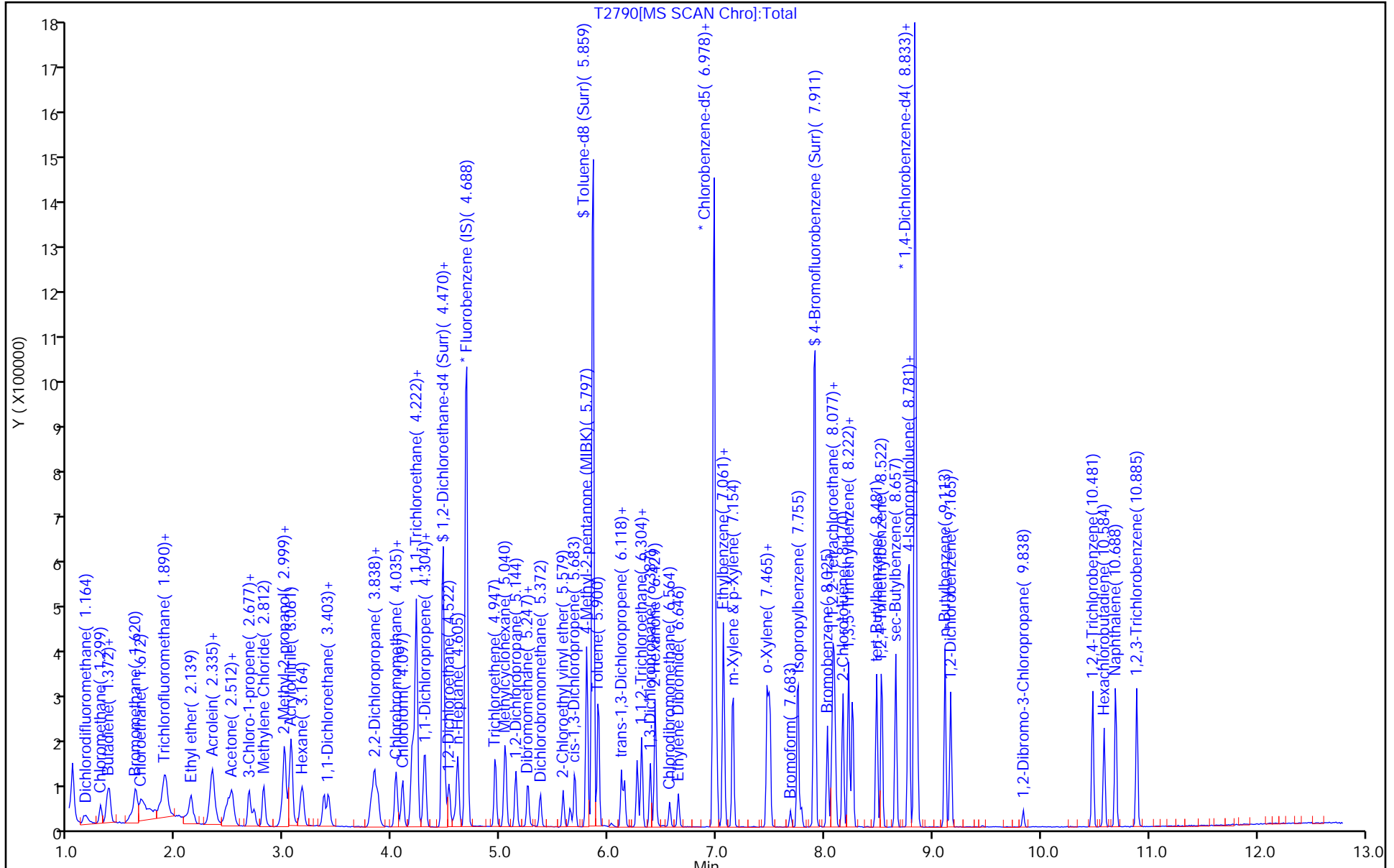
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Euofins TestAmerica, Buffalo

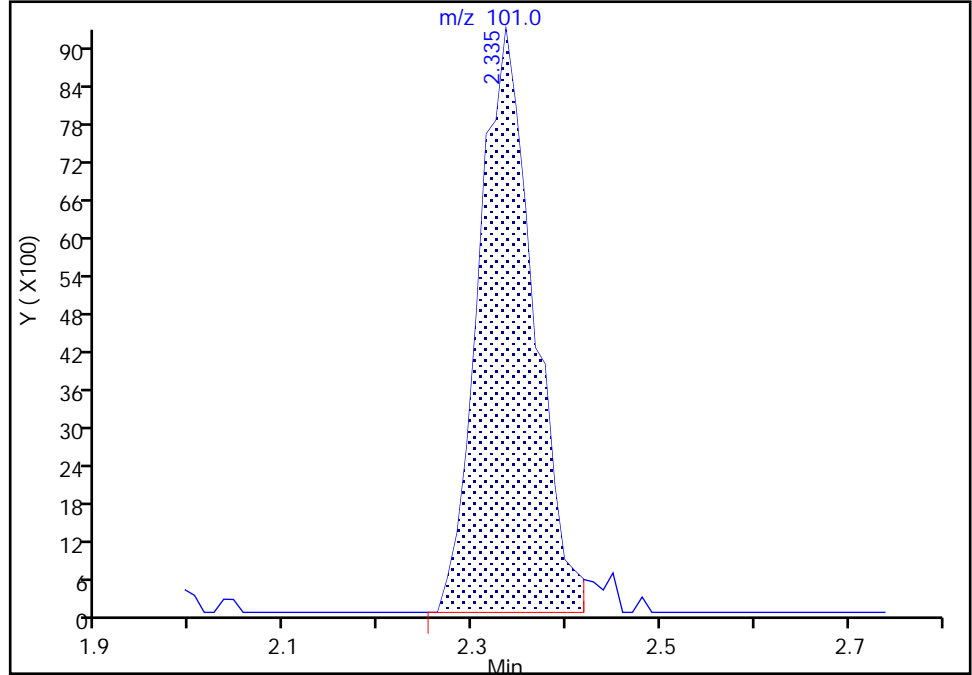
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2790.D
Injection Date: 08-Jul-2019 15:59:30 Instrument ID: HP5975T
Lims ID: IC 3
Client ID:
Operator ID: KN ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

20 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

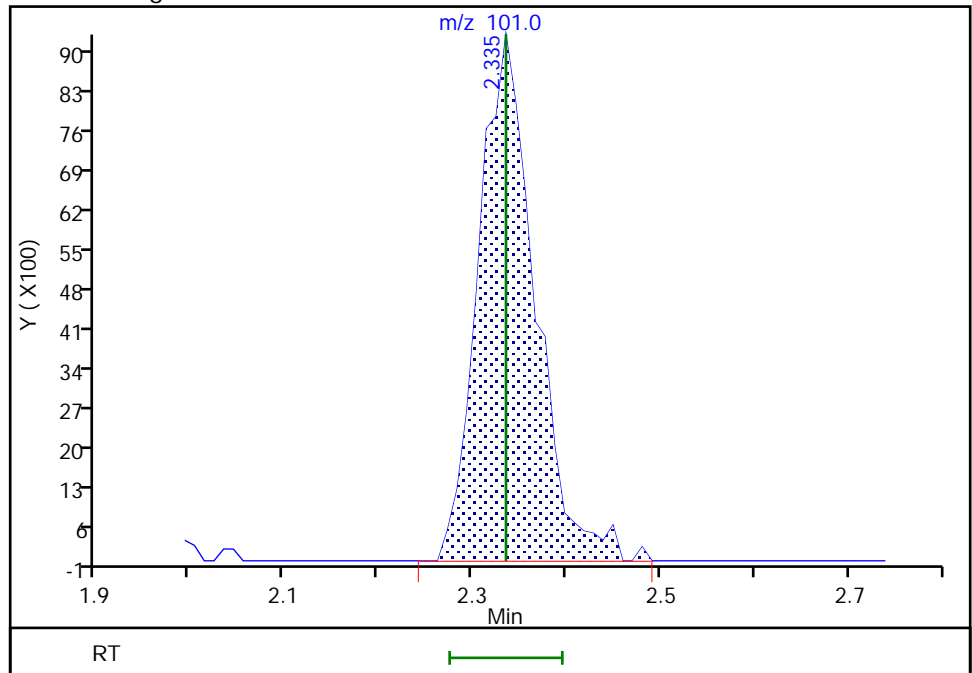
RT: 2.34
Area: 37715
Amount: 4.782685
Amount Units: ug/L

Processing Integration Results



RT: 2.34
Area: 38901
Amount: 5.055689
Amount Units: ug/L

Manual Integration Results



Reviewer: HillL, 09-Jul-2019 11:48:09
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

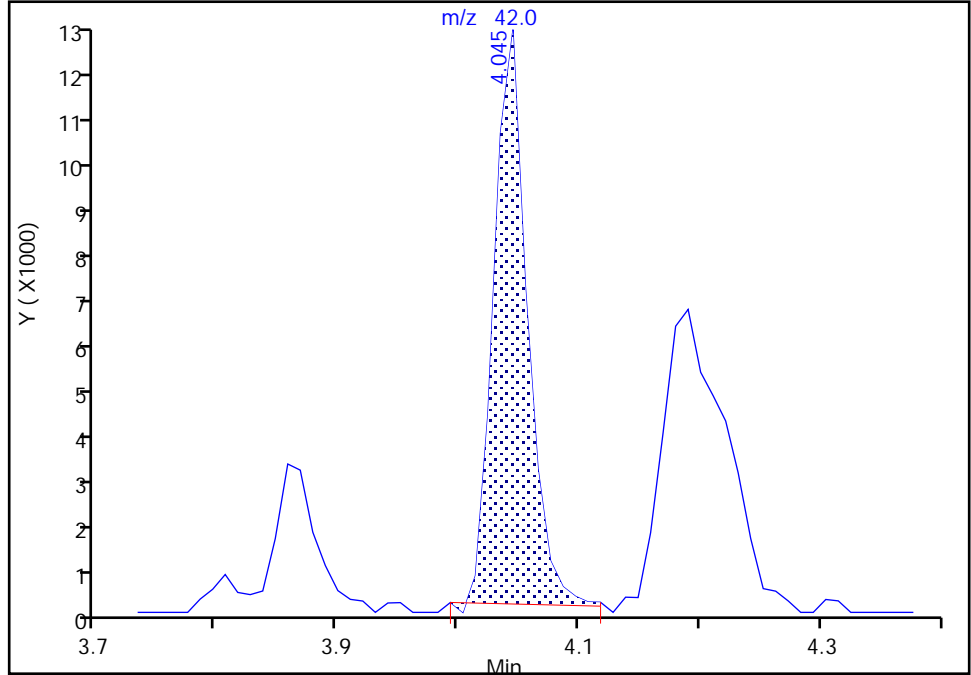
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2790.D
Injection Date: 08-Jul-2019 15:59:30 Instrument ID: HP5975T
Lims ID: IC 3
Client ID:
Operator ID: KN ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

48 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

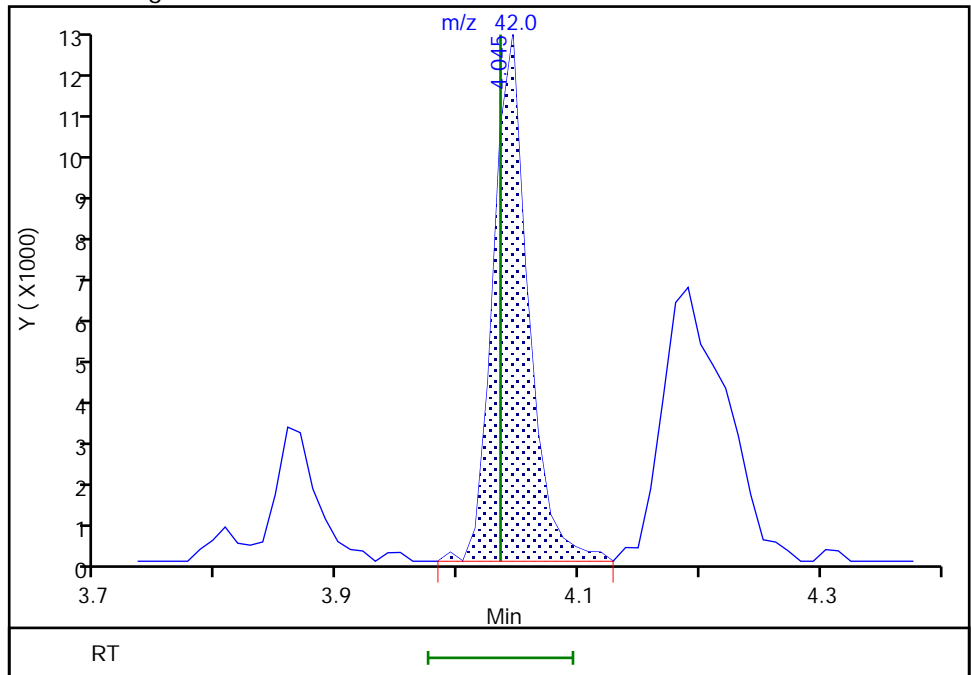
RT: 4.05
Area: 24699
Amount: 8.162596
Amount Units: ug/L

Processing Integration Results



RT: 4.05
Area: 26151
Amount: 8.583458
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:50:35
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2791.D
 Lims ID: IC 4
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 08-Jul-2019 16:23:30 ALS Bottle#: 9 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 4
 Misc. Info.: 480-0082467-009
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:23 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:56:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	166052	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	85	709993	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	402252	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.222	-0.001	95	227369	25.0	24.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.460	0.010	0	265836	25.0	25.2	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.849	0.010	93	868762	25.0	25.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	288304	25.0	24.7	
11 Dichlorodifluoromethane	85	1.154	1.144	0.010	99	104169	10.0	9.40	
13 Chloromethane	50	1.299	1.289	0.010	98	97420	10.0	9.51	
151 Butadiene	54	1.372	1.361	0.011	88	84239	10.0	9.35	
14 Vinyl chloride	62	1.382	1.382	0.000	98	95365	10.0	9.07	
15 Bromomethane	94	1.620	1.620	0.000	93	80826	10.0	9.26	
16 Chloroethane	64	1.672	1.672	0.000	99	68361	10.0	9.72	
18 Dichlorofluoromethane	67	1.890	1.890	0.000	95	169635	10.0	9.73	
17 Trichlorofluoromethane	101	1.900	1.890	0.010	73	171641	10.0	9.69	
19 Ethyl ether	59	2.138	2.128	0.010	91	77290	10.0	9.42	
21 Acrolein	56	2.304	2.304	0.000	98	63357	50.0	43.5	
22 1,1-Dichloroethene	96	2.335	2.335	0.000	98	65277	10.0	8.57	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.335	0.000	65	70515	10.0	8.71	
23 Acetone	43	2.449	2.449	0.000	100	124037	50.0	48.3	
24 Iodomethane	142	2.480	2.481	-0.001	99	148440	10.0	8.90	
25 Carbon disulfide	76	2.512	2.512	0.000	99	217721	10.0	8.66	
27 3-Chloro-1-propene	41	2.667	2.667	0.000	86	90974	10.0	8.69	
28 Methyl acetate	43	2.719	2.709	0.010	97	127937	20.0	18.6	
30 Methylene Chloride	84	2.812	2.802	0.010	91	87069	10.0	9.25	
31 2-Methyl-2-propanol	59	2.988	2.978	0.010	52	98107	100.0	88.4	
33 Methyl tert-butyl ether	73	2.988	2.988	0.000	97	238931	10.0	9.26	
32 trans-1,2-Dichloroethene	96	2.999	2.999	0.000	96	80069	10.0	8.96	
34 Acrylonitrile	53	3.061	3.061	0.000	99	356703	100.0	95.5	
35 Hexane	57	3.164	3.165	-0.001	91	101549	10.0	8.25	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.361	3.361	0.000	96	133056	10.0	9.15	
39 Vinyl acetate	43	3.413	3.403	0.010	97	251084	20.0	18.2	
42 2,2-Dichloropropane	77	3.807	3.807	0.000	89	101681	10.0	8.67	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	80	90188	10.0	8.96	
44 2-Butanone (MEK)	43	3.859	3.859	0.000	99	203133	50.0	47.1	
47 Chlorobromomethane	128	4.025	4.025	0.000	93	49357	10.0	8.86	
48 Tetrahydrofuran	42	4.045	4.035	0.010	83	60971	20.0	19.0	M
50 Chloroform	83	4.097	4.097	0.000	94	140555	10.0	9.06	
51 1,1,1-Trichloroethane	97	4.180	4.180	0.000	86	99313	10.0	8.80	
52 Cyclohexane	56	4.190	4.180	0.010	86	120239	10.0	8.79	
54 1,1-Dichloropropene	75	4.304	4.294	0.010	97	98793	10.0	8.79	
53 Carbon tetrachloride	117	4.294	4.294	0.000	96	68157	10.0	7.92	
55 Benzene	78	4.470	4.470	0.000	91	308357	10.0	8.87	
56 Isobutyl alcohol	43	4.491	4.491	0.000	91	68618	250.0	231.9	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	98	113492	10.0	9.23	
59 n-Heptane	43	4.605	4.605	0.000	90	100767	10.0	8.16	
60 Trichloroethene	95	4.947	4.947	0.000	96	81372	10.0	8.74	
62 Methylcyclohexane	83	5.040	5.040	0.000	89	127919	10.0	8.64	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	95	79121	10.0	9.36	
65 Dibromomethane	93	5.247	5.247	0.000	93	54215	10.0	9.31	
66 1,4-Dioxane	88	5.258	5.258	0.000	46	31184	200.0	206.5	
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	73457	10.0	8.68	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	93	61255	10.0	9.68	
71 cis-1,3-Dichloropropene	75	5.683	5.683	0.000	95	116476	10.0	9.24	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	472510	50.0	50.6	
73 Toluene	92	5.900	5.900	0.000	98	202279	10.0	8.80	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	91	108127	10.0	9.45	
77 Ethyl methacrylate	69	6.149	6.149	0.000	88	99559	10.0	9.47	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	91	65179	10.0	9.43	
79 Tetrachloroethene	166	6.304	6.305	-0.001	97	92176	10.0	9.17	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	89	135211	10.0	9.48	
81 2-Hexanone	43	6.429	6.429	0.000	95	325016	50.0	50.6	
82 Chlorodibromomethane	129	6.563	6.564	-0.001	90	50221	10.0	9.04	
83 Ethylene Dibromide	107	6.646	6.647	0.000	98	81629	10.0	9.55	
86 Chlorobenzene	112	6.999	6.999	0.000	97	246846	10.0	9.38	
88 Ethylbenzene	91	7.061	7.061	0.000	98	386643	10.0	9.10	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	88	57948	10.0	8.72	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	154738	10.0	9.04	
91 o-Xylene	106	7.465	7.465	0.000	97	158540	10.0	9.23	
92 Styrene	104	7.486	7.486	0.000	96	269928	10.0	9.33	
93 Bromoform	173	7.683	7.683	0.000	92	27923	10.0	8.83	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	394143	10.0	9.07	
97 Bromobenzene	156	8.025	8.025	0.000	90	109573	10.0	9.10	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	95	105416	10.0	9.42	
99 N-Propylbenzene	91	8.077	8.077	-0.001	99	458939	10.0	9.09	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	87	38558	10.0	9.92	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	84	32617	10.0	9.97	
105 2-Chlorotoluene	126	8.170	8.170	0.000	98	102984	10.0	9.36	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	95	345392	10.0	9.36	
102 4-Chlorotoluene	91	8.253	8.253	0.000	98	323874	10.0	9.21	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	79547	10.0	9.09	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	96	347809	10.0	9.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	93	425099	10.0	8.98	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	383357	10.0	9.19	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	97	215514	10.0	9.18	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	97	227537	10.0	9.50	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	331808	10.0	9.10	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	99	218219	10.0	9.38	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	81	12928	10.0	9.65	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	95	158279	10.0	9.31	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	96	59744	10.0	8.29	
121 Naphthalene	128	10.688	10.688	0.000	97	465755	10.0	9.69	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	96	158191	10.0	9.28	
S 123 1,3-Dichloropropene, Total	1				0			18.7	
S 125 Total BTEX	1				0			45.0	
S 126 Xylenes, Total	1				0			18.3	
S 124 1,2-Dichloroethene, Total	1				0			17.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00159

Amount Added: 5.00

Units: uL

GAS CORP mix_00349

Amount Added: 5.00

Units: uL

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00222

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2791.D

Injection Date: 08-Jul-2019 16:23:30

Instrument ID: HP5975T

Operator ID: KN

Lims ID: IC 4

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

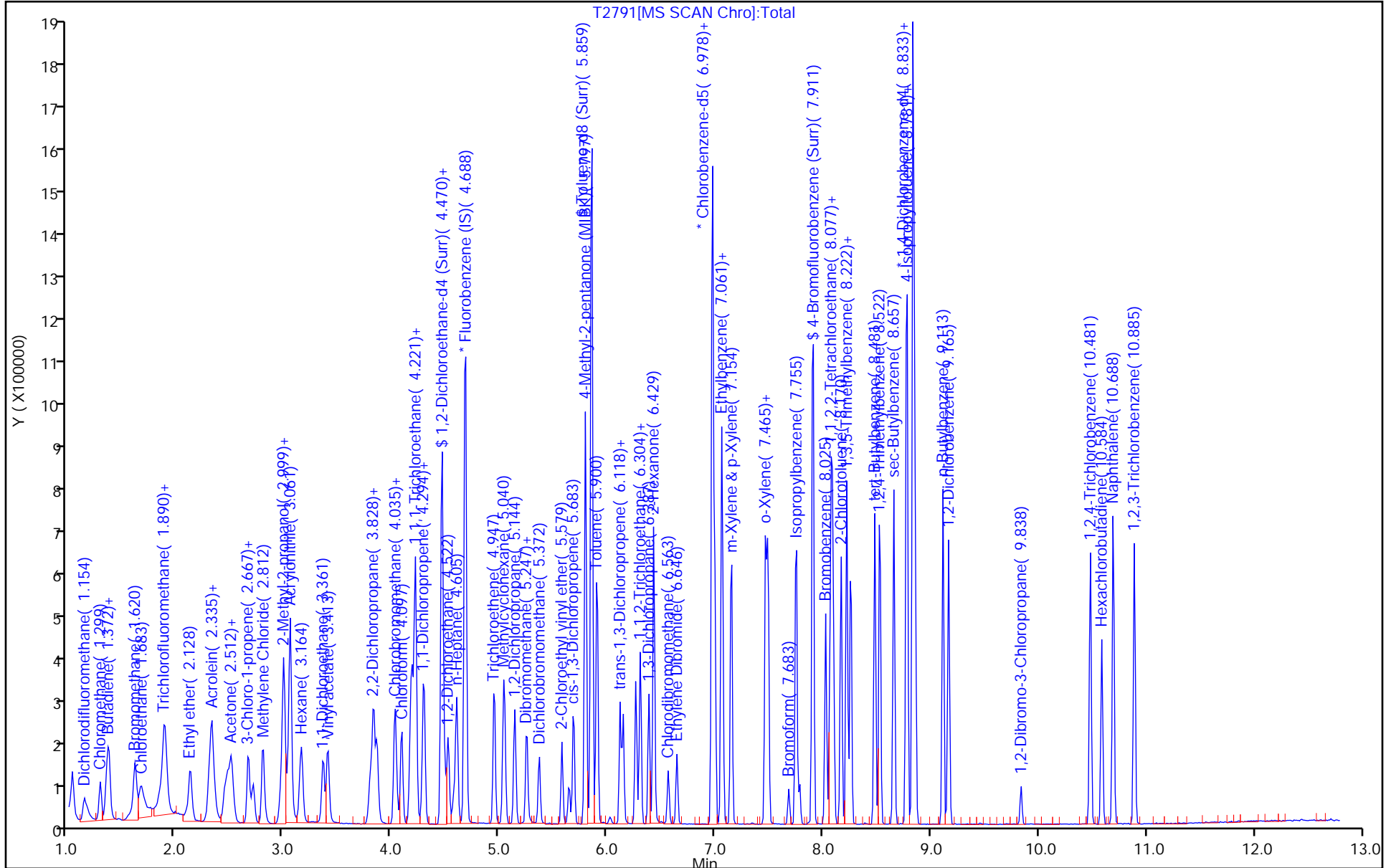
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

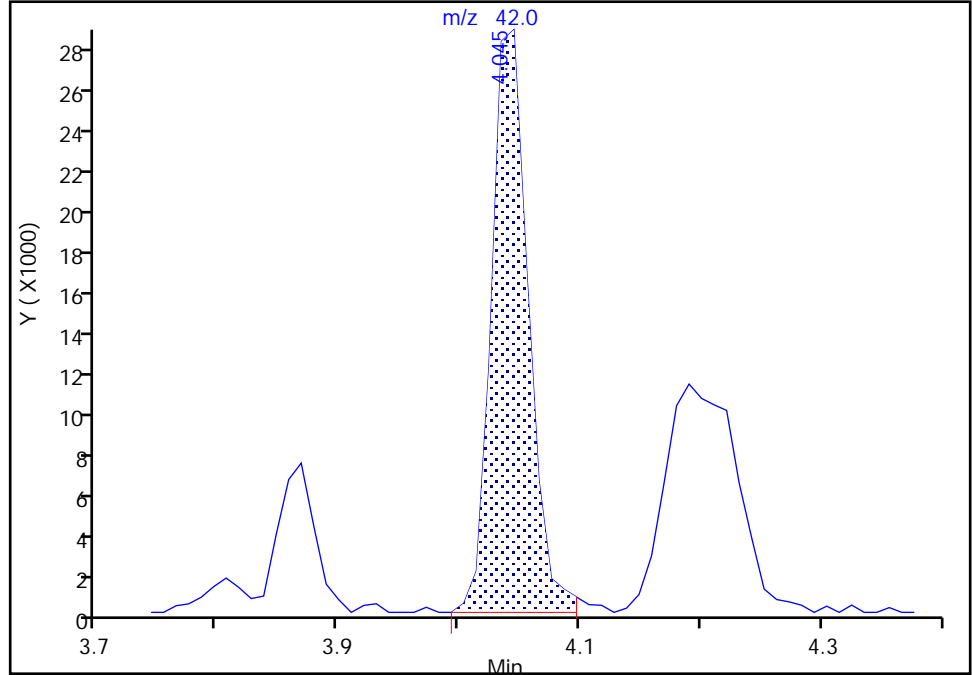
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2791.D
Injection Date: 08-Jul-2019 16:23:30 Instrument ID: HP5975T
Lims ID: IC 4
Client ID:
Operator ID: KN ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

48 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

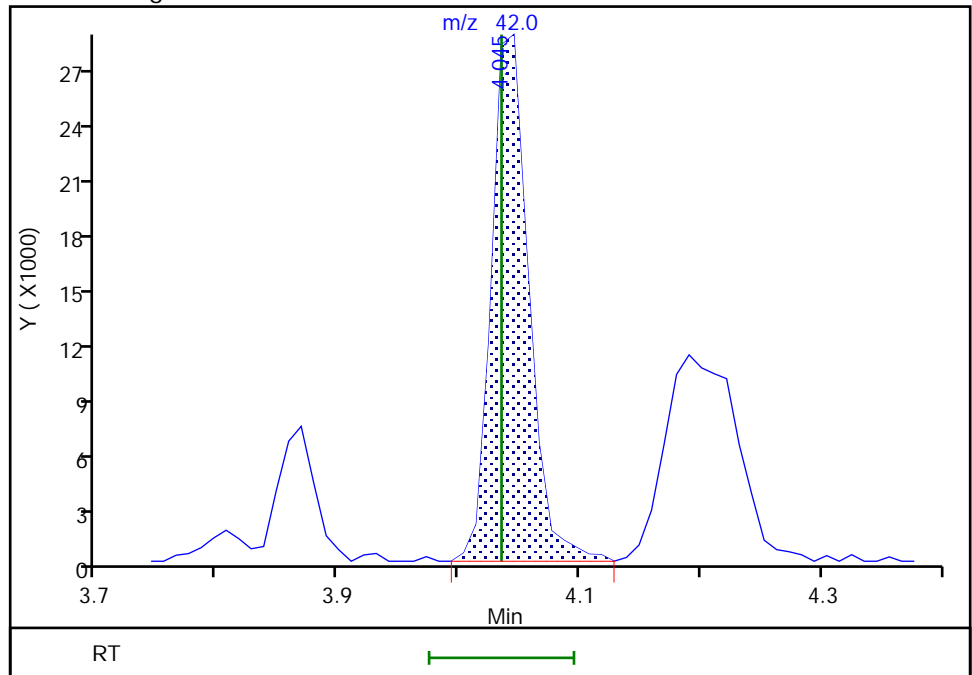
RT: 4.05
Area: 60525
Amount: 18.891395
Amount Units: ug/L

Processing Integration Results



RT: 4.05
Area: 60971
Amount: 19.014060
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 08:55:02
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2792.D
 Lims ID: ICIS 5
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 08-Jul-2019 16:47:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: icis 5
 Misc. Info.: 480-0082467-010
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:29 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:08:34

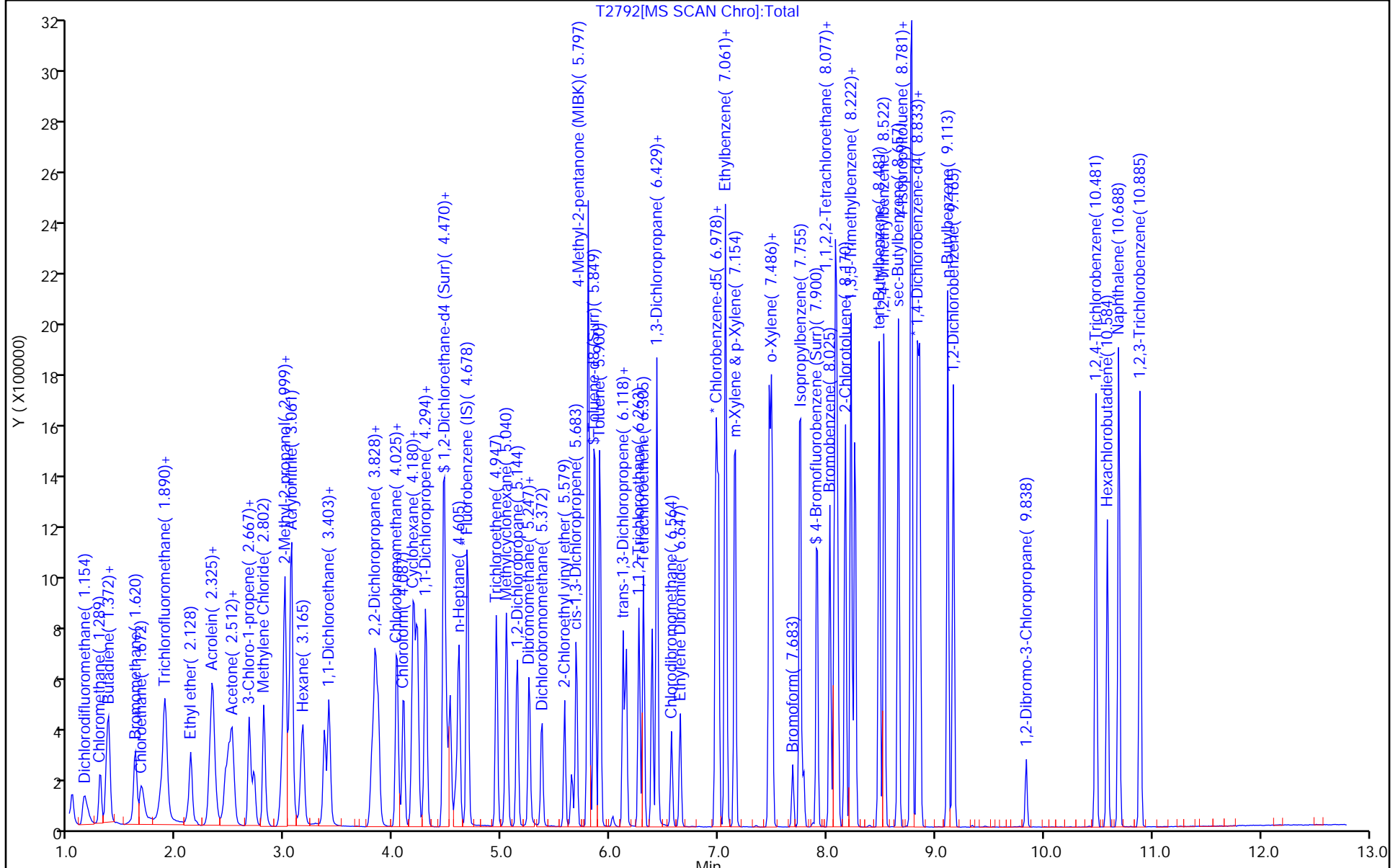
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.678	4.678	0.000	99	167087	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	87	719413	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	401726	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.222	0.000	94	228807	25.0	24.8	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.460	0.000	0	264627	25.0	24.9	
\$ 6 Toluene-d8 (Surr)	98	5.849	5.849	0.000	93	878845	25.0	24.9	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	295296	25.0	25.0	
11 Dichlorodifluoromethane	85	1.144	1.144	0.000	99	236609	25.0	21.2	
13 Chloromethane	50	1.289	1.289	0.000	98	238540	25.0	23.1	
151 Butadiene	54	1.361	1.361	0.000	89	191339	25.0	21.1	
14 Vinyl chloride	62	1.382	1.382	0.000	98	235036	25.0	22.2	
15 Bromomethane	94	1.620	1.620	0.000	92	215717	25.0	24.6	
16 Chloroethane	64	1.672	1.672	0.000	99	162356	25.0	23.0	
18 Dichlorofluoromethane	67	1.890	1.890	0.000	98	407494	25.0	23.2	
17 Trichlorofluoromethane	101	1.890	1.890	0.000	99	387536	25.0	21.7	
19 Ethyl ether	59	2.128	2.128	0.000	91	195214	25.0	23.6	
21 Acrolein	56	2.304	2.304	0.000	100	178645	125.0	121.8	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.335	0.000	62	163652	25.0	20.1	
22 1,1-Dichloroethene	96	2.335	2.335	0.000	97	165725	25.0	21.6	
23 Acetone	43	2.449	2.449	0.000	100	331440	125.0	128.4	
24 Iodomethane	142	2.481	2.481	0.000	100	380358	25.0	22.7	
25 Carbon disulfide	76	2.512	2.512	0.000	100	554806	25.0	21.9	
27 3-Chloro-1-propene	41	2.667	2.667	0.000	87	246505	25.0	23.4	
28 Methyl acetate	43	2.709	2.709	0.000	97	329871	50.0	47.8	
30 Methylene Chloride	84	2.802	2.802	0.000	90	225332	25.0	24.6	
31 2-Methyl-2-propanol	59	2.978	2.978	0.000	98	292227	250.0	261.8	
33 Methyl tert-butyl ether	73	2.988	2.988	0.000	99	635360	25.0	24.5	
32 trans-1,2-Dichloroethene	96	2.999	2.999	0.000	98	206036	25.0	22.9	
34 Acrylonitrile	53	3.061	3.061	0.000	100	925757	250.0	246.2	
35 Hexane	57	3.165	3.165	0.000	90	251172	25.0	20.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.361	3.361	0.000	96	344471	25.0	23.5	
39 Vinyl acetate	43	3.403	3.403	0.000	97	713461	50.0	51.3	
42 2,2-Dichloropropane	77	3.807	3.807	0.000	90	263036	25.0	22.3	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	78	237669	25.0	23.5	
44 2-Butanone (MEK)	43	3.859	3.859	0.000	99	535969	125.0	123.6	
47 Chlorobromomethane	128	4.025	4.025	0.000	89	138170	25.0	24.6	
48 Tetrahydrofuran	42	4.035	4.035	0.000	86	158054	50.0	49.0	
50 Chloroform	83	4.097	4.097	0.000	94	365160	25.0	23.4	
51 1,1,1-Trichloroethane	97	4.180	4.180	0.000	95	263896	25.0	23.2	
52 Cyclohexane	56	4.180	4.180	0.000	85	284672	25.0	20.7	
54 1,1-Dichloropropene	75	4.294	4.294	0.000	96	250666	25.0	22.2	
53 Carbon tetrachloride	117	4.294	4.294	0.000	96	187102	25.0	21.6	
55 Benzene	78	4.470	4.470	0.000	96	800030	25.0	22.9	
56 Isobutyl alcohol	43	4.491	4.491	0.000	92	214116	625.0	719.0	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	97	301640	25.0	24.4	
59 n-Heptane	43	4.605	4.605	0.000	89	257664	25.0	20.7	
60 Trichloroethene	95	4.947	4.947	0.000	95	211557	25.0	22.6	
62 Methylcyclohexane	83	5.040	5.040	0.000	89	312314	25.0	21.0	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	94	204134	25.0	24.0	
65 Dibromomethane	93	5.247	5.247	0.000	94	147693	25.0	25.2	
66 1,4-Dioxane	88	5.258	5.258	0.000	91	81783	500.0	534.4	
67 Dichlorobromomethane	83	5.372	5.372	0.000	97	211443	25.0	24.8	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	93	158912	25.0	25.0	
71 cis-1,3-Dichloropropene	75	5.683	5.683	0.000	96	326906	25.0	25.8	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	1244531	125.0	131.6	
73 Toluene	92	5.900	5.900	0.000	99	537324	25.0	23.1	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	93	297618	25.0	25.7	
77 Ethyl methacrylate	69	6.149	6.149	0.000	87	284531	25.0	26.7	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	89	170958	25.0	24.4	
79 Tetrachloroethene	166	6.305	6.305	0.000	97	232563	25.0	22.8	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	89	354184	25.0	24.5	
81 2-Hexanone	43	6.429	6.429	0.000	94	872593	125.0	134.1	
82 Chlorodibromomethane	129	6.564	6.564	0.000	89	151702	25.0	27.0	
83 Ethylene Dibromide	107	6.647	6.647	0.000	100	225407	25.0	26.0	
86 Chlorobenzene	112	6.999	6.999	0.000	97	632848	25.0	23.7	
88 Ethylbenzene	91	7.061	7.061	0.000	97	1016165	25.0	23.6	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	91	178111	25.0	26.4	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	413928	25.0	23.9	
91 o-Xylene	106	7.465	7.465	0.000	97	409520	25.0	23.5	
92 Styrene	104	7.486	7.486	0.000	95	709564	25.0	24.2	
93 Bromoform	173	7.683	7.683	0.000	96	89835	25.0	28.0	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	1037097	25.0	23.9	
97 Bromobenzene	156	8.025	8.025	0.000	89	299844	25.0	24.9	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	96	297579	25.0	26.6	
99 N-Propylbenzene	91	8.077	8.077	0.000	99	1205412	25.0	23.9	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	88	105624	25.0	27.2	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	87	86408	25.0	26.5	
105 2-Chlorotoluene	126	8.170	8.170	0.000	98	268964	25.0	24.5	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	95	904358	25.0	24.5	
102 4-Chlorotoluene	91	8.253	8.253	0.000	98	864493	25.0	24.6	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	206718	25.0	23.7	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	96	940070	25.0	24.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	94	1128181	25.0	23.9	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	1026850	25.0	24.7	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	98	583546	25.0	24.9	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	96	593656	25.0	24.8	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	902889	25.0	24.8	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	99	589101	25.0	25.4	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	86	40469	25.0	30.3	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	435151	25.0	25.6	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	97	173458	25.0	24.1	
121 Naphthalene	128	10.688	10.688	0.000	97	1253792	25.0	26.1	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	96	428986	25.0	25.2	

Reagents:

8260 CORP mix_00159	Amount Added: 12.50	Units: uL	
GAS CORP mix_00349	Amount Added: 12.50	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00222	Amount Added: 1.00	Units: uL	Run Reagent



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2793.D
 Lims ID: IC 6
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 08-Jul-2019 17:11:30 ALS Bottle#: 11 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 6
 Misc. Info.: 480-0082467-011
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:36 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:58:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.678	0.010	99	168514	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	83	733544	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	429492	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.222	-0.001	75	233600	25.0	25.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.460	0.010	0	261834	25.0	24.5	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.849	0.010	92	894809	25.0	24.9	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	309784	25.0	25.7	
11 Dichlorodifluoromethane	85	1.154	1.144	0.010	99	612339	50.0	54.4	
13 Chloromethane	50	1.299	1.289	0.010	98	524869	50.0	50.5	
151 Butadiene	54	1.361	1.361	0.000	90	490724	50.0	53.7	
14 Vinyl chloride	62	1.382	1.382	0.000	98	563575	50.0	52.8	
15 Bromomethane	94	1.620	1.620	0.000	92	455687	50.0	51.4	
16 Chloroethane	64	1.683	1.672	0.011	99	377532	50.0	52.9	
18 Dichlorofluoromethane	67	1.890	1.890	0.000	97	884894	50.0	50.0	
17 Trichlorofluoromethane	101	1.900	1.890	0.010	98	959075	50.0	53.3	
19 Ethyl ether	59	2.128	2.128	0.000	92	373781	50.0	44.9	
21 Acrolein	56	2.304	2.304	0.000	100	330600	250.0	223.5	
22 1,1-Dichloroethene	96	2.335	2.335	0.000	98	359580	50.0	46.5	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.335	0.000	65	396057	50.0	48.2	
23 Acetone	43	2.449	2.449	0.000	99	616658	250.0	236.8	
24 Iodomethane	142	2.491	2.481	0.010	99	789324	50.0	46.6	
25 Carbon disulfide	76	2.512	2.512	0.000	100	1239998	50.0	48.6	
27 3-Chloro-1-propene	41	2.667	2.667	0.000	86	511773	50.0	48.2	
28 Methyl acetate	43	2.719	2.709	0.010	97	643899	100.0	92.4	
30 Methylene Chloride	84	2.812	2.802	0.010	91	438297	50.0	47.8	
31 2-Methyl-2-propanol	59	2.978	2.978	0.000	100	609048	500.0	541.0	
33 Methyl tert-butyl ether	73	2.999	2.988	0.011	99	1229890	50.0	47.0	
32 trans-1,2-Dichloroethene	96	2.999	2.999	0.000	98	441340	50.0	48.6	
34 Acrylonitrile	53	3.061	3.061	0.000	99	1792660	500.0	472.7	
35 Hexane	57	3.164	3.165	-0.001	90	569729	50.0	45.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.361	3.361	0.000	96	724812	50.0	49.1	
39 Vinyl acetate	43	3.403	3.403	0.000	97	1518680	100.0	108.3	
42 2,2-Dichloropropane	77	3.807	3.807	0.000	90	580535	50.0	48.8	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	78	495363	50.0	48.5	
44 2-Butanone (MEK)	43	3.859	3.859	0.000	99	1050691	250.0	240.2	
47 Chlorobromomethane	128	4.025	4.025	0.000	88	273259	50.0	48.3	
48 Tetrahydrofuran	42	4.035	4.035	0.000	85	289824	100.0	89.1	
50 Chloroform	83	4.097	4.097	0.000	93	741863	50.0	47.1	
51 1,1,1-Trichloroethane	97	4.180	4.180	0.000	91	605234	50.0	52.9	
52 Cyclohexane	56	4.190	4.180	0.010	89	690911	50.0	49.8	
54 1,1-Dichloropropene	75	4.304	4.294	0.010	95	556202	50.0	48.8	
53 Carbon tetrachloride	117	4.294	4.294	0.000	97	466812	50.0	53.4	
55 Benzene	78	4.470	4.470	0.000	97	1661056	50.0	47.1	
56 Isobutyl alcohol	43	4.491	4.491	0.000	93	471334	1250.0	1569.3	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	98	599428	50.0	48.1	
59 n-Heptane	43	4.605	4.605	0.000	89	588080	50.0	46.9	
60 Trichloroethene	95	4.947	4.947	0.000	95	447749	50.0	47.4	
62 Methylcyclohexane	83	5.040	5.040	0.000	89	727107	50.0	48.4	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	94	419009	50.0	48.8	
65 Dibromomethane	93	5.247	5.247	0.000	93	293590	50.0	49.7	
66 1,4-Dioxane	88	5.258	5.258	0.000	44	155220	1000.0	994.8	
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	466260	50.0	54.3	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	92	319052	50.0	49.7	
71 cis-1,3-Dichloropropene	75	5.683	5.683	0.000	96	670384	50.0	52.4	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	2414093	250.0	250.4	
73 Toluene	92	5.900	5.900	0.000	98	1116345	50.0	47.0	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	92	630686	50.0	53.3	
77 Ethyl methacrylate	69	6.149	6.149	0.000	87	588205	50.0	54.1	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	90	345409	50.0	48.4	
79 Tetrachloroethene	166	6.304	6.305	-0.001	97	513622	50.0	49.5	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	89	697755	50.0	47.3	
81 2-Hexanone	43	6.429	6.429	0.000	94	1703575	250.0	256.7	
82 Chlorodibromomethane	129	6.564	6.564	0.000	89	349351	50.0	60.9	
83 Ethylene Dibromide	107	6.646	6.647	0.000	98	454613	50.0	51.5	
86 Chlorobenzene	112	6.999	6.999	0.000	96	1282735	50.0	47.2	
88 Ethylbenzene	91	7.061	7.061	0.000	98	2097532	50.0	47.8	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	93	404989	50.0	59.0	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	859192	50.0	48.6	
91 o-Xylene	106	7.465	7.465	0.000	97	848766	50.0	47.8	
92 Styrene	104	7.486	7.486	0.000	96	1475521	50.0	49.4	
93 Bromoform	173	7.683	7.683	0.000	96	208851	50.0	63.9	M
95 Isopropylbenzene	105	7.755	7.755	0.000	95	2188031	50.0	47.2	
97 Bromobenzene	156	8.025	8.025	0.000	89	611443	50.0	47.6	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	96	585940	50.0	49.1	
99 N-Propylbenzene	91	8.077	8.077	0.000	99	2529434	50.0	46.9	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	88	207921	50.0	50.1	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	86	173398	50.0	49.7	
105 2-Chlorotoluene	126	8.170	8.170	0.000	97	554430	50.0	47.2	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	95	1892594	50.0	48.0	
102 4-Chlorotoluene	91	8.253	8.253	0.000	98	1766990	50.0	47.1	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	445227	50.0	47.7	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	96	1940977	50.0	47.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	94	2408733	50.0	47.6	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	2176582	50.0	48.9	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	98	1194306	50.0	47.7	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	96	1198792	50.0	46.9	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	1884251	50.0	48.4	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	99	1191423	50.0	48.0	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	87	86612	50.0	60.6	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	855481	50.0	47.1	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	97	370391	50.0	48.1	
121 Naphthalene	128	10.688	10.688	0.000	97	2445422	50.0	47.7	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	96	849108	50.0	46.6	
S 123 1,3-Dichloropropene, Total	1				0			105.8	
S 125 Total BTEX	1				0			238.3	
S 126 Xylenes, Total	1				0			96.4	
S 124 1,2-Dichloroethene, Total	1				0			97.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00159

Amount Added: 25.00

Units: uL

GAS CORP mix_00349

Amount Added: 25.00

Units: uL

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

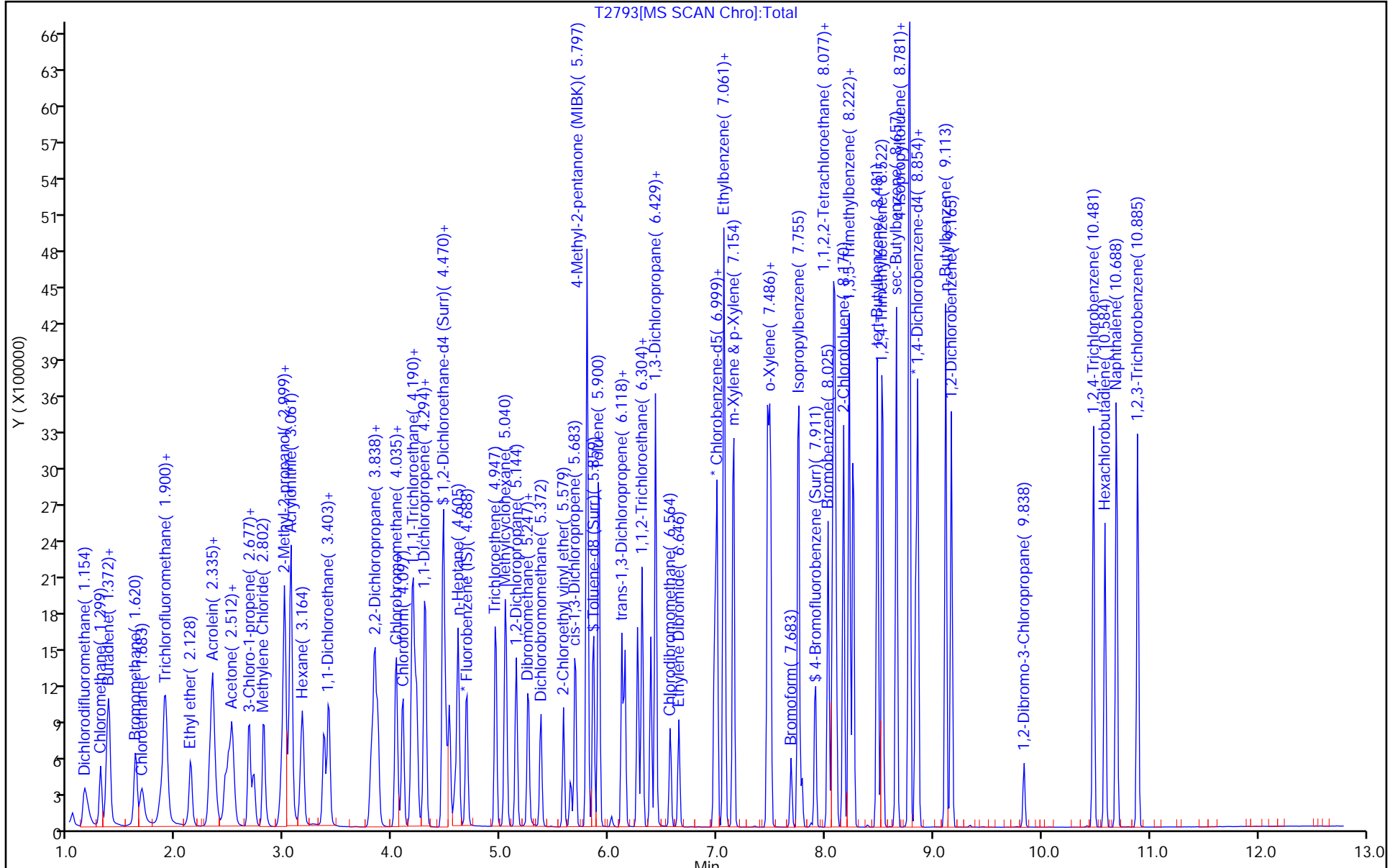
Run Reagent

T_8260_IS_00222

Amount Added: 1.00

Units: uL

Run Reagent



Eurofins TestAmerica, Buffalo

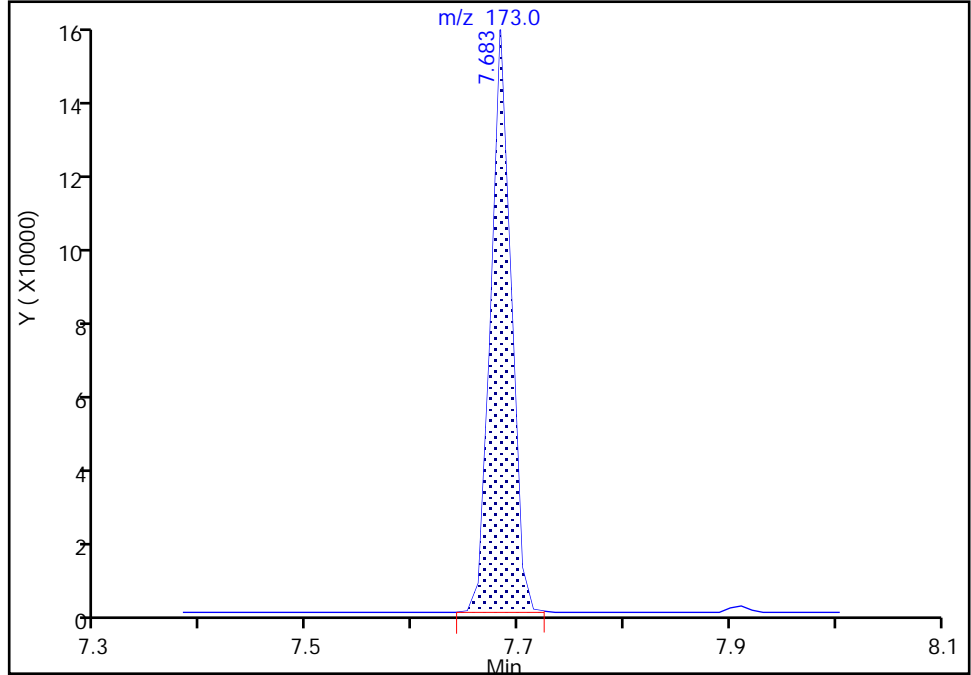
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2793.D
Injection Date: 08-Jul-2019 17:11:30 Instrument ID: HP5975T
Lims ID: IC 6
Client ID:
Operator ID: KN ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

93 Bromoform, CAS: 75-25-2

Signal: 1

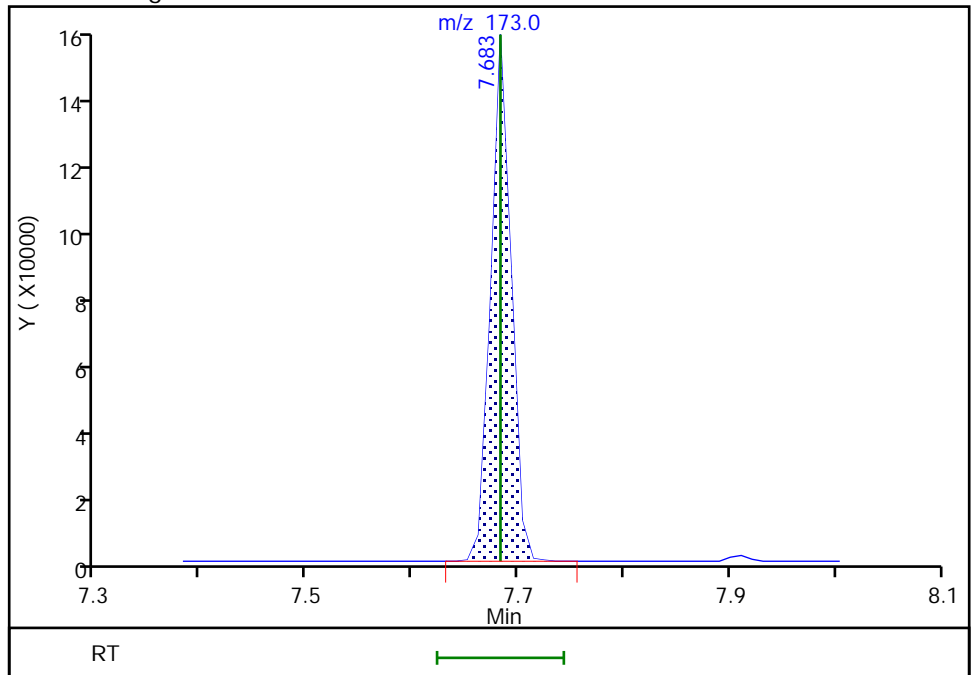
RT: 7.68
Area: 208893
Amount: 58.745871
Amount Units: ug/L

Processing Integration Results



RT: 7.68
Area: 208851
Amount: 63.931053
Amount Units: ug/L

Manual Integration Results



Reviewer: farrellr, 09-Jul-2019 09:45:58
Audit Action: Manually Integrated

Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2794.D
 Lims ID: IC 7
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 08-Jul-2019 17:35:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ic 7
 Misc. Info.: 480-0082467-012
 Operator ID: KN Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:44 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: farrellr

Date: 09-Jul-2019 08:59:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.678	0.010	99	168296	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	83	754344	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	446356	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.222	-0.001	57	246679	25.0	26.5	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.460	0.010	0	262388	25.0	24.5	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.849	0.010	92	913408	25.0	24.7	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	329192	25.0	26.5	
11 Dichlorodifluoromethane	85	1.154	1.144	0.010	99	1197542	100.0	106.6	
13 Chloromethane	50	1.299	1.289	0.010	99	1033721	100.0	99.5	
151 Butadiene	54	1.361	1.361	0.000	91	951227	100.0	104.1	
14 Vinyl chloride	62	1.382	1.382	0.000	98	1087503	100.0	102.0	
15 Bromomethane	94	1.620	1.620	0.000	92	897279	100.0	101.4	
16 Chloroethane	64	1.682	1.672	0.010	99	732302	100.0	102.8	
18 Dichlorofluoromethane	67	1.890	1.890	0.000	97	1632941	100.0	92.4	
17 Trichlorofluoromethane	101	1.900	1.890	0.010	99	1770401	100.0	98.6	
19 Ethyl ether	59	2.128	2.128	0.000	90	765358	100.0	92.0	
21 Acrolein	56	2.304	2.304	0.000	100	704326	500.0	476.7	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.335	0.000	68	908698	100.0	110.7	
22 1,1-Dichloroethene	96	2.335	2.335	0.000	98	802235	100.0	103.9	
23 Acetone	43	2.449	2.449	0.000	100	1329552	500.0	511.3	
24 Iodomethane	142	2.491	2.481	0.010	99	1724012	100.0	102.0	
25 Carbon disulfide	76	2.511	2.512	-0.001	100	2764187	100.0	108.4	
27 3-Chloro-1-propene	41	2.667	2.667	0.000	87	1135356	100.0	107.0	
28 Methyl acetate	43	2.719	2.709	0.010	97	1368808	200.0	196.8	
30 Methylene Chloride	84	2.812	2.802	0.010	91	940046	100.0	103.3	
31 2-Methyl-2-propanol	59	2.967	2.978	-0.011	98	1433789	1000.0	1275.3	
33 Methyl tert-butyl ether	73	2.988	2.988	0.000	98	2597944	100.0	99.4	
32 trans-1,2-Dichloroethene	96	2.998	2.999	-0.001	97	948455	100.0	104.7	
34 Acrylonitrile	53	3.061	3.061	0.000	99	3775665	1000.0	996.9	
35 Hexane	57	3.164	3.165	-0.001	90	1277208	100.0	102.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.361	3.361	0.000	96	1539243	100.0	104.4	
39 Vinyl acetate	43	3.403	3.403	0.000	97	3395759	200.0	242.5	
42 2,2-Dichloropropane	77	3.807	3.807	0.000	90	1283580	100.0	108.0	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	80	1058651	100.0	103.8	
44 2-Butanone (MEK)	43	3.859	3.859	0.000	99	2229969	500.0	510.5	
47 Chlorobromomethane	128	4.035	4.025	0.010	87	583667	100.0	103.4	
48 Tetrahydrofuran	42	4.035	4.035	0.000	85	620107	200.0	190.8	
50 Chloroform	83	4.097	4.097	0.000	93	1592266	100.0	101.2	
51 1,1,1-Trichloroethane	97	4.190	4.180	0.010	97	1401427	100.0	122.6	
52 Cyclohexane	56	4.190	4.180	0.010	90	1537272	100.0	110.9	
54 1,1-Dichloropropene	75	4.304	4.294	0.010	96	1221870	100.0	107.3	
53 Carbon tetrachloride	117	4.294	4.294	0.000	97	1163086	100.0	133.3	
55 Benzene	78	4.470	4.470	0.000	96	3529551	100.0	100.1	
56 Isobutyl alcohol	43	4.491	4.491	0.000	94	1162673	2500.0	3876.1	
57 1,2-Dichloroethane	62	4.522	4.522	0.000	98	1241969	100.0	99.7	
59 n-Heptane	43	4.605	4.605	0.000	90	1313631	100.0	105.0	
60 Trichloroethene	95	4.947	4.947	0.000	95	967106	100.0	102.5	
62 Methylcyclohexane	83	5.040	5.040	0.000	89	1666272	100.0	111.1	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	95	884950	100.0	103.2	
65 Dibromomethane	93	5.247	5.247	0.000	93	636346	100.0	107.9	
66 1,4-Dioxane	88	5.247	5.258	-0.011	92	335894	2000.0	2093.4	
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	1086684	100.0	126.7	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	93	672763	100.0	104.9	
71 cis-1,3-Dichloropropene	75	5.683	5.683	-0.001	96	1477330	100.0	115.7	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	-0.001	95	5043250	500.0	508.6	
73 Toluene	92	5.900	5.900	0.000	98	2398006	100.0	98.2	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	92	1406962	100.0	115.7	
77 Ethyl methacrylate	69	6.149	6.149	0.000	88	1291873	100.0	115.6	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	90	727576	100.0	99.1	
79 Tetrachloroethene	166	6.304	6.305	-0.001	98	1153520	100.0	108.0	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	88	1478046	100.0	97.5	
81 2-Hexanone	43	6.429	6.429	0.000	94	3583258	500.0	525.1	
82 Chlorodibromomethane	129	6.563	6.564	-0.001	90	880797	100.0	149.3	
83 Ethylene Dibromide	107	6.646	6.647	0.000	98	997039	100.0	109.7	
86 Chlorobenzene	112	6.999	6.999	0.000	96	2737983	100.0	97.9	
88 Ethylbenzene	91	7.061	7.061	0.000	97	4509828	100.0	100.0	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	95	955241	100.0	135.2	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	1873225	100.0	103.0	
91 o-Xylene	106	7.465	7.465	0.000	97	1864579	100.0	102.2	
92 Styrene	104	7.496	7.486	0.010	95	3159227	100.0	102.8	
93 Bromoform	173	7.683	7.683	0.000	97	573663	100.0	170.8	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	4778097	100.0	99.1	
97 Bromobenzene	156	8.025	8.025	0.000	89	1336108	100.0	100.0	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	96	1278192	100.0	103.0	
99 N-Propylbenzene	91	8.076	8.077	-0.001	99	5468841	100.0	97.7	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	87	439355	100.0	101.8	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	83	389475	100.0	107.3	
105 2-Chlorotoluene	126	8.170	8.170	0.000	97	1188913	100.0	97.4	
104 1,3,5-Trimethylbenzene	105	8.221	8.222	-0.001	96	4048757	100.0	98.9	
102 4-Chlorotoluene	91	8.253	8.253	0.000	98	3826652	100.0	98.1	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	993535	100.0	102.4	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	97	4176757	100.0	97.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	94	5346269	100.0	101.7	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	96	4755916	100.0	102.8	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	98	2589092	100.0	99.4	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	97	2608714	100.0	98.1	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	4151072	100.0	102.6	
116 1,2-Dichlorobenzene	146	9.164	9.165	-0.001	99	2592868	100.0	100.4	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	90	219789	100.0	147.9	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	95	1905428	100.0	101.0	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	98	853128	100.0	106.7	
121 Naphthalene	128	10.688	10.688	0.000	97	5194726	100.0	97.4	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	96	1879474	100.0	99.3	
S 123 1,3-Dichloropropene, Total	1				0			231.4	
S 125 Total BTEX	1				0			503.4	
S 126 Xylenes, Total	1				0			205.1	
S 124 1,2-Dichloroethene, Total	1				0			208.5	

Reagents:

8260 CORP mix_00159	Amount Added: 50.00	Units: uL	
GAS CORP mix_00349	Amount Added: 50.00	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00222	Amount Added: 1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2794.D

Injection Date: 08-Jul-2019 17:35:30

Instrument ID: HP5975T

Operator ID: KN

Lims ID: IC 7

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

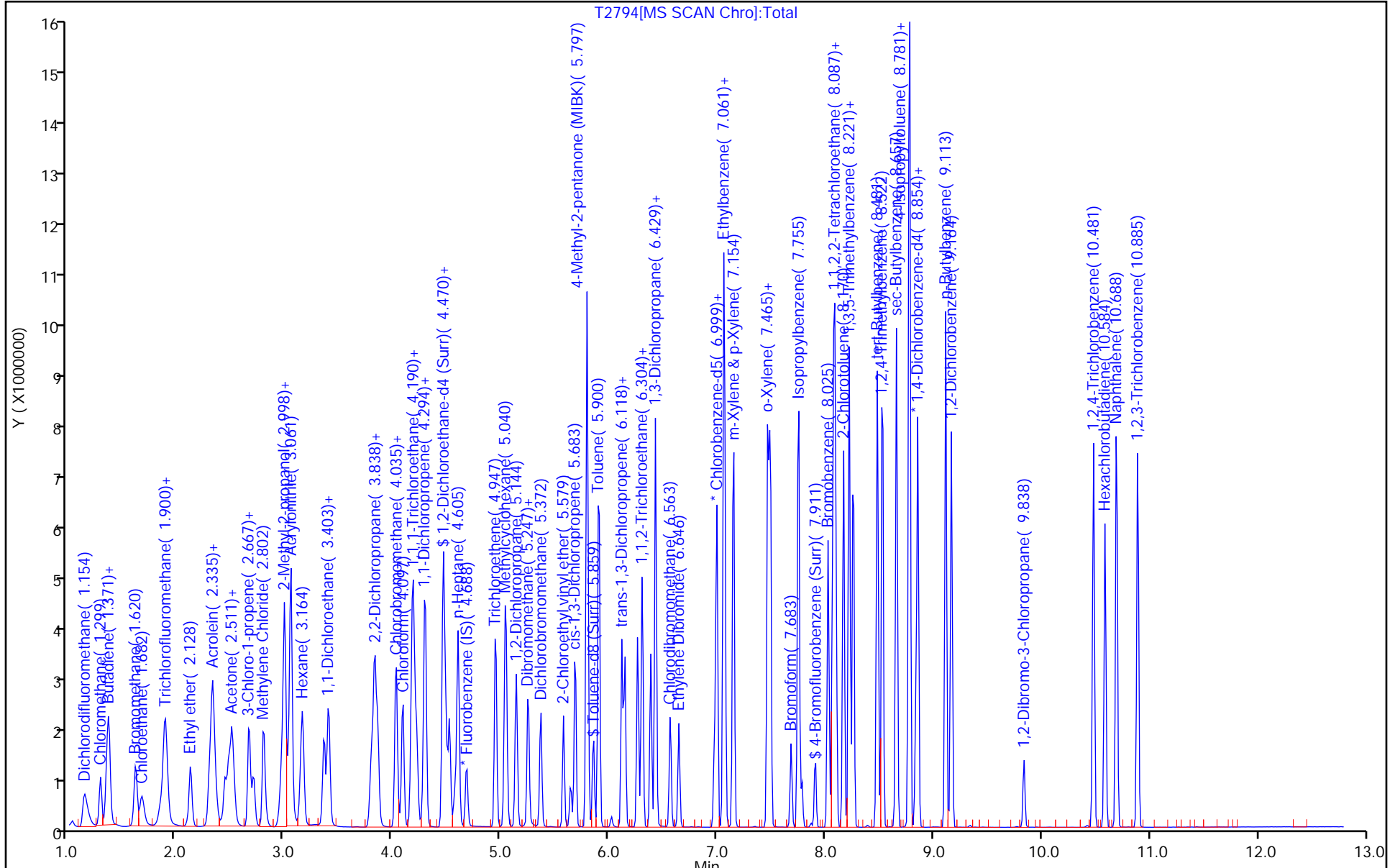
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-482537/3 Calibration Date: 07/17/2019 20:06
 Instrument ID: HP5975T Calib Start Date: 07/08/2019 14:46
 GC Column: ZB-624 (20) ID: 0.18 (mm) Calib End Date: 07/08/2019 17:35
 Lab File ID: T3125.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.669	1.214	0.1000	18.2	25.0	-27.3	50.0
Chloromethane	Ave	1.543	1.196	0.1000	19.4	25.0	-22.5*	20.0
Butadiene	Ave	1.357	1.223		22.5	25.0	-9.9	20.0
Vinyl chloride	Ave	1.583	1.278	0.1000	20.2	25.0	-19.3	20.0
Bromomethane	Ave	1.314	0.9823	0.1000	18.7	25.0	-25.3	50.0
Chloroethane	Ave	1.058	0.7568	0.1000	17.9	25.0	-28.5	50.0
Dichlorofluoromethane	Ave	2.626	2.045		19.5	25.0	-22.1*	20.0
Trichlorofluoromethane	Ave	2.668	2.141	0.1000	20.1	25.0	-19.7	20.0
Ethyl ether	Ave	1.235	1.065		21.5	25.0	-13.8	20.0
Acrolein	Ave	0.2195	0.2414		137	125	10.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.219	1.292	0.1000	26.5	25.0	6.0	20.0
1,1-Dichloroethene	Ave	1.147	1.106	0.1000	24.1	25.0	-3.5	20.0
Acetone	Ave	0.3863	0.5735	0.1000	186	125	48.5	50.0
Iodomethane	Ave	2.511	2.588		25.8	25.0	3.0	20.0
Carbon disulfide	Ave	3.787	3.754	0.1000	24.8	25.0	-0.9	20.0
Allyl chloride	Ave	1.576	1.509		23.9	25.0	-4.2	20.0
Methyl acetate	Ave	1.033	1.030	0.1000	49.8	50.0	-0.3	50.0
Methylene Chloride	Lin1		1.514	0.1000	27.6	25.0	10.6	20.0
2-Methyl-2-propanol	Ave	0.1670	0.1600		240	250	-4.2	50.0
Methyl tert-butyl ether	Ave	3.883	3.808	0.1000	24.5	25.0	-1.9	20.0
trans-1,2-Dichloroethene	Ave	1.346	1.315	0.1000	24.4	25.0	-2.3	20.0
Acrylonitrile	Ave	0.5626	0.5827		259	250	3.6	20.0
Hexane	Ave	1.852	1.821		24.6	25.0	-1.7	20.0
1,1-Dichloroethane	Ave	2.190	2.183	0.2000	24.9	25.0	-0.3	20.0
Vinyl acetate	Ave	2.081	1.739		41.8	50.0	-16.4	20.0
2,2-Dichloropropane	Ave	1.766	1.669		23.6	25.0	-5.5	20.0
cis-1,2-Dichloroethene	Ave	1.515	1.428	0.1000	23.6	25.0	-5.7	20.0
2-Butanone (MEK)	Ave	0.6489	0.7845	0.1000	151	125	20.9*	20.0
Bromochloromethane	Ave	0.8388	0.8561		25.5	25.0	2.1	20.0
Tetrahydrofuran	Ave	0.4828	0.4815		49.9	50.0	-0.3	20.0
Chloroform	Ave	2.336	2.271	0.2000	24.3	25.0	-2.8	20.0
1,1,1-Trichloroethane	Ave	1.698	1.797	0.1000	26.5	25.0	5.8	20.0
Cyclohexane	Ave	2.060	2.070	0.1000	25.1	25.0	0.5	20.0
1,1-Dichloropropene	Ave	1.692	1.698		25.1	25.0	0.4	20.0
Carbon tetrachloride	Ave	1.296	1.408	0.1000	27.2	25.0	8.7	20.0
Benzene	Ave	5.236	4.938	0.5000	23.6	25.0	-5.7	20.0
Isobutyl alcohol	Ave	0.0446	0.0448		628	625	0.5	50.0
1,2-Dichloroethane	Ave	1.850	1.858	0.1000	25.1	25.0	0.4	20.0
n-Heptane	Ave	1.859	1.839		24.7	25.0	-1.1	20.0
Trichloroethene	Ave	1.401	1.359	0.2000	24.3	25.0	-3.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-482537/3 Calibration Date: 07/17/2019 20:06
 Instrument ID: HP5975T Calib Start Date: 07/08/2019 14:46
 GC Column: ZB-624 (20) ID: 0.18 (mm) Calib End Date: 07/08/2019 17:35
 Lab File ID: T3125.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.228	2.245	0.1000	25.2	25.0	0.8	20.0
1,2-Dichloropropane	Ave	1.273	1.229	0.1000	24.1	25.0	-3.5	20.0
1,4-Dioxane	Ave	0.0053	0.0061		573	500	14.6	50.0
Dibromomethane	Ave	0.8764	0.9243	0.1000	26.4	25.0	5.5	20.0
Bromodichloromethane	Ave	1.274	1.428	0.2000	28.0	25.0	12.1	20.0
2-Chloroethyl vinyl ether	Ave	0.9524	1.027		26.9	25.0	7.8	20.0
cis-1,3-Dichloropropene	Ave	1.897	1.897	0.2000	25.0	25.0	-0.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3286	0.3607	0.1000	137	125	9.8	20.0
Toluene	Ave	0.8092	0.7646	0.4000	23.6	25.0	-5.5	20.0
trans-1,3-Dichloropropene	Ave	0.4031	0.4107	0.1000	25.5	25.0	1.9	20.0
Ethyl methacrylate	Ave	0.3703	0.3594		24.3	25.0	-3.0	20.0
1,1,2-Trichloroethane	Ave	0.2434	0.2455	0.1000	25.2	25.0	0.9	20.0
Tetrachloroethene	Ave	0.3539	0.3858	0.2000	27.3	25.0	9.0	20.0
1,3-Dichloropropane	Ave	0.5024	0.4903		24.4	25.0	-2.4	20.0
2-Hexanone	Ave	0.2261	0.2676	0.1000	148	125	18.3	20.0
Dibromochloromethane	Ave	0.1955	0.2417	0.1000	30.9	25.0	23.6*	20.0
1,2-Dibromoethane	Ave	0.3011	0.3169		26.3	25.0	5.2	20.0
Chlorobenzene	Ave	0.9270	0.9000	0.5000	24.3	25.0	-2.9	20.0
Ethylbenzene	Ave	1.495	1.454	0.1000	24.3	25.0	-2.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.2341	0.2571		27.5	25.0	9.8	20.0
m,p-Xylene	Ave	0.6030	0.6005	0.1000	24.9	25.0	-0.4	20.0
o-Xylene	Ave	0.6047	0.5857	0.3000	24.2	25.0	-3.2	20.0
Styrene	Ave	1.019	0.995	0.3000	24.4	25.0	-2.3	20.0
Bromoform	Ave	0.1113	0.1434	0.1000	32.2	25.0	28.8	50.0
Isopropylbenzene	Ave	2.700	2.599	0.1000	24.1	25.0	-3.7	20.0
Bromobenzene	Ave	0.7480	0.7423		24.8	25.0	-0.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6952	0.7116	0.3000	25.6	25.0	2.4	20.0
N-Propylbenzene	Ave	3.136	3.045		24.3	25.0	-2.9	20.0
1,2,3-Trichloropropane	Ave	0.2417	0.2616		27.1	25.0	8.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2032	0.1492		18.4	25.0	-26.6	50.0
2-Chlorotoluene	Ave	0.6837	0.6700		24.5	25.0	-2.0	20.0
1,3,5-Trimethylbenzene	Ave	2.294	2.223		24.2	25.0	-3.1	20.0
4-Chlorotoluene	Ave	2.184	2.099		24.0	25.0	-3.9	20.0
tert-Butylbenzene	Ave	0.5436	0.5280		24.3	25.0	-2.9	20.0
1,2,4-Trimethylbenzene	Ave	2.389	2.238		23.4	25.0	-6.3	20.0
sec-Butylbenzene	Ave	2.943	2.837		24.1	25.0	-3.6	20.0
4-Isopropyltoluene	Ave	2.591	2.613		25.2	25.0	0.8	20.0
1,3-Dichlorobenzene	Ave	1.459	1.424	0.6000	24.4	25.0	-2.4	20.0
1,4-Dichlorobenzene	Ave	1.489	1.472	0.5000	24.7	25.0	-1.1	20.0
n-Butylbenzene	Ave	2.265	2.265		25.0	25.0	0.0	20.0
1,2-Dichlorobenzene	Ave	1.446	1.418	0.4000	24.5	25.0	-2.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-482537/3 Calibration Date: 07/17/2019 20:06
 Instrument ID: HP5975T Calib Start Date: 07/08/2019 14:46
 GC Column: ZB-624 (20) ID: 0.18 (mm) Calib End Date: 07/08/2019 17:35
 Lab File ID: T3125.D Conc. Units: ug/L 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	0.0833	0.1013	0.0500	30.4	25.0	21.7	50.0
1,2,4-Trichlorobenzene	Ave	1.057	1.137	0.2000	26.9	25.0	7.6	20.0
Hexachlorobutadiene	Ave	0.4480	0.5249		29.3	25.0	17.2	20.0
Naphthalene	Ave	2.987	3.094		25.9	25.0	3.6	20.0
1,2,3-Trichlorobenzene	Ave	1.060	1.122		26.5	25.0	5.9	20.0
Dibromofluoromethane (Surr)	Ave	1.382	1.387		25.1	25.0	0.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	1.588	1.590		25.0	25.0	0.1	20.0
Toluene-d8 (Surr)	Ave	1.226	1.192		24.3	25.0	-2.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4113	0.4349		26.4	25.0	5.7	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3125.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 17-Jul-2019 20:06:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 480-0082700-003
 Operator ID: AEM Instrument ID: HP5975T
 Sublist: chrom-T-8260*sub48
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 01:54:39 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0339

First Level Reviewer: milligana

Date: 17-Jul-2019 20:42:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	181521	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	784358	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	452684	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.222	0.000	93	251850	25.0	25.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	288616	25.0	25.0	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	92	934652	25.0	24.3	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	341121	25.0	26.4	
11 Dichlorodifluoromethane	85	1.164	1.164	0.000	99	220315	25.0	18.2	
13 Chloromethane	50	1.320	1.320	0.000	98	217166	25.0	19.4	
151 Butadiene	54	1.382	1.382	0.000	88	221957	25.0	22.5	M
14 Vinyl chloride	62	1.403	1.403	0.000	98	231985	25.0	20.2	
15 Bromomethane	94	1.641	1.641	0.000	93	178307	25.0	18.7	
16 Chloroethane	64	1.703	1.703	0.000	100	137373	25.0	17.9	M
18 Dichlorofluoromethane	67	1.911	1.911	0.000	98	371174	25.0	19.5	
17 Trichlorofluoromethane	101	1.921	1.921	0.000	98	388711	25.0	20.1	
19 Ethyl ether	59	2.149	2.149	0.000	89	193286	25.0	21.5	
21 Acrolein	56	2.325	2.325	0.000	99	219098	125.0	137.5	
20 1,1,2-Trichloro-1,2,2-trif	101	2.346	2.346	0.000	72	234614	25.0	26.5	
22 1,1-Dichloroethene	96	2.346	2.346	0.000	98	200765	25.0	24.1	
23 Acetone	43	2.460	2.460	0.000	100	520509	125.0	185.6	
24 Iodomethane	142	2.501	2.501	0.000	99	469712	25.0	25.8	
25 Carbon disulfide	76	2.532	2.532	0.000	100	681467	25.0	24.8	
27 3-Chloro-1-propene	41	2.677	2.677	0.000	85	273980	25.0	23.9	
28 Methyl acetate	43	2.719	2.719	0.000	97	374021	50.0	49.8	
30 Methylene Chloride	84	2.823	2.823	0.000	92	274833	25.0	27.6	
31 2-Methyl-2-propanol	59	2.988	2.988	0.000	54	290435	250.0	239.5	
33 Methyl tert-butyl ether	73	3.009	3.009	0.000	98	691305	25.0	24.5	
32 trans-1,2-Dichloroethene	96	3.009	3.009	0.000	99	238682	25.0	24.4	
34 Acrylonitrile	53	3.071	3.071	0.000	99	1057625	250.0	258.9	
35 Hexane	57	3.175	3.175	0.000	91	330583	25.0	24.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	396203	25.0	24.9	
39 Vinyl acetate	43	3.413	3.413	0.000	97	631448	50.0	41.8	
42 2,2-Dichloropropane	77	3.817	3.817	0.000	89	303006	25.0	23.6	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	81	259211	25.0	23.6	
44 2-Butanone (MEK)	43	3.869	3.869	0.000	99	711970	125.0	151.1	
47 Chlorobromomethane	128	4.035	4.035	0.000	87	155404	25.0	25.5	
48 Tetrahydrofuran	42	4.045	4.045	0.000	86	174808	50.0	49.9	
50 Chloroform	83	4.097	4.097	0.000	94	412241	25.0	24.3	
51 1,1,1-Trichloroethane	97	4.190	4.190	0.000	91	326263	25.0	26.5	
52 Cyclohexane	56	4.190	4.190	0.000	90	375794	25.0	25.1	
53 Carbon tetrachloride	117	4.304	4.304	0.000	97	255600	25.0	27.2	
54 1,1-Dichloropropene	75	4.304	4.304	0.000	95	308306	25.0	25.1	
55 Benzene	78	4.470	4.470	0.000	96	896432	25.0	23.6	
56 Isobutyl alcohol	43	4.491	4.491	0.000	90	203189	625.0	628.0	
57 1,2-Dichloroethane	62	4.532	4.532	0.000	97	337280	25.0	25.1	
59 n-Heptane	43	4.605	4.605	0.000	88	333764	25.0	24.7	
60 Trichloroethene	95	4.957	4.957	0.000	95	246766	25.0	24.3	
62 Methylcyclohexane	83	5.051	5.051	0.000	89	407600	25.0	25.2	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	93	223027	25.0	24.1	
65 Dibromomethane	93	5.258	5.258	0.000	91	167788	25.0	26.4	
66 1,4-Dioxane	88	5.258	5.258	0.000	93	95570	500.0	572.8	
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	259219	25.0	28.0	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	93	186356	25.0	26.9	
71 cis-1,3-Dichloropropene	75	5.693	5.693	0.000	95	344265	25.0	25.0	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	96	1414698	125.0	137.2	
73 Toluene	92	5.911	5.911	0.000	98	599711	25.0	23.6	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	94	322140	25.0	25.5	
77 Ethyl methacrylate	69	6.149	6.149	0.000	88	281857	25.0	24.3	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	91	192558	25.0	25.2	
79 Tetrachloroethene	166	6.305	6.305	0.000	97	302604	25.0	27.3	
80 1,3-Dichloropropane	76	6.387	6.387	0.000	90	384552	25.0	24.4	
81 2-Hexanone	43	6.429	6.429	0.000	94	1049409	125.0	147.9	
82 Chlorodibromomethane	129	6.564	6.564	0.000	89	189586	25.0	30.9	
83 Ethylene Dibromide	107	6.647	6.647	0.000	100	248580	25.0	26.3	
86 Chlorobenzene	112	6.999	6.999	0.000	96	705926	25.0	24.3	
88 Ethylbenzene	91	7.061	7.061	0.000	98	1140597	25.0	24.3	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	92	201638	25.0	27.5	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	470990	25.0	24.9	
91 o-Xylene	106	7.465	7.465	0.000	97	459374	25.0	24.2	
92 Styrene	104	7.496	7.496	0.000	94	780753	25.0	24.4	
93 Bromoform	173	7.683	7.683	0.000	97	112484	25.0	32.2	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	1176731	25.0	24.1	
97 Bromobenzene	156	8.025	8.025	0.000	89	336006	25.0	24.8	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	94	322124	25.0	25.6	
99 N-Propylbenzene	91	8.077	8.077	0.000	99	1378378	25.0	24.3	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	78	67537	25.0	18.4	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	89	118424	25.0	27.1	
105 2-Chlorotoluene	126	8.170	8.170	0.000	97	303306	25.0	24.5	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	94	1006380	25.0	24.2	
102 4-Chlorotoluene	91	8.253	8.253	0.000	98	950107	25.0	24.0	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	238996	25.0	24.3	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	96	1013247	25.0	23.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	8.657	8.657	0.000	94	1284386	25.0	24.1	
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	1183060	25.0	25.2	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	99	644720	25.0	24.4	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	96	666372	25.0	24.7	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	1025338	25.0	25.0	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	99	641696	25.0	24.5	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	86	45873	25.0	30.4	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	514726	25.0	26.9	
120 Hexachlorobutadiene	225	10.584	10.584	0.000	98	237627	25.0	29.3	
121 Naphthalene	128	10.688	10.688	0.000	97	1400377	25.0	25.9	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	96	507822	25.0	26.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00160	Amount Added: 12.50	Units: uL	
GAS CORP mix_00350	Amount Added: 12.50	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00223	Amount Added: 1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3125.D

Injection Date: 17-Jul-2019 20:06:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

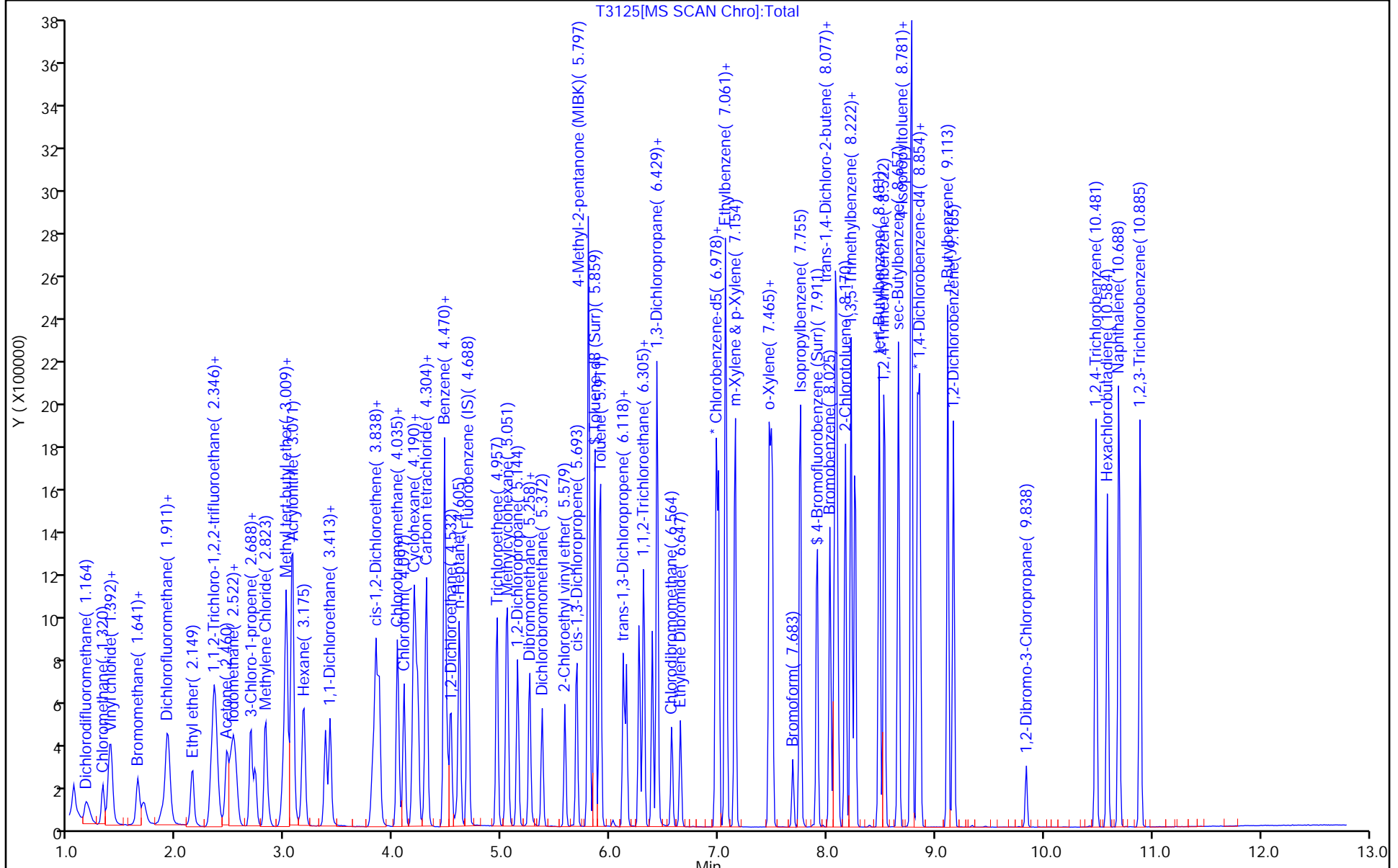
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

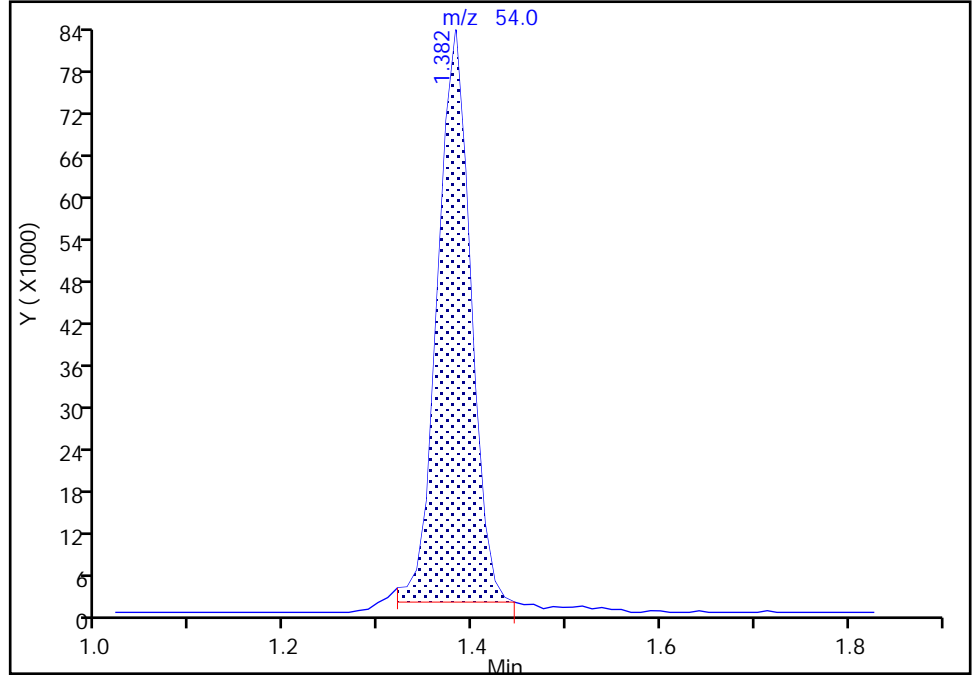
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3125.D
Injection Date: 17-Jul-2019 20:06:30 Instrument ID: HP5975T
Lims ID: CCVIS
Client ID:
Operator ID: AEM ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

151 Butadiene, CAS: 106-99-0

Signal: 1

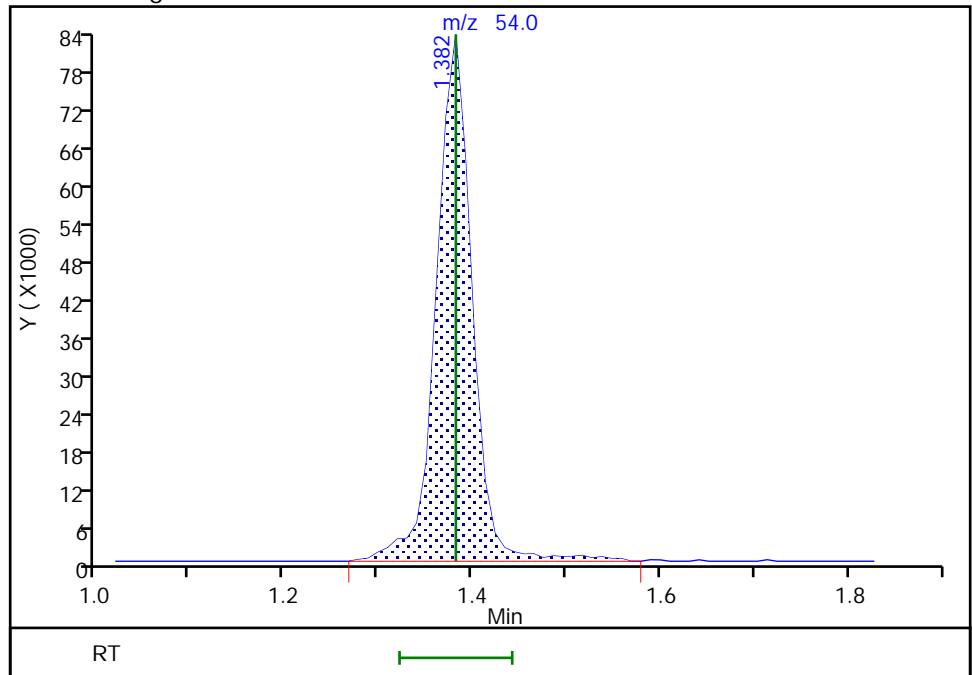
RT: 1.38
Area: 202319
Amount: 20.536622
Amount Units: ug/L

Processing Integration Results



RT: 1.38
Area: 221957
Amount: 22.529999
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 17-Jul-2019 20:37:42
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Buffalo

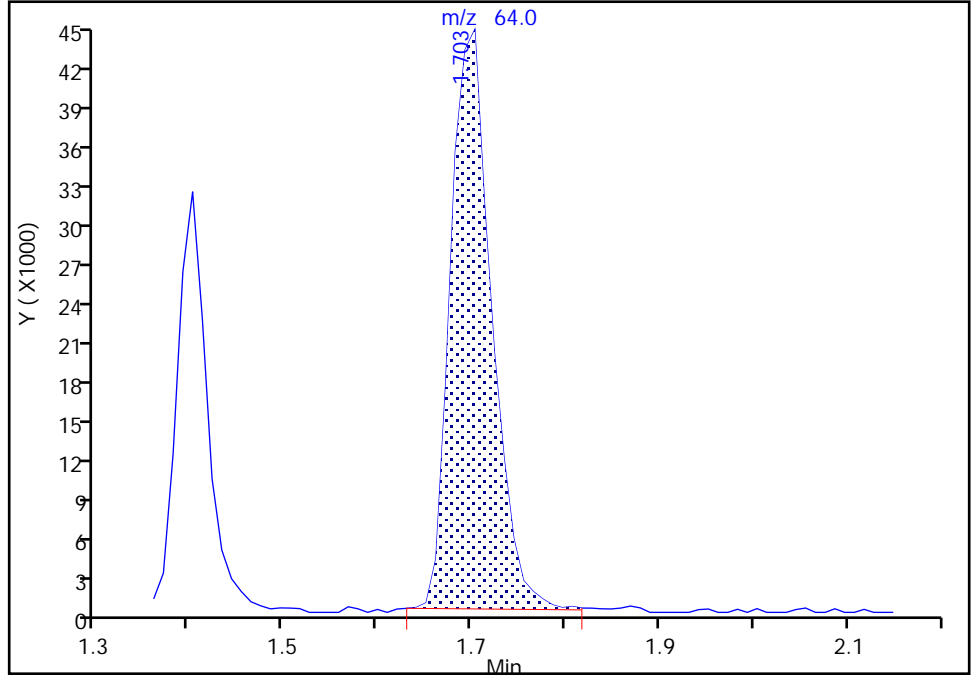
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3125.D
Injection Date: 17-Jul-2019 20:06:30 Instrument ID: HP5975T
Lims ID: CCVIS
Client ID:
Operator ID: AEM ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

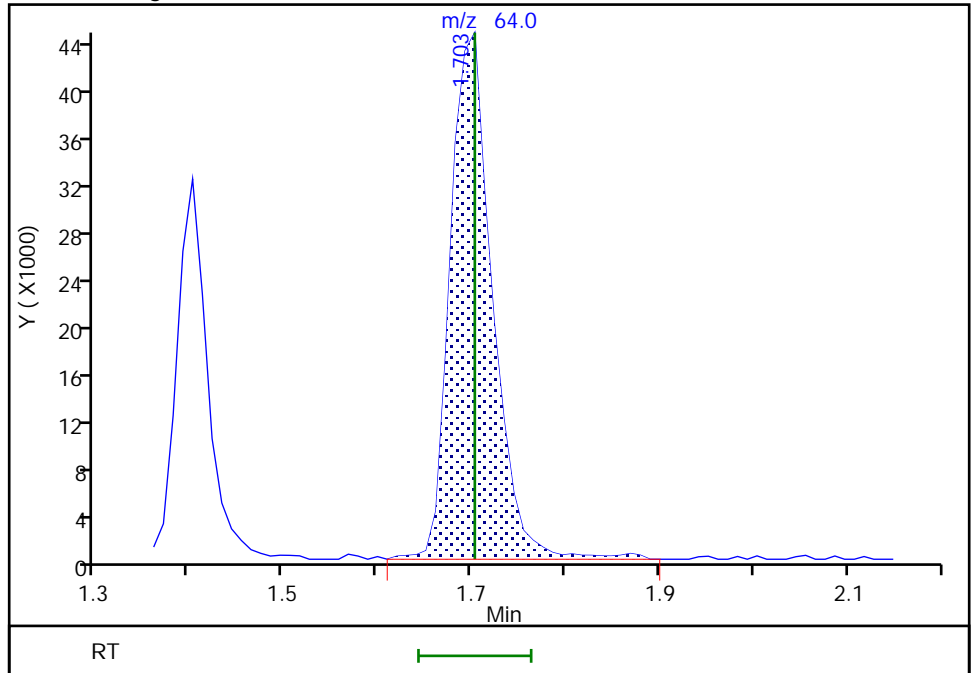
RT: 1.70
Area: 133049
Amount: 17.314138
Amount Units: ug/L

Processing Integration Results



RT: 1.70
Area: 137373
Amount: 17.876836
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 17-Jul-2019 20:38:02
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2785.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 08-Jul-2019 13:56:30 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: bfb
 Misc. Info.: 480-0082467-003
 Operator ID: KN Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 09-Jul-2019 12:50:49 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0325

First Level Reviewer: nowakk Date: 08-Jul-2019 14:07:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 5 BFB	95	5.303	5.303	0.000	90	181663	NR	NR	
----------	----	-------	-------	-------	----	--------	----	----	--

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

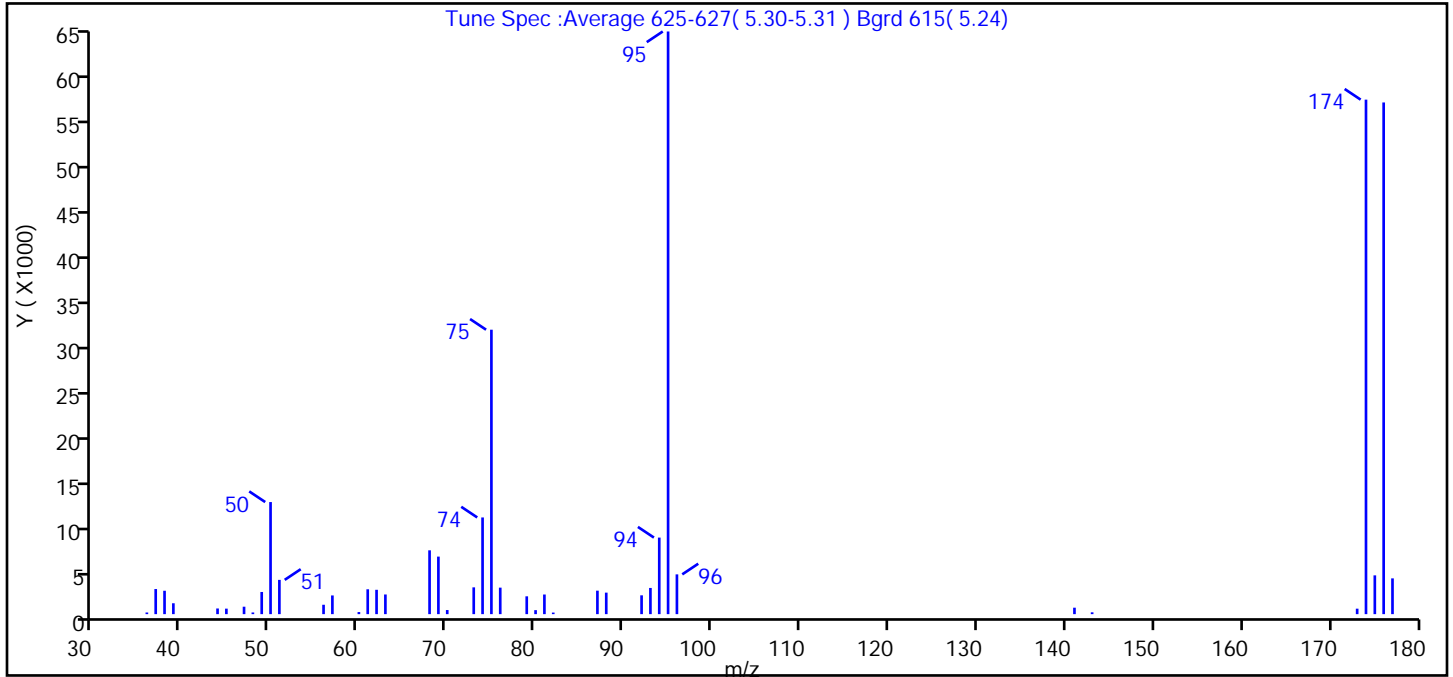
Reagents:

MV_BFB_STK_00073 Amount Added: 1.00 Units: uL

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2785.D
 Injection Date: 08-Jul-2019 13:56:30 Instrument ID: HP5975T
 Lims ID: BFB
 Client ID:
 Operator ID: KN ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.2
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.9 (1.1)
174	50 to 120% of m/z 95	88.3
175	5 to 9% of m/z 174	6.7 (7.5)
176	Greater than 95% but less than 101% of m/z 174	87.8 (99.5)
177	5 to 9% of m/z 176	6.1 (7.0)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2785.D\T-8260.rslt\spectra.d
 Injection Date: 08-Jul-2019 13:56:30
 Spectrum: Tune Spec :Average 625-627(5.30-5.31) Bgrd 615(5.24)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 42

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	184	56.00	1041	75.00	31544	95.00	64616
37.00	2783	57.00	2074	76.00	2939	96.00	4411
38.00	2594	60.00	232	79.00	1977	141.00	715
39.00	1207	61.00	2757	80.00	444	143.00	203
44.00	628	62.00	2700	81.00	2178	173.00	606
45.00	610	63.00	2181	82.00	175	174.00	57056
47.00	825	68.00	7078	87.00	2603	175.00	4301
48.00	186	69.00	6381	88.00	2385	176.00	56744
49.00	2458	70.00	455	92.00	2087	177.00	3967
50.00	12430	73.00	2971	93.00	2905		
51.00	3801	74.00	10723	94.00	8490		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3124.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 17-Jul-2019 19:36:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 480-0082700-002
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 17-Jul-2019 20:05:47 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0326

First Level Reviewer: milligana Date: 17-Jul-2019 20:05:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 5 BFB	95	5.291	5.291	0.000	90	189630	NR	NR	
----------	----	-------	-------	-------	----	--------	----	----	--

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

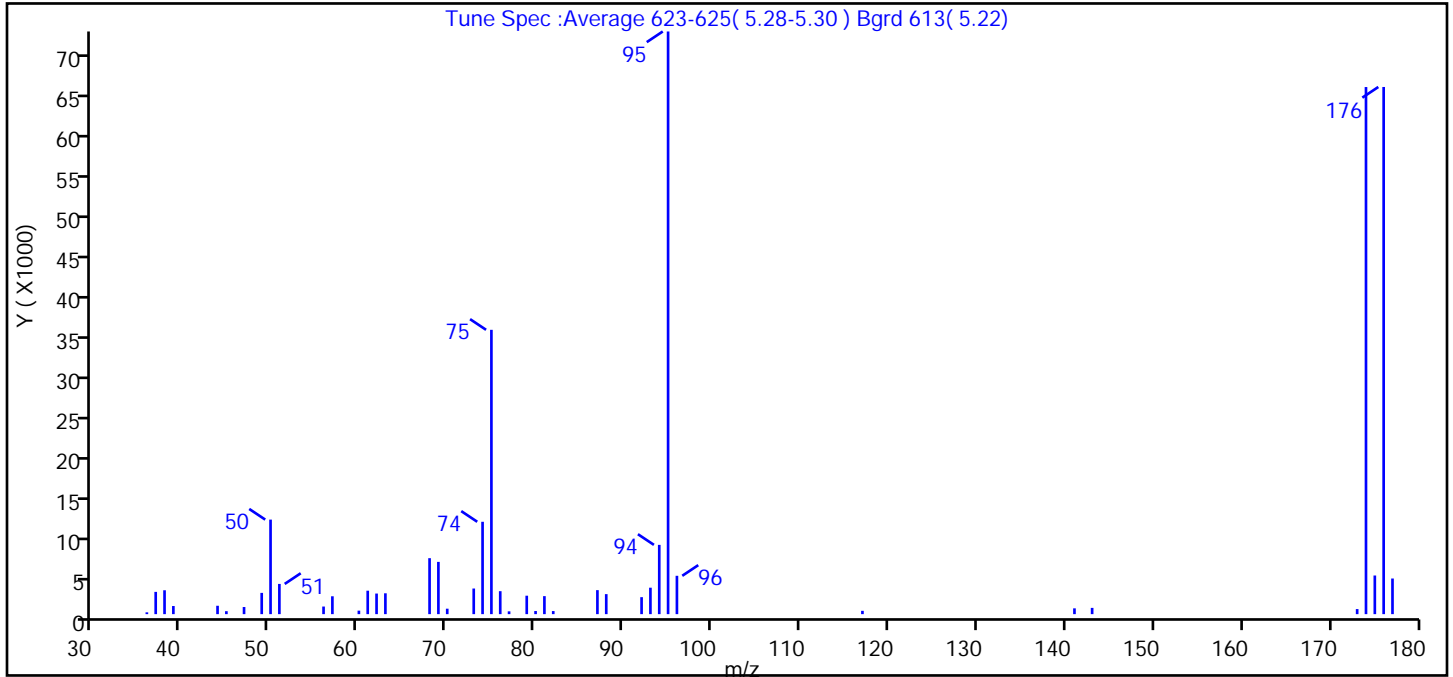
Reagents:

BFB_WRK_00089 Amount Added: 1.00 Units: uL

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3124.D
 Injection Date: 17-Jul-2019 19:36:30 Instrument ID: HP5975T
 Lims ID: BFB
 Client ID:
 Operator ID: AEM ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.9 (1.0)
174	50 to 120% of m/z 95	90.5
175	5 to 9% of m/z 174	6.6 (7.3)
176	Greater than 95% but less than 101% of m/z 174	90.5 (100.0)
177	5 to 9% of m/z 176	6.1 (6.8)

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3124.D\T-8260.rslt\spectra.d
Injection Date: 17-Jul-2019 19:36:30
Spectrum: Tune Spec :Average 623-625(5.28-5.30) Bgrd 613(5.22)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 43

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	225	57.00	2215	76.00	2846	95.00	72232
37.00	2760	60.00	433	77.00	347	96.00	4754
38.00	2960	61.00	2906	79.00	2286	117.00	411
39.00	1007	62.00	2553	80.00	386	141.00	719
44.00	1039	63.00	2585	81.00	2233	143.00	776
45.00	367	68.00	6938	82.00	381	173.00	628
47.00	883	69.00	6478	87.00	2976	174.00	65344
49.00	2636	70.00	675	88.00	2482	175.00	4790
50.00	11720	73.00	3176	92.00	2105	176.00	65352
51.00	3746	74.00	11450	93.00	3278	177.00	4417
56.00	943	75.00	35248	94.00	8588		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-482537/7
 Matrix: Water Lab File ID: T3129.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 21:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	ND		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
123-91-1	1,4-Dioxane	ND		40	9.3
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
74-97-5	Bromochloromethane	ND		1.0	0.87
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-482537/7
 Matrix: Water Lab File ID: T3129.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 21:43
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3129.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 17-Jul-2019 21:43:30 ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 480-0082700-007
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 01:54:32 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0339

First Level Reviewer: milligana Date: 18-Jul-2019 01:54:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	172717	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	753670	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	449206	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.222	0.000	93	244295	25.0	25.6	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	279534	25.0	25.5	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	900744	25.0	24.4	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	326529	25.0	26.3	
11 Dichlorodifluoromethane	85		1.164					ND	
12 Chlorodifluoromethane	51		1.175					ND	
13 Chloromethane	50		1.320					ND	
151 Butadiene	54		1.382					ND	
14 Vinyl chloride	62		1.403					ND	
15 Bromomethane	94		1.641					ND	
16 Chloroethane	64		1.703					ND	
18 Dichlorofluoromethane	67		1.911					ND	
17 Trichlorofluoromethane	101		1.921					ND	
19 Ethyl ether	59		2.149					ND	
148 Ethanol	45		2.170					ND	
84 Propene oxide	58		2.221					ND	
21 Acrolein	56		2.325					ND	
20 1,1,2-Trichloro-1,2,2-trif	101		2.346					ND	
22 1,1-Dichloroethene	96		2.346					ND	
23 Acetone	43		2.460					ND	
24 Iodomethane	142		2.501					ND	
25 Carbon disulfide	76		2.532					ND	
26 Isopropyl alcohol	45		2.636					ND	
27 3-Chloro-1-propene	41		2.677					ND	
28 Methyl acetate	43		2.719					ND	
29 Acetonitrile	40		2.740					ND	
30 Methylene Chloride	84		2.823					ND	U
31 2-Methyl-2-propanol	59		2.988					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
33 Methyl tert-butyl ether	73		3.009					ND	
32 trans-1,2-Dichloroethene	96		3.009					ND	
34 Acrylonitrile	53		3.071					ND	
35 Hexane	57		3.175					ND	
36 1,1-Dichloroethane	63		3.372					ND	
37 Isopropyl ether	45		3.382					ND	
139 Halothane	117		3.413					ND	
38 2-Chloro-1,3-butadiene	53		3.413					ND	
39 Vinyl acetate	43		3.413					ND	
40 1,1-Dimethoxyethane	75		3.444					ND	
41 Tert-butyl ethyl ether	59		3.662					ND	
42 2,2-Dichloropropane	77		3.817					ND	
43 cis-1,2-Dichloroethene	96		3.838					ND	
44 2-Butanone (MEK)	43		3.869					ND	
45 Ethyl acetate	43		3.890					ND	
46 Propionitrile	54		3.952					ND	
49 Methacrylonitrile	41		4.035					ND	
47 Chlorobromomethane	128		4.035					ND	
48 Tetrahydrofuran	42		4.045					ND	
50 Chloroform	83	4.097	4.097	0.000	88	2617		0.1621	
52 Cyclohexane	56		4.190					ND	
51 1,1,1-Trichloroethane	97		4.190					ND	
53 Carbon tetrachloride	117		4.304					ND	
54 1,1-Dichloropropene	75		4.304					ND	
152 Isooctane	57		4.460					ND	
55 Benzene	78		4.470					ND	
56 Isobutyl alcohol	43		4.491					ND	
58 Tert-amyl methyl ether	73		4.532					ND	
57 1,2-Dichloroethane	62		4.532					ND	
147 t-Amyl alcohol	59		4.543					ND	
59 n-Heptane	43		4.605					ND	
1 1,4-Difluorobenzene	114		4.771					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.864					ND	
60 Trichloroethene	95		4.957					ND	
61 n-Butanol	56		4.978					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.050					ND	
142 Ethyl acrylate	55		5.051					ND	
62 Methylcyclohexane	83		5.051					ND	
63 1,2-Dichloropropane	63		5.144					ND	
64 Methyl methacrylate	41		5.216					ND	
65 Dibromomethane	93		5.258					ND	
66 1,4-Dioxane	88		5.258					ND	
67 Dichlorobromomethane	83		5.372					ND	
68 2-Nitropropane	43		5.569					ND	
69 2-Chloroethyl vinyl ether	63		5.579					ND	
70 Epichlorohydrin	57		5.652					ND	
71 cis-1,3-Dichloropropene	75		5.693					ND	
72 4-Methyl-2-pentanone (MIBK)	43		5.797					ND	
73 Toluene	92		5.911					ND	
74 2-Methylthiophene	97		6.014					ND	
75 trans-1,3-Dichloropropene	75		6.118					ND	
76 3-Methylthiophene	97		6.139					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
77 Ethyl methacrylate	69		6.149					ND	
78 1,1,2-Trichloroethane	83		6.263					ND	
79 Tetrachloroethene	166		6.305					ND	
80 1,3-Dichloropropane	76		6.387					ND	
81 2-Hexanone	43		6.429					ND	
155 n-Butyl acetate	43		6.512					ND	
82 Chlorodibromomethane	129		6.564					ND	
83 Ethylene Dibromide	107		6.647					ND	
146 1-Chlorohexane	55		6.947					ND	U
85 3-Chlorobenzotrifluoride	180		6.968					ND	
86 Chlorobenzene	112		6.999					ND	
87 4-Chlorobenzotrifluoride	180		7.009					ND	
88 Ethylbenzene	91		7.061					ND	
89 1,1,1,2-Tetrachloroethane	131		7.071					ND	
90 m-Xylene & p-Xylene	106		7.154					ND	
91 o-Xylene	106		7.465					ND	
92 Styrene	104		7.496					ND	
93 Bromoform	173		7.683					ND	
94 2-Chlorobenzotrifluoride	180		7.693					ND	
95 Isopropylbenzene	105		7.755					ND	
96 Cyclohexanone	55		7.890					ND	U
97 Bromobenzene	156		8.025					ND	
98 1,1,2,2-Tetrachloroethane	83		8.066					ND	
99 N-Propylbenzene	91		8.077					ND	
101 trans-1,4-Dichloro-2-buten	53		8.097					ND	
100 1,2,3-Trichloropropane	110		8.097					ND	
105 2-Chlorotoluene	126		8.170					ND	
103 3-Chlorotoluene	126		8.222					ND	
104 1,3,5-Trimethylbenzene	105		8.222					ND	
102 4-Chlorotoluene	91		8.253					ND	
106 tert-Butylbenzene	134		8.481					ND	
107 1,2,4-Trimethylbenzene	105		8.522					ND	
108 Pentachloroethane	167		8.533					ND	
109 sec-Butylbenzene	105		8.657					ND	
111 4-Isopropyltoluene	119		8.771					ND	
110 1,3-Dichlorobenzene	146		8.781					ND	
112 Dicyclopentadiene	66		8.833					ND	
113 1,4-Dichlorobenzene	146		8.854					ND	U
114 1,2,3-Trimethylbenzene	105		8.874					ND	
150 Benzyl chloride	126		8.978					ND	
115 n-Butylbenzene	91		9.113					ND	
116 1,2-Dichlorobenzene	146		9.165					ND	
117 1,2-Dibromo-3-Chloropropan	75		9.838					ND	
118 1,3,5-Trichlorobenzene	180		9.952					ND	
119 1,2,4-Trichlorobenzene	180		10.481					ND	
120 Hexachlorobutadiene	225		10.584					ND	
121 Naphthalene	128		10.688					ND	
122 1,2,3-Trichlorobenzene	180		10.885					ND	
149 2-Methylnaphthalene	142		11.569					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
137 Methyl acrylate	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
136 Nitrobenzene	77		0.000					ND	
S 126 Xylenes, Total	1		30.000					ND	
S 124 1,2-Dichloroethene, Total	1		30.000					ND	
S 123 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 Total BTEX	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

T_8260_Surr_00193

Amount Added: 1.00

Units: uL

Run Reagent

T_8260_IS_00223

Amount Added: 1.00

Units: uL

Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3129.D

Injection Date: 17-Jul-2019 21:43:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: MB

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

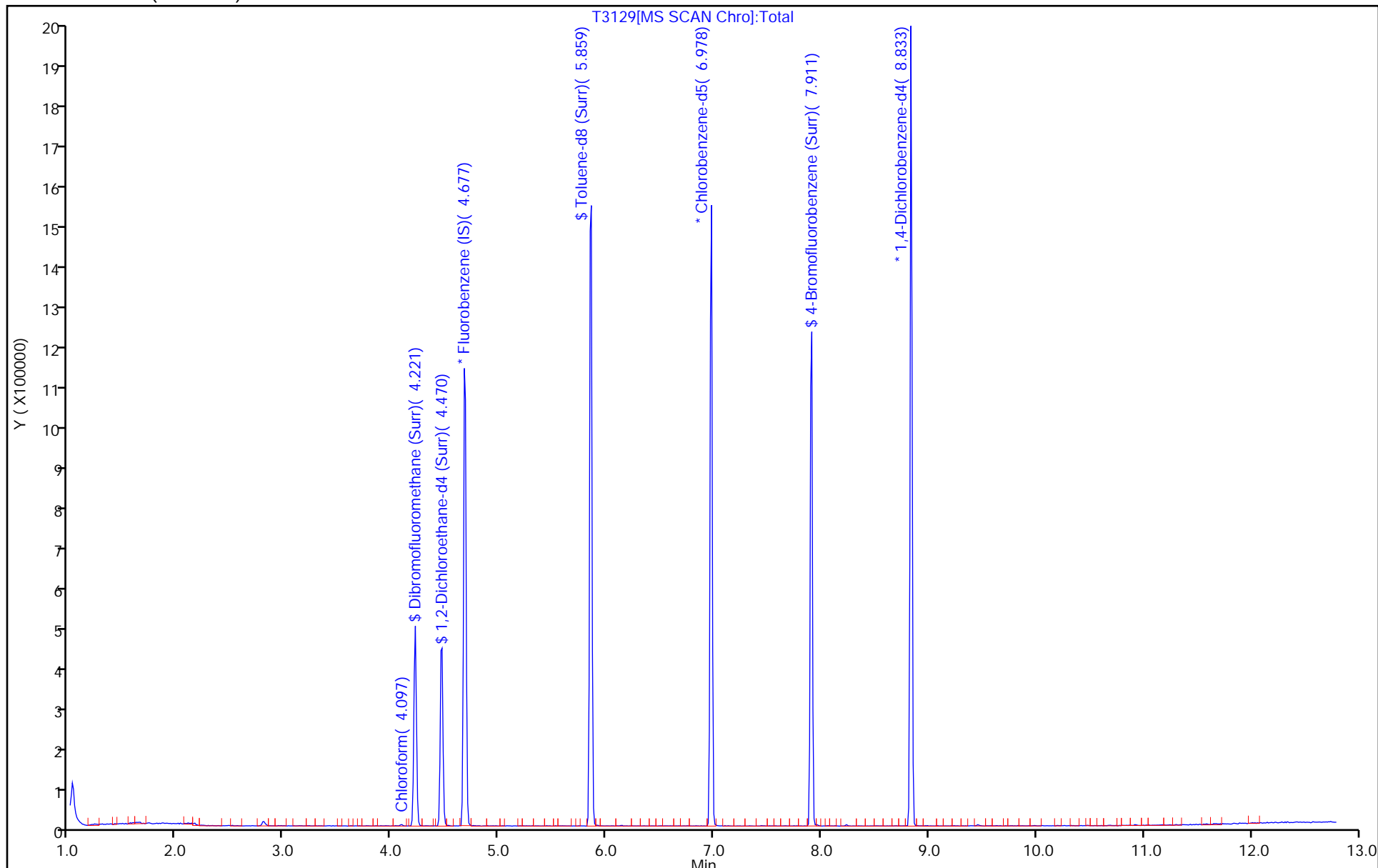
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)

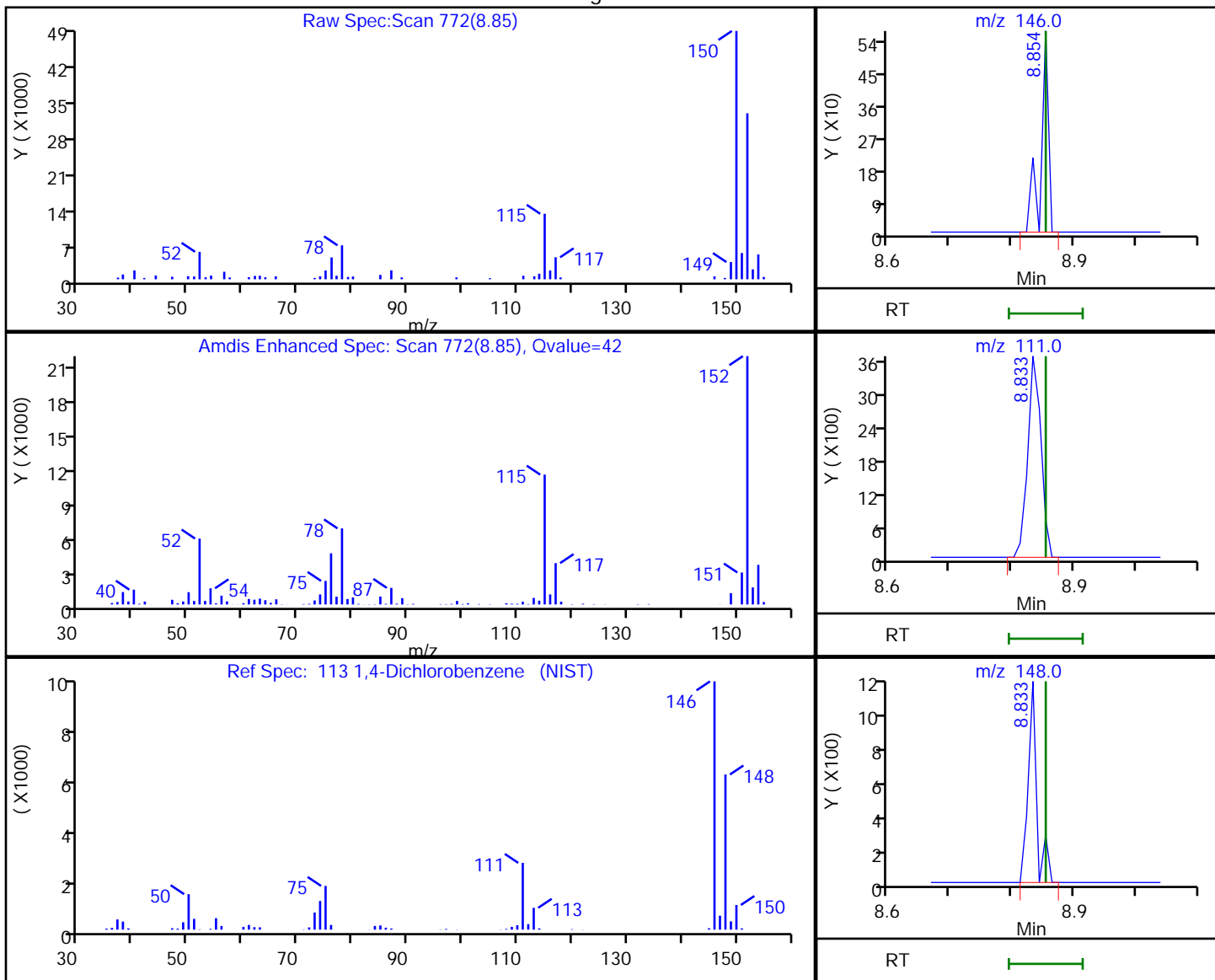


Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3129.D
 Injection Date: 17-Jul-2019 21:43:30 Instrument ID: HP5975T
 Lims ID: MB
 Client ID:
 Operator ID: AEM ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
8.85	146.00	484	0.018092
8.83	111.00	5489	
8.83	148.00	1096	

Reviewer: milligana, 17-Jul-2019 22:08:05

Audit Action: Marked Compound Undetected

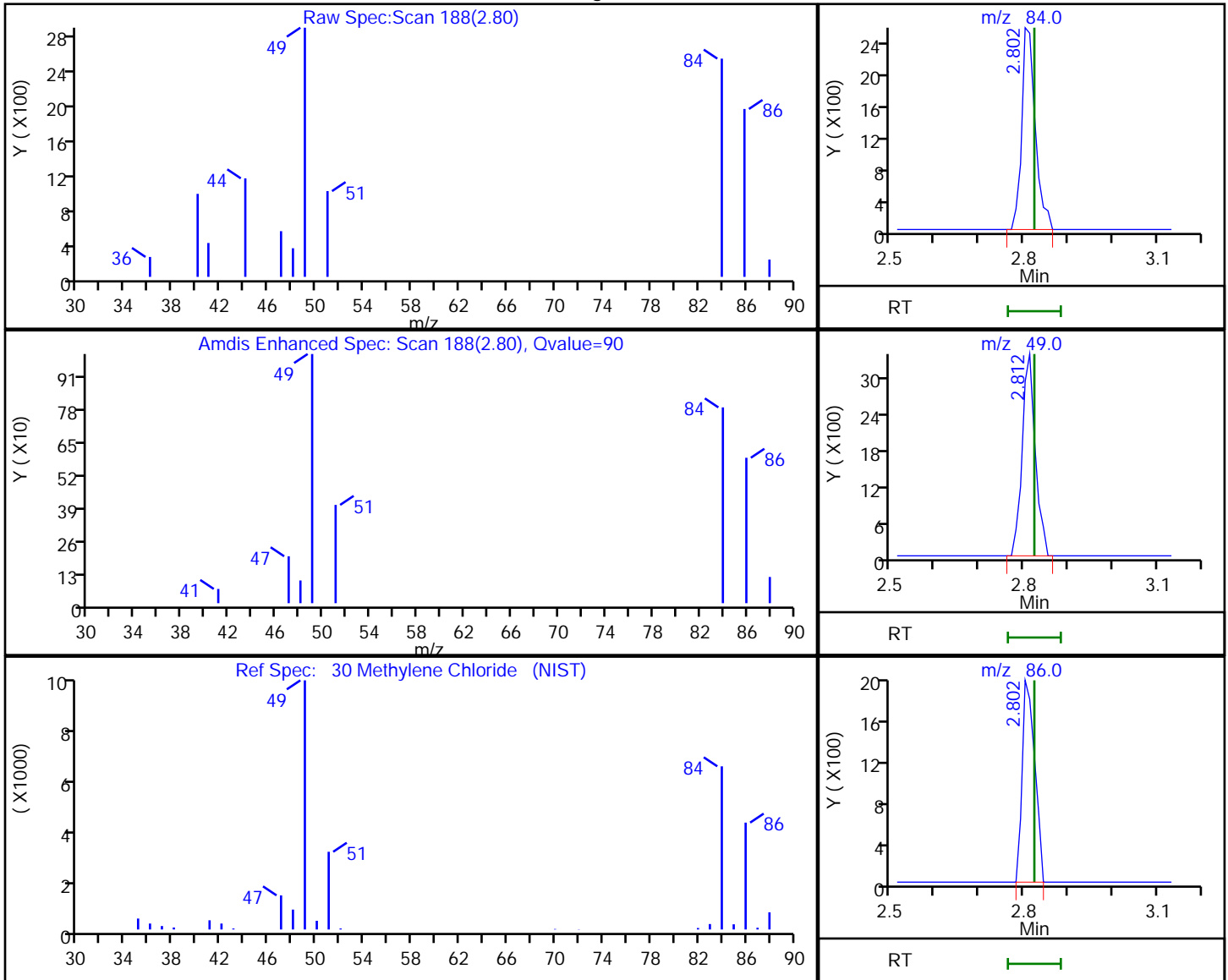
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3129.D
 Injection Date: 17-Jul-2019 21:43:30 Instrument ID: HP5975T
 Lims ID: MB
 Client ID:
 Operator ID: AEM ALS Bottle#: 7 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Method: T-8260 Limit Group: MV - 8260C ICAL
 Column: ZB-624 (0.18 mm) Detector: MS SCAN

30 Methylene Chloride, CAS: 75-09-2

Processing Results



RT	Mass	Response	Amount
2.80	84.00	5410	0.045564
2.81	49.00	6925	
2.80	86.00	3854	

Reviewer: milligana, 18-Jul-2019 01:53:58

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-482537/5
 Matrix: Water Lab File ID: T3127.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 20:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	27.4		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	25.8		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.7		1.0	0.31
79-00-5	1,1,2-Trichloroethane	26.0		1.0	0.23
75-34-3	1,1-Dichloroethane	24.9		1.0	0.38
75-35-4	1,1-Dichloroethene	24.7		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	26.7		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	27.8		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	30.7		1.0	0.39
106-93-4	1,2-Dibromoethane	26.8		1.0	0.73
95-50-1	1,2-Dichlorobenzene	25.4		1.0	0.79
107-06-2	1,2-Dichloroethane	25.9		1.0	0.21
78-87-5	1,2-Dichloropropane	24.7		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.1		1.0	0.78
106-46-7	1,4-Dichlorobenzene	24.9		1.0	0.84
123-91-1	1,4-Dioxane	550		40	9.3
78-93-3	2-Butanone (MEK)	145		10	1.3
591-78-6	2-Hexanone	147		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	136		5.0	2.1
67-64-1	Acetone	176		10	3.0
71-43-2	Benzene	23.9		1.0	0.41
74-97-5	Bromochloromethane	25.6		1.0	0.87
75-27-4	Bromodichloromethane	29.0		1.0	0.39
75-25-2	Bromoform	35.8		1.0	0.26
74-83-9	Bromomethane	19.0		1.0	0.69
75-15-0	Carbon disulfide	25.5		1.0	0.19
56-23-5	Carbon tetrachloride	28.8		1.0	0.27
108-90-7	Chlorobenzene	25.0		1.0	0.75
75-00-3	Chloroethane	17.8		1.0	0.32
67-66-3	Chloroform	24.3		1.0	0.34
74-87-3	Chloromethane	20.5		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	24.6		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.2		1.0	0.36
110-82-7	Cyclohexane	25.7		1.0	0.18
124-48-1	Dibromochloromethane	33.0		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-482537/5
 Matrix: Water Lab File ID: T3127.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 07/17/2019 20:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	18.1		1.0	0.68
100-41-4	Ethylbenzene	25.2		1.0	0.74
98-82-8	Isopropylbenzene	24.8		1.0	0.79
79-20-9	Methyl acetate	49.6		2.5	1.3
1634-04-4	Methyl tert-butyl ether	24.6		1.0	0.16
108-87-2	Methylcyclohexane	25.5		1.0	0.16
75-09-2	Methylene Chloride	27.2		1.0	0.44
100-42-5	Styrene	24.7		1.0	0.73
127-18-4	Tetrachloroethene	28.2		1.0	0.36
108-88-3	Toluene	24.3		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	25.0		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	26.0		1.0	0.37
79-01-6	Trichloroethene	24.3		1.0	0.46
75-69-4	Trichlorofluoromethane	20.2		1.0	0.88
75-01-4	Vinyl chloride	20.2		1.0	0.90
1330-20-7	Xylenes, Total	50.5		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3127.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 17-Jul-2019 20:54:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 480-0082700-005
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 01:58:02 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0339

First Level Reviewer: milligana

Date: 17-Jul-2019 21:26:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.688	4.688	0.000	99	179313	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	83	764667	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	443129	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.222	4.222	0.000	93	248553	25.0	25.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	284285	25.0	25.0	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	914319	25.0	24.4	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	336752	25.0	26.8	
11 Dichlorodifluoromethane	85	1.165	1.164	0.001	99	217078	25.0	18.1	
13 Chloromethane	50	1.310	1.320	-0.010	98	226751	25.0	20.5	
151 Butadiene	54	1.372	1.382	-0.010	90	222172	25.0	22.8	
14 Vinyl chloride	62	1.393	1.403	-0.010	98	229492	25.0	20.2	
15 Bromomethane	94	1.631	1.641	-0.010	93	179201	25.0	19.0	
16 Chloroethane	64	1.693	1.693	-0.010	99	135194	25.0	17.8	M
18 Dichlorofluoromethane	67	1.911	1.911	0.000	98	370520	25.0	19.7	
17 Trichlorofluoromethane	101	1.921	1.921	0.000	98	385652	25.0	20.2	
19 Ethyl ether	59	2.139	2.149	-0.010	89	191465	25.0	21.6	
21 Acrolein	56	2.315	2.325	-0.010	100	209231	125.0	132.9	
20 1,1,2-Trichloro-1,2,2-trif	101	2.346	2.346	0.000	91	233199	25.0	26.7	
22 1,1-Dichloroethene	96	2.346	2.346	0.000	98	203279	25.0	24.7	
23 Acetone	43	2.460	2.460	0.000	100	486993	125.0	175.8	
24 Iodomethane	142	2.501	2.501	0.000	100	464819	25.0	25.8	
25 Carbon disulfide	76	2.532	2.532	0.000	100	691424	25.0	25.5	
27 3-Chloro-1-propene	41	2.678	2.677	0.001	86	279508	25.0	24.7	
28 Methyl acetate	43	2.719	2.719	0.000	97	367720	50.0	49.6	
30 Methylene Chloride	84	2.812	2.823	-0.011	91	267449	25.0	27.2	
31 2-Methyl-2-propanol	59	2.978	2.988	-0.010	59	306040	250.0	255.5	
33 Methyl tert-butyl ether	73	2.999	3.009	-0.010	98	683901	25.0	24.6	
32 trans-1,2-Dichloroethene	96	3.009	3.009	0.000	98	241271	25.0	25.0	
34 Acrylonitrile	53	3.061	3.071	-0.010	98	1034437	250.0	256.3	
35 Hexane	57	3.165	3.175	-0.010	91	324264	25.0	24.4	
36 1,1-Dichloroethane	63	3.372	3.372	0.000	96	391129	25.0	24.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 Vinyl acetate	43	3.413	3.413	0.000	98	611536	50.0	41.0	
42 2,2-Dichloropropane	77	3.807	3.817	-0.010	91	307163	25.0	24.2	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	79	267593	25.0	24.6	
44 2-Butanone (MEK)	43	3.859	3.869	-0.010	99	675241	125.0	145.1	
47 Chlorobromomethane	128	4.035	4.035	0.000	86	153862	25.0	25.6	
48 Tetrahydrofuran	42	4.045	4.045	0.000	85	172062	50.0	49.7	
50 Chloroform	83	4.097	4.097	0.000	93	406605	25.0	24.3	
51 1,1,1-Trichloroethane	97	4.191	4.190	0.001	92	334127	25.0	27.4	
52 Cyclohexane	56	4.191	4.190	0.001	89	378985	25.0	25.7	
53 Carbon tetrachloride	117	4.294	4.304	-0.010	96	267797	25.0	28.8	
54 1,1-Dichloropropene	75	4.305	4.304	0.001	97	318416	25.0	26.2	
55 Benzene	78	4.470	4.470	0.000	96	897369	25.0	23.9	
56 Isobutyl alcohol	43	4.491	4.491	0.000	92	198824	625.0	622.1	
57 1,2-Dichloroethane	62	4.522	4.532	-0.010	97	344112	25.0	25.9	
59 n-Heptane	43	4.605	4.605	0.000	88	330298	25.0	24.8	
60 Trichloroethene	95	4.947	4.957	-0.010	94	244421	25.0	24.3	
62 Methylcyclohexane	83	5.040	5.051	-0.011	89	407430	25.0	25.5	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	93	225128	25.0	24.7	
65 Dibromomethane	93	5.248	5.258	-0.010	91	166637	25.0	26.5	
66 1,4-Dioxane	88	5.258	5.258	0.000	90	89386	500.0	549.6	
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	264939	25.0	29.0	
69 2-Chloroethyl vinyl ether	63	5.579	5.579	0.000	93	181788	25.0	26.6	
71 cis-1,3-Dichloropropene	75	5.683	5.693	-0.010	95	343156	25.0	25.2	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	1369429	125.0	136.2	
73 Toluene	92	5.900	5.911	-0.011	98	602231	25.0	24.3	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	93	320661	25.0	26.0	
77 Ethyl methacrylate	69	6.149	6.149	0.000	88	286425	25.0	25.3	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	91	193207	25.0	26.0	
79 Tetrachloroethene	166	6.305	6.305	0.000	97	304972	25.0	28.2	
80 1,3-Dichloropropane	76	6.388	6.387	0.001	90	384714	25.0	25.0	
81 2-Hexanone	43	6.429	6.429	0.000	94	1019002	125.0	147.3	
82 Chlorodibromomethane	129	6.564	6.564	0.000	89	197069	25.0	33.0	
83 Ethylene Dibromide	107	6.647	6.647	0.000	99	247026	25.0	26.8	
86 Chlorobenzene	112	6.999	6.999	0.000	96	710278	25.0	25.0	
88 Ethylbenzene	91	7.061	7.061	0.000	98	1152163	25.0	25.2	
89 1,1,1,2-Tetrachloroethane	131	7.071	7.071	0.000	91	208154	25.0	29.1	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	465819	25.0	25.3	
91 o-Xylene	106	7.465	7.465	0.000	97	465477	25.0	25.2	
92 Styrene	104	7.486	7.496	-0.010	95	770815	25.0	24.7	
93 Bromoform	173	7.683	7.683	0.000	97	121997	25.0	35.8	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	1185864	25.0	24.8	
97 Bromobenzene	156	8.025	8.025	0.000	89	344059	25.0	25.9	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	94	317844	25.0	25.8	
99 N-Propylbenzene	91	8.077	8.077	0.000	99	1387100	25.0	25.0	
101 trans-1,4-Dichloro-2-buten	53	8.097	8.097	0.000	81	65666	25.0	18.2	
100 1,2,3-Trichloropropane	110	8.097	8.097	0.000	89	112818	25.0	26.3	
105 2-Chlorotoluene	126	8.170	8.170	0.000	98	306497	25.0	25.3	
104 1,3,5-Trimethylbenzene	105	8.222	8.222	0.000	95	1020241	25.0	25.1	
102 4-Chlorotoluene	91	8.253	8.253	0.000	98	955445	25.0	24.7	
106 tert-Butylbenzene	134	8.481	8.481	0.000	91	242709	25.0	25.2	
107 1,2,4-Trimethylbenzene	105	8.522	8.522	0.000	97	1040302	25.0	24.6	
109 sec-Butylbenzene	105	8.657	8.657	0.000	94	1306499	25.0	25.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 4-Isopropyltoluene	119	8.771	8.771	0.000	97	1201864	25.0	26.2	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	98	648159	25.0	25.1	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	96	657241	25.0	24.9	
115 n-Butylbenzene	91	9.113	9.113	0.000	97	1012238	25.0	25.2	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	99	651782	25.0	25.4	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	87	45334	25.0	30.7	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	520477	25.0	27.8	
120 Hexachlorobutadiene	225	10.585	10.584	0.001	98	235620	25.0	29.7	
121 Naphthalene	128	10.688	10.688	0.000	97	1377758	25.0	26.0	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	95	501140	25.0	26.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00160	Amount Added: 12.50	Units: uL	
GAS CORP mix_00350	Amount Added: 12.50	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00223	Amount Added: 1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3127.D

Injection Date: 17-Jul-2019 20:54:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: LCS

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

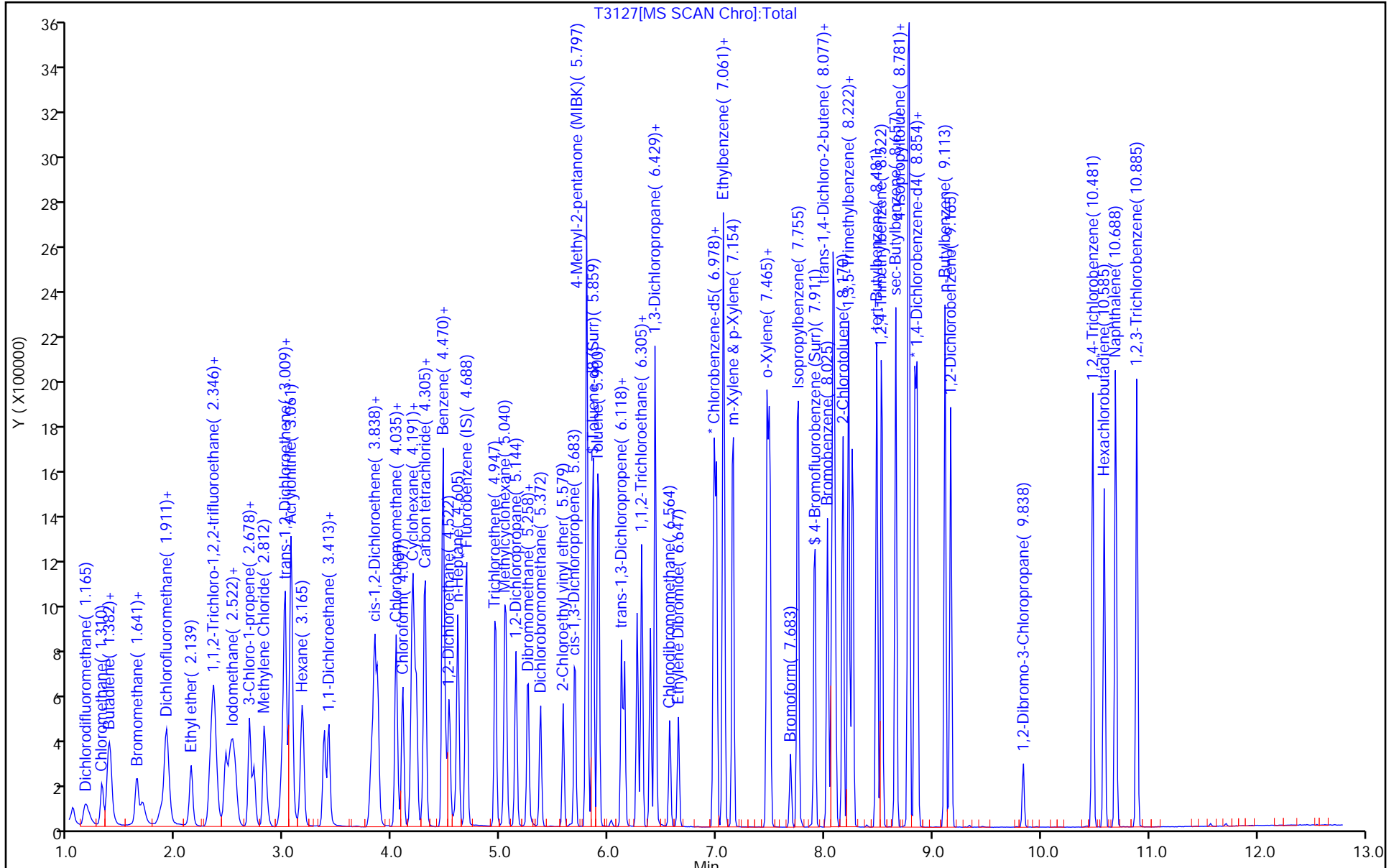
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

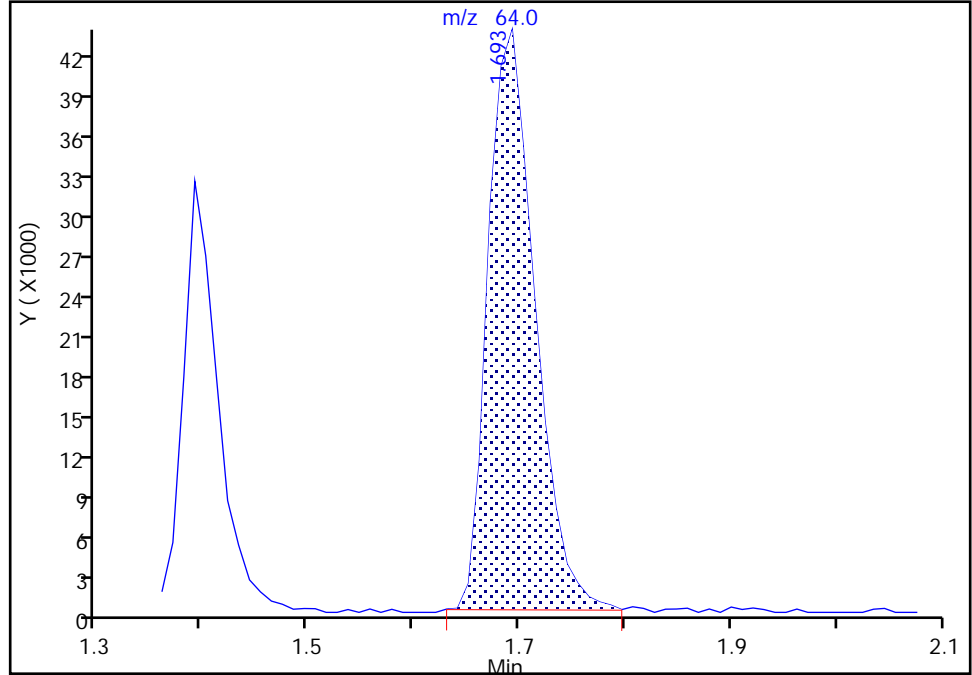
Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3127.D
Injection Date: 17-Jul-2019 20:54:30 Instrument ID: HP5975T
Lims ID: LCS
Client ID:
Operator ID: AEM ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: T-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

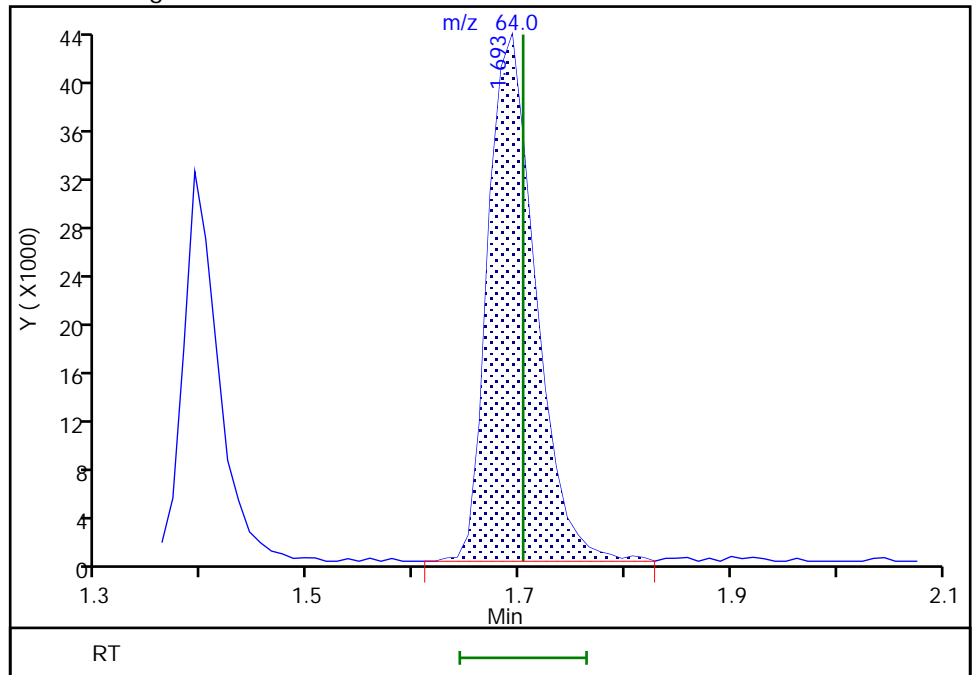
RT: 1.69
Area: 132810
Amount: 17.180462
Amount Units: ug/L

Processing Integration Results



RT: 1.69
Area: 135194
Amount: 17.809912
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 18-Jul-2019 01:57:37
Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MS Lab Sample ID: 480-156213-14 MS
 Matrix: Water Lab File ID: T3150.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 06:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	40.3		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	26.3		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28.8		1.0	0.31
79-00-5	1,1,2-Trichloroethane	25.7		1.0	0.23
75-34-3	1,1-Dichloroethane	28.0		1.0	0.38
75-35-4	1,1-Dichloroethene	31.3		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	27.7		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	27.6		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	32.4		1.0	0.39
106-93-4	1,2-Dibromoethane	27.0		1.0	0.73
95-50-1	1,2-Dichlorobenzene	26.4		1.0	0.79
107-06-2	1,2-Dichloroethane	27.8		1.0	0.21
78-87-5	1,2-Dichloropropane	26.9		1.0	0.72
541-73-1	1,3-Dichlorobenzene	26.1		1.0	0.78
106-46-7	1,4-Dichlorobenzene	26.0		1.0	0.84
123-91-1	1,4-Dioxane	499		40	9.3
78-93-3	2-Butanone (MEK)	140		10	1.3
591-78-6	2-Hexanone	140		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	133		5.0	2.1
67-64-1	Acetone	158		10	3.0
71-43-2	Benzene	26.1		1.0	0.41
74-97-5	Bromochloromethane	28.2		1.0	0.87
75-27-4	Bromodichloromethane	31.0		1.0	0.39
75-25-2	Bromoform	33.5		1.0	0.26
74-83-9	Bromomethane	22.9		1.0	0.69
75-15-0	Carbon disulfide	27.6		1.0	0.19
56-23-5	Carbon tetrachloride	33.3		1.0	0.27
108-90-7	Chlorobenzene	26.2		1.0	0.75
75-00-3	Chloroethane	22.8		1.0	0.32
67-66-3	Chloroform	27.1		1.0	0.34
74-87-3	Chloromethane	24.5		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	27.2		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	25.9		1.0	0.36
110-82-7	Cyclohexane	28.0		1.0	0.18
124-48-1	Dibromochloromethane	32.8		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MS Lab Sample ID: 480-156213-14 MS
 Matrix: Water Lab File ID: T3150.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 06:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	21.1		1.0	0.68
100-41-4	Ethylbenzene	26.6		1.0	0.74
98-82-8	Isopropylbenzene	26.5		1.0	0.79
79-20-9	Methyl acetate	48.9		2.5	1.3
1634-04-4	Methyl tert-butyl ether	25.5		1.0	0.16
108-87-2	Methylcyclohexane	27.8		1.0	0.16
75-09-2	Methylene Chloride	28.0		1.0	0.44
100-42-5	Styrene	26.0		1.0	0.73
127-18-4	Tetrachloroethene	30.0		1.0	0.36
108-88-3	Toluene	25.9		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	28.4		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.3		1.0	0.37
79-01-6	Trichloroethene	28.0		1.0	0.46
75-69-4	Trichlorofluoromethane	25.4		1.0	0.88
75-01-4	Vinyl chloride	25.7		1.0	0.90
1330-20-7	Xylenes, Total	53.2		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	103		73-120
1868-53-7	Dibromofluoromethane (Surr)	103		75-123
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3150.D
 Lims ID: 480-156213-C-14 MS
 Client ID: 356023-MW6B
 Sample Type: MS
 Inject. Date: 18-Jul-2019 06:21:30 ALS Bottle#: 28 Worklist Smp#: 29
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-C-14 MS
 Misc. Info.: 480-0082700-029
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:44:16 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:46:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	168717	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	753814	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	94	436100	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	94	240043	25.0	25.7	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.470	4.470	0.000	0	281485	25.0	26.3	
\$ 6 Toluene-d8 (Surr)	98	5.859	5.859	0.000	93	886174	25.0	24.0	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	319437	25.0	25.8	
11 Dichlorodifluoromethane	85	1.154	1.164	-0.010	99	238011	25.0	21.1	
13 Chloromethane	50	1.299	1.320	-0.021	99	255108	25.0	24.5	
14 Vinyl chloride	62	1.382	1.403	-0.021	98	274539	25.0	25.7	
15 Bromomethane	94	1.620	1.641	-0.021	92	202983	25.0	22.9	
16 Chloroethane	64	1.683	1.703	-0.020	99	162900	25.0	22.8	
17 Trichlorofluoromethane	101	1.911	1.921	-0.010	98	457482	25.0	25.4	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.346	-0.011	91	237046	25.0	28.8	
22 1,1-Dichloroethene	96	2.346	2.335	0.000	98	242246	25.0	31.3	
23 Acetone	43	2.449	2.460	-0.011	100	411223	125.0	157.7	
25 Carbon disulfide	76	2.532	2.532	0.000	100	704517	25.0	27.6	
28 Methyl acetate	43	2.719	2.719	0.000	97	341293	50.0	48.9	
30 Methylene Chloride	84	2.812	2.823	-0.011	91	258475	25.0	28.0	
33 Methyl tert-butyl ether	73	2.988	3.009	-0.021	98	668835	25.0	25.5	
32 trans-1,2-Dichloroethene	96	2.999	3.009	-0.010	98	258403	25.0	28.4	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	96	413304	25.0	28.0	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	80	278198	25.0	27.2	
44 2-Butanone (MEK)	43	3.859	3.869	-0.010	99	611465	125.0	139.6	
47 Chlorobromomethane	128	4.025	4.035	-0.010	87	159836	25.0	28.2	
50 Chloroform	83	4.097	4.076	0.000	94	426965	25.0	27.1	
52 Cyclohexane	56	4.190	4.190	0.000	86	388632	25.0	28.0	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	98	461932	25.0	40.3	
53 Carbon tetrachloride	117	4.294	4.304	-0.010	98	291153	25.0	33.3	
55 Benzene	78	4.470	4.470	0.000	96	923195	25.0	26.1	
57 1,2-Dichloroethane	62	4.522	4.522	-0.010	98	346606	25.0	27.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	94	264425	25.0	28.0	
62 Methylcyclohexane	83	5.040	5.051	-0.011	89	417533	25.0	27.8	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	93	231394	25.0	26.9	
66 1,4-Dioxane	88	5.258	5.258	0.000	91	80053	500.0	499.3	
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	266492	25.0	31.0	
71 cis-1,3-Dichloropropene	75	5.683	5.693	-0.010	95	331559	25.0	25.9	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	1320760	125.0	133.3	
73 Toluene	92	5.900	5.911	-0.011	98	631600	25.0	25.9	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	93	307870	25.0	25.3	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	92	188316	25.0	25.7	
79 Tetrachloroethene	166	6.304	6.304	-0.001	97	319675	25.0	30.0	
81 2-Hexanone	43	6.429	6.429	0.000	94	956201	125.0	140.2	
82 Chlorodibromomethane	129	6.564	6.564	0.000	89	193222	25.0	32.8	
83 Ethylene Dibromide	107	6.646	6.646	-0.001	99	245338	25.0	27.0	
86 Chlorobenzene	112	6.999	6.999	0.000	97	731067	25.0	26.2	
88 Ethylbenzene	91	7.061	7.061	0.000	98	1201121	25.0	26.6	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	489156		26.9	
91 o-Xylene	106	7.465	7.465	0.000	97	478841		26.3	
92 Styrene	104	7.486	7.496	-0.010	95	798562	25.0	26.0	
93 Bromoform	173	7.683	7.683	0.000	97	112485	25.0	33.5	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	1248207	25.0	26.5	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	97	318706	25.0	26.3	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	98	665122	25.0	26.1	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	97	674034	25.0	26.0	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	99	666253	25.0	26.4	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	88	46982	25.0	32.4	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	509661	25.0	27.6	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	96	512371	25.0	27.7	
S 126 Xylenes, Total	1				0			53.2	

Reagents:

8260 CORP mix_00160	Amount Added: 12.50	Units: uL	
GAS CORP mix_00350	Amount Added: 12.50	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00223	Amount Added: 1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3150.D

Injection Date: 18-Jul-2019 06:21:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-C-14 MS

Worklist Smp#: 29

Client ID: 356023-MW6B

Purge Vol: 5.000 mL

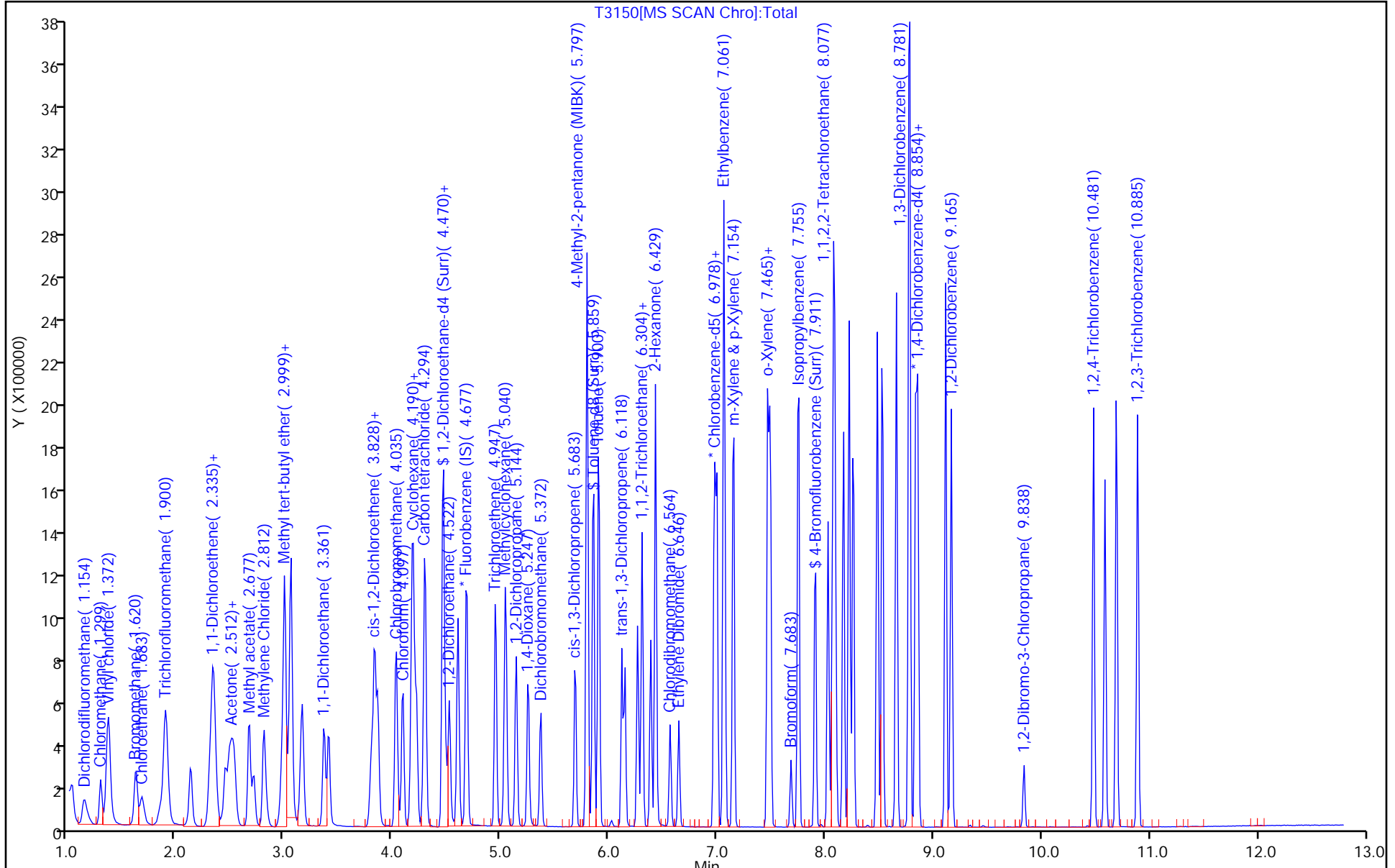
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MSD Lab Sample ID: 480-156213-14 MSD
 Matrix: Water Lab File ID: T3151.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 06:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	39.9		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	26.2		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28.1		1.0	0.31
79-00-5	1,1,2-Trichloroethane	26.0		1.0	0.23
75-34-3	1,1-Dichloroethane	27.9		1.0	0.38
75-35-4	1,1-Dichloroethene	30.4		1.0	0.29
87-61-6	1,2,3-Trichlorobenzene	28.0		1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	28.3		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	33.9		1.0	0.39
106-93-4	1,2-Dibromoethane	27.6		1.0	0.73
95-50-1	1,2-Dichlorobenzene	26.6		1.0	0.79
107-06-2	1,2-Dichloroethane	27.3		1.0	0.21
78-87-5	1,2-Dichloropropane	26.2		1.0	0.72
541-73-1	1,3-Dichlorobenzene	26.4		1.0	0.78
106-46-7	1,4-Dichlorobenzene	26.0		1.0	0.84
123-91-1	1,4-Dioxane	559		40	9.3
78-93-3	2-Butanone (MEK)	143		10	1.3
591-78-6	2-Hexanone	144		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	137		5.0	2.1
67-64-1	Acetone	155		10	3.0
71-43-2	Benzene	26.1		1.0	0.41
74-97-5	Bromochloromethane	27.5		1.0	0.87
75-27-4	Bromodichloromethane	31.3		1.0	0.39
75-25-2	Bromoform	34.9		1.0	0.26
74-83-9	Bromomethane	22.3		1.0	0.69
75-15-0	Carbon disulfide	27.3		1.0	0.19
56-23-5	Carbon tetrachloride	33.5		1.0	0.27
108-90-7	Chlorobenzene	26.5		1.0	0.75
75-00-3	Chloroethane	23.9		1.0	0.32
67-66-3	Chloroform	26.8		1.0	0.34
74-87-3	Chloromethane	23.9		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	26.7		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	26.0		1.0	0.36
110-82-7	Cyclohexane	27.7		1.0	0.18
124-48-1	Dibromochloromethane	33.7		1.0	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MSD Lab Sample ID: 480-156213-14 MSD
 Matrix: Water Lab File ID: T3151.D
 Analysis Method: 8260C Date Collected: 07/11/2019 13:15
 Sample wt/vol: 5 (mL) Date Analyzed: 07/18/2019 06:45
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: ZB-624 (20) ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 482537 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-71-8	Dichlorodifluoromethane	20.7		1.0	0.68
100-41-4	Ethylbenzene	27.2		1.0	0.74
98-82-8	Isopropylbenzene	26.8		1.0	0.79
79-20-9	Methyl acetate	48.9		2.5	1.3
1634-04-4	Methyl tert-butyl ether	25.6		1.0	0.16
108-87-2	Methylcyclohexane	27.4		1.0	0.16
75-09-2	Methylene Chloride	26.9		1.0	0.44
100-42-5	Styrene	26.5		1.0	0.73
127-18-4	Tetrachloroethene	30.7		1.0	0.36
108-88-3	Toluene	26.2		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	28.7		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.8		1.0	0.37
79-01-6	Trichloroethene	27.0		1.0	0.46
75-69-4	Trichlorofluoromethane	25.2		1.0	0.88
75-01-4	Vinyl chloride	25.6		1.0	0.90
1330-20-7	Xylenes, Total	54.3		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		77-120
460-00-4	4-Bromofluorobenzene (Surr)	107		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3151.D
 Lims ID: 480-156213-C-14 MSD
 Client ID: 356023-MW6B
 Sample Type: MSD
 Inject. Date: 18-Jul-2019 06:45:30 ALS Bottle#: 29 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 480-156213-C-14 MSD
 Misc. Info.: 480-0082700-030
 Operator ID: AEM Instrument ID: HP5975T
 Method: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T-8260.m
 Limit Group: MV - 8260C ICAL
 Last Update: 18-Jul-2019 13:44:16 Calib Date: 08-Jul-2019 21:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5975T\20190708-82467.b\T2805.D
 Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
 Process Host: CTX0321

First Level Reviewer: farrellr

Date: 18-Jul-2019 13:47:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	4.677	4.688	-0.011	99	171331	25.0	25.0	
* 2 Chlorobenzene-d5	117	6.978	6.978	0.000	84	749405	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	8.833	8.833	0.000	93	438666	25.0	25.0	
\$ 154 Dibromofluoromethane (Surr	113	4.221	4.212	-0.001	94	247278	25.0	26.1	
\$ 4 1,2-Dichloroethane-d4 (Sur	65	4.460	4.470	-0.010	0	282545	25.0	26.0	
\$ 6 Toluene-d8 (Surr)	98	5.848	5.859	-0.011	93	896989	25.0	24.4	
\$ 7 4-Bromofluorobenzene (Surr	174	7.911	7.911	0.000	0	329224	25.0	26.7	
11 Dichlorodifluoromethane	85	1.144	1.164	-0.020	99	236786	25.0	20.7	
13 Chloromethane	50	1.299	1.320	-0.021	98	252918	25.0	23.9	
14 Vinyl chloride	62	1.382	1.403	-0.021	98	277300	25.0	25.6	
15 Bromomethane	94	1.620	1.641	-0.021	93	201025	25.0	22.3	
16 Chloroethane	64	1.683	1.703	-0.021	99	173370	25.0	23.9	
17 Trichlorofluoromethane	101	1.900	1.921	-0.021	99	461349	25.0	25.2	
20 1,1,2-Trichloro-1,2,2-trif	101	2.335	2.346	-0.011	59	234830	25.0	28.1	
22 1,1-Dichloroethene	96	2.335	2.335	-0.011	98	238716	25.0	30.4	
23 Acetone	43	2.449	2.460	-0.011	100	410840	125.0	155.2	
25 Carbon disulfide	76	2.522	2.532	-0.010	100	707521	25.0	27.3	
28 Methyl acetate	43	2.708	2.719	-0.011	97	346133	50.0	48.9	
30 Methylene Chloride	84	2.802	2.823	-0.021	92	252988	25.0	26.9	
33 Methyl tert-butyl ether	73	2.988	3.009	-0.021	100	682037	25.0	25.6	
32 trans-1,2-Dichloroethene	96	2.999	3.009	-0.010	98	264825	25.0	28.7	
36 1,1-Dichloroethane	63	3.361	3.372	-0.011	96	419065	25.0	27.9	
43 cis-1,2-Dichloroethene	96	3.838	3.838	0.000	78	277573	25.0	26.7	
44 2-Butanone (MEK)	43	3.859	3.869	-0.010	99	637081	125.0	143.3	
47 Chlorobromomethane	128	4.025	4.035	-0.010	89	158127	25.0	27.5	
50 Chloroform	83	4.097	4.076	0.000	94	428605	25.0	26.8	
52 Cyclohexane	56	4.180	4.190	-0.010	86	391381	25.0	27.7	
51 1,1,1-Trichloroethane	97	4.180	4.190	-0.010	98	464658	25.0	39.9	
53 Carbon tetrachloride	117	4.294	4.304	-0.010	98	297574	25.0	33.5	
55 Benzene	78	4.470	4.470	0.000	96	937478	25.0	26.1	
57 1,2-Dichloroethane	62	4.522	4.522	-0.010	98	345661	25.0	27.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
60 Trichloroethene	95	4.947	4.957	-0.010	94	259514	25.0	27.0	
62 Methylcyclohexane	83	5.040	5.051	-0.011	89	417670	25.0	27.4	
63 1,2-Dichloropropane	63	5.144	5.144	0.000	93	228832	25.0	26.2	
66 1,4-Dioxane	88	5.258	5.258	0.000	92	89107	500.0	559.0	
67 Dichlorobromomethane	83	5.372	5.372	0.000	98	273535	25.0	31.3	
71 cis-1,3-Dichloropropene	75	5.683	5.693	-0.010	95	337924	25.0	26.0	
72 4-Methyl-2-pentanone (MIBK)	43	5.797	5.797	0.000	95	1345072	125.0	136.6	
73 Toluene	92	5.900	5.911	-0.011	98	636527	25.0	26.2	
75 trans-1,3-Dichloropropene	75	6.118	6.118	0.000	90	311325	25.0	25.8	
78 1,1,2-Trichloroethane	83	6.263	6.263	0.000	92	189358	25.0	26.0	
79 Tetrachloroethene	166	6.304	6.304	-0.001	98	325234	25.0	30.7	
81 2-Hexanone	43	6.429	6.429	0.000	94	975356	125.0	143.9	
82 Chlorodibromomethane	129	6.563	6.564	-0.001	89	197578	25.0	33.7	
83 Ethylene Dibromide	107	6.646	6.646	-0.001	99	248876	25.0	27.6	
86 Chlorobenzene	112	6.999	6.999	0.000	97	735840	25.0	26.5	
88 Ethylbenzene	91	7.061	7.061	0.000	98	1220393	25.0	27.2	
90 m-Xylene & p-Xylene	106	7.154	7.154	0.000	0	501214		27.7	
91 o-Xylene	106	7.465	7.465	0.000	97	481904		26.6	
92 Styrene	104	7.486	7.496	-0.010	96	809824	25.0	26.5	
93 Bromoform	173	7.683	7.683	0.000	97	116636	25.0	34.9	
95 Isopropylbenzene	105	7.755	7.755	0.000	95	1270389	25.0	26.8	
98 1,1,2,2-Tetrachloroethane	83	8.066	8.066	0.000	95	319215	25.0	26.2	
110 1,3-Dichlorobenzene	146	8.781	8.781	0.000	98	674740	25.0	26.4	
113 1,4-Dichlorobenzene	146	8.854	8.854	0.000	96	678158	25.0	26.0	
116 1,2-Dichlorobenzene	146	9.165	9.165	0.000	99	674242	25.0	26.6	
117 1,2-Dibromo-3-Chloropropan	75	9.838	9.838	0.000	86	49545	25.0	33.9	
119 1,2,4-Trichlorobenzene	180	10.481	10.481	0.000	94	523913	25.0	28.3	
122 1,2,3-Trichlorobenzene	180	10.885	10.885	0.000	95	520039	25.0	28.0	
S 126 Xylenes, Total	1				0			54.3	

Reagents:

8260 CORP mix_00160	Amount Added: 12.50	Units: uL	
GAS CORP mix_00350	Amount Added: 12.50	Units: uL	
T_8260_Surr_00193	Amount Added: 1.00	Units: uL	Run Reagent
T_8260_IS_00223	Amount Added: 1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5975T\20190717-82700.b\T3151.D

Injection Date: 18-Jul-2019 06:45:30

Instrument ID: HP5975T

Operator ID: AEM

Lims ID: 480-156213-C-14 MSD

Worklist Smp#: 30

Client ID: 356023-MW6B

Purge Vol: 5.000 mL

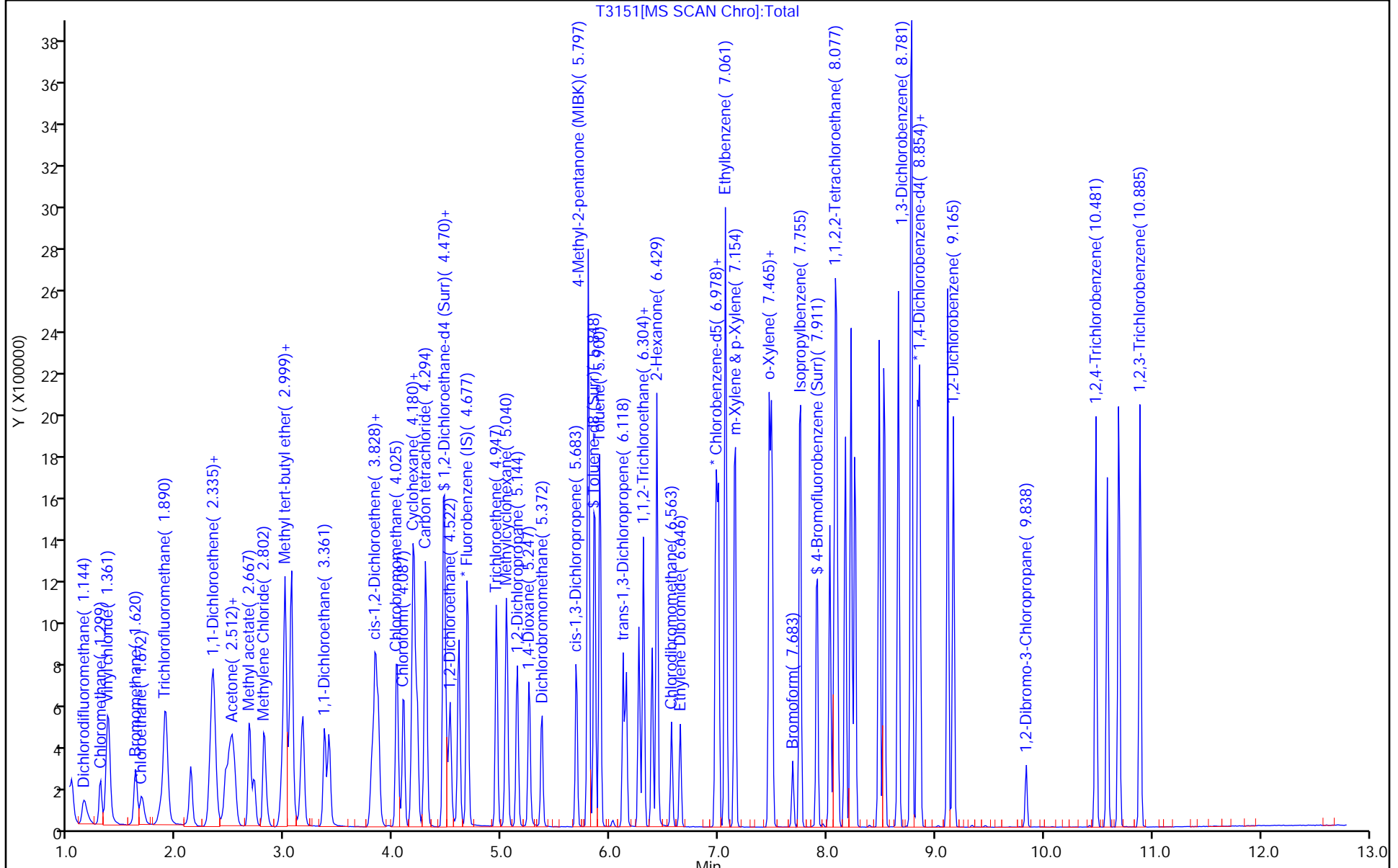
Dil. Factor: 1.0000

ALS Bottle#: 29

Method: T-8260

Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, BuffaloJob No.: 480-156213-1

SDG No.: _____

Instrument ID: HP5975TStart Date: 07/08/2019 13:56Analysis Batch Number: 481153End Date: 07/08/2019 23:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-481153/3		07/08/2019 13:56	1	T2785.D	ZB-624 (20) 0.18 (mm)
IC 480-481153/5		07/08/2019 14:46	1	T2787.D	ZB-624 (20) 0.18 (mm)
IC 480-481153/6		07/08/2019 15:10	1	T2788.D	ZB-624 (20) 0.18 (mm)
IC 480-481153/7		07/08/2019 15:35	1	T2789.D	ZB-624 (20) 0.18 (mm)
IC 480-481153/8		07/08/2019 15:59	1	T2790.D	ZB-624 (20) 0.18 (mm)
IC 480-481153/9		07/08/2019 16:23	1	T2791.D	ZB-624 (20) 0.18 (mm)
ICIS 480-481153/10		07/08/2019 16:47	1	T2792.D	ZB-624 (20) 0.18 (mm)
IC 480-481153/11		07/08/2019 17:11	1	T2793.D	ZB-624 (20) 0.18 (mm)
IC 480-481153/12		07/08/2019 17:35	1	T2794.D	ZB-624 (20) 0.18 (mm)
MDLV 480-481153/14		07/08/2019 18:23	1		ZB-624 (20) 0.18 (mm)
IC 480-481153/17		07/08/2019 19:34	1		ZB-624 (20) 0.18 (mm)
IC 480-481153/18		07/08/2019 19:58	1		ZB-624 (20) 0.18 (mm)
IC 480-481153/19		07/08/2019 20:22	1		ZB-624 (20) 0.18 (mm)
IC 480-481153/20		07/08/2019 20:46	1		ZB-624 (20) 0.18 (mm)
IC 480-481153/21		07/08/2019 21:09	1		ZB-624 (20) 0.18 (mm)
IC 480-481153/22		07/08/2019 21:34	1		ZB-624 (20) 0.18 (mm)
IC 480-481153/23		07/08/2019 21:58	1		ZB-624 (20) 0.18 (mm)
MDLV 480-481153/25		07/08/2019 22:46	1		ZB-624 (20) 0.18 (mm)
ICV 480-481153/26		07/08/2019 23:10	1		ZB-624 (20) 0.18 (mm)
ICV 480-481153/27		07/08/2019 23:34	1		ZB-624 (20) 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Instrument ID: HP5975T Start Date: 07/17/2019 19:36

Analysis Batch Number: 482537 End Date: 07/18/2019 06:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-482537/2		07/17/2019 19:36	1	T3124.D	ZB-624 (20) 0.18 (mm)
CCVIS 480-482537/3		07/17/2019 20:06	1	T3125.D	ZB-624 (20) 0.18 (mm)
CCV 480-482537/4		07/17/2019 20:30	1		ZB-624 (20) 0.18 (mm)
LCS 480-482537/5		07/17/2019 20:54	1	T3127.D	ZB-624 (20) 0.18 (mm)
RL 480-482537/6		07/17/2019 21:18	1		ZB-624 (20) 0.18 (mm)
MB 480-482537/7		07/17/2019 21:43	1	T3129.D	ZB-624 (20) 0.18 (mm)
480-156213-1		07/17/2019 22:23	1	T3130.D	ZB-624 (20) 0.18 (mm)
480-156213-2		07/17/2019 22:47	1	T3131.D	ZB-624 (20) 0.18 (mm)
480-156213-3		07/17/2019 23:11	1	T3132.D	ZB-624 (20) 0.18 (mm)
480-156213-4		07/17/2019 23:35	1	T3133.D	ZB-624 (20) 0.18 (mm)
480-156213-5		07/17/2019 23:59	1	T3134.D	ZB-624 (20) 0.18 (mm)
480-156213-6		07/18/2019 00:23	1	T3135.D	ZB-624 (20) 0.18 (mm)
480-156213-7		07/18/2019 00:47	1	T3136.D	ZB-624 (20) 0.18 (mm)
480-156213-8		07/18/2019 01:11	1	T3137.D	ZB-624 (20) 0.18 (mm)
480-156213-9		07/18/2019 01:35	1	T3138.D	ZB-624 (20) 0.18 (mm)
480-156213-10		07/18/2019 01:59	1	T3139.D	ZB-624 (20) 0.18 (mm)
480-156213-11		07/18/2019 02:23	40	T3140.D	ZB-624 (20) 0.18 (mm)
480-156213-12		07/18/2019 02:47	50	T3141.D	ZB-624 (20) 0.18 (mm)
480-156213-13		07/18/2019 03:11	20	T3142.D	ZB-624 (20) 0.18 (mm)
480-156213-14		07/18/2019 03:34	1	T3143.D	ZB-624 (20) 0.18 (mm)
480-156213-15		07/18/2019 03:58	1	T3144.D	ZB-624 (20) 0.18 (mm)
480-156213-16		07/18/2019 04:22	1	T3145.D	ZB-624 (20) 0.18 (mm)
480-156213-17		07/18/2019 04:46	1	T3146.D	ZB-624 (20) 0.18 (mm)
480-156213-18		07/18/2019 05:09	2	T3147.D	ZB-624 (20) 0.18 (mm)
480-156213-19		07/18/2019 05:34	1	T3148.D	ZB-624 (20) 0.18 (mm)
480-156213-20		07/18/2019 05:57	1	T3149.D	ZB-624 (20) 0.18 (mm)
480-156213-14 MS		07/18/2019 06:21	1	T3150.D	ZB-624 (20) 0.18 (mm)
480-156213-14 MSD		07/18/2019 06:45	1	T3151.D	ZB-624 (20) 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Batch Number: 482537 Batch Start Date: 07/17/19 19:36 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00160	BFB_WRK 00089	GAS CORP mix 00350
BFB 480-482537/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-482537/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-482537/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-482537/7		8260C		5 mL	5 mL				
480-156213-D-1	356023-MW8B	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-2	356023-MW8BD	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-3	356023-MW16	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-4	356023-MW14B 150	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-5	356023-MW12B 190	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-6	356023-MW11B	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-7	356023-MW11C	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-8	356023-MW1801	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-9	356023-MW1802	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-10	356023-MW1803	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-11	356023-MW5B	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-12	356023-ERT4	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-13	356023-MW4	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-14	356023-MW6B	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-15	356023-MW15B	8260C	T	5 mL	5 mL	<2 SU			
480-156213-C-16	356023-EB1	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-17	356023-MW1B	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-18	356023-MW5R	8260C	T	5 mL	5 mL	<2 SU			
480-156213-D-19	356023-MW7R	8260C	T	5 mL	5 mL	<2 SU			
480-156213-A-20	356023-TB1	8260C	T	5 mL	5 mL	<2 SU			
480-156213-C-14 MS	356023-MW6B	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL
480-156213-C-14 MSD	356023-MW6B	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 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, Buffalo Job No.: 480-156213-1

SDG No.: _____

Batch Number: 482537 Batch Start Date: 07/17/19 19:36 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	T_8260_IS 00223	T_8260_Surr 00193				
BFB 480-482537/2		8260C							
CCVIS 480-482537/3		8260C		1 uL	1 uL				
LCS 480-482537/5		8260C		1 uL	1 uL				
MB 480-482537/7		8260C		1 uL	1 uL				
480-156213-D-1	356023-MW8B	8260C	T	1 uL	1 uL				
480-156213-D-2	356023-MW8BD	8260C	T	1 uL	1 uL				
480-156213-D-3	356023-MW16	8260C	T	1 uL	1 uL				
480-156213-D-4	356023-MW14B 150	8260C	T	1 uL	1 uL				
480-156213-D-5	356023-MW12B 190	8260C	T	1 uL	1 uL				
480-156213-D-6	356023-MW11B	8260C	T	1 uL	1 uL				
480-156213-D-7	356023-MW11C	8260C	T	1 uL	1 uL				
480-156213-D-8	356023-MW1801	8260C	T	1 uL	1 uL				
480-156213-D-9	356023-MW1802	8260C	T	1 uL	1 uL				
480-156213-D-10	356023-MW1803	8260C	T	1 uL	1 uL				
480-156213-D-11	356023-MW5B	8260C	T	1 uL	1 uL				
480-156213-D-12	356023-ERT4	8260C	T	1 uL	1 uL				
480-156213-D-13	356023-MW4	8260C	T	1 uL	1 uL				
480-156213-D-14	356023-MW6B	8260C	T	1 uL	1 uL				
480-156213-D-15	356023-MW15B	8260C	T	1 uL	1 uL				
480-156213-C-16	356023-EB1	8260C	T	1 uL	1 uL				
480-156213-D-17	356023-MW1B	8260C	T	1 uL	1 uL				
480-156213-D-18	356023-MW5R	8260C	T	1 uL	1 uL				
480-156213-D-19	356023-MW7R	8260C	T	1 uL	1 uL				
480-156213-A-20	356023-TB1	8260C	T	1 uL	1 uL				
480-156213-C-14 MS	356023-MW6B	8260C	T	1 uL	1 uL				
480-156213-C-14 MSD	356023-MW6B	8260C	T	1 uL	1 uL				

Batch Notes	

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, Buffalo Job No.: 480-156213-1

SDG No.: _____

Batch Number: 482537 Batch Start Date: 07/17/19 19:36 Batch Analyst: Farrell, Ryan J

Batch Method: 8260C Batch End Date: _____

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.

Method 8270D

SIM-ID

Semivolatile Organic Compounds
(GC/MS SIM / Isotope Dilution) by
Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo

Job No.: 480-156213-1

SDG No.: _____

Matrix: Water

Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DXE #
356023-MW8B	480-156213-1	31
356023-MW8BD	480-156213-2	39
356023-MW16	480-156213-3	39
356023-MW14B 150	480-156213-4	36
356023-MW12B 190	480-156213-5	35
356023-MW11B	480-156213-6	35
356023-MW11C	480-156213-7	39
356023-MW1801	480-156213-8	45
356023-MW1802	480-156213-9	37
356023-MW1803	480-156213-10	39
356023-MW5B	480-156213-11	34
356023-ERT4	480-156213-12	28
356023-MW4	480-156213-13	37
356023-MW6B	480-156213-14	43
356023-MW15B	480-156213-15	32
356023-EB1	480-156213-16	33
356023-MW1B	480-156213-17	43
356023-MW5R	480-156213-18	37
356023-MW7R	480-156213-19	41
	MB 480-482507/1-A	38
	LCS 480-482507/2-A	34
356023-MW6B MS	480-156213-14 MS	34
356023-MW6B MSD	480-156213-14 MSD	38

DXE = 1,4-Dioxane-d8

QC LIMITS
15-110

Column to be used to flag recovery values

FORM II 8270D SIM ID

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: U33151385.D

Lab ID: LCS 480-482507/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	1.00	1.15	115	40-140	
1,4-Dioxane-d8	10.0	3.36	34	15-110	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: U33151386.D

Lab ID: 480-156213-14 MS Client ID: 356023-MW6B MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	1.00	0.76	1.93	117	40-140	E
1,4-Dioxane-d8	10.0	4.3	3.39	34	15-110	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: U33151387.D

Lab ID: 480-156213-14 MSD Client ID: 356023-MW6B MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,4-Dioxane	1.00	1.90	114	2	20	40-140	E
1,4-Dioxane-d8	10.0	3.76	38			15-110	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: U33151384.D Lab Sample ID: MB 480-482507/1-A
 Matrix: Water Date Extracted: 07/17/2019 15:17
 Instrument ID: HP5973U Date Analyzed: 07/18/2019 19:44
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-482507/2-A	U33151385.D	07/18/2019 20:08
356023-MW6B MS	480-156213-14 MS	U33151386.D	07/18/2019 20:32
356023-MW6B MSD	480-156213-14 MSD	U33151387.D	07/18/2019 20:55
356023-MW6B	480-156213-14	U33151388.D	07/18/2019 21:19
356023-MW8B	480-156213-1	U33151389.D	07/18/2019 21:43
356023-MW8BD	480-156213-2	U33151390.D	07/18/2019 22:07
356023-MW11C	480-156213-7	U33151398.D	07/19/2019 01:24
356023-MW1801	480-156213-8	U33151399.D	07/19/2019 01:48
356023-MW1802	480-156213-9	U33151400.D	07/19/2019 02:11
356023-MW1803	480-156213-10	U33151401.D	07/19/2019 02:35
356023-EB1	480-156213-16	U33151406.D	07/19/2019 04:32
356023-MW1B	480-156213-17	U33151407.D	07/19/2019 04:56
356023-MW7R	480-156213-19	U33151409.D	07/19/2019 05:43
356023-MW16	480-156213-3	U33151427.D	07/21/2019 17:29
356023-MW14B 150	480-156213-4	U33151428.D	07/21/2019 17:53
356023-MW12B 190	480-156213-5	U33151429.D	07/21/2019 18:17
356023-MW11B	480-156213-6	U33151430.D	07/21/2019 18:40
356023-MW5B	480-156213-11	U33151431.D	07/21/2019 19:04
356023-ERT4	480-156213-12	U33151432.D	07/21/2019 19:28
356023-MW4	480-156213-13	U33151433.D	07/21/2019 19:51
356023-MW15B	480-156213-15	U33151434.D	07/21/2019 20:15
356023-MW5R	480-156213-18	U33151435.D	07/21/2019 20:38

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: U33151151.D DFTPP Injection Date: 07/03/2019
 Instrument ID: HP5973U DFTPP Injection Time: 14:17
 Analysis Batch No.: 480789

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	35.3
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	37.1
70	Less than 2% of mass 69	0.0 (0.0) 1
127	10-80% of Base Peak	44.1
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.9
275	10-60% of Base Peak	29.6
365	Greater than 1% of mass 198	3.1
441	present but less than 24% of mass 442	11.5 (14.1) 2
442	Greater than 50% of mass 198	81.3
443	15-24% of mass 442	15.5 (19.0) 2

1-Value is % mass 69

2-Value is % mass 442

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
	IC 480-480789/3	U33151152.D	07/03/2019	14:45
	IC 480-480789/4	U33151153.D	07/03/2019	15:09
	ICIS 480-480789/5	U33151154.D	07/03/2019	15:34
	IC 480-480789/6	U33151155.D	07/03/2019	15:58
	IC 480-480789/7	U33151156.D	07/03/2019	16:23
	IC 480-480789/8	U33151157.D	07/03/2019	16:46

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: U33151365.D DFTPP Injection Date: 07/18/2019
 Instrument ID: HP5973U DFTPP Injection Time: 12:13
 Analysis Batch No.: 482664

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	36.1
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	37.1
70	Less than 2% of mass 69	0.2 (0.5) 1
127	10-80% of Base Peak	45.1
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.6
275	10-60% of Base Peak	27.8
365	Greater than 1% of mass 198	3.1
441	present but less than 24% of mass 442	10.5 (13.7) 2
442	Greater than 50% of mass 198	76.6
443	15-24% of mass 442	14.8 (19.3) 2

1-Value is % mass 69

2-Value is % mass 442

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 480-482664/3	U33151366.D	07/18/2019	12:41
	MB 480-482507/1-A	U33151384.D	07/18/2019	19:44
	LCS 480-482507/2-A	U33151385.D	07/18/2019	20:08
356023-MW6B MS	480-156213-14 MS	U33151386.D	07/18/2019	20:32
356023-MW6B MSD	480-156213-14 MSD	U33151387.D	07/18/2019	20:55
356023-MW6B	480-156213-14	U33151388.D	07/18/2019	21:19
356023-MW8B	480-156213-1	U33151389.D	07/18/2019	21:43
356023-MW8BD	480-156213-2	U33151390.D	07/18/2019	22:07

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: U33151395.D DFTPP Injection Date: 07/19/2019
 Instrument ID: HP5973U DFTPP Injection Time: 00:08
 Analysis Batch No.: 482665

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	36.1
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	37.0
70	Less than 2% of mass 69	0.1 (0.2) 1
127	10-80% of Base Peak	43.8
197	Less than 2% of mass 198	0.7
198	Base peak	100.0
199	5-9% of mass 198	6.6
275	10-60% of Base Peak	27.9
365	Greater than 1% of mass 198	3.1
441	present but less than 24% of mass 442	11.0 (14.7) 2
442	Greater than 50% of mass 198	74.6
443	15-24% of mass 442	14.5 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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 480-482665/3	U33151396.D	07/19/2019	00:36
356023-MW11C	480-156213-7	U33151398.D	07/19/2019	01:24
356023-MW1801	480-156213-8	U33151399.D	07/19/2019	01:48
356023-MW1802	480-156213-9	U33151400.D	07/19/2019	02:11
356023-MW1803	480-156213-10	U33151401.D	07/19/2019	02:35
356023-EB1	480-156213-16	U33151406.D	07/19/2019	04:32
356023-MW1B	480-156213-17	U33151407.D	07/19/2019	04:56
356023-MW7R	480-156213-19	U33151409.D	07/19/2019	05:43

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: U33151419.D DFTPP Injection Date: 07/21/2019
 Instrument ID: HP5973U DFTPP Injection Time: 14:10
 Analysis Batch No.: 482965

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	36.1
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	37.3
70	Less than 2% of mass 69	0.1 (0.3) 1
127	10-80% of Base Peak	42.7
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.7
275	10-60% of Base Peak	28.4
365	Greater than 1% of mass 198	2.8
441	present but less than 24% of mass 442	12.0 (16.4) 2
442	Greater than 50% of mass 198	73.3
443	15-24% of mass 442	15.1 (20.6) 2

1-Value is % mass 69

2-Value is % mass 442

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 480-482965/3	U33151420.D	07/21/2019	14:38
356023-MW16	480-156213-3	U33151427.D	07/21/2019	17:29
356023-MW14B 150	480-156213-4	U33151428.D	07/21/2019	17:53
356023-MW12B 190	480-156213-5	U33151429.D	07/21/2019	18:17
356023-MW11B	480-156213-6	U33151430.D	07/21/2019	18:40
356023-MW5B	480-156213-11	U33151431.D	07/21/2019	19:04
356023-ERT4	480-156213-12	U33151432.D	07/21/2019	19:28
356023-MW4	480-156213-13	U33151433.D	07/21/2019	19:51
356023-MW15B	480-156213-15	U33151434.D	07/21/2019	20:15
356023-MW5R	480-156213-18	U33151435.D	07/21/2019	20:38

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: ICIS 480-480789/5 Date Analyzed: 07/03/2019 15:34
 Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)
 Lab File ID (Standard): U33151154.D Heated Purge: (Y/N) N
 Calibration ID: 37196

	DCBd4					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	332481	5.83				
UPPER LIMIT	664962	6.33				
LOWER LIMIT	166241	5.33				
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCVIS 480-482664/3		553552	5.83			
CCVIS 480-482665/3		534890	5.83			
CCVIS 480-482965/3		490415	5.83			

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 8270D SIM ID

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: CCVIS 480-482664/3 Date Analyzed: 07/18/2019 12:41
 Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25 (mm)
 Lab File ID (Standard): U33151366.D Heated Purge: (Y/N) N
 Calibration ID: 37196

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		553552	5.83				
UPPER LIMIT		1107104	6.33				
LOWER LIMIT		276776	5.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-482507/1-A		469713	5.83				
LCS 480-482507/2-A		484580	5.84				
480-156213-14 MS	356023-MW6B MS	449185	5.84				
480-156213-14 MSD	356023-MW6B MSD	437747	5.84				
480-156213-14	356023-MW6B	430382	5.83				
480-156213-1	356023-MW8B	446089	5.83				
480-156213-2	356023-MW8BD	434031	5.83				

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
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: CCVIS 480-482665/3 Date Analyzed: 07/19/2019 00:36
 Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)
 Lab File ID (Standard): U33151396.D Heated Purge: (Y/N) N
 Calibration ID: 37196

	DCBd4					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	534890	5.83				
UPPER LIMIT	1069780	6.33				
LOWER LIMIT	267445	5.33				
LAB SAMPLE ID	CLIENT SAMPLE ID					
480-156213-7	356023-MW11C	416462	5.83			
480-156213-8	356023-MW1801	434399	5.83			
480-156213-9	356023-MW1802	433993	5.83			
480-156213-10	356023-MW1803	415368	5.83			
480-156213-16	356023-EB1	401096	5.83			
480-156213-17	356023-MW1B	406825	5.83			
480-156213-19	356023-MW7R	424529	5.83			

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
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: CCVIS 480-482965/3 Date Analyzed: 07/21/2019 14:38
 Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)
 Lab File ID (Standard): U33151420.D Heated Purge: (Y/N) N
 Calibration ID: 37196

	DCBd4					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	490415	5.83				
UPPER LIMIT	980830	6.33				
LOWER LIMIT	245208	5.33				
LAB SAMPLE ID	CLIENT SAMPLE ID					
480-156213-3	356023-MW16	409425	5.83			
480-156213-4	356023-MW14B 150	425977	5.83			
480-156213-5	356023-MW12B 190	428530	5.83			
480-156213-6	356023-MW11B	423029	5.83			
480-156213-11	356023-MW5B	419248	5.83			
480-156213-12	356023-ERT4	417438	5.83			
480-156213-13	356023-MW4	409746	5.83			
480-156213-15	356023-MW15B	411083	5.83			
480-156213-18	356023-MW5R	404454	5.83			

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 8270D SIM ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8B Lab Sample ID: 480-156213-1
 Matrix: Water Lab File ID: U33151389.D
 Analysis Method: 8270D SIM ID Date Collected: 07/09/2019 13:20
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/18/2019 21:43
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482664 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.4	H E	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	31		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151389.D
 Lims ID: 480-156213-B-1-A
 Client ID: 356023-MW8B
 Sample Type: Client
 Inject. Date: 18-Jul-2019 21:43:30 ALS Bottle#: 26 Worklist Smp#: 26
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 26
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 19-Jul-2019 16:36:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.640	2.558	0.082	89	159965	3.11	31.1	
3 1,4-Dioxane	88	2.676	2.615	0.061	86	38356	2.44		E
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	96	446089	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151389.D

Injection Date: 18-Jul-2019 21:43:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-1-A

Lab Sample ID: 480-156213-1

Worklist Smp#: 26

Client ID: 356023-MW8B

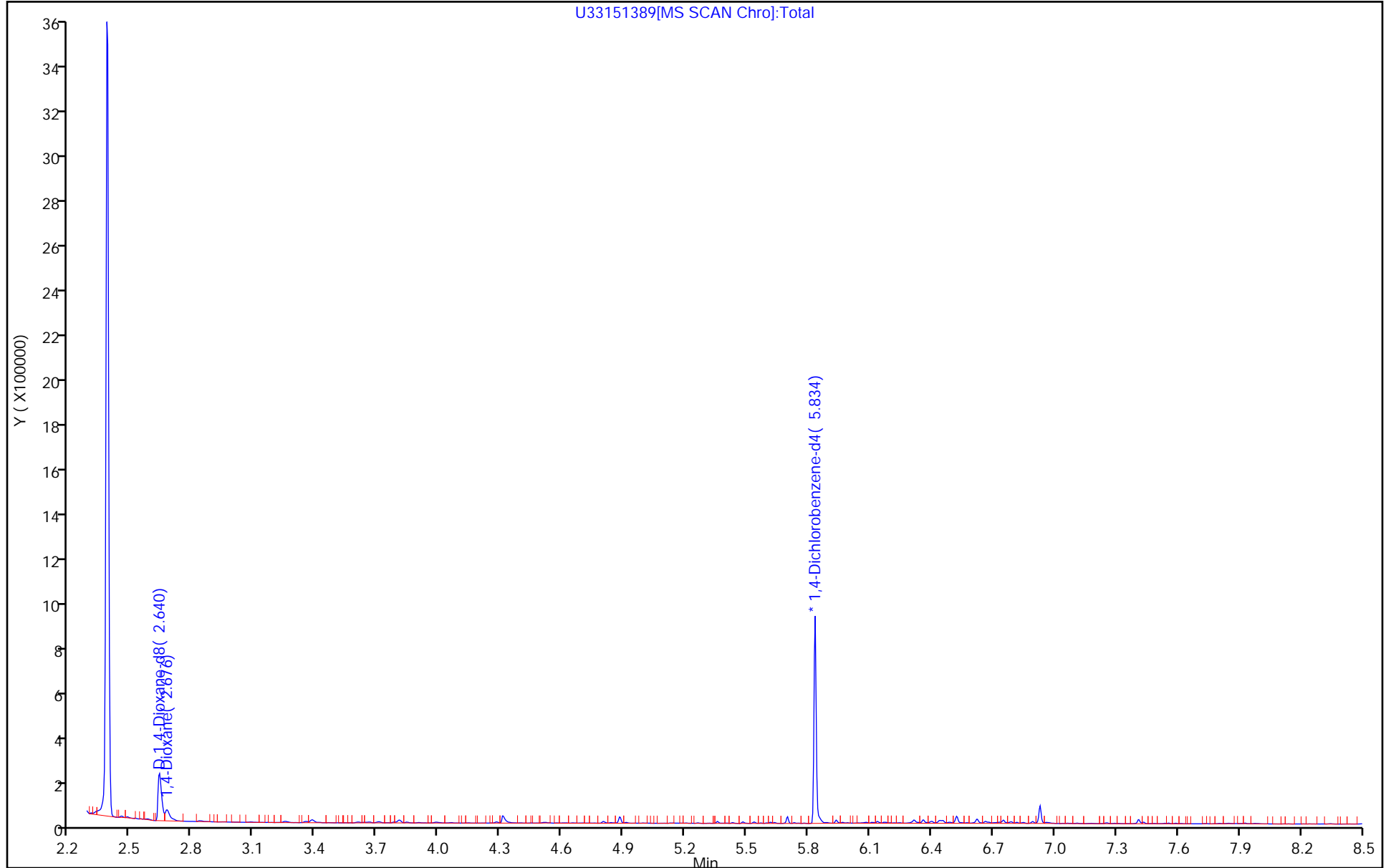
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 26

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151389.D

Injection Date: 18-Jul-2019 21:43:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-1-A

Lab Sample ID: 480-156213-1

Client ID: 356023-MW8B

Operator ID: bs

ALS Bottle#: 26

Worklist Smp#: 26

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

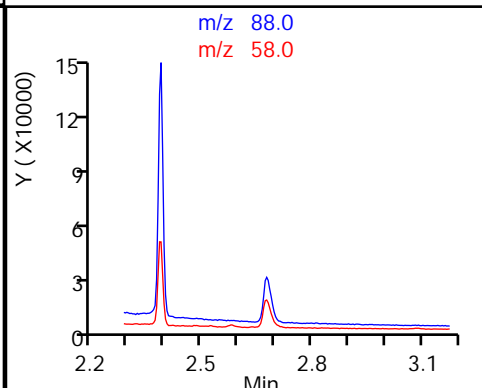
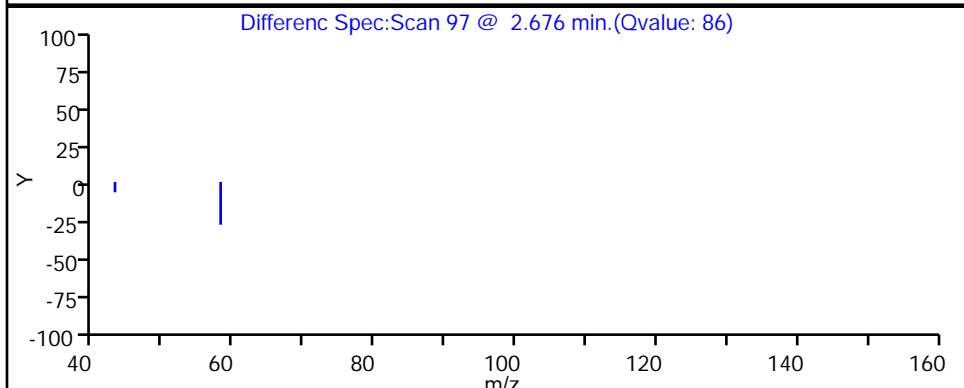
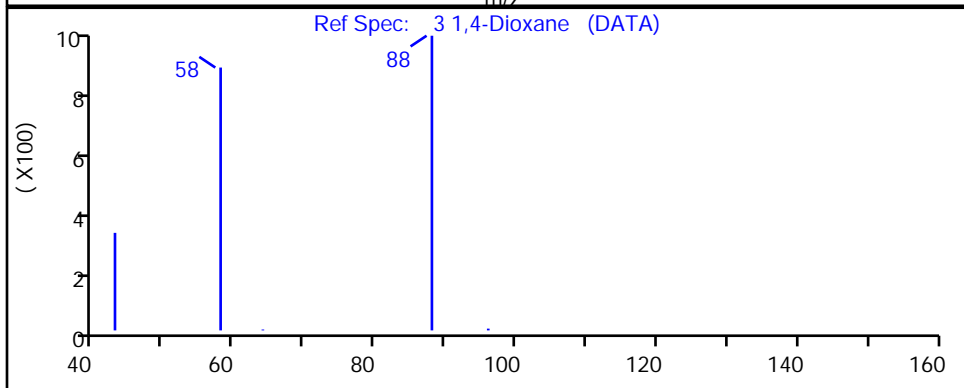
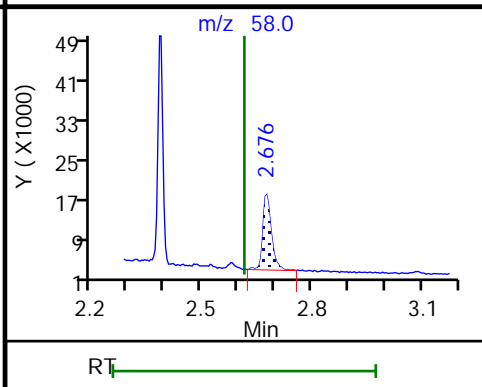
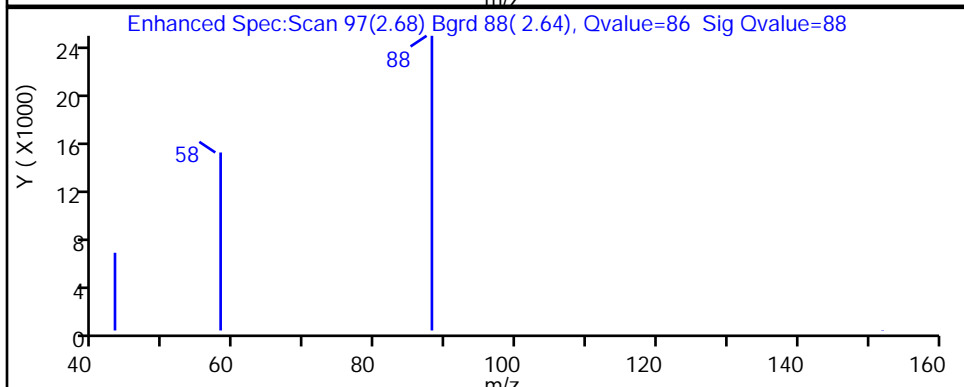
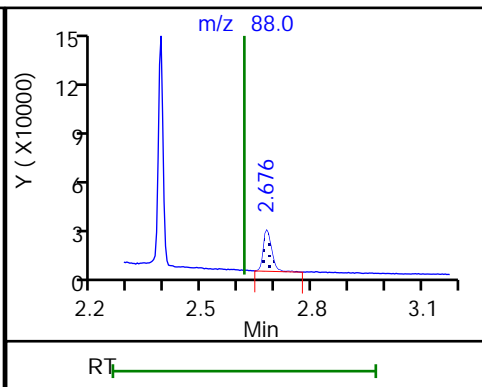
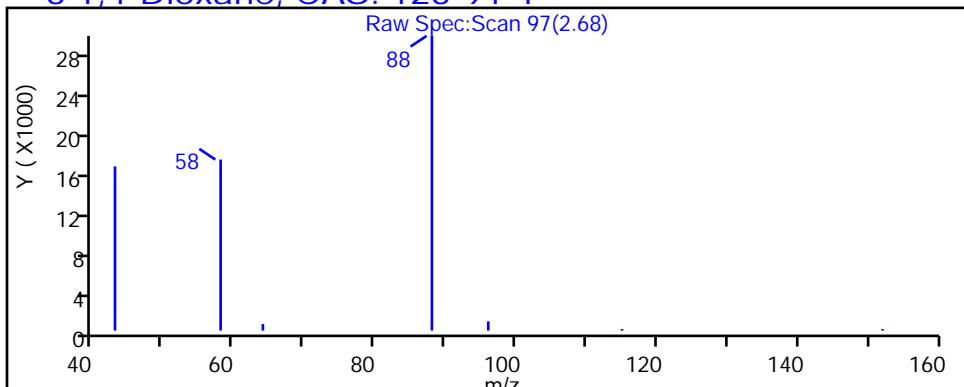
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151389.D

Injection Date: 18-Jul-2019 21:43:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-1-A

Lab Sample ID: 480-156213-1

Client ID: 356023-MW8B

Operator ID: bs

ALS Bottle#: 26

Worklist Smp#: 26

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

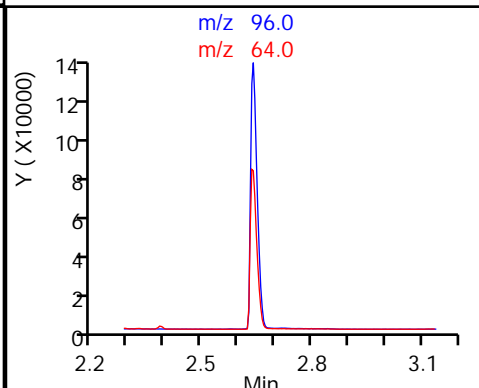
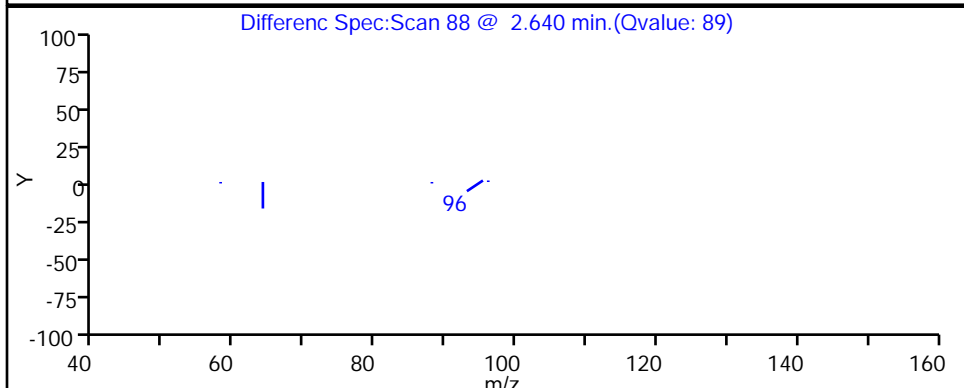
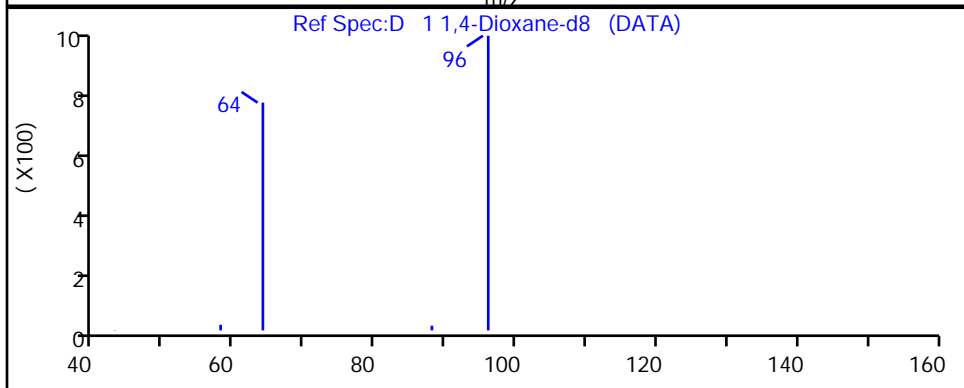
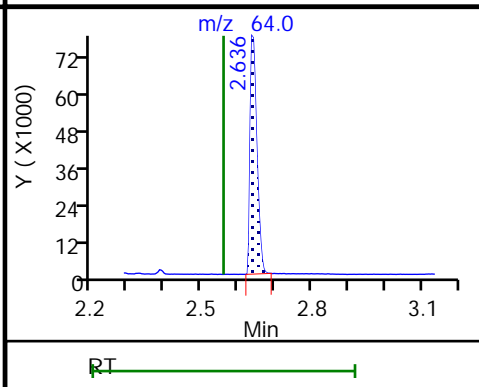
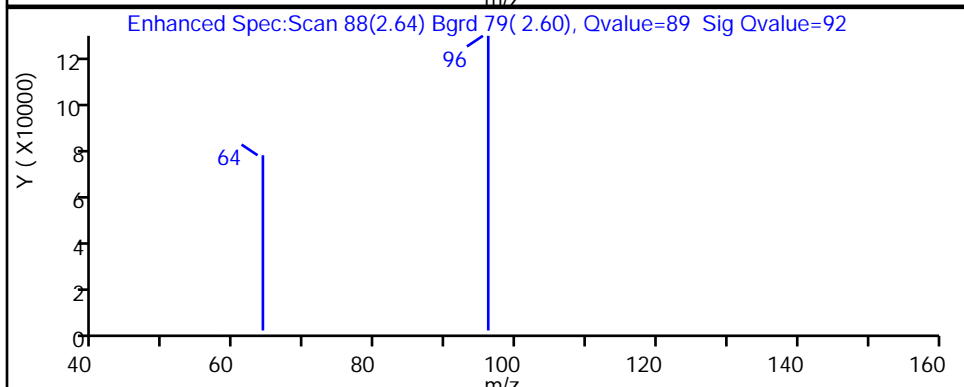
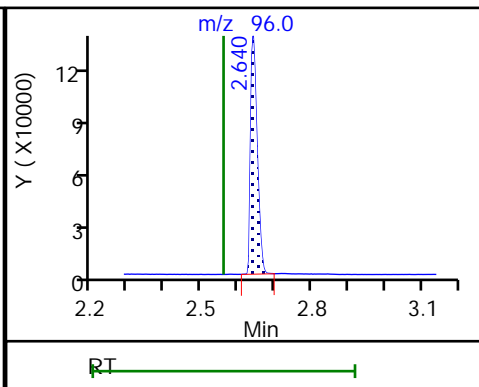
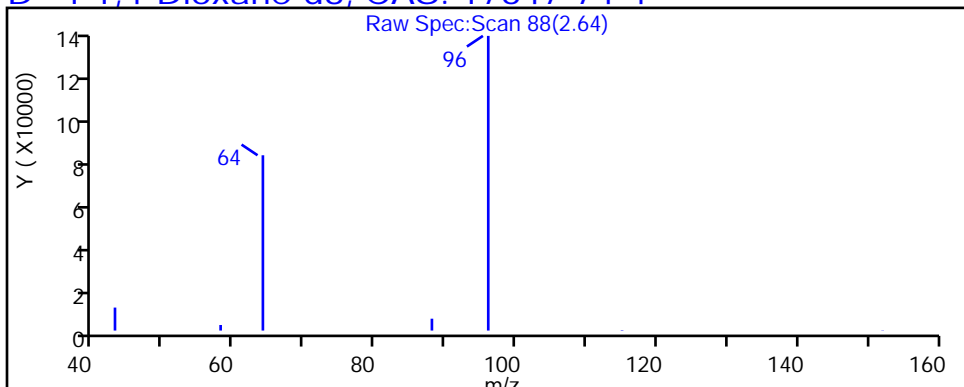
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8BD Lab Sample ID: 480-156213-2
 Matrix: Water Lab File ID: U33151390.D
 Analysis Method: 8270D SIM ID Date Collected: 07/09/2019 13:20
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/18/2019 22:07
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482664 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.4	H E	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151390.D
 Lims ID: 480-156213-B-2-A
 Client ID: 356023-MW8BD
 Sample Type: Client
 Inject. Date: 18-Jul-2019 22:07:30 ALS Bottle#: 27 Worklist Smp#: 27
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 27
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 19-Jul-2019 16:36:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.652	2.558	0.094	91	195194	3.90	39.0	
3 1,4-Dioxane	88	2.689	2.615	0.074	87	46310	2.42		E
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	97	434031	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151390.D

Injection Date: 18-Jul-2019 22:07:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-2-A

Lab Sample ID: 480-156213-2

Worklist Smp#: 27

Client ID: 356023-MW8BD

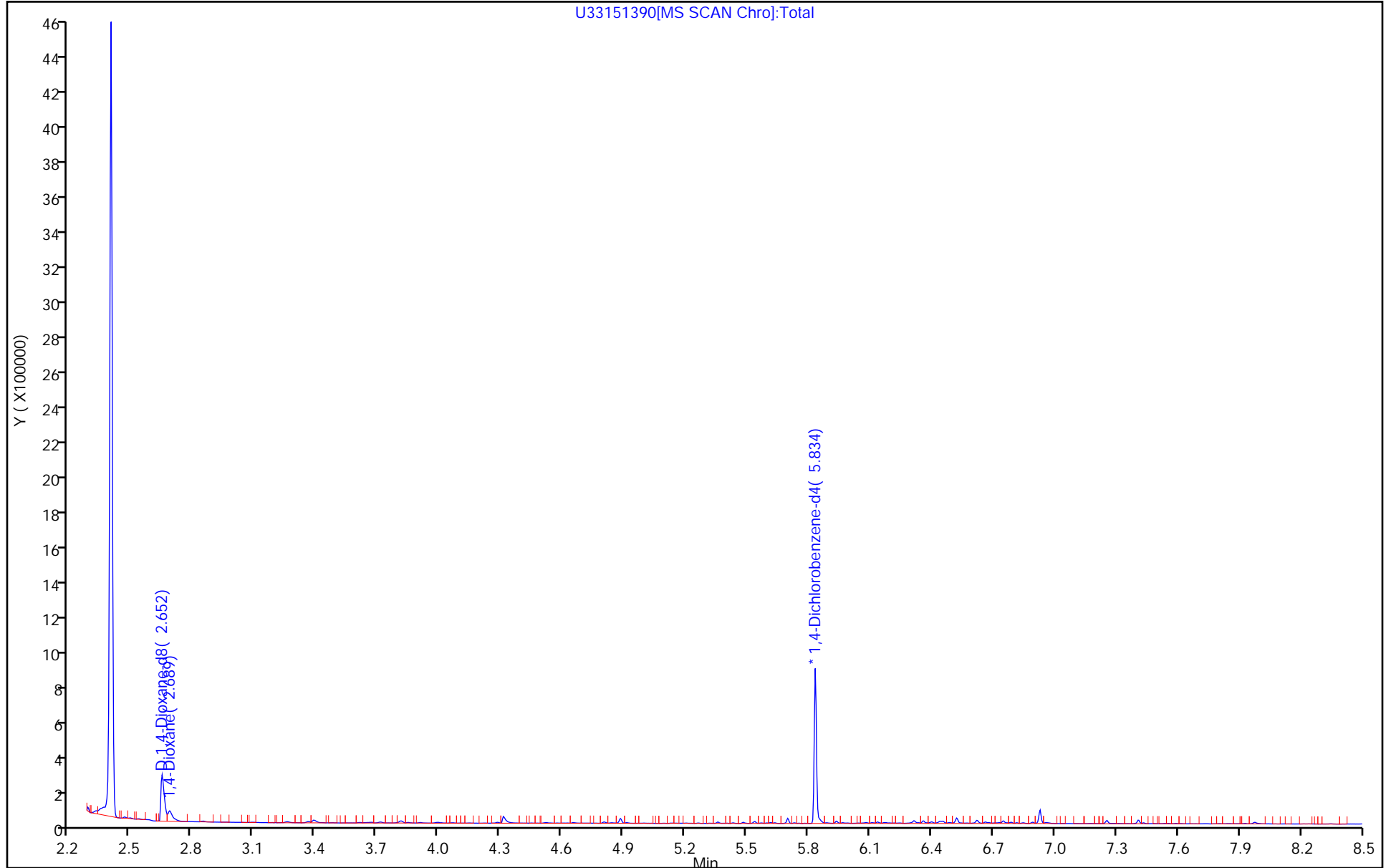
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 27

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151390.D

Injection Date: 18-Jul-2019 22:07:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-2-A

Lab Sample ID: 480-156213-2

Client ID: 356023-MW8BD

Operator ID: bs

ALS Bottle#: 27

Worklist Smp#: 27

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

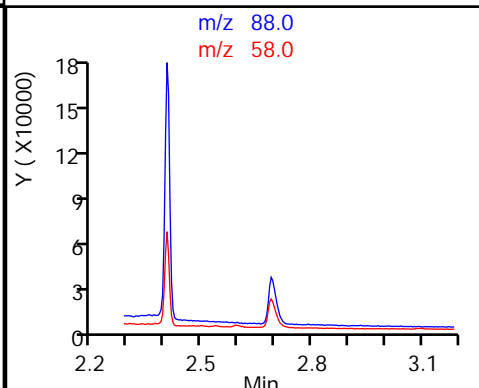
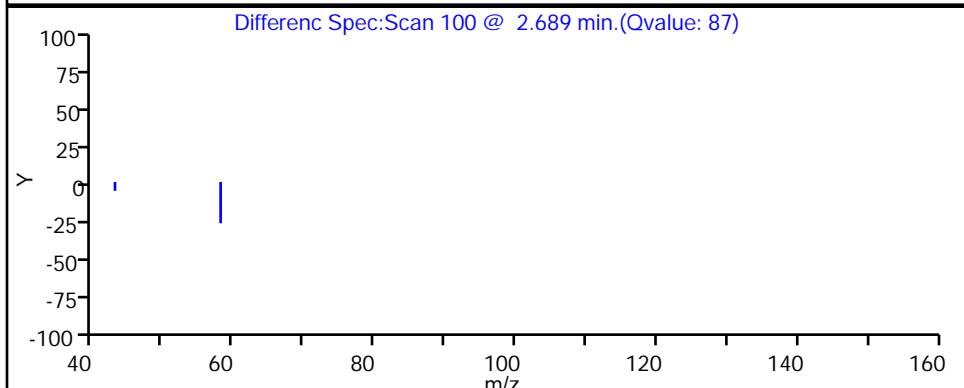
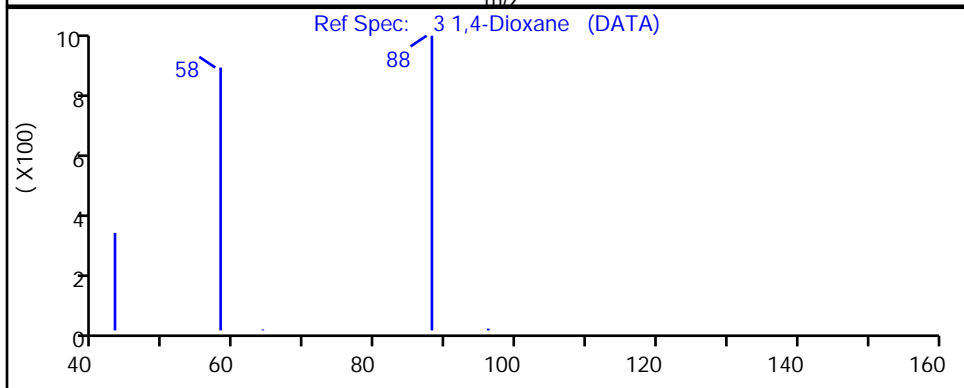
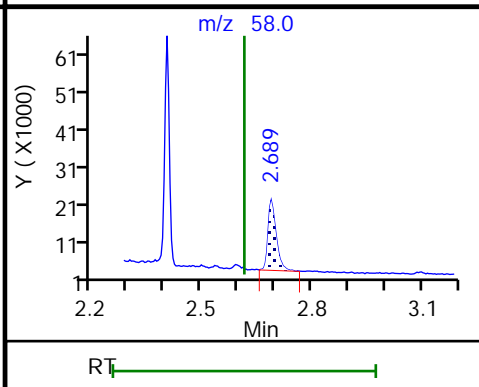
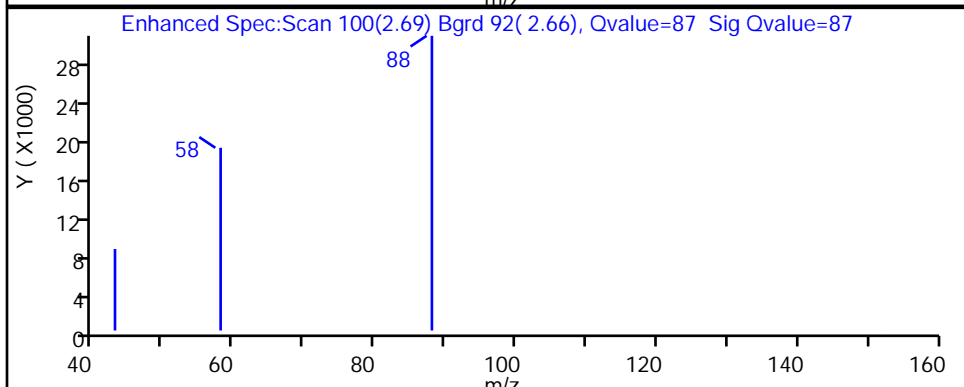
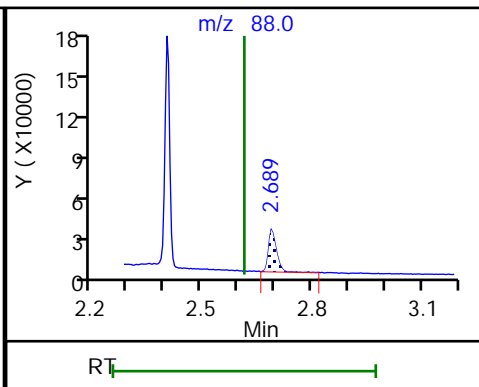
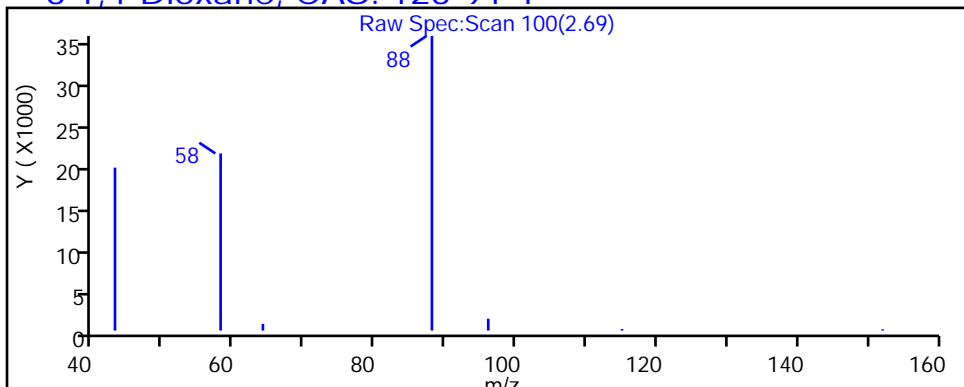
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151390.D

Injection Date: 18-Jul-2019 22:07:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-2-A

Lab Sample ID: 480-156213-2

Client ID: 356023-MW8BD

Operator ID: bs

ALS Bottle#: 27

Worklist Smp#: 27

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

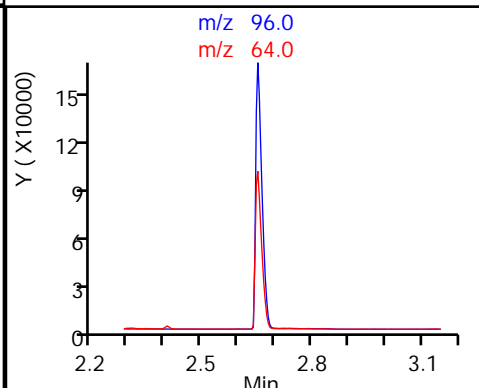
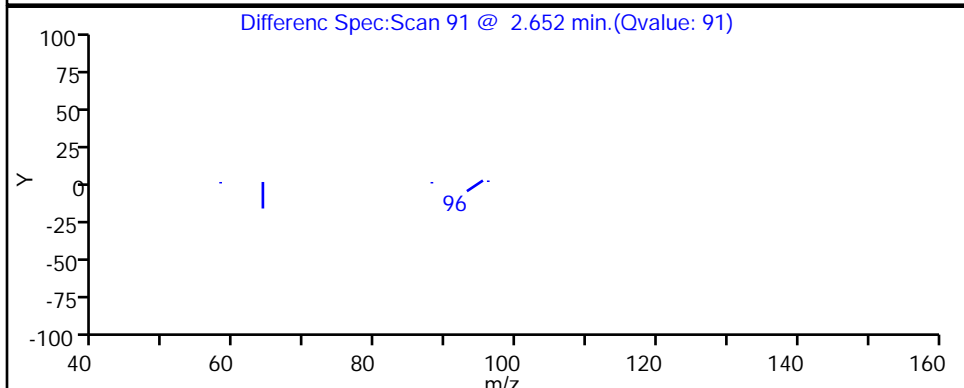
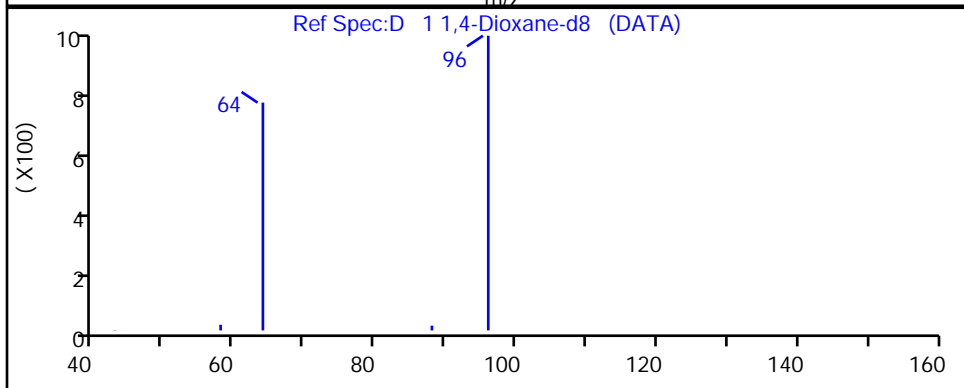
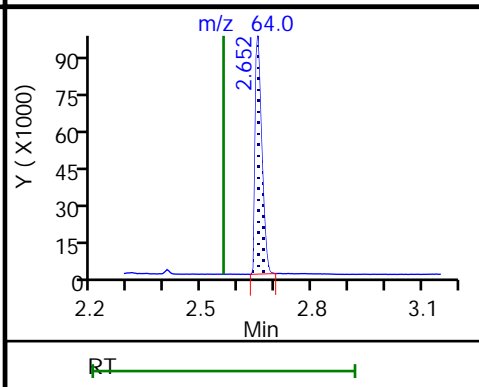
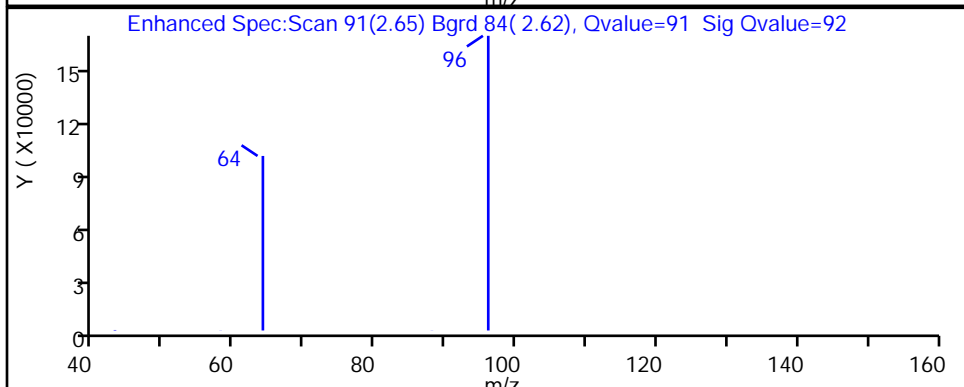
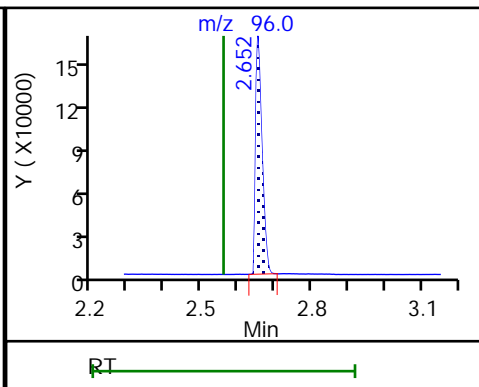
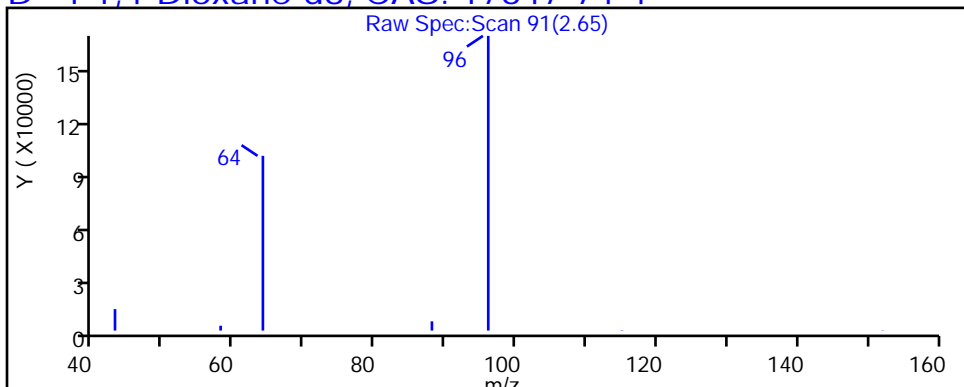
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW16 Lab Sample ID: 480-156213-3
 Matrix: Water Lab File ID: U33151427.D
 Analysis Method: 8270D SIM ID Date Collected: 07/09/2019 17:10
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 17:29
 Con. Extract Vol.: 1 (mL) Dilution Factor: 5
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.2	H	1.0	0.50

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151427.D
 Lims ID: 480-156213-A-3-A
 Client ID: 356023-MW16
 Sample Type: Client
 Inject. Date: 21-Jul-2019 17:29:30 ALS Bottle#: 10 Worklist Smp#: 10
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 10
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:36:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.603	2.575	0.028	86	36459	0.7718	38.6	
3 1,4-Dioxane	88	2.640	2.611	0.029	84	14863	0.8302		M
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	98	409425	4.00		

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151427.D

Injection Date: 21-Jul-2019 17:29:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-3-A

Lab Sample ID: 480-156213-3

Worklist Smp#: 10

Client ID: 356023-MW16

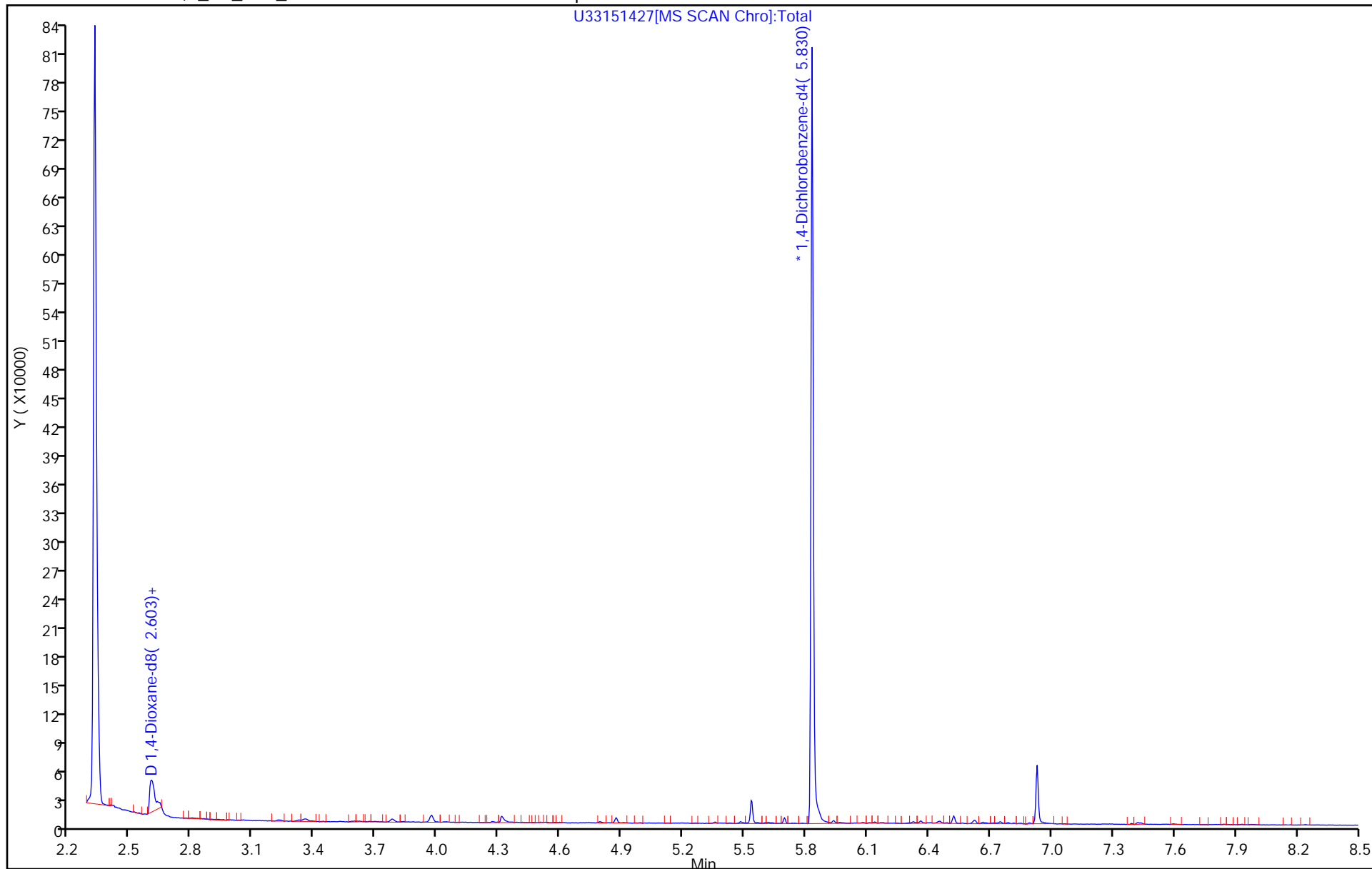
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 10

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151427.D

Injection Date: 21-Jul-2019 17:29:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-3-A

Lab Sample ID: 480-156213-3

Client ID: 356023-MW16

Operator ID: bs

ALS Bottle#: 10

Worklist Smp#: 10

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

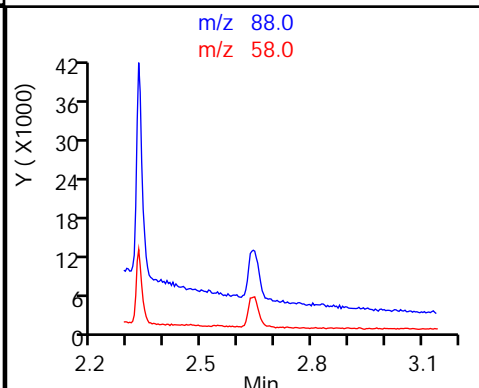
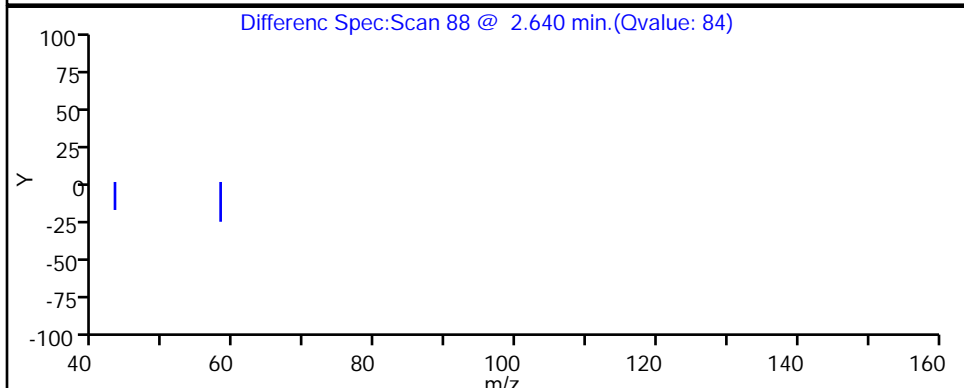
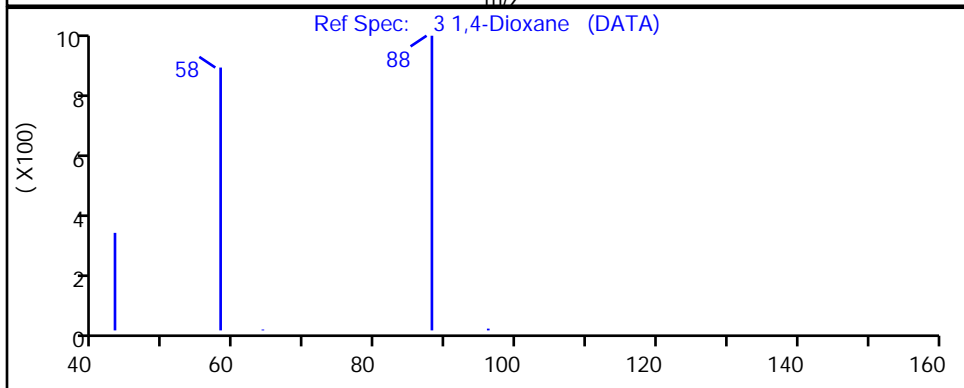
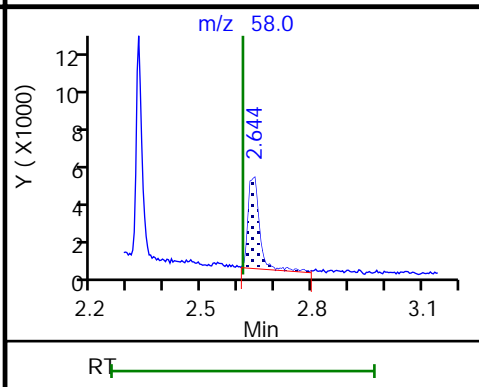
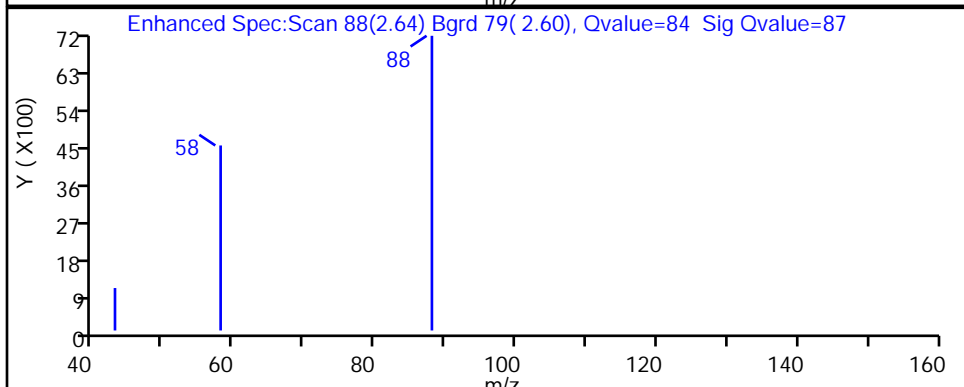
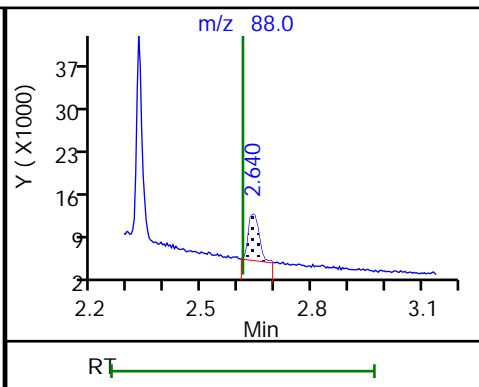
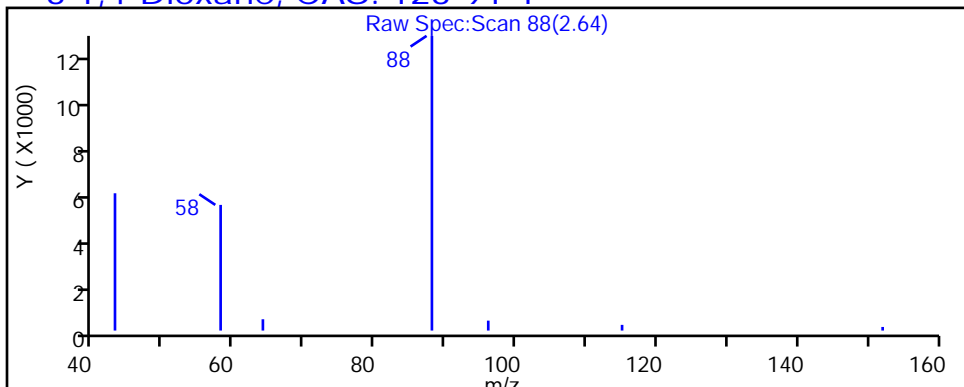
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151427.D

Injection Date: 21-Jul-2019 17:29:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-3-A

Lab Sample ID: 480-156213-3

Client ID: 356023-MW16

Operator ID: bs

ALS Bottle#: 10

Worklist Smp#: 10

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

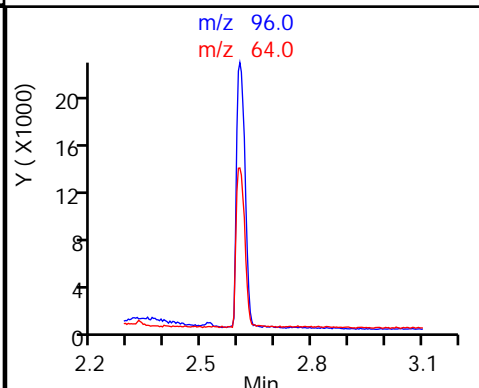
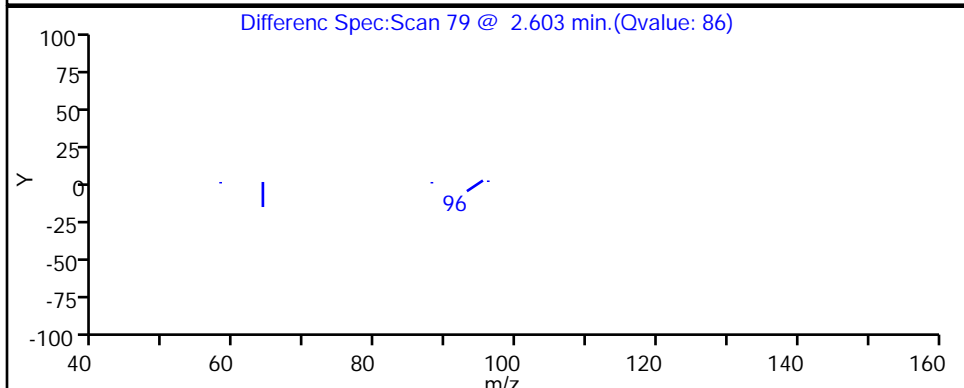
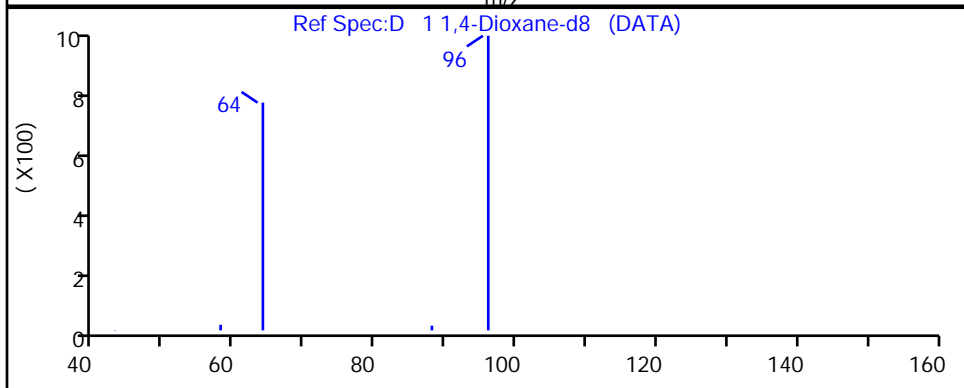
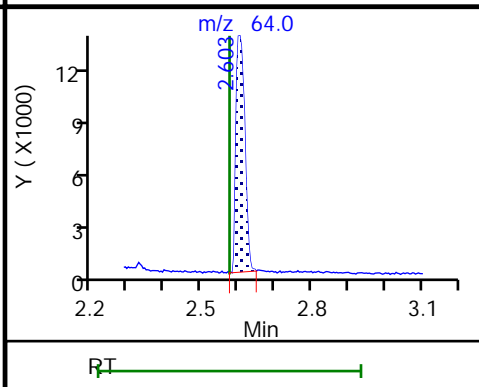
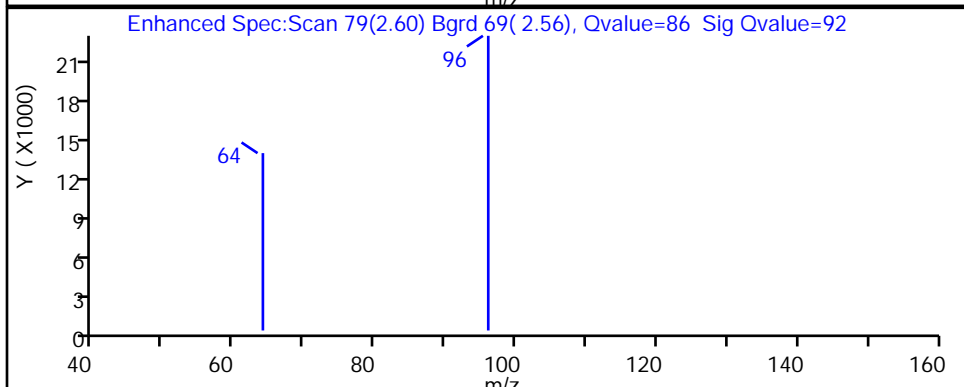
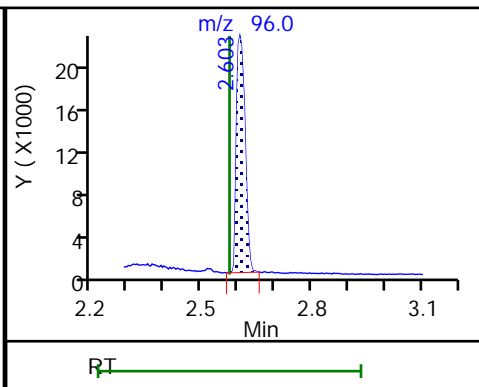
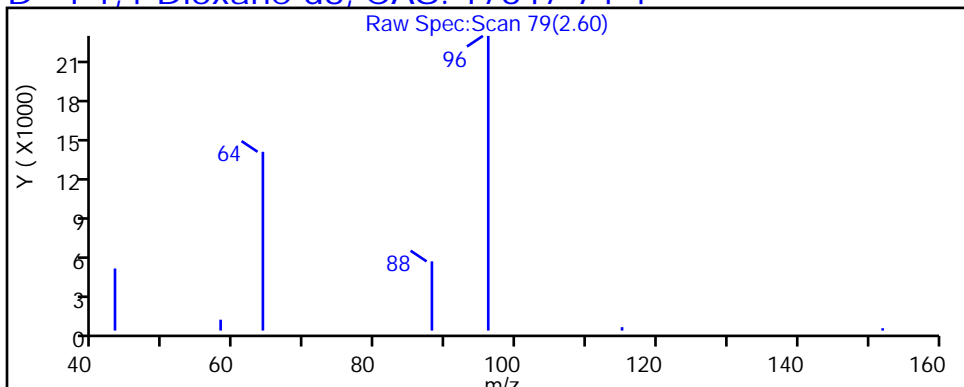
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Eurofins TestAmerica, Buffalo

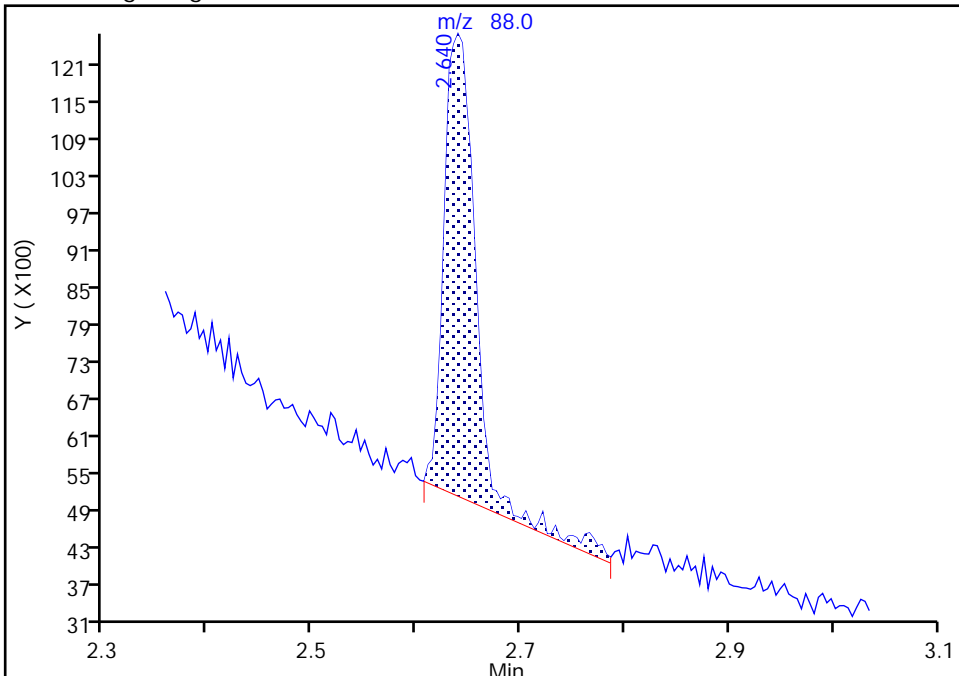
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151427.D
Injection Date: 21-Jul-2019 17:29:30 Instrument ID: HP5973U
Lims ID: 480-156213-A-3-A Lab Sample ID: 480-156213-3
Client ID: 356023-MW16
Operator ID: bs ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

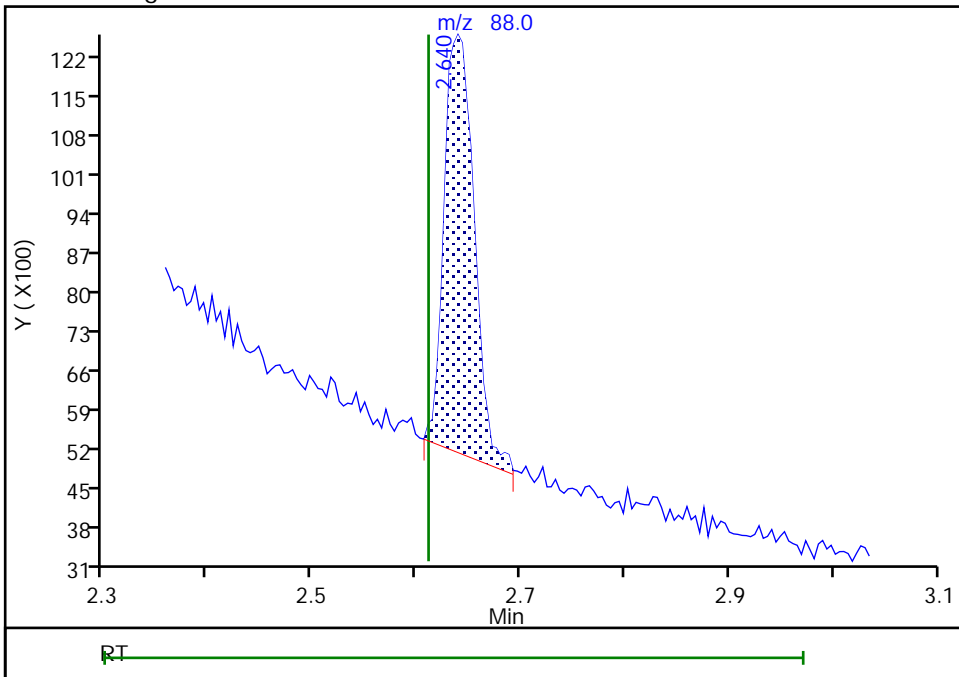
RT: 2.64
Area: 15711
Amount: 0.877615
Amount Units: ng/ul

Processing Integration Results



RT: 2.64
Area: 14863
Amount: 0.830246
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 22-Jul-2019 13:36:29
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW14B 150 Lab Sample ID: 480-156213-4
 Matrix: Water Lab File ID: U33151428.D
 Analysis Method: 8270D SIM ID Date Collected: 07/09/2019 11:50
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 17:53
 Con. Extract Vol.: 1 (mL) Dilution Factor: 5
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.4	H	1.0	0.50

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	36		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151428.D
 Lims ID: 480-156213-B-4-A
 Client ID: 356023-MW14B 150
 Sample Type: Client
 Inject. Date: 21-Jul-2019 17:53:30 ALS Bottle#: 11 Worklist Smp#: 11
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 11
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:36:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.599	2.575	0.024	86	35782	0.7281	36.4	
3 1,4-Dioxane	88	2.636	2.611	0.025	83	11805	0.6719		M
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	98	425977	4.00		

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151428.D

Injection Date: 21-Jul-2019 17:53:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-4-A

Lab Sample ID: 480-156213-4

Worklist Smp#: 11

Client ID: 356023-MW14B 150

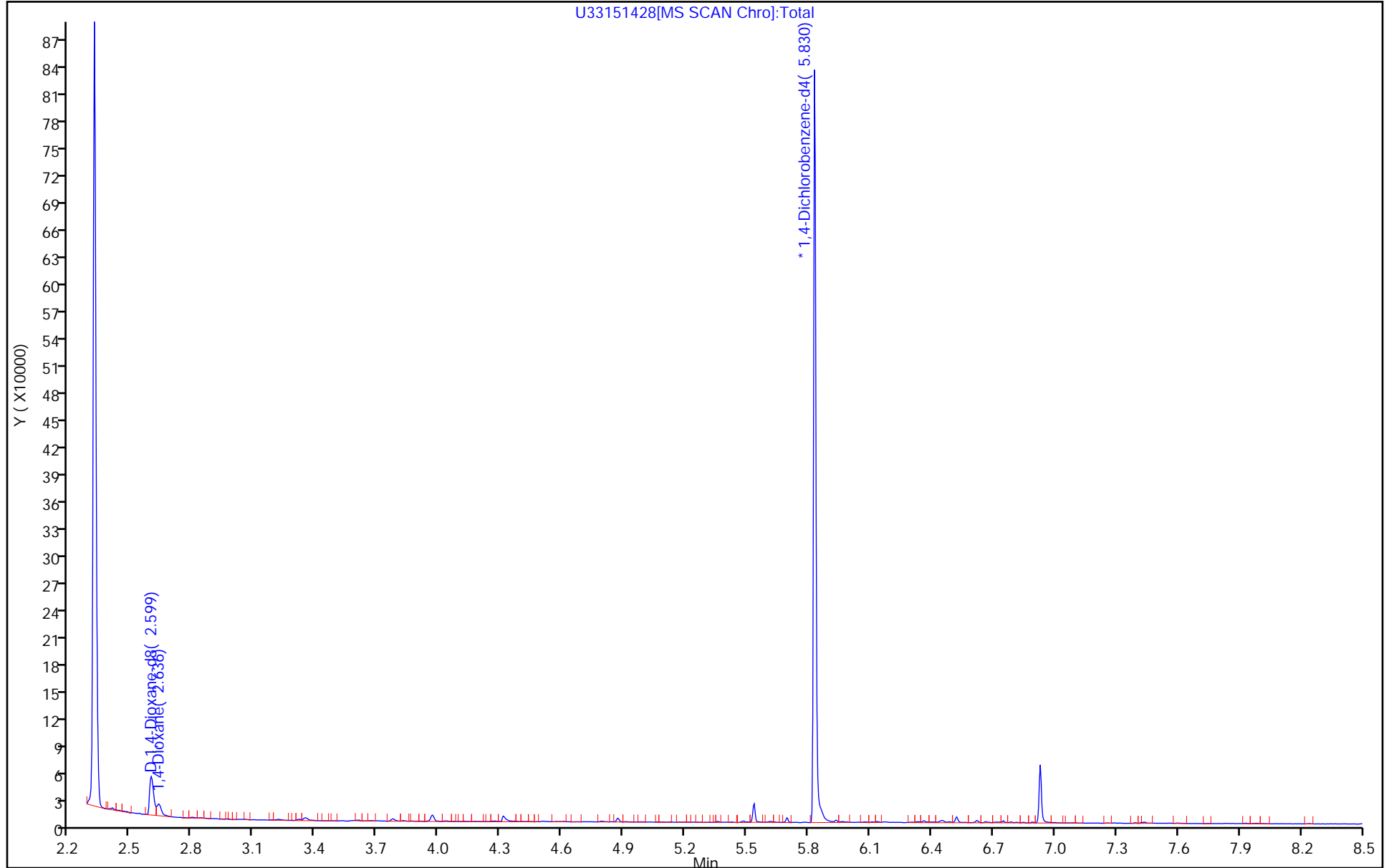
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 11

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151428.D

Injection Date: 21-Jul-2019 17:53:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-4-A

Lab Sample ID: 480-156213-4

Client ID: 356023-MW14B 150

Operator ID: bs

ALS Bottle#: 11

Worklist Smp#: 11

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

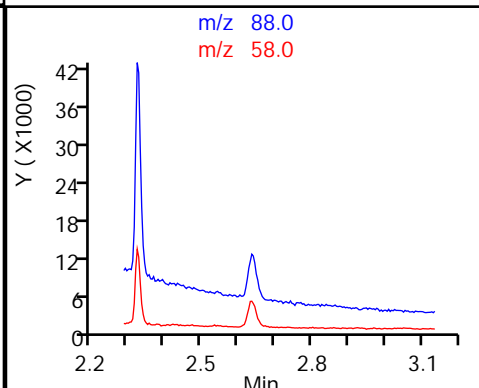
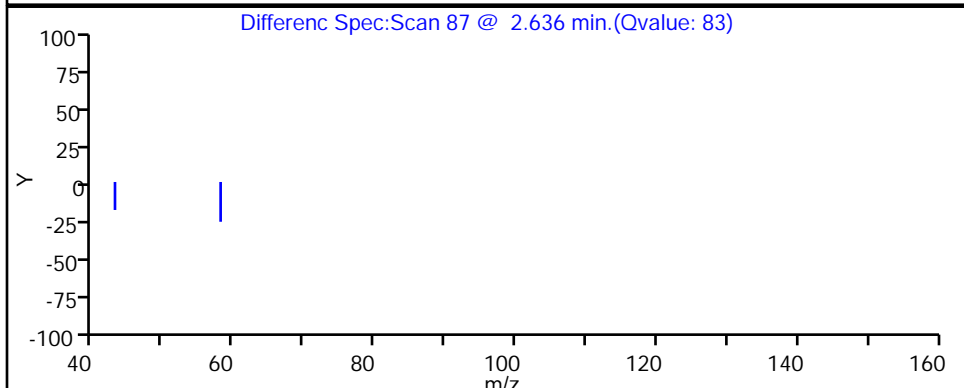
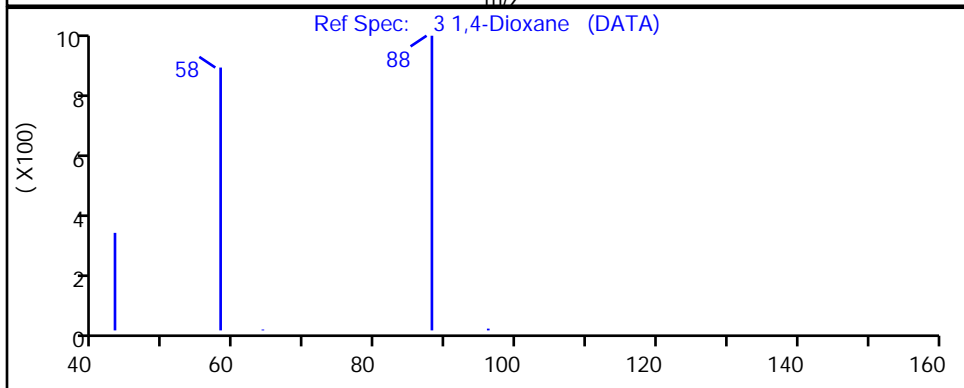
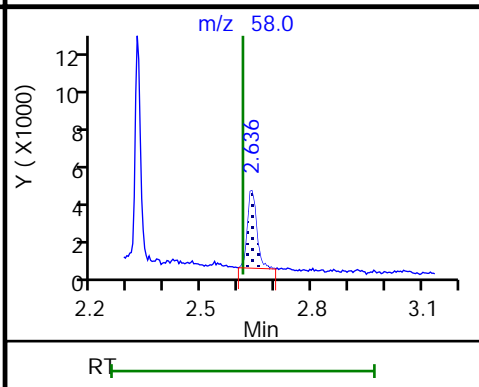
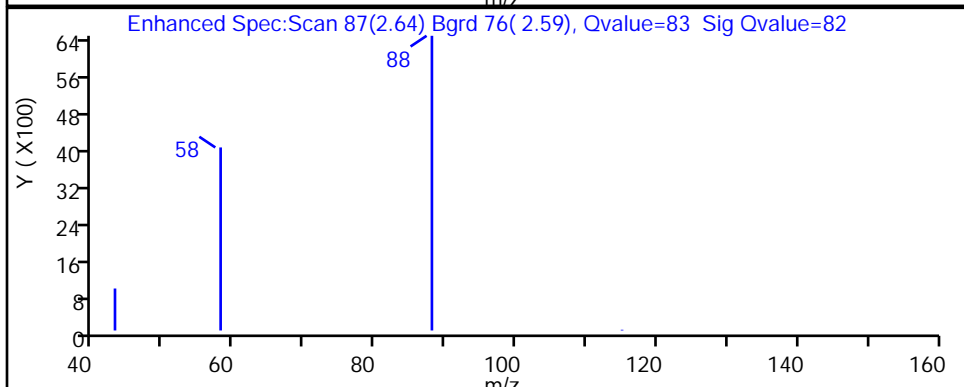
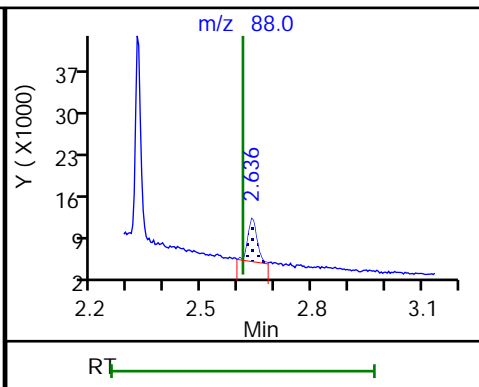
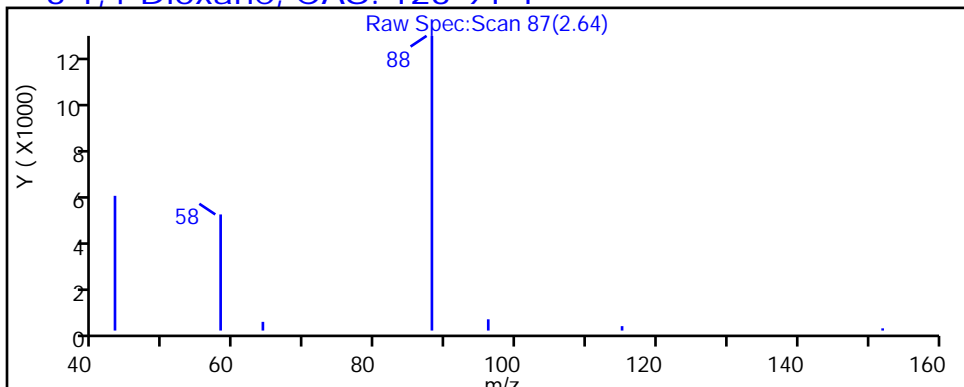
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151428.D

Injection Date: 21-Jul-2019 17:53:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-4-A

Lab Sample ID: 480-156213-4

Client ID: 356023-MW14B 150

Operator ID: bs

ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

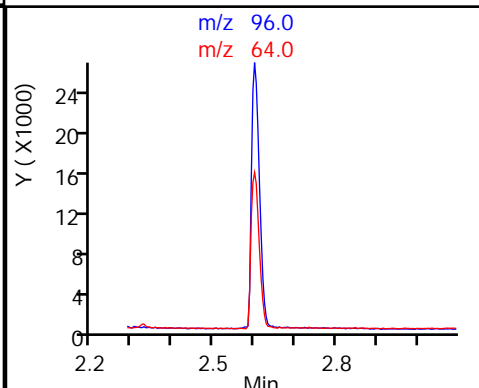
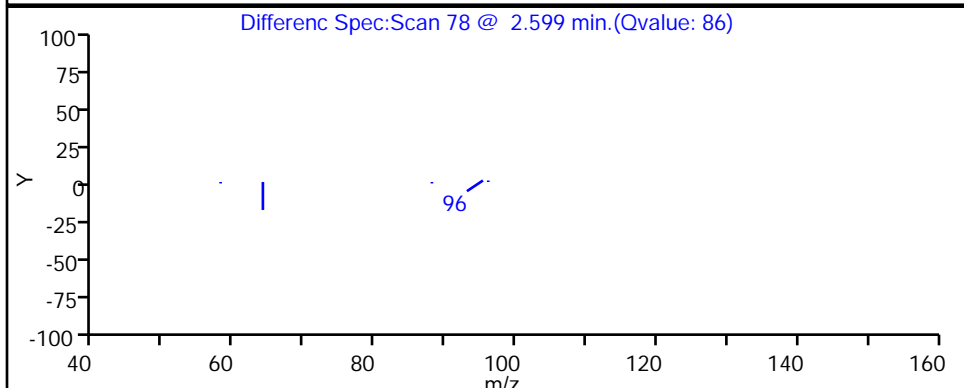
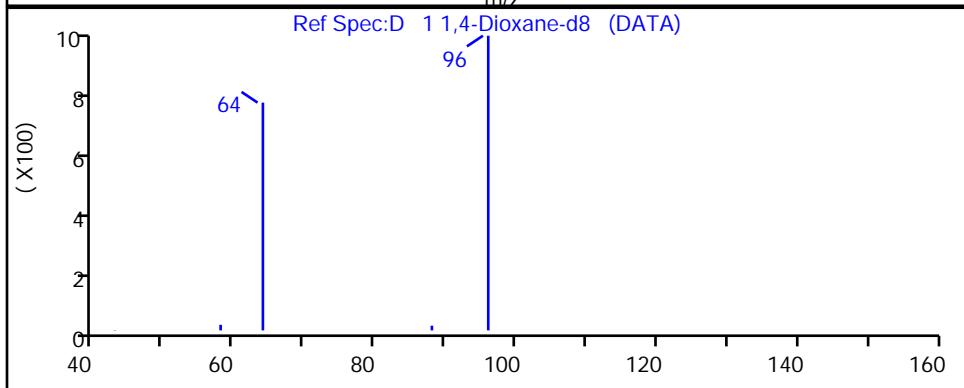
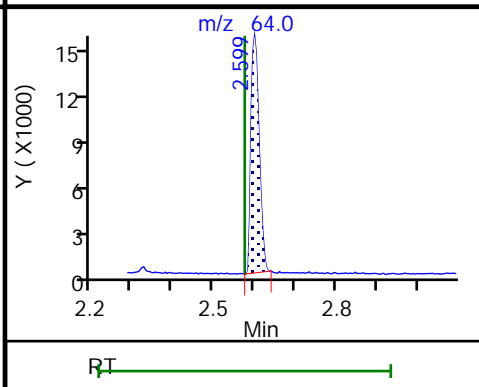
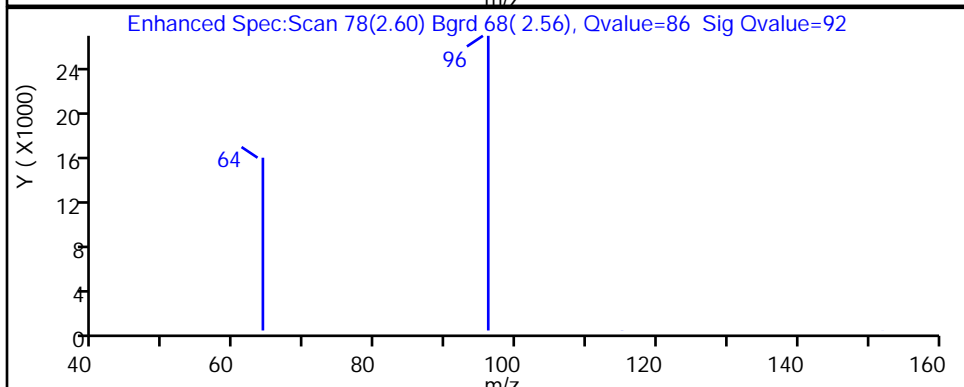
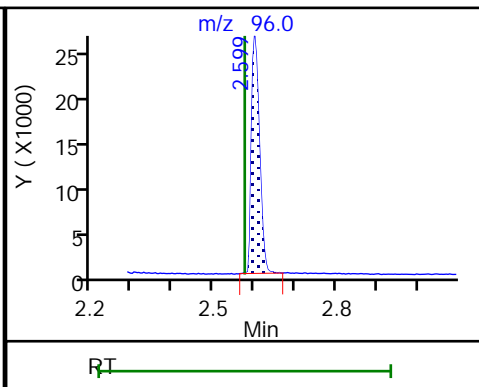
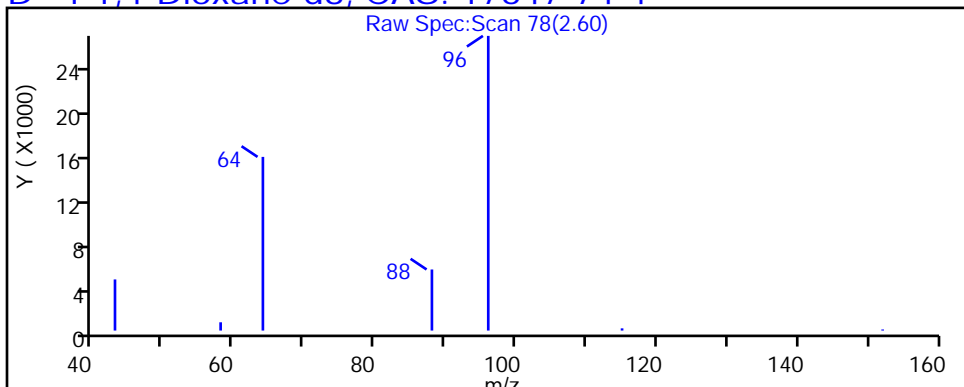
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Euofins TestAmerica, Buffalo

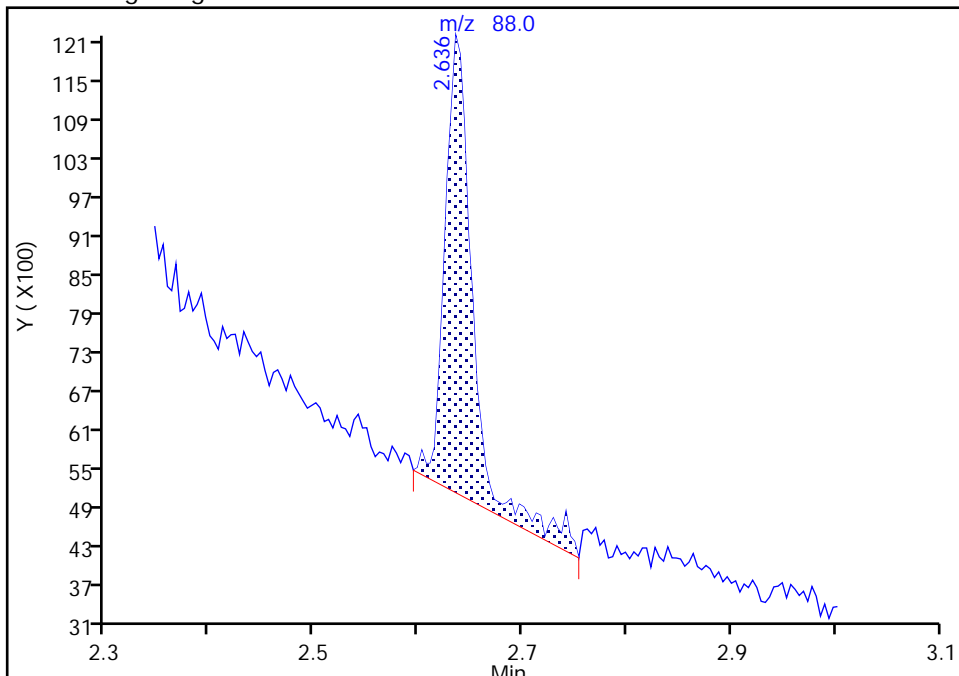
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151428.D
Injection Date: 21-Jul-2019 17:53:30 Instrument ID: HP5973U
Lims ID: 480-156213-B-4-A Lab Sample ID: 480-156213-4
Client ID: 356023-MW14B 150
Operator ID: bs ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

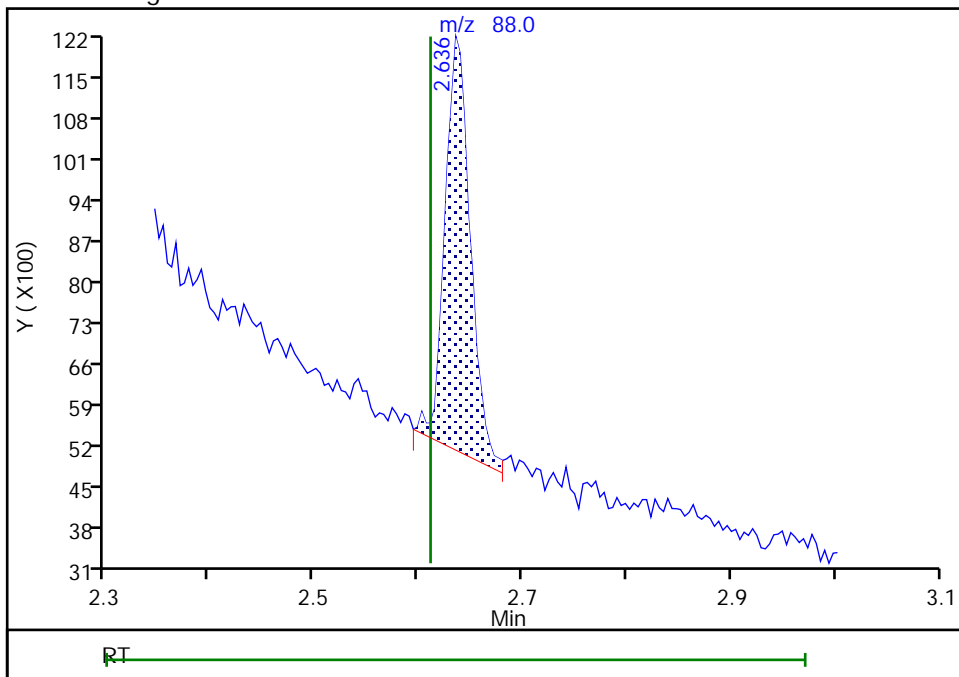
RT: 2.64
Area: 12963
Amount: 0.737812
Amount Units: ng/ul

Processing Integration Results



RT: 2.64
Area: 11805
Amount: 0.671903
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 22-Jul-2019 13:36:39
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW12B 190 Lab Sample ID: 480-156213-5
 Matrix: Water Lab File ID: U33151429.D
 Analysis Method: 8270D SIM ID Date Collected: 07/09/2019 17:27
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 18:17
 Con. Extract Vol.: 1 (mL) Dilution Factor: 10
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	9.2	H	2.0	1.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	35		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151429.D
 Lims ID: 480-156213-B-5-A
 Client ID: 356023-MW12B 190
 Sample Type: Client
 Inject. Date: 21-Jul-2019 18:17:30 ALS Bottle#: 12 Worklist Smp#: 12
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 12
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:36:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.591	2.575	0.016	90	17108	0.3460	34.6	
3 1,4-Dioxane	88	2.623	2.611	0.012	88	15526	0.9241		M
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	98	428530	4.00		

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151429.D

Injection Date: 21-Jul-2019 18:17:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-5-A

Lab Sample ID: 480-156213-5

Worklist Smp#: 12

Client ID: 356023-MW12B 190

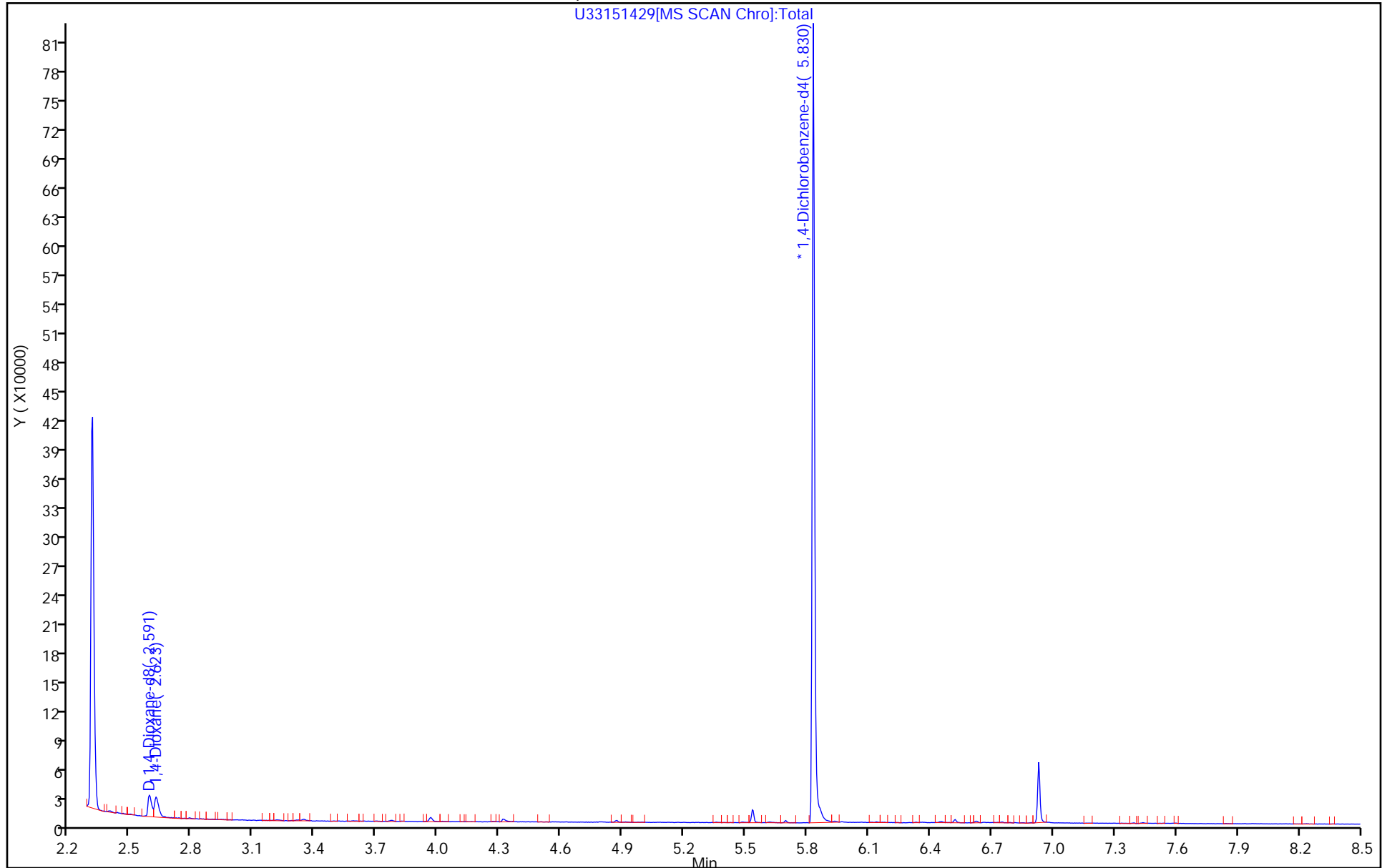
Injection Vol: 1.0 ul

Dil. Factor: 10.0000

ALS Bottle#: 12

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151429.D

Injection Date: 21-Jul-2019 18:17:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-5-A

Lab Sample ID: 480-156213-5

Client ID: 356023-MW12B 190

Operator ID: bs

ALS Bottle#: 12

Worklist Smp#: 12

Injection Vol: 1.0 ul

Dil. Factor: 10.0000

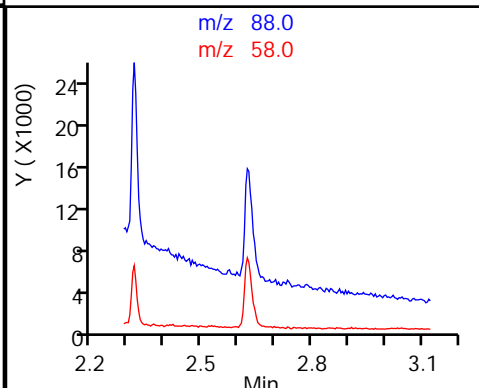
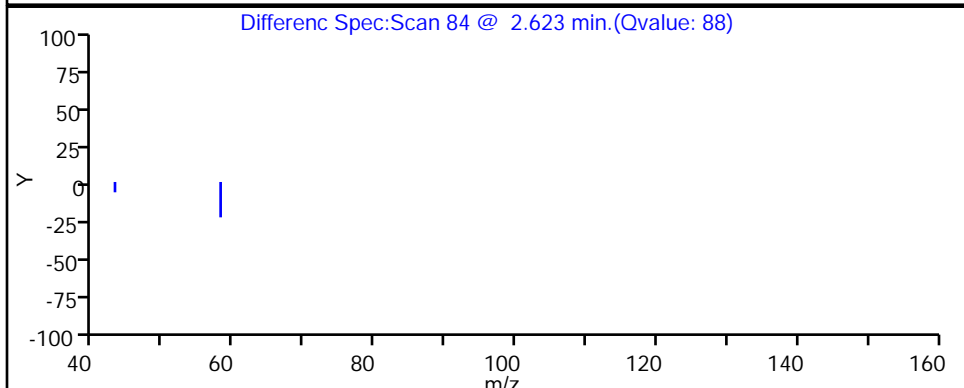
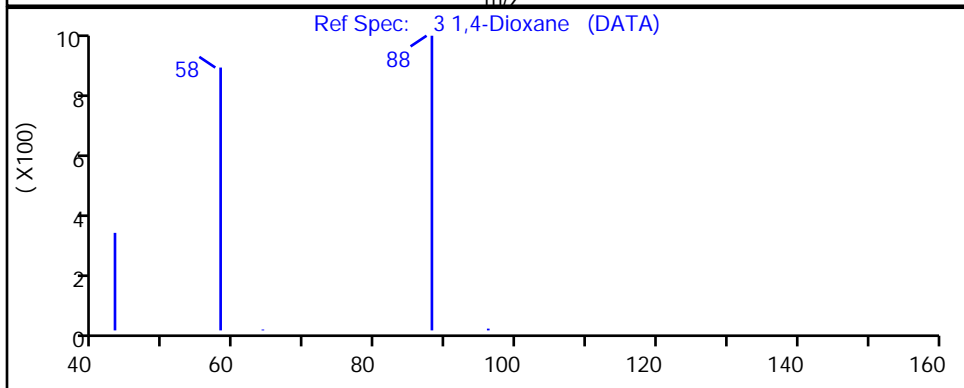
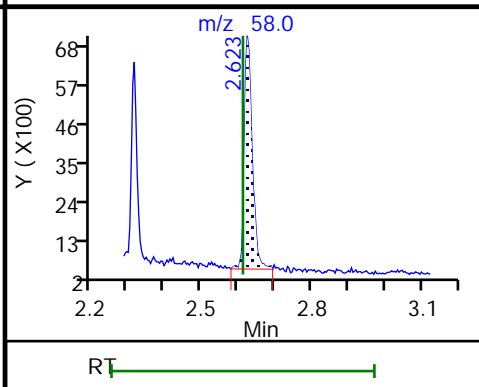
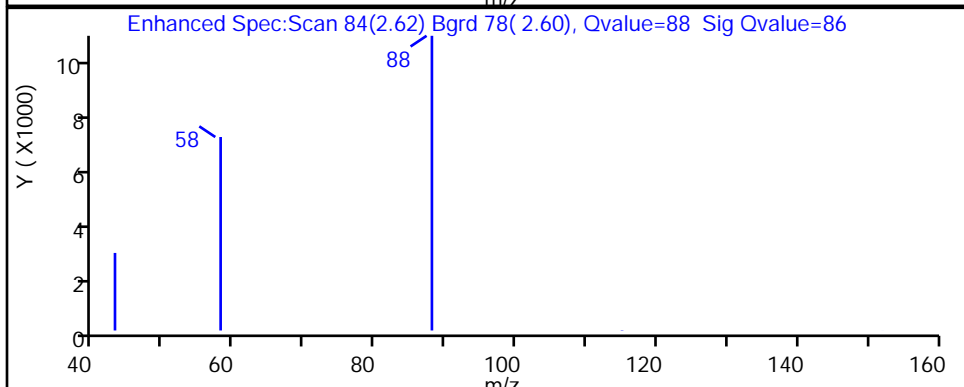
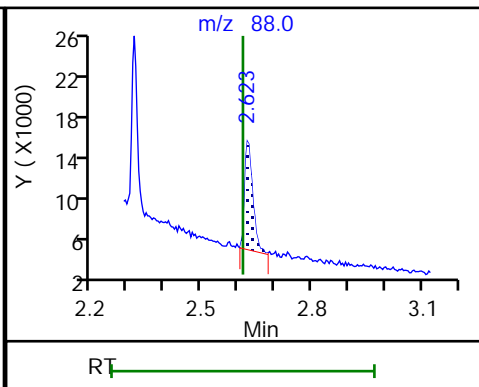
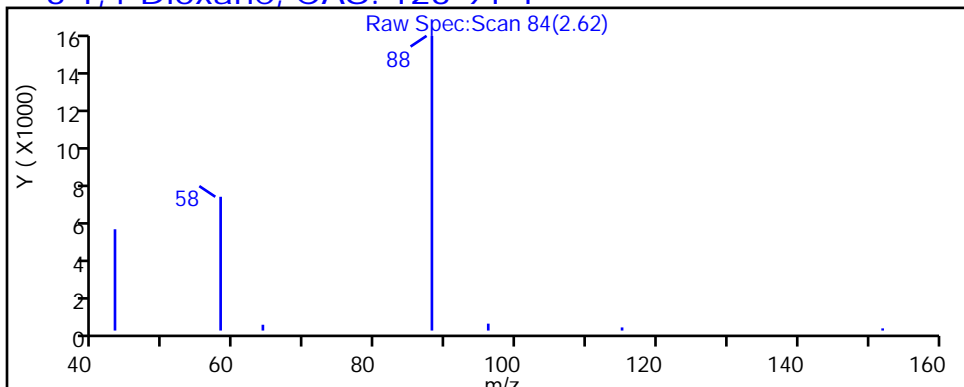
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151429.D

Injection Date: 21-Jul-2019 18:17:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-5-A

Lab Sample ID: 480-156213-5

Client ID: 356023-MW12B 190

Operator ID: bs

ALS Bottle#: 12

Worklist Smp#: 12

Injection Vol: 1.0 ul

Dil. Factor: 10.0000

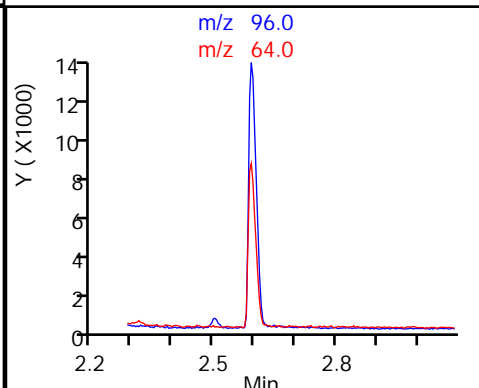
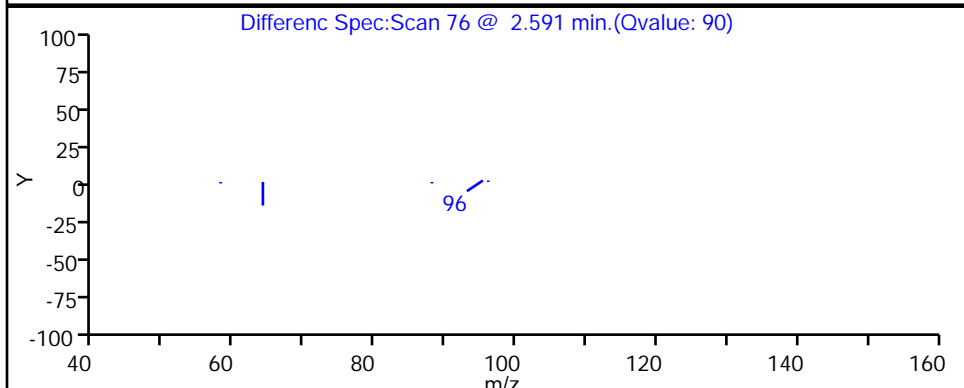
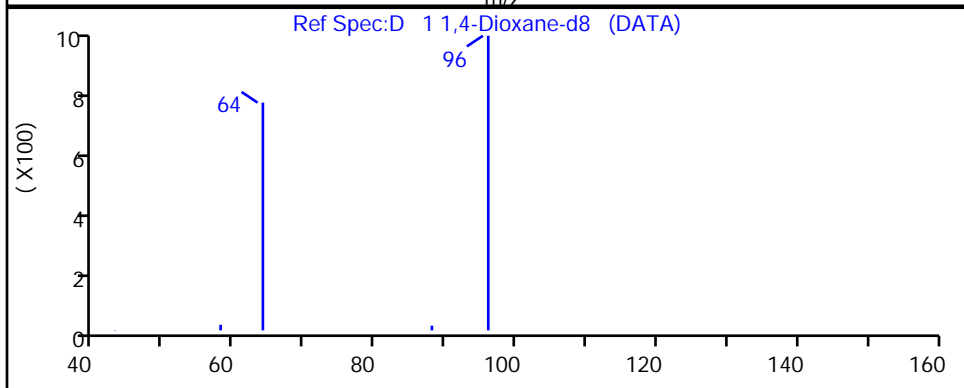
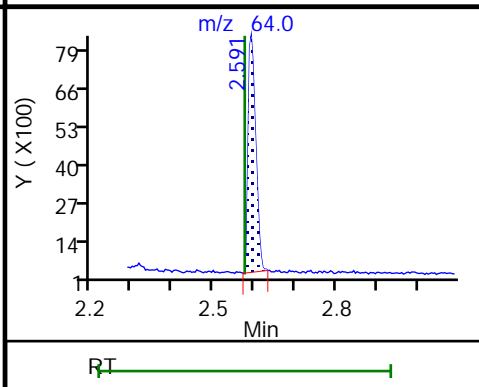
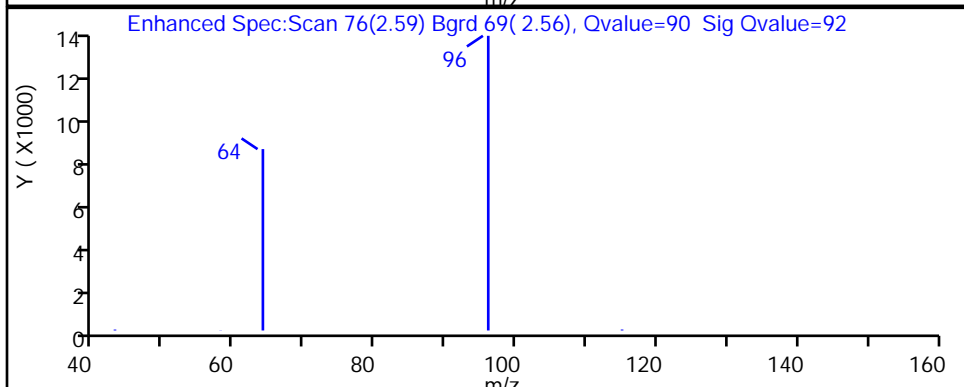
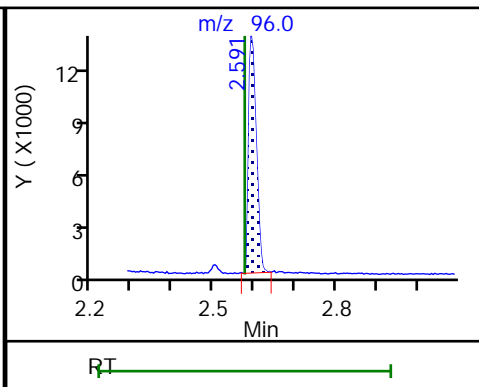
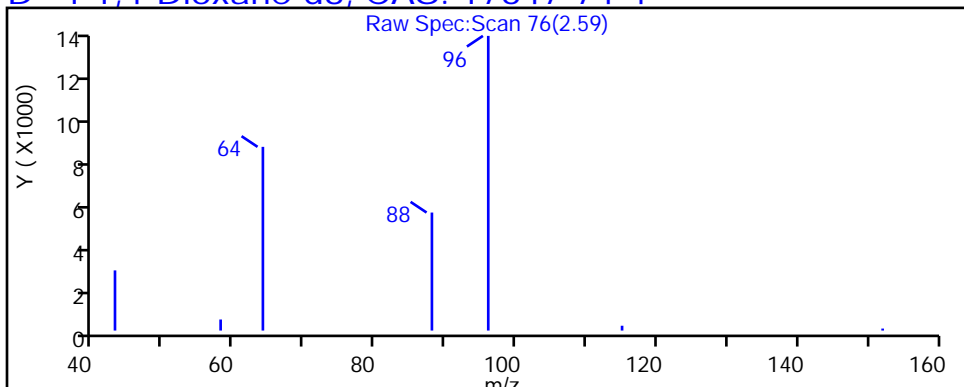
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Eurofins TestAmerica, Buffalo

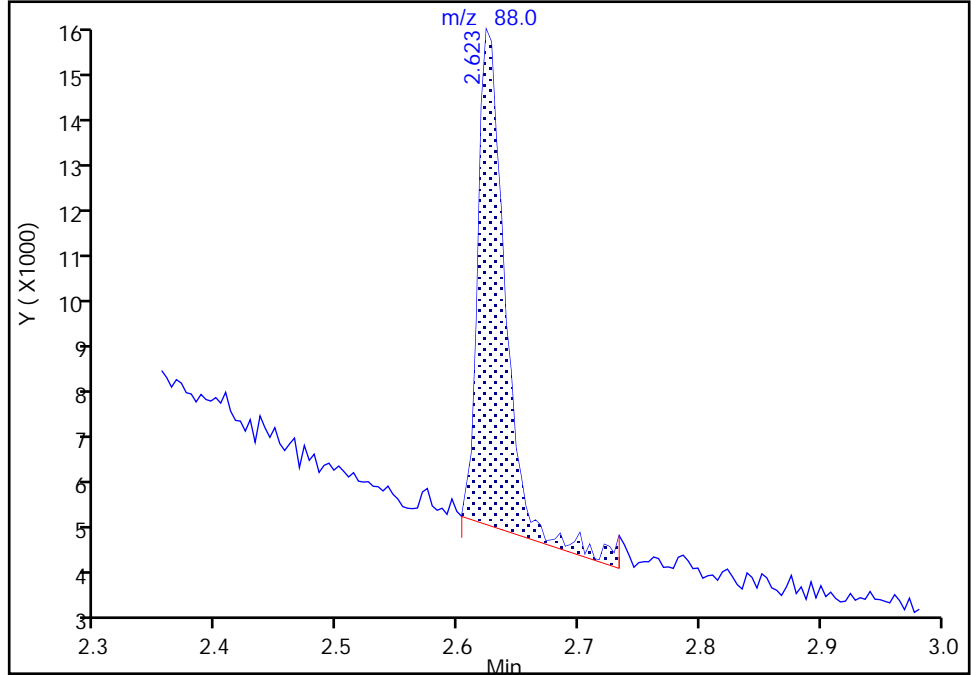
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151429.D
Injection Date: 21-Jul-2019 18:17:30 Instrument ID: HP5973U
Lims ID: 480-156213-B-5-A Lab Sample ID: 480-156213-5
Client ID: 356023-MW12B 190
Operator ID: bs ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

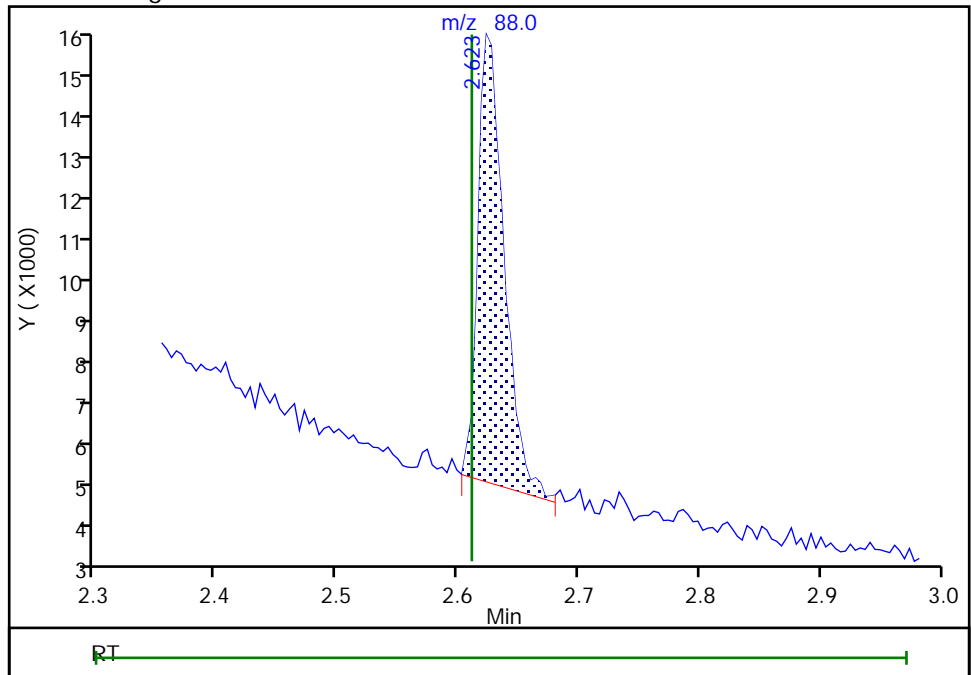
RT: 2.62
Area: 16302
Amount: 0.970324
Amount Units: ng/ul

Processing Integration Results



RT: 2.62
Area: 15526
Amount: 0.924135
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 22-Jul-2019 13:36:50
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11B Lab Sample ID: 480-156213-6
 Matrix: Water Lab File ID: U33151430.D
 Analysis Method: 8270D SIM ID Date Collected: 07/10/2019 11:37
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 18:40
 Con. Extract Vol.: 1 (mL) Dilution Factor: 5
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.1		1.0	0.50

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	35		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151430.D
 Lims ID: 480-156213-B-6-A
 Client ID: 356023-MW11B
 Sample Type: Client
 Inject. Date: 21-Jul-2019 18:40:30 ALS Bottle#: 13 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 13
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:37:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.595	2.575	0.020	86	34034	0.6973	34.9	
3 1,4-Dioxane	88	2.632	2.611	0.021	85	10456	0.6257		M
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	98	423029	4.00		

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151430.D

Injection Date: 21-Jul-2019 18:40:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-6-A

Lab Sample ID: 480-156213-6

Worklist Smp#: 13

Client ID: 356023-MW11B

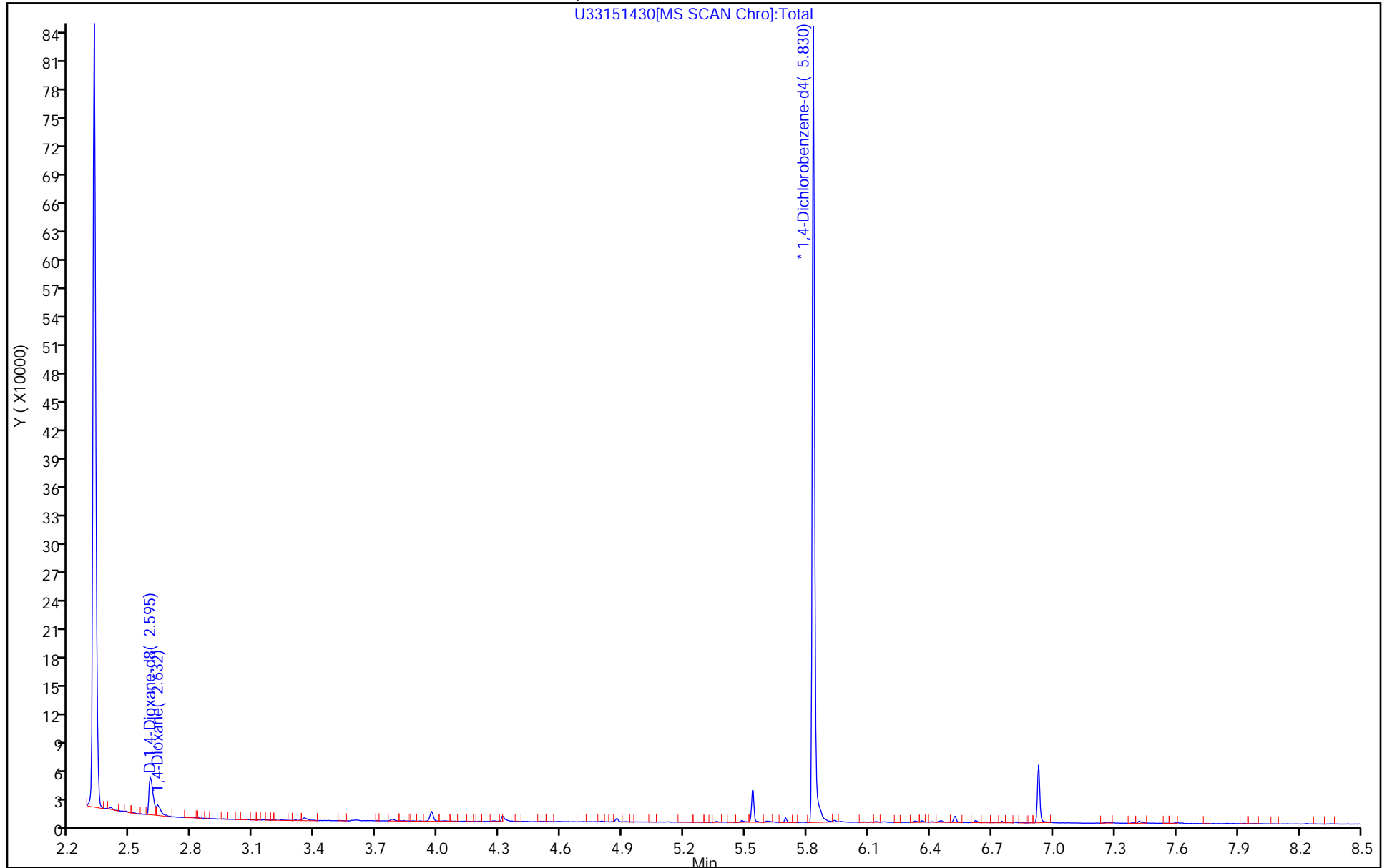
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 13

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151430.D

Injection Date: 21-Jul-2019 18:40:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-6-A

Lab Sample ID: 480-156213-6

Client ID: 356023-MW11B

Operator ID: bs

ALS Bottle#: 13

Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

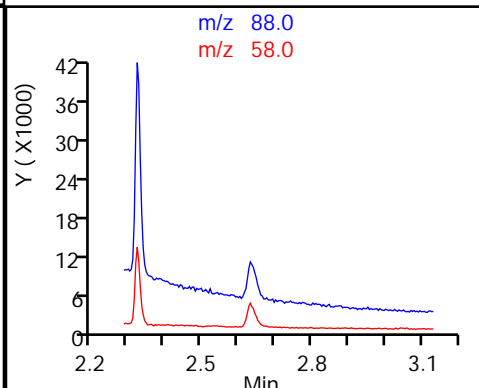
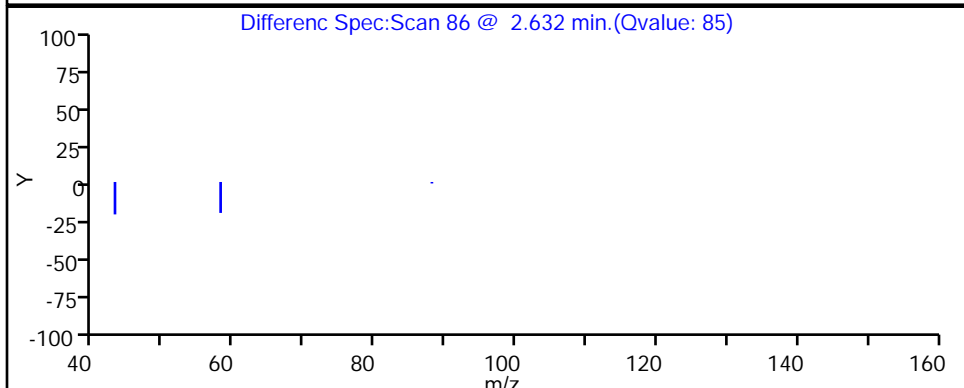
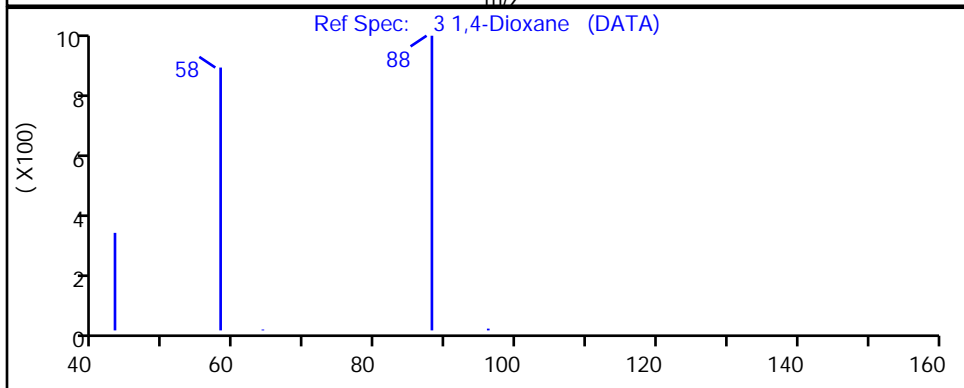
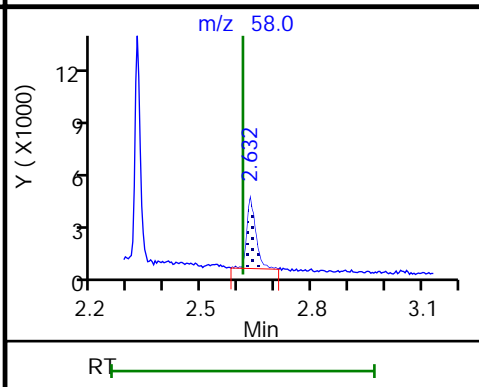
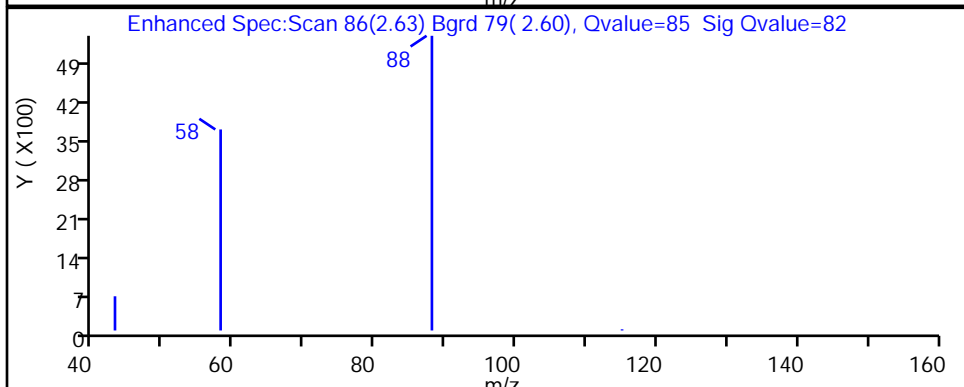
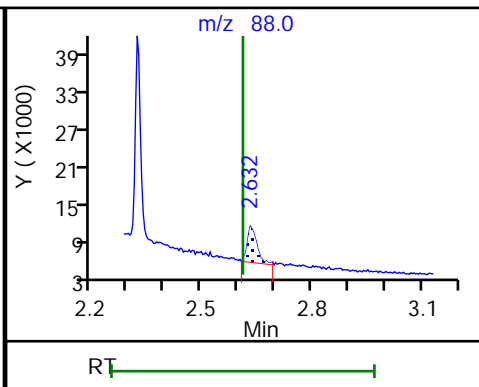
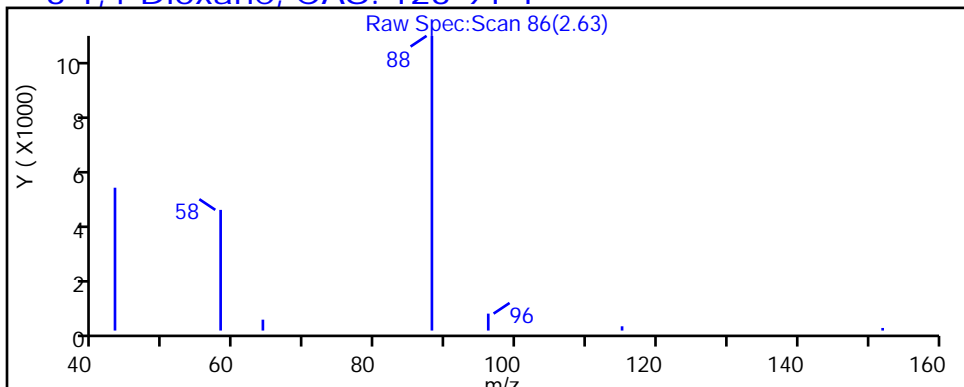
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151430.D

Injection Date: 21-Jul-2019 18:40:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-6-A

Lab Sample ID: 480-156213-6

Client ID: 356023-MW11B

Operator ID: bs

ALS Bottle#: 13

Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

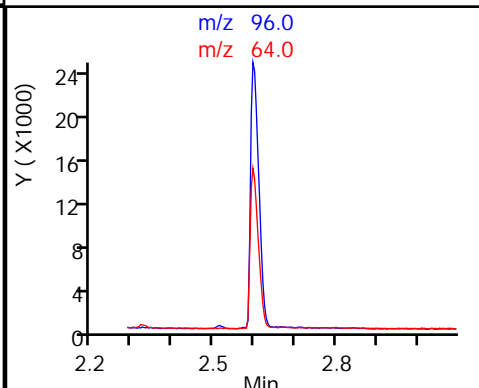
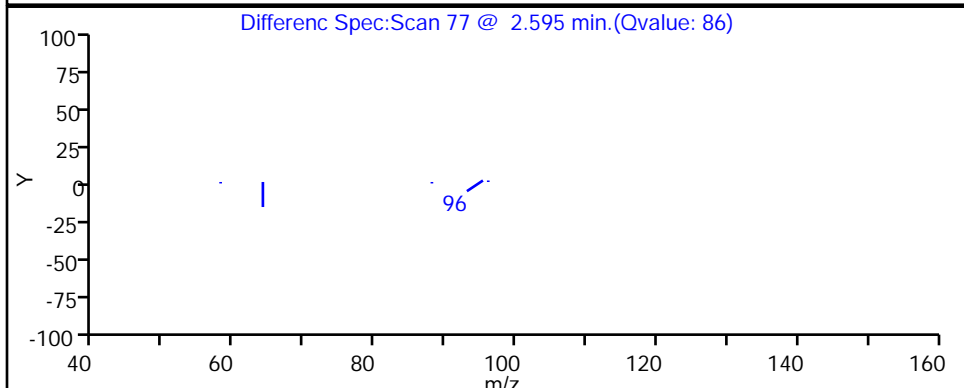
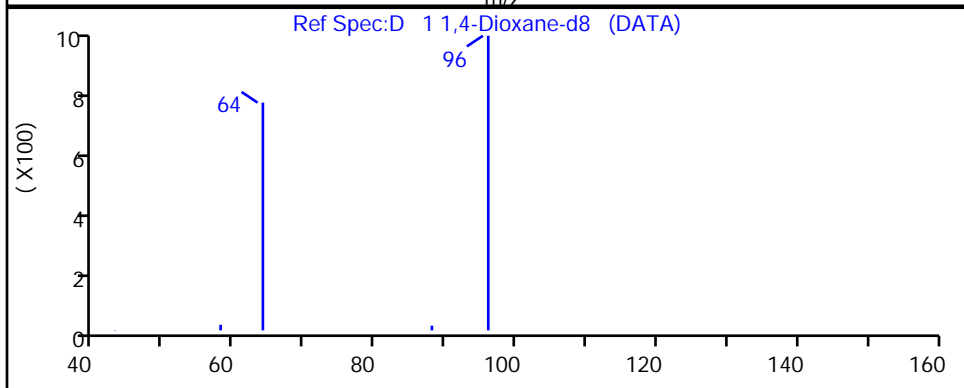
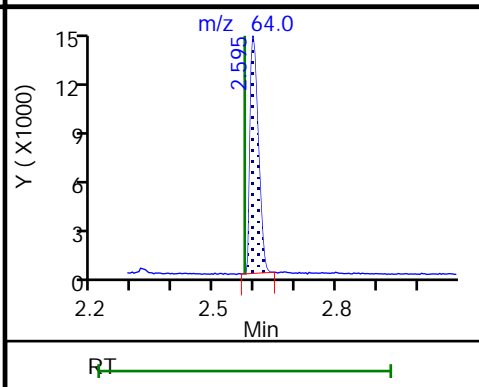
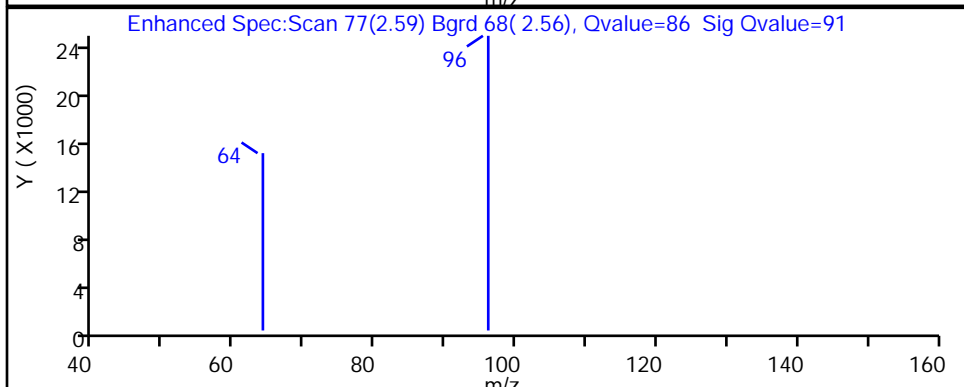
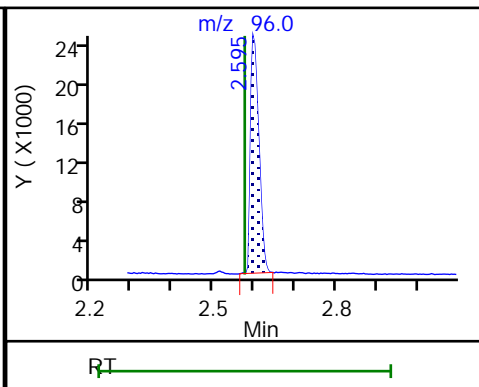
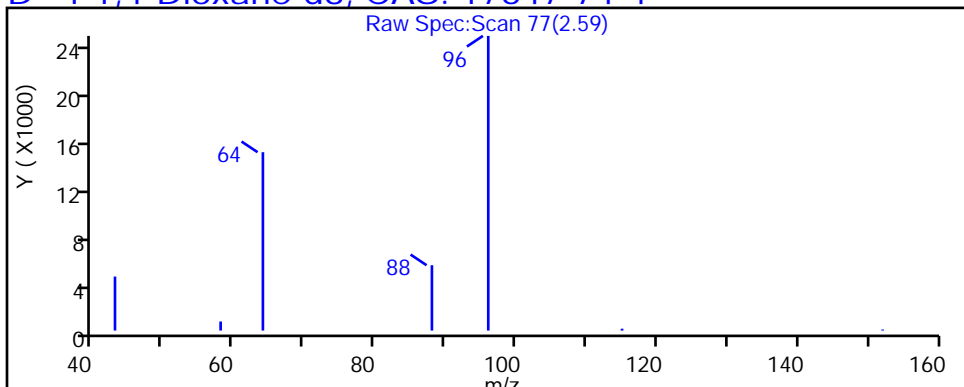
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Euofins TestAmerica, Buffalo

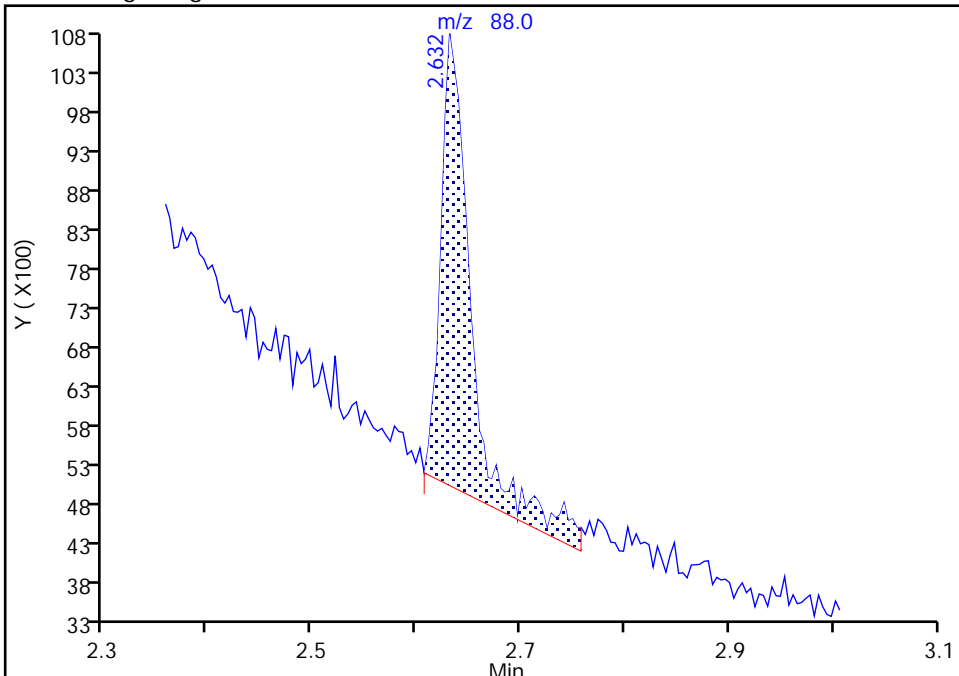
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151430.D
Injection Date: 21-Jul-2019 18:40:30 Instrument ID: HP5973U
Lims ID: 480-156213-B-6-A Lab Sample ID: 480-156213-6
Client ID: 356023-MW11B
Operator ID: bs ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

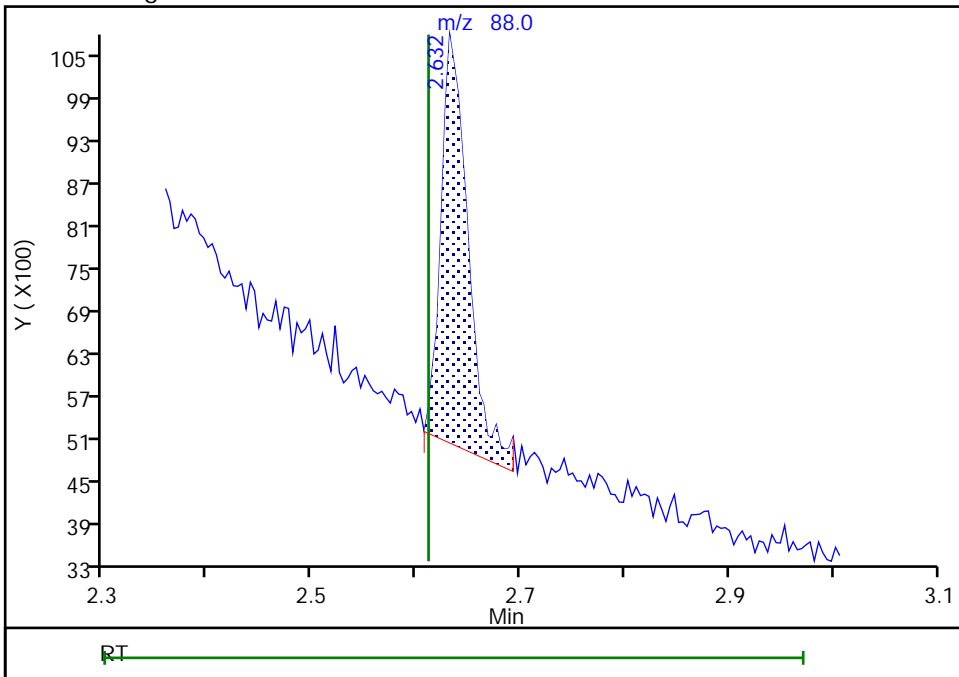
RT: 2.63
Area: 11628
Amount: 0.695820
Amount Units: ng/ul

Processing Integration Results



RT: 2.63
Area: 10456
Amount: 0.625688
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 22-Jul-2019 13:36:59
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11C Lab Sample ID: 480-156213-7
 Matrix: Water Lab File ID: U33151398.D
 Analysis Method: 8270D SIM ID Date Collected: 07/10/2019 15:23
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/19/2019 01:24
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482665 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.8	E	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151398.D
 Lims ID: 480-156213-A-7-A
 Client ID: 356023-MW11C
 Sample Type: Client
 Inject. Date: 19-Jul-2019 01:24:30 ALS Bottle#: 35 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 35
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:37:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.648	2.574	0.074	89	188568	3.92	39.2	
3 1,4-Dioxane	88	2.689	2.615	0.074	85	33953	1.83		E
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	97	416462	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151398.D

Injection Date: 19-Jul-2019 01:24:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-7-A

Lab Sample ID: 480-156213-7

Worklist Smp#: 5

Client ID: 356023-MW11C

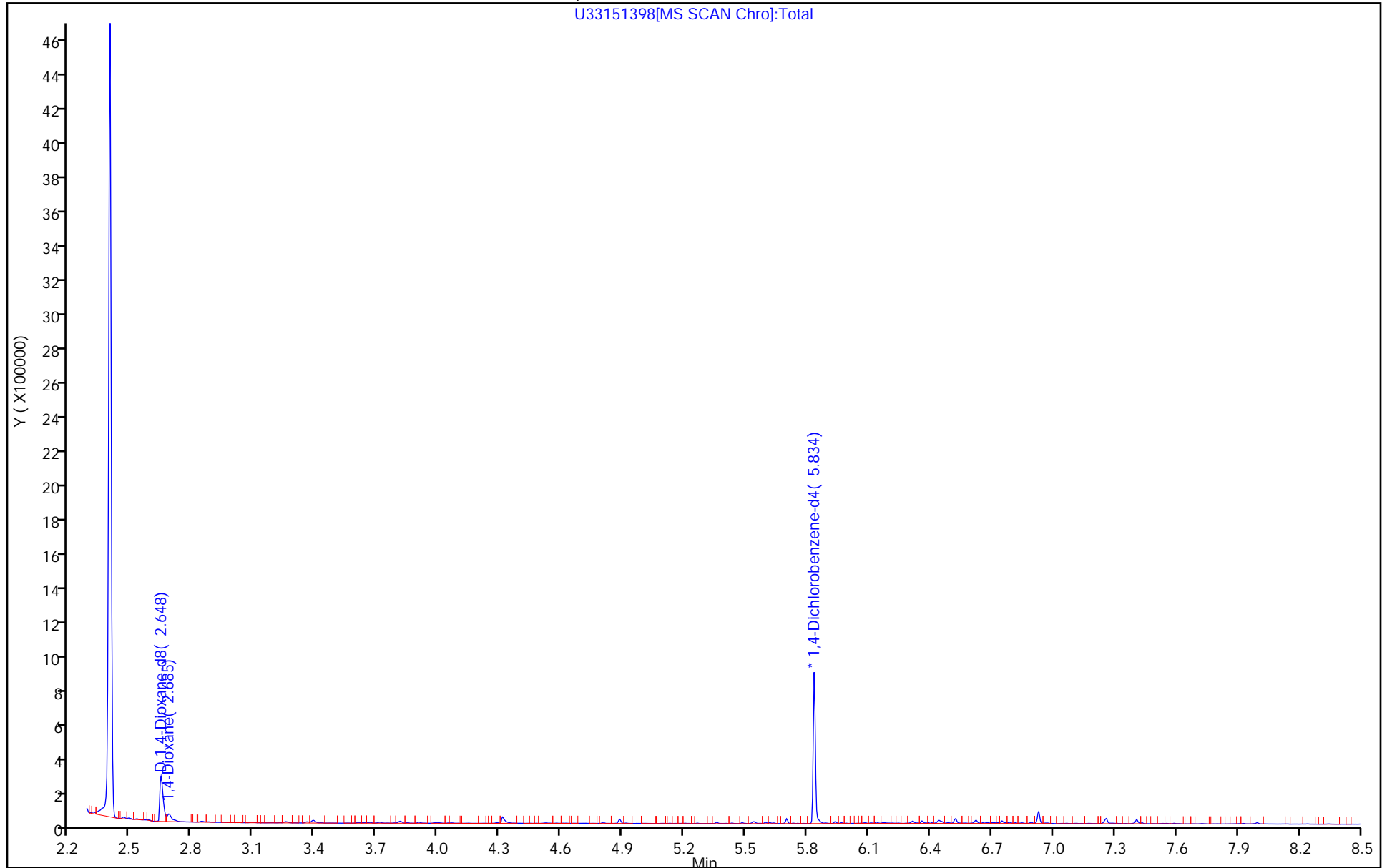
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 35

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151398.D

Injection Date: 19-Jul-2019 01:24:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-7-A

Lab Sample ID: 480-156213-7

Client ID: 356023-MW11C

Operator ID: bs

ALS Bottle#: 35 Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

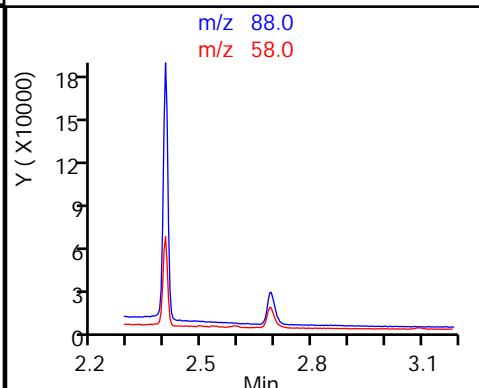
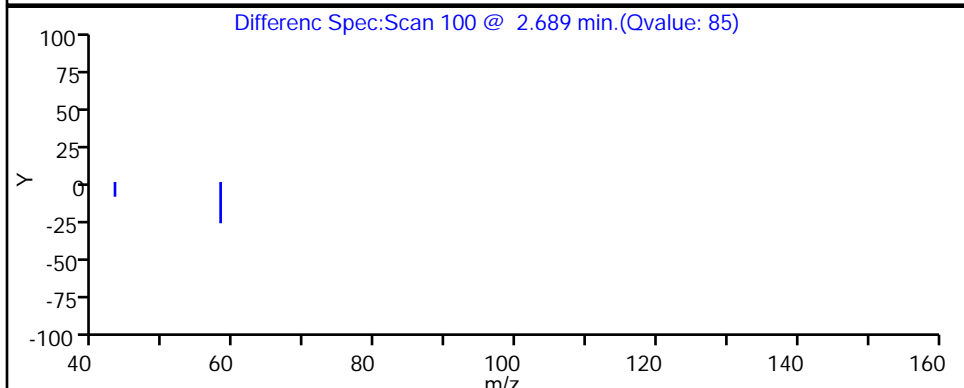
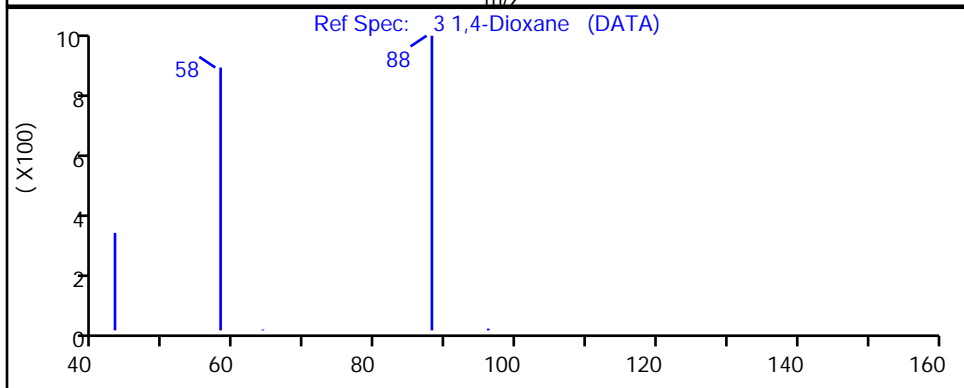
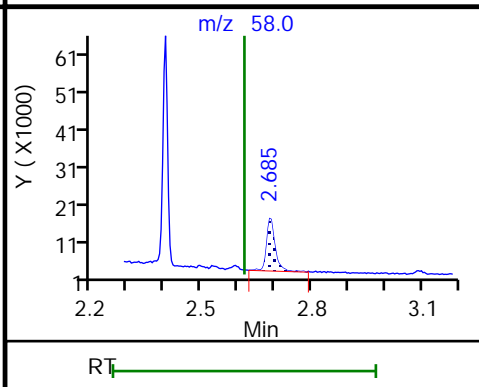
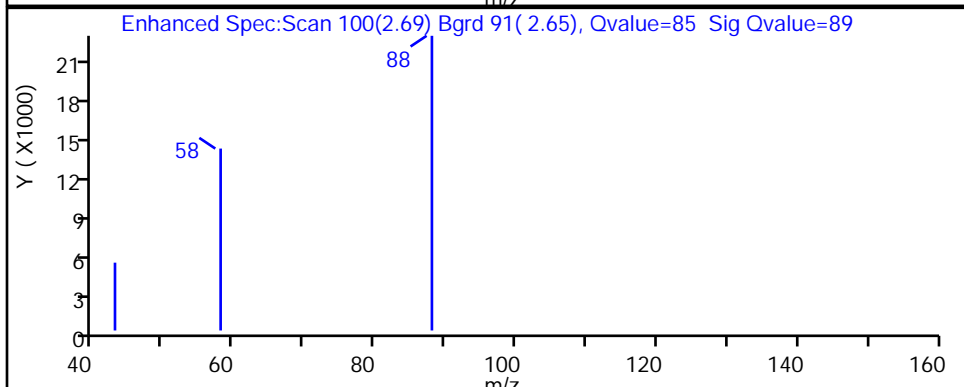
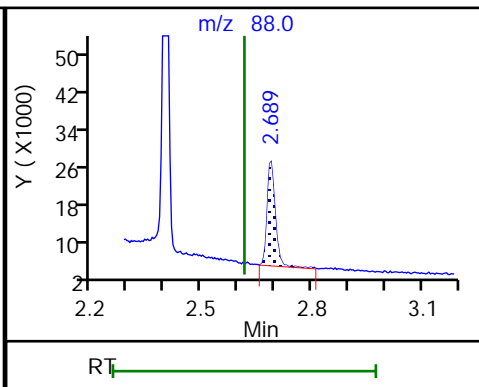
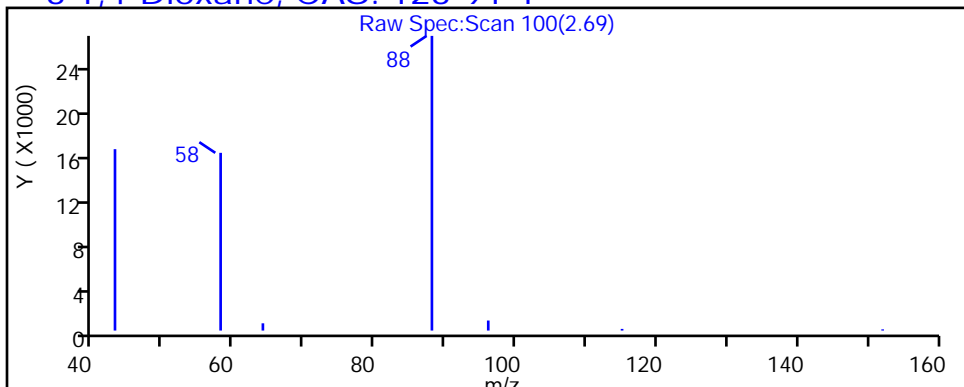
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151398.D

Injection Date: 19-Jul-2019 01:24:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-7-A

Lab Sample ID: 480-156213-7

Client ID: 356023-MW11C

Operator ID: bs

ALS Bottle#: 35 Worklist Smp#: 5

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

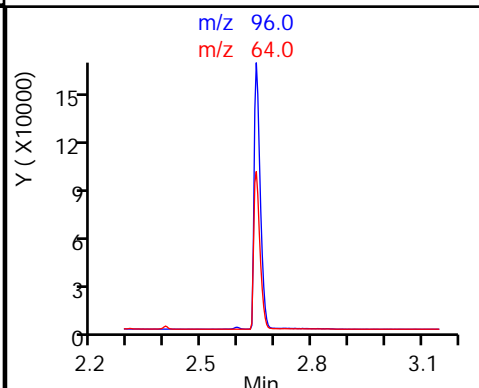
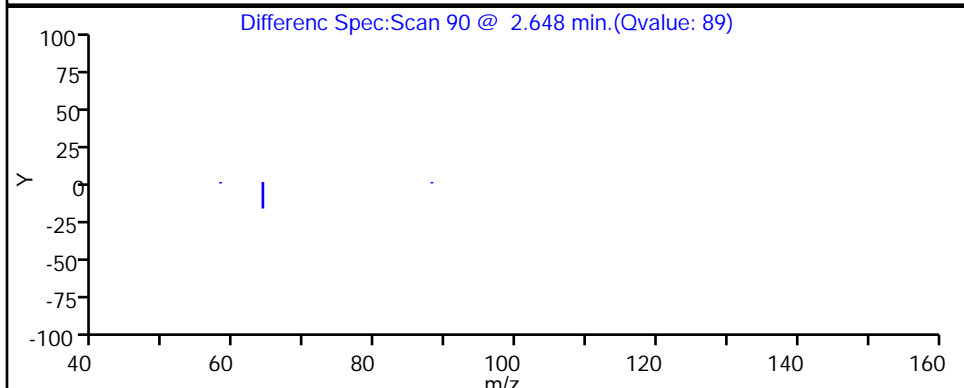
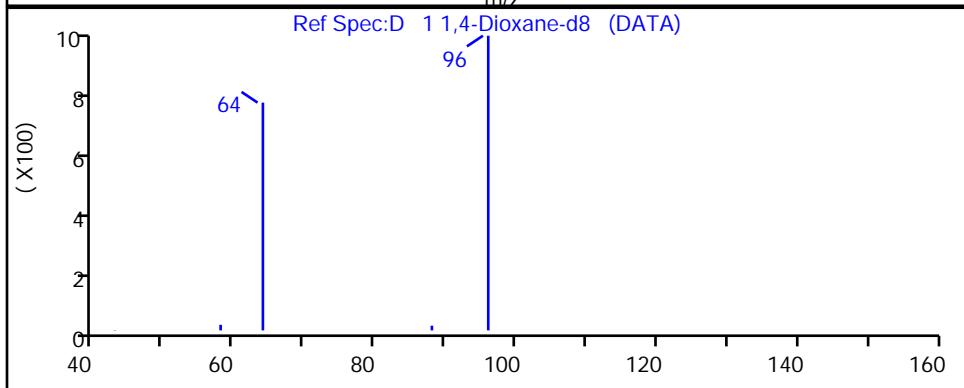
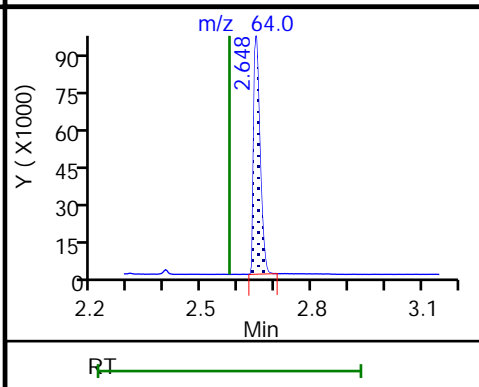
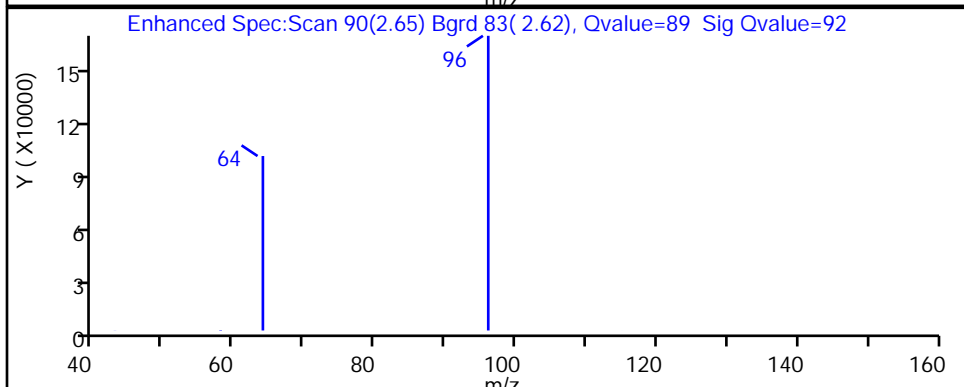
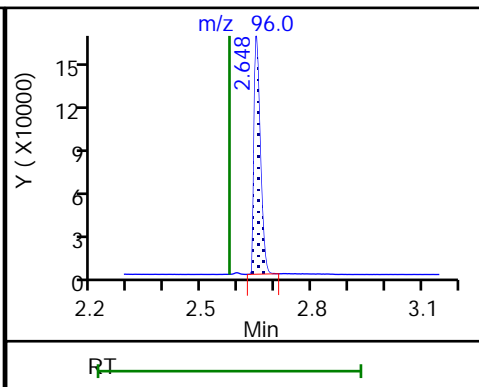
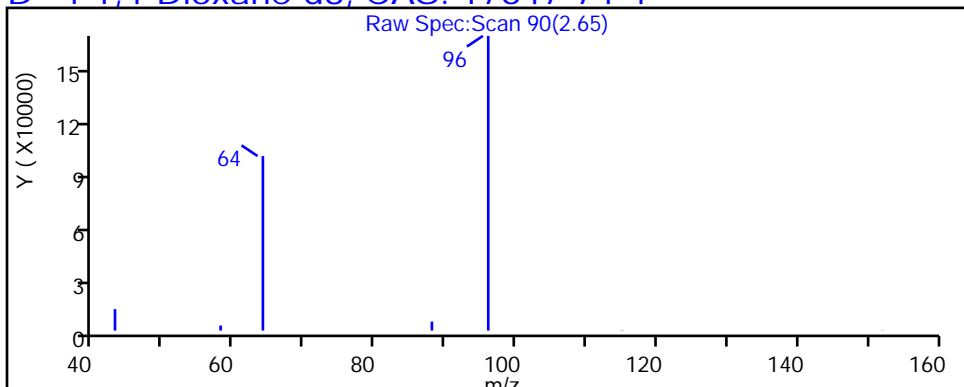
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1801 Lab Sample ID: 480-156213-8
 Matrix: Water Lab File ID: U33151399.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 11:10
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/19/2019 01:48
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482665 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	45		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151399.D
 Lims ID: 480-156213-B-8-A
 Client ID: 356023-MW1801
 Sample Type: Client
 Inject. Date: 19-Jul-2019 01:48:30 ALS Bottle#: 36 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 36
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:37:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.660	2.574	0.086	89	225575	4.50	45.0	
3 1,4-Dioxane	88	2.701	2.615	0.086	84	22149	1.00		
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	98	434399	4.00		

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151399.D

Injection Date: 19-Jul-2019 01:48:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-8-A

Lab Sample ID: 480-156213-8

Worklist Smp#: 6

Client ID: 356023-MW1801

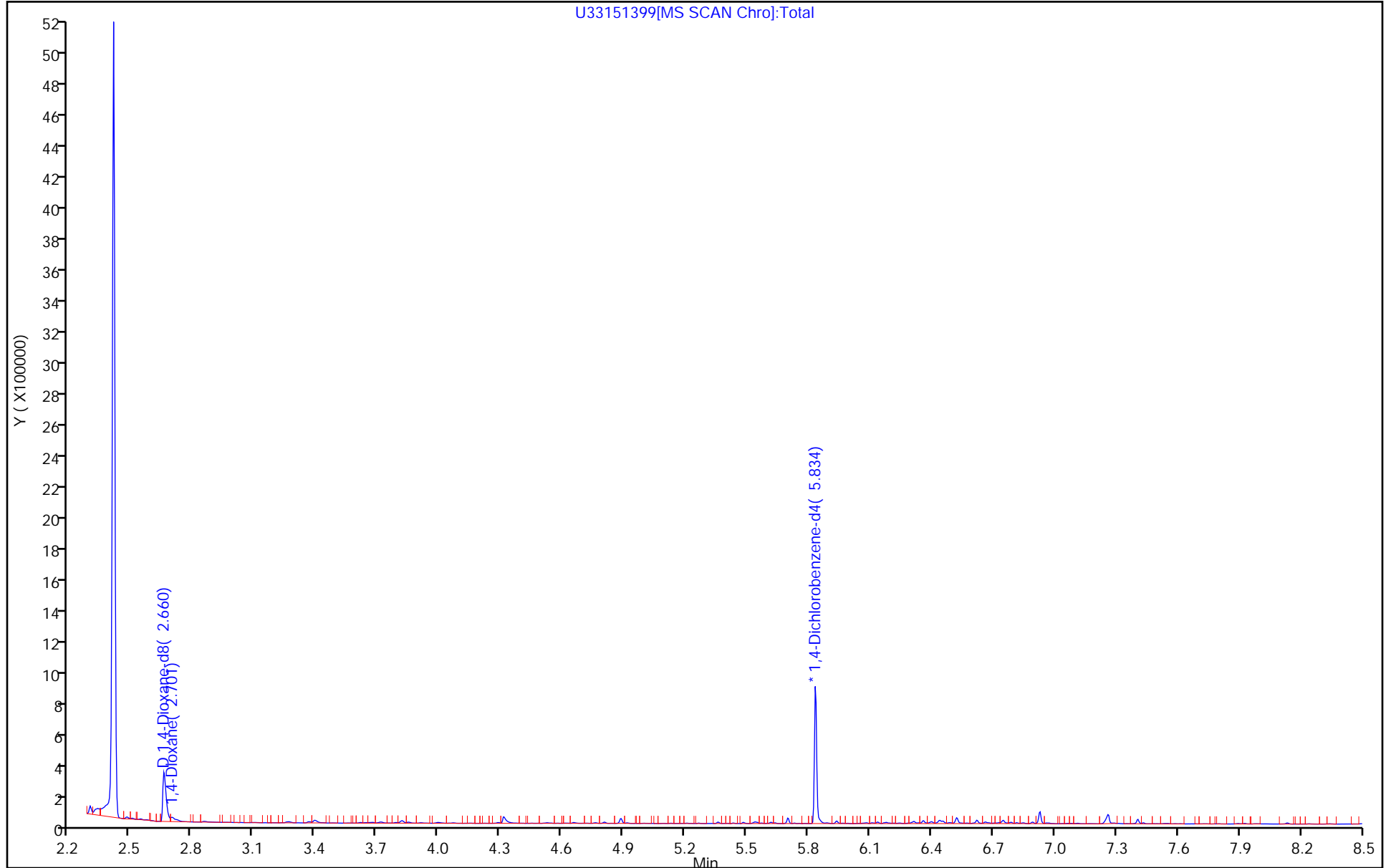
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 36

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151399.D

Injection Date: 19-Jul-2019 01:48:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-8-A

Lab Sample ID: 480-156213-8

Client ID: 356023-MW1801

Operator ID: bs

ALS Bottle#: 36

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

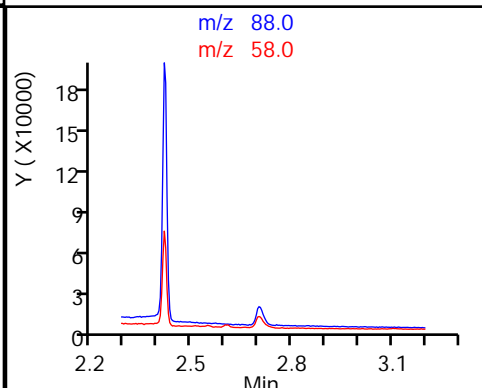
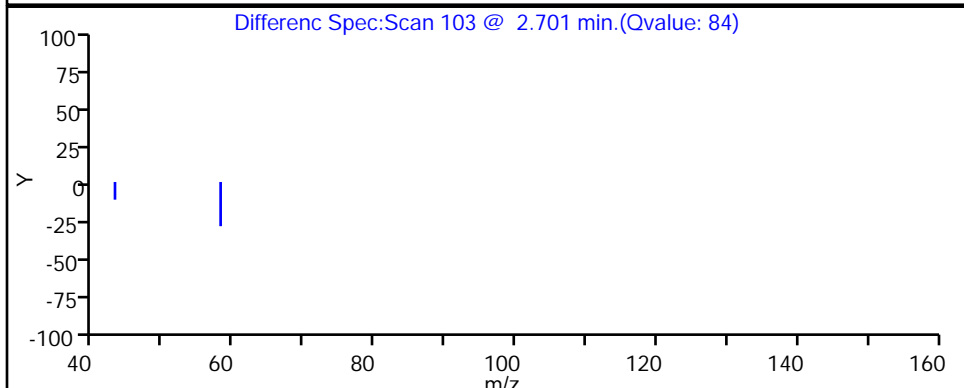
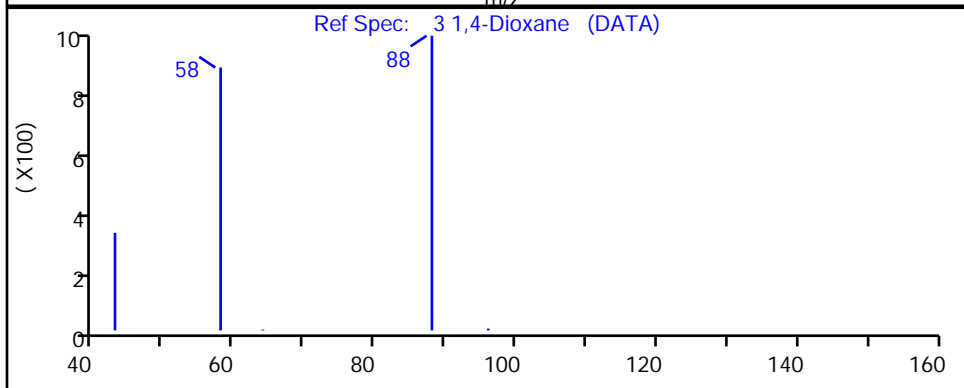
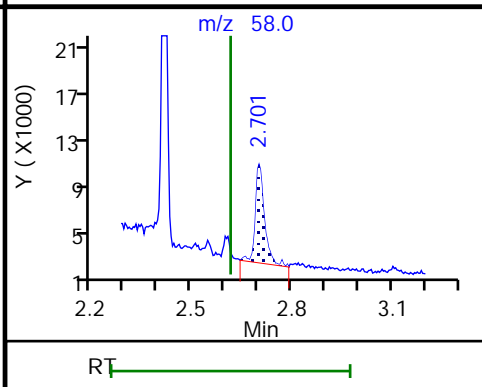
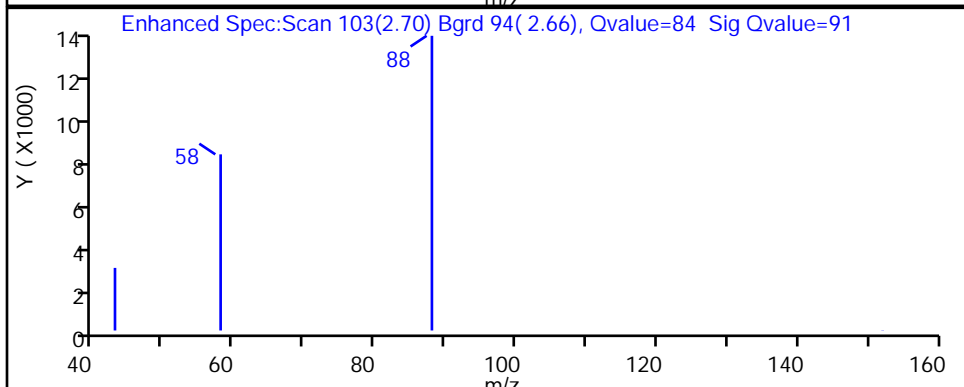
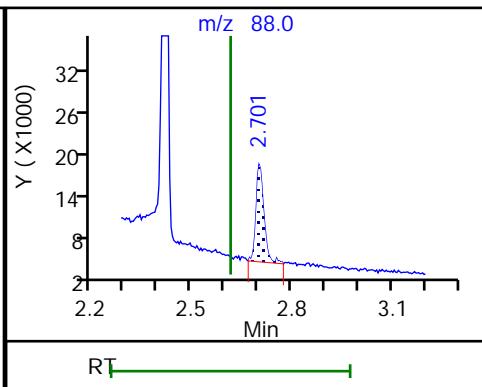
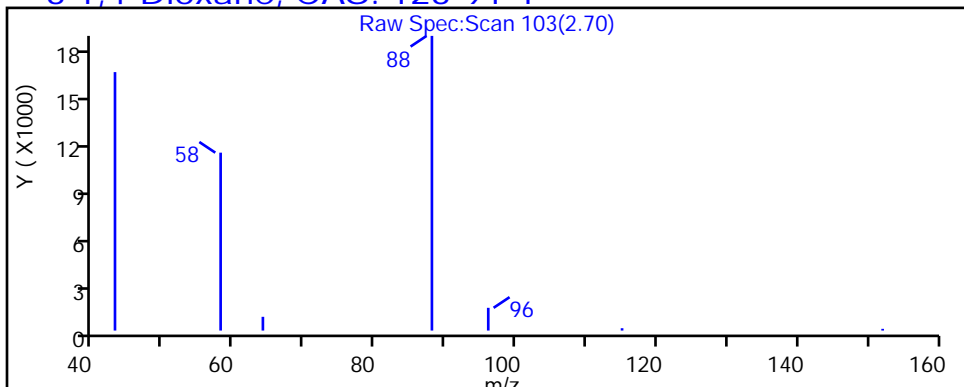
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151399.D

Injection Date: 19-Jul-2019 01:48:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-8-A

Lab Sample ID: 480-156213-8

Client ID: 356023-MW1801

Operator ID: bs

ALS Bottle#: 36

Worklist Smp#: 6

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

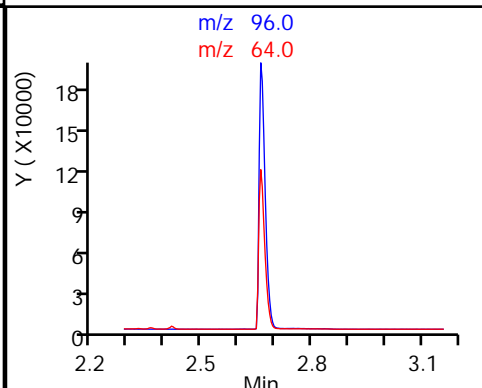
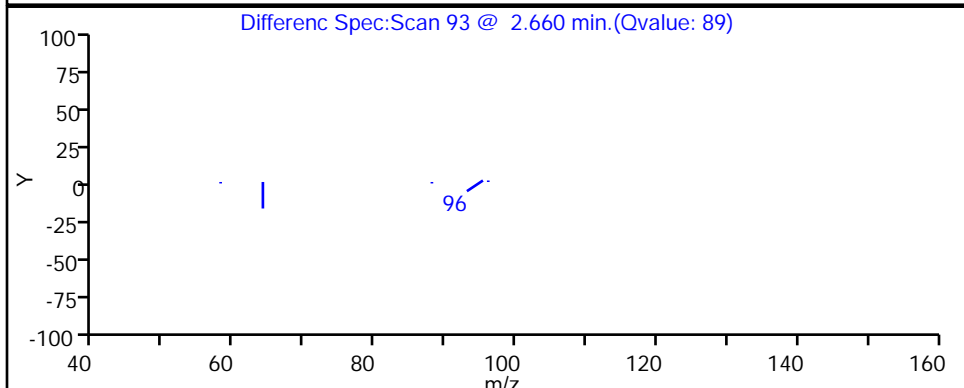
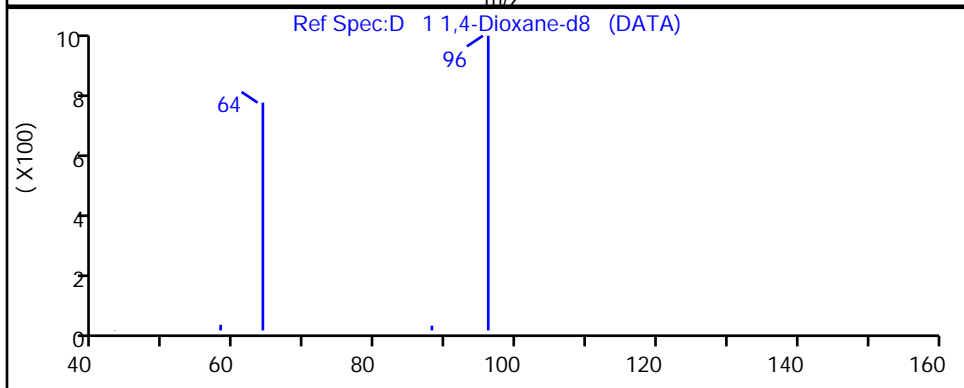
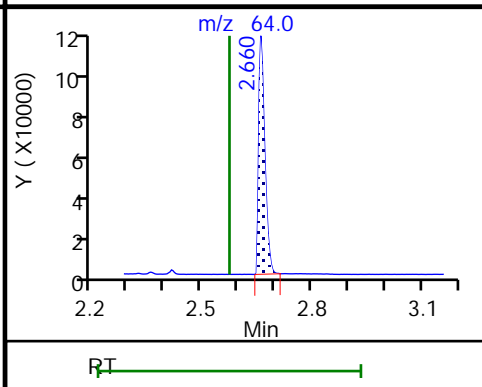
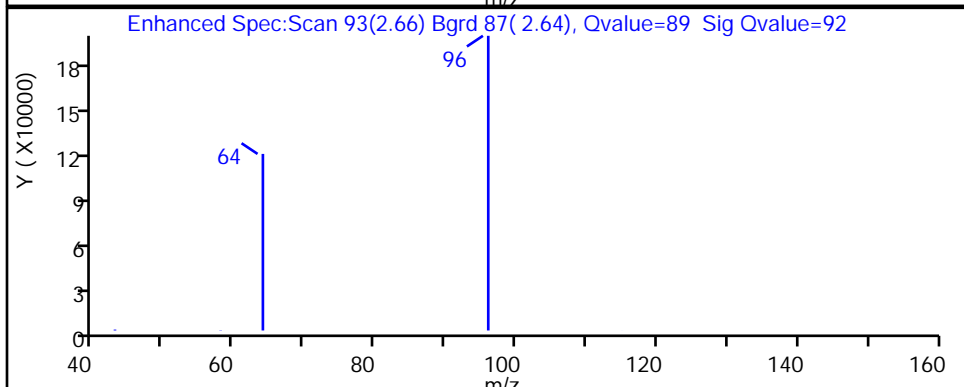
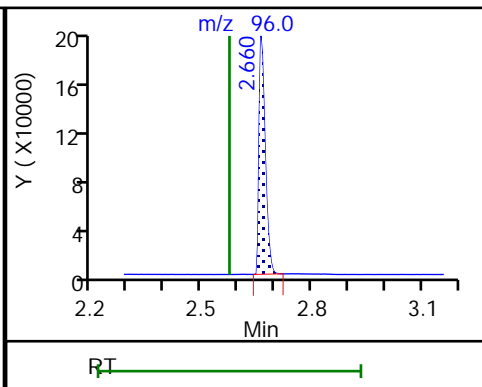
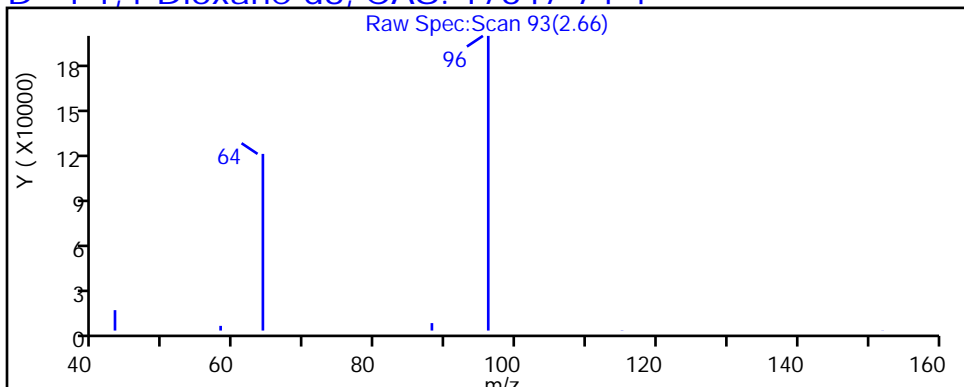
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1802 Lab Sample ID: 480-156213-9
 Matrix: Water Lab File ID: U33151400.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 11:20
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/19/2019 02:11
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482665 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.3	E	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151400.D
 Lims ID: 480-156213-A-9-A
 Client ID: 356023-MW1802
 Sample Type: Client
 Inject. Date: 19-Jul-2019 02:11:30 ALS Bottle#: 37 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 37
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:37:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.652	2.574	0.078	85	187477	3.74	37.4	
3 1,4-Dioxane	88	2.688	2.615	0.073	86	23637	1.28		E
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	98	433993	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151400.D

Injection Date: 19-Jul-2019 02:11:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-9-A

Lab Sample ID: 480-156213-9

Worklist Smp#: 7

Client ID: 356023-MW1802

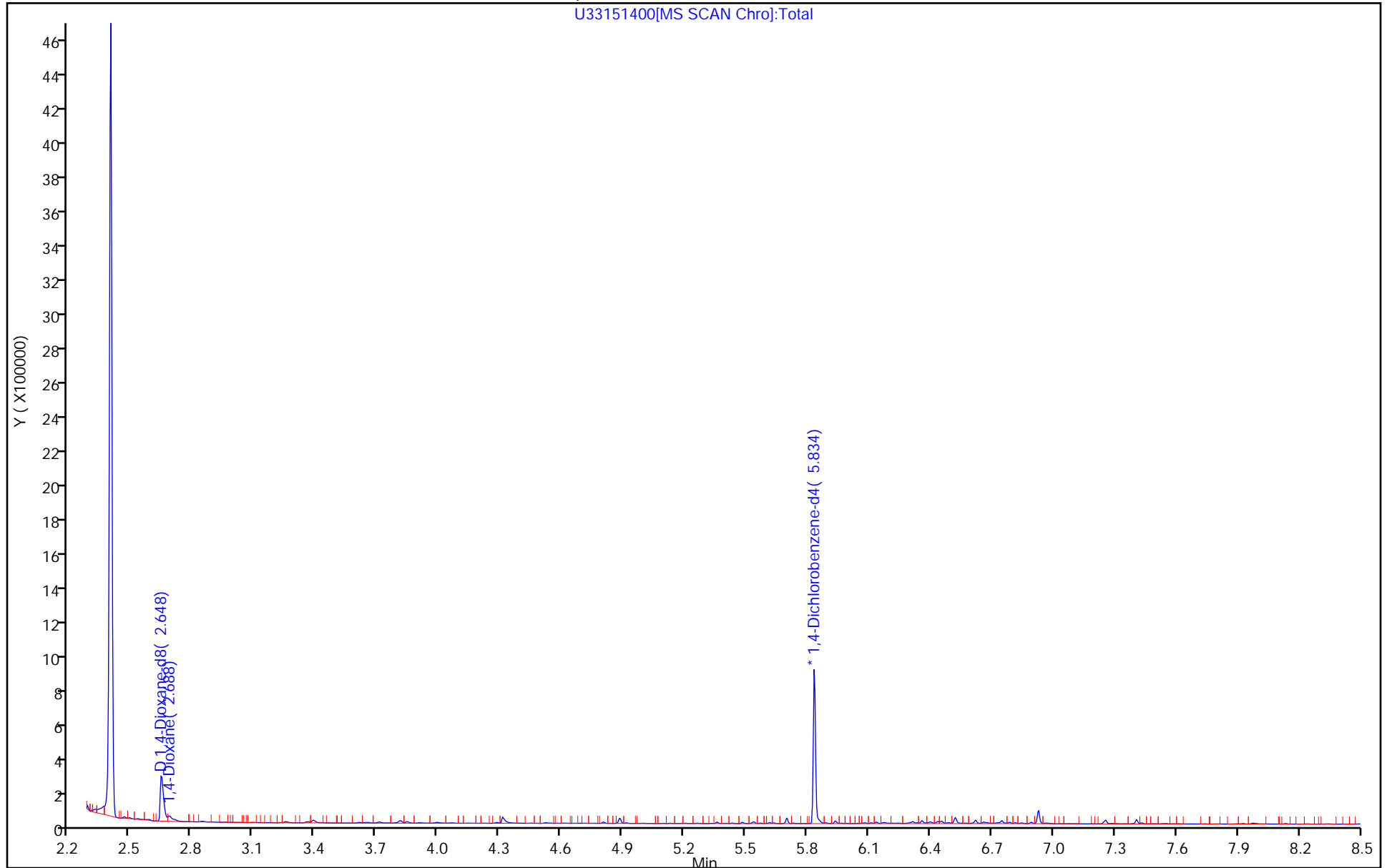
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 37

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151400.D

Injection Date: 19-Jul-2019 02:11:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-9-A

Lab Sample ID: 480-156213-9

Client ID: 356023-MW1802

Operator ID: bs

ALS Bottle#: 37

Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

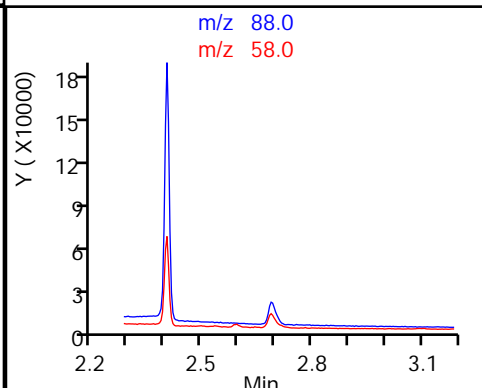
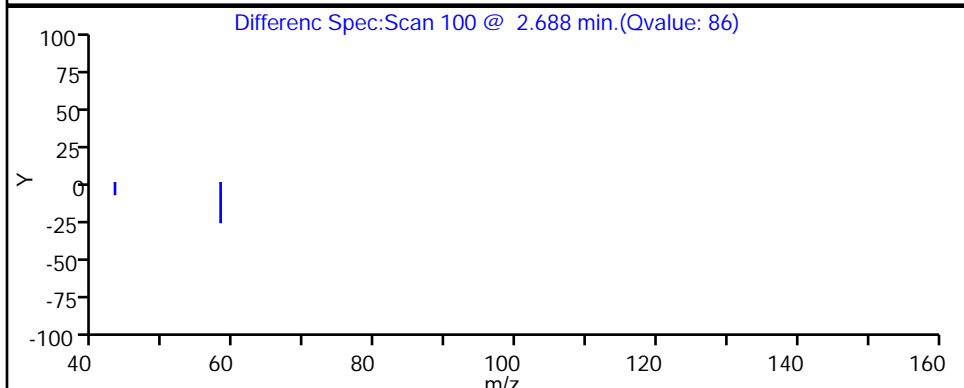
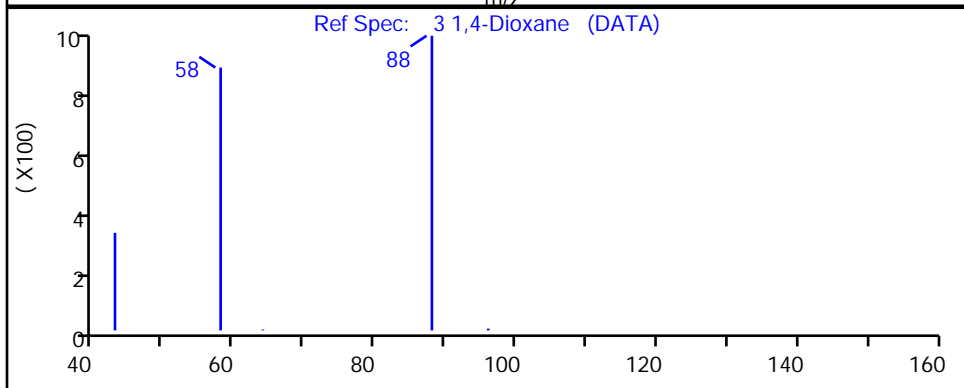
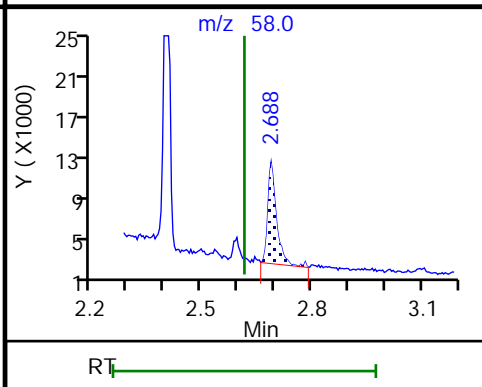
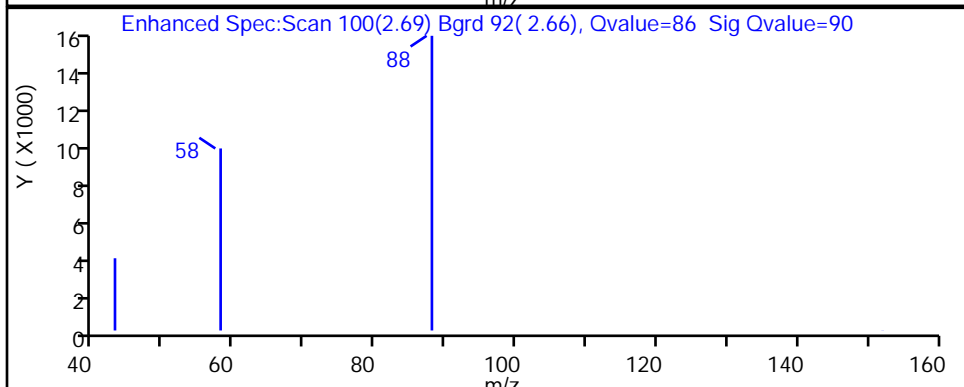
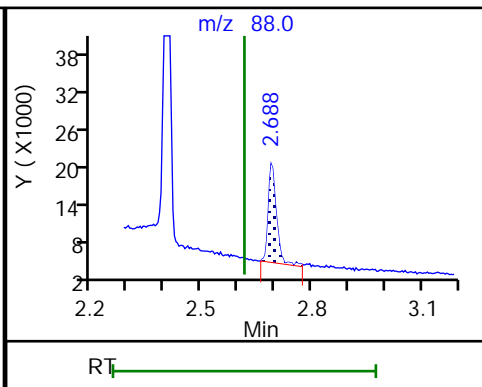
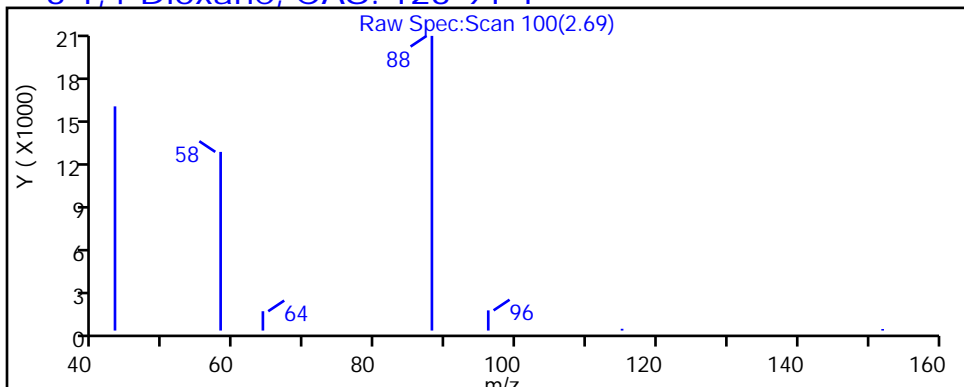
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151400.D

Injection Date: 19-Jul-2019 02:11:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-9-A

Lab Sample ID: 480-156213-9

Client ID: 356023-MW1802

Operator ID: bs

ALS Bottle#: 37 Worklist Smp#: 7

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

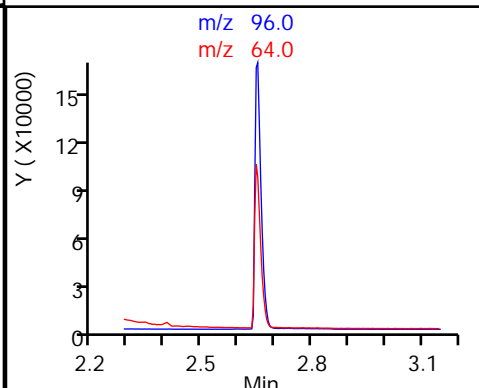
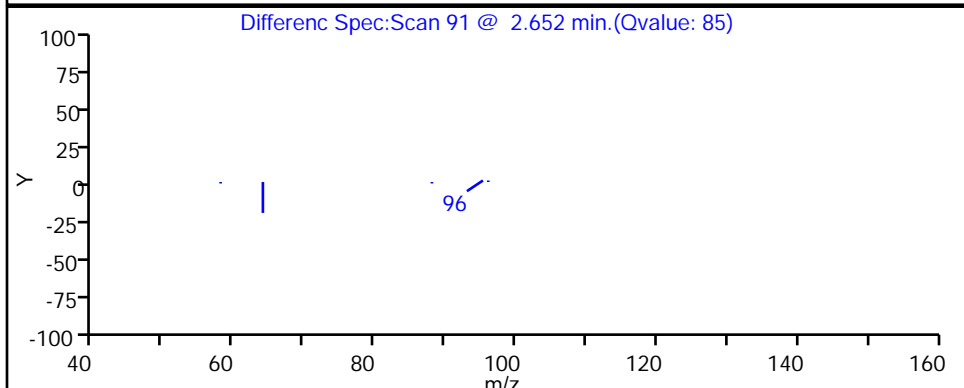
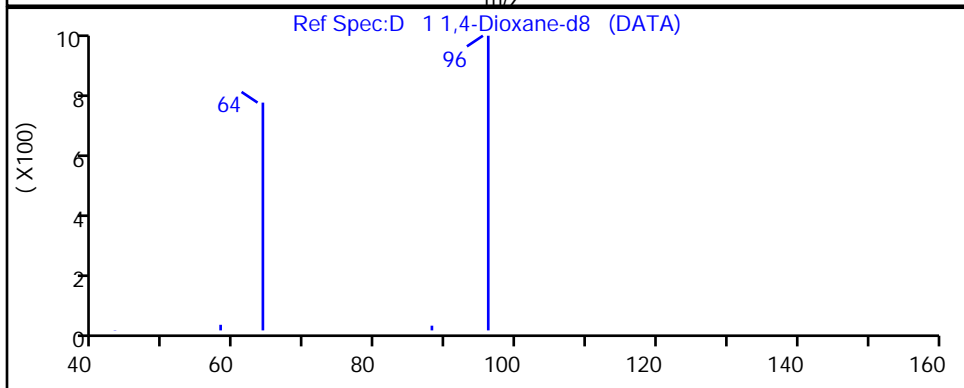
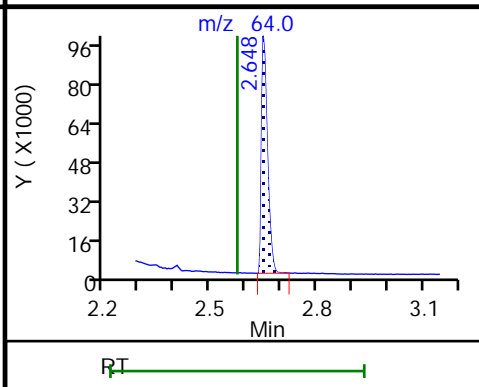
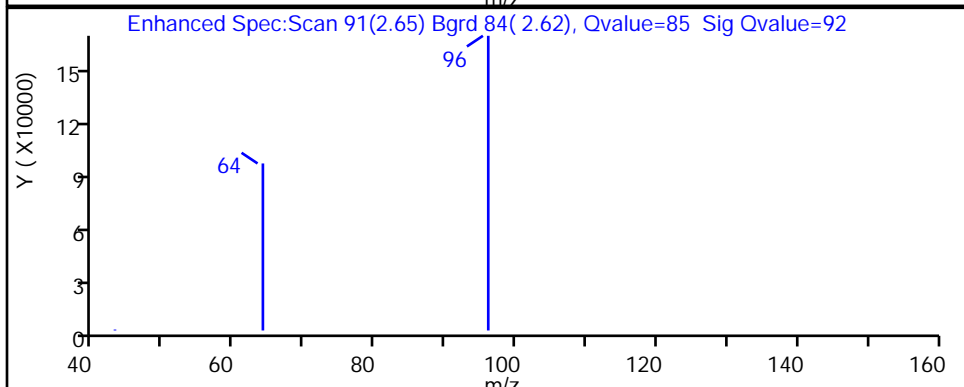
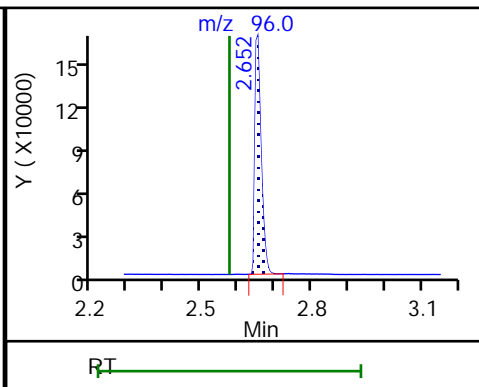
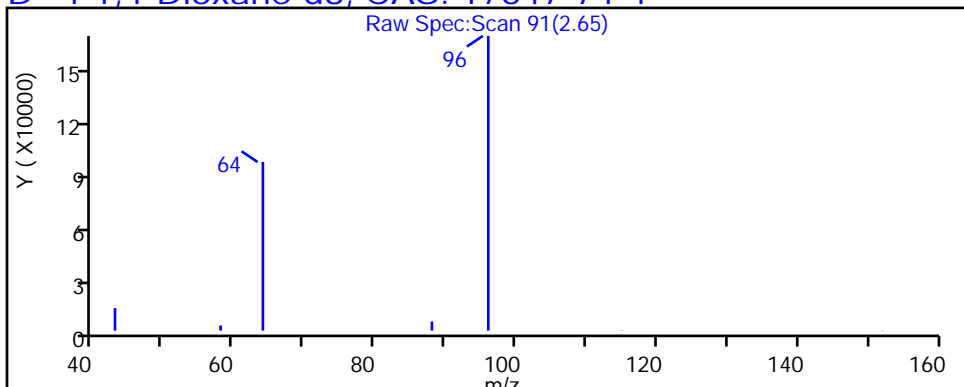
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1803 Lab Sample ID: 480-156213-10
 Matrix: Water Lab File ID: U33151401.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 11:30
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/19/2019 02:35
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482665 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.4	E	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	39		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151401.D
 Lims ID: 480-156213-B-10-A
 Client ID: 356023-MW1803
 Sample Type: Client
 Inject. Date: 19-Jul-2019 02:35:30 ALS Bottle#: 38 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 38
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:37:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.648	2.574	0.074	92	186861	3.90	39.0	
3 1,4-Dioxane	88	2.689	2.615	0.074	86	25361	1.38		E
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	98	415368	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151401.D

Injection Date: 19-Jul-2019 02:35:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-10-A

Lab Sample ID: 480-156213-10

Worklist Smp#: 8

Client ID: 356023-MW1803

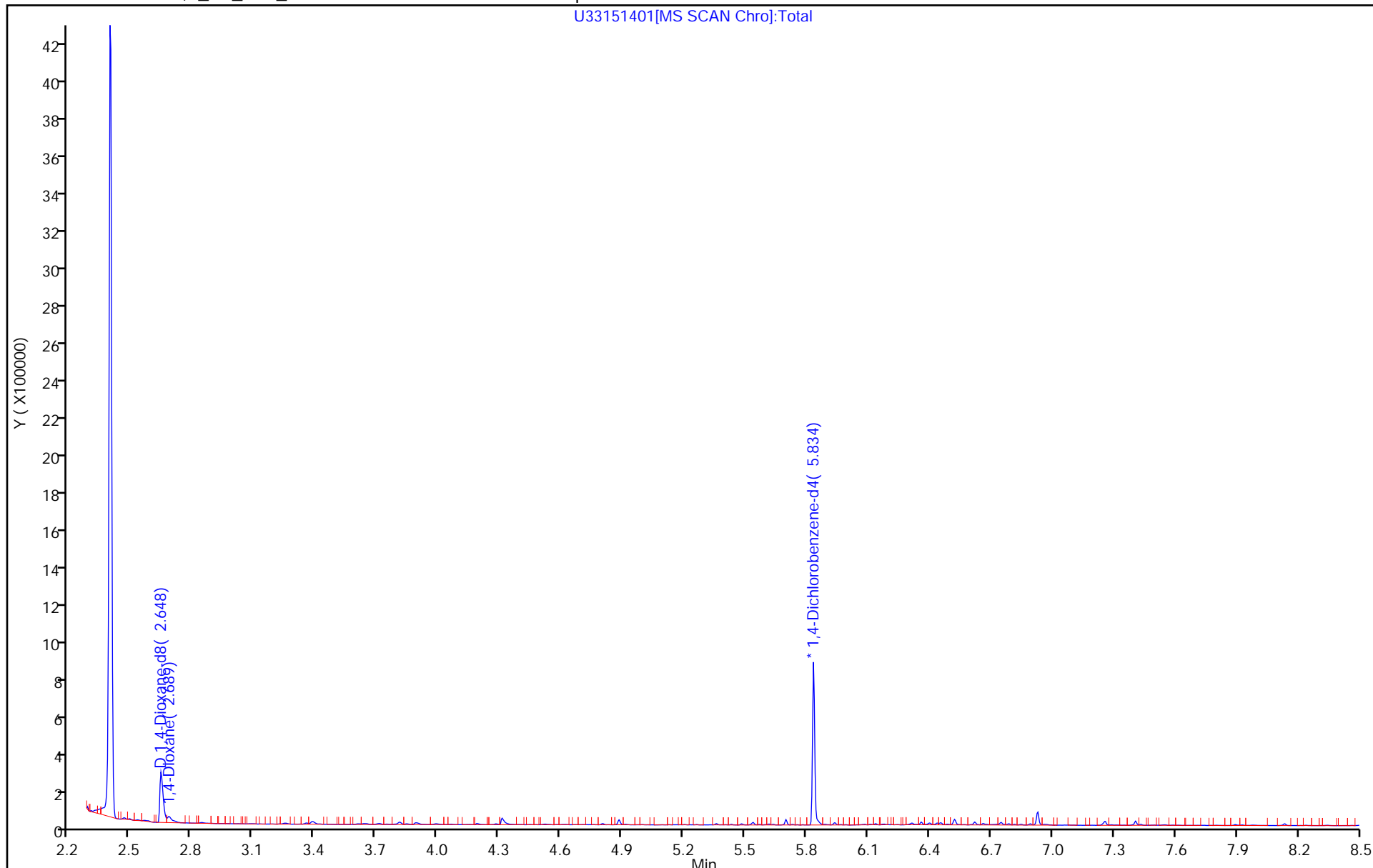
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 38

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151401.D

Injection Date: 19-Jul-2019 02:35:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-10-A

Lab Sample ID: 480-156213-10

Client ID: 356023-MW1803

Operator ID: bs

ALS Bottle#: 38

Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

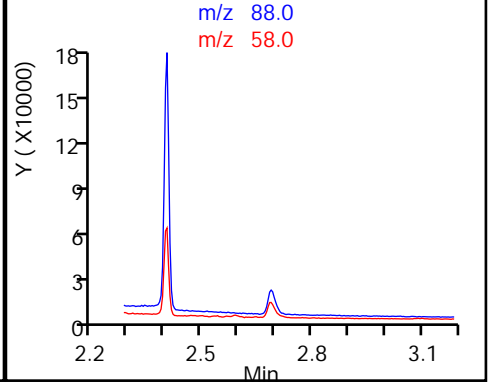
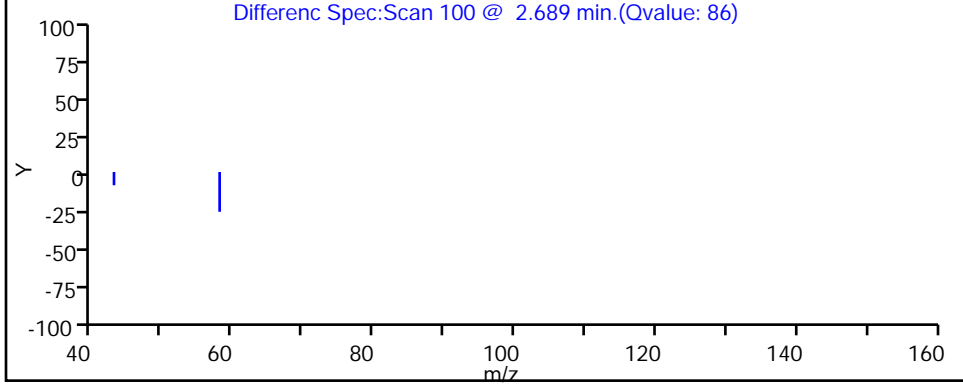
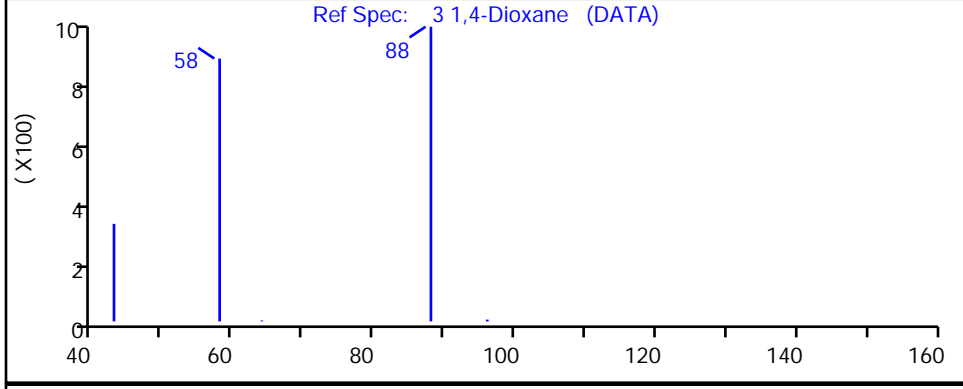
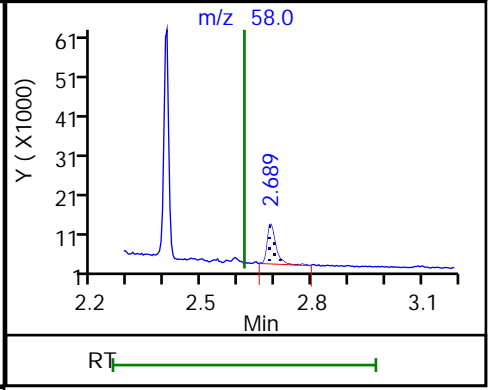
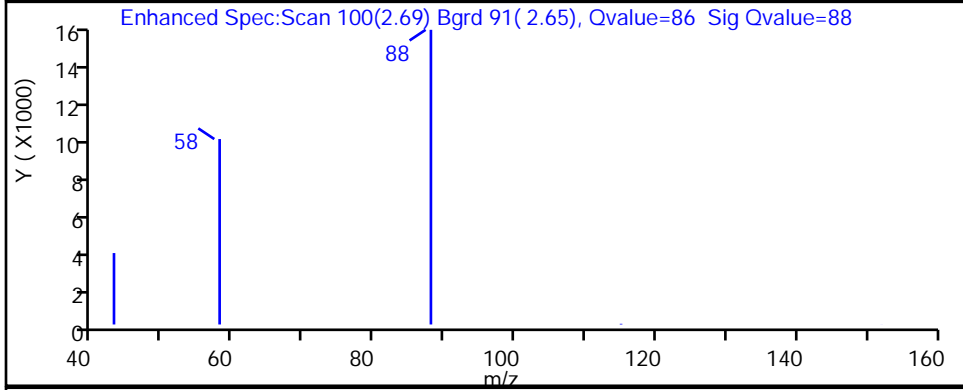
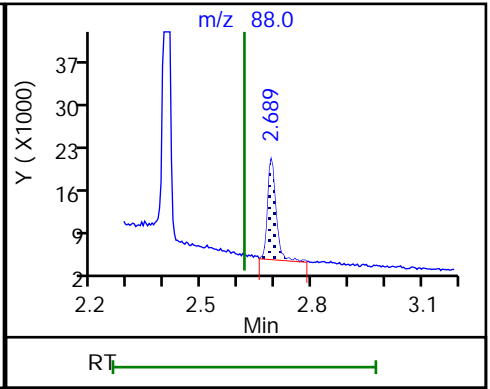
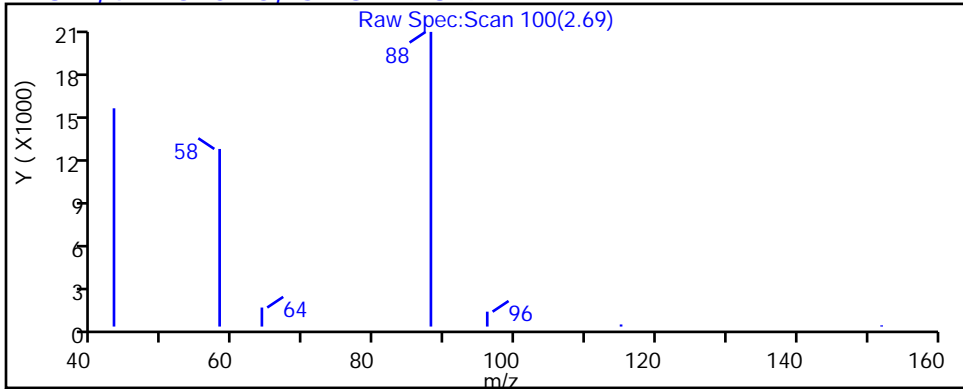
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151401.D

Injection Date: 19-Jul-2019 02:35:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-10-A

Lab Sample ID: 480-156213-10

Client ID: 356023-MW1803

Operator ID: bs

ALS Bottle#: 38 Worklist Smp#: 8

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

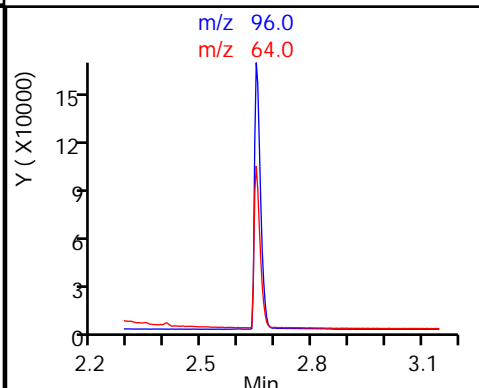
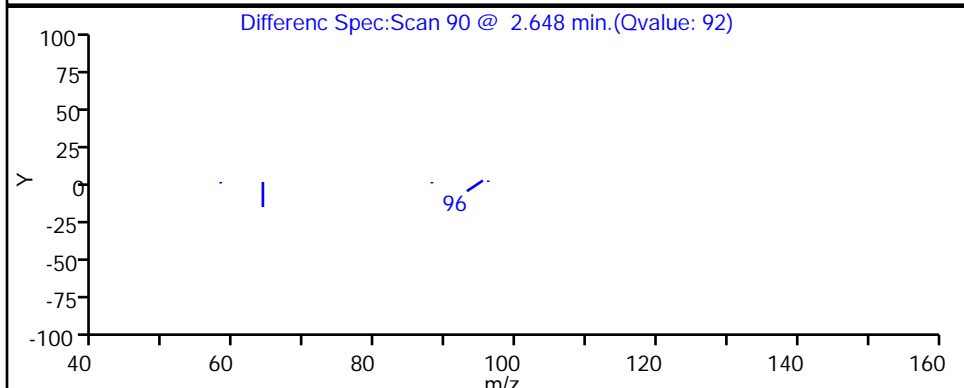
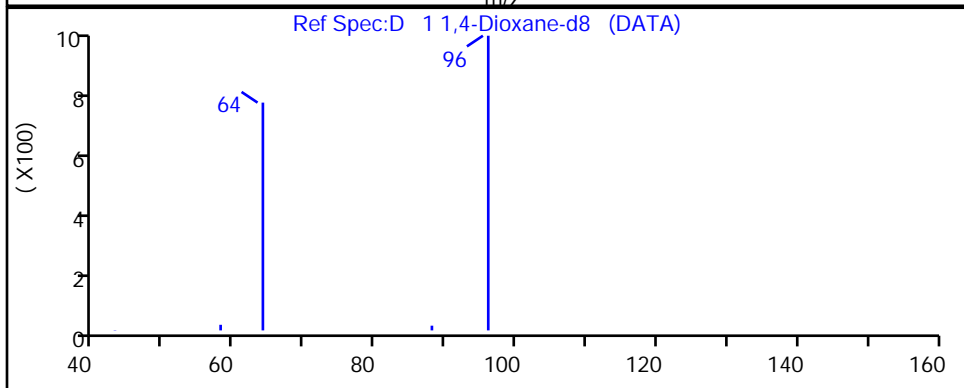
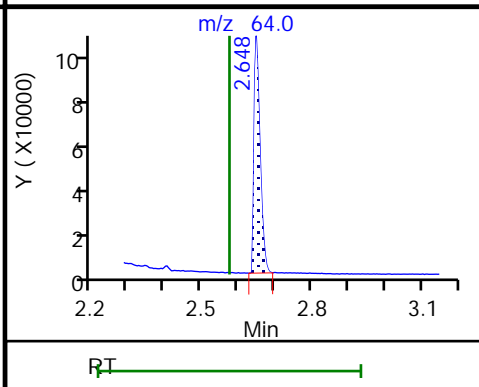
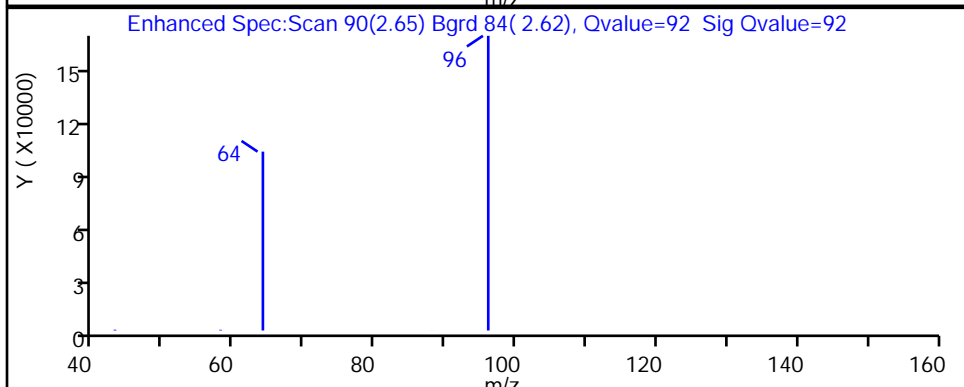
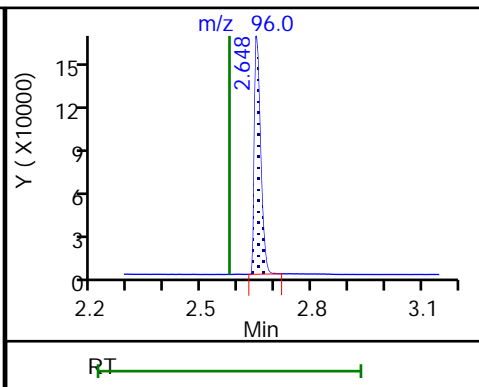
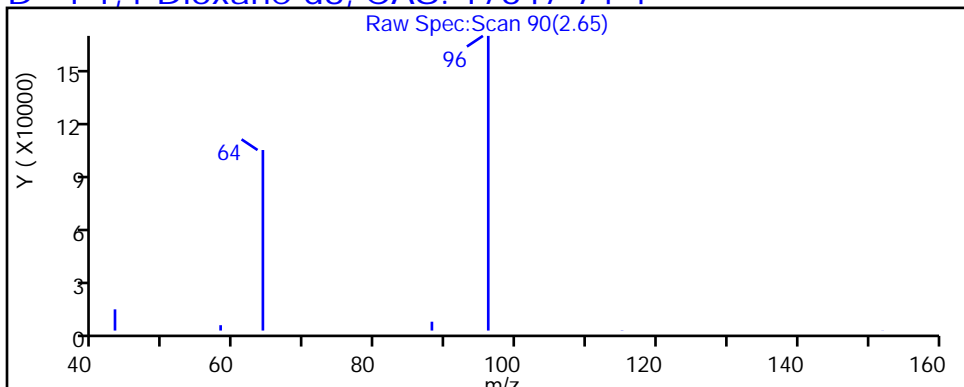
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5B Lab Sample ID: 480-156213-11
 Matrix: Water Lab File ID: U33151431.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 13:10
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 19:04
 Con. Extract Vol.: 1 (mL) Dilution Factor: 10
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	10		2.0	1.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151431.D
 Lims ID: 480-156213-B-11-A
 Client ID: 356023-MW5B
 Sample Type: Client
 Inject. Date: 21-Jul-2019 19:04:30 ALS Bottle#: 14 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 14
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:37:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.595	2.575	0.020	86	16666	0.3445	34.5	
3 1,4-Dioxane	88	2.628	2.611	0.017	87	16935	1.03		
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	97	419248	4.00		

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151431.D

Injection Date: 21-Jul-2019 19:04:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-11-A

Lab Sample ID: 480-156213-11

Worklist Smp#: 14

Client ID: 356023-MW5B

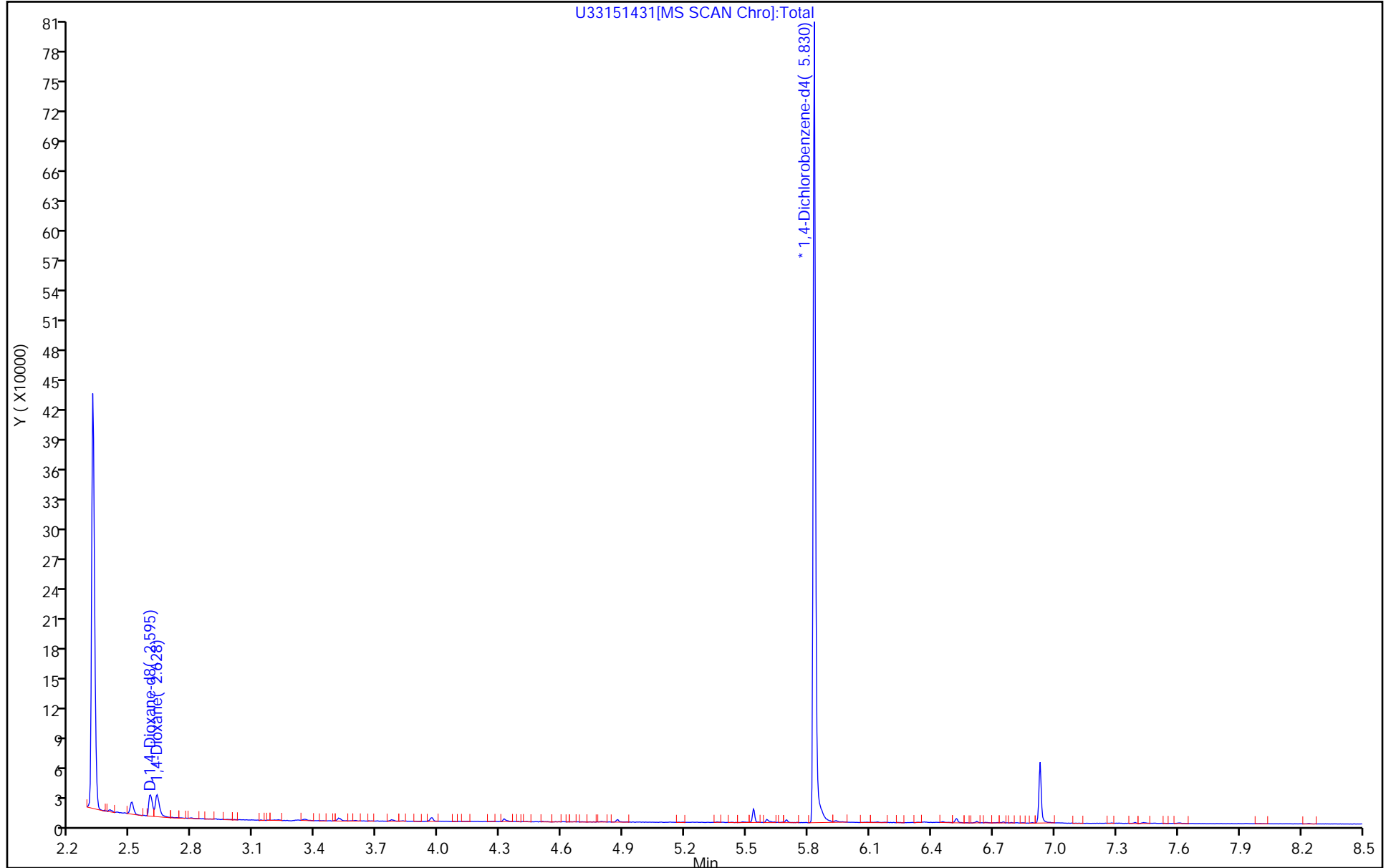
Injection Vol: 1.0 ul

Dil. Factor: 10.0000

ALS Bottle#: 14

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151431.D

Injection Date: 21-Jul-2019 19:04:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-11-A

Lab Sample ID: 480-156213-11

Client ID: 356023-MW5B

Operator ID: bs

ALS Bottle#: 14

Worklist Smp#: 14

Injection Vol: 1.0 ul

Dil. Factor: 10.0000

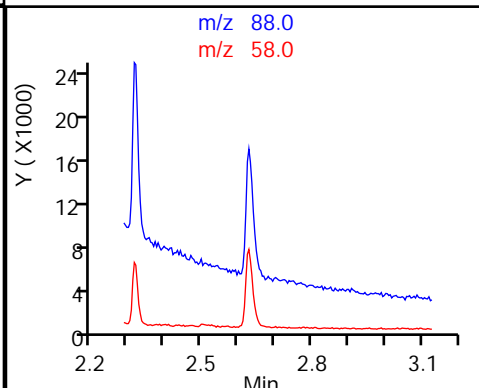
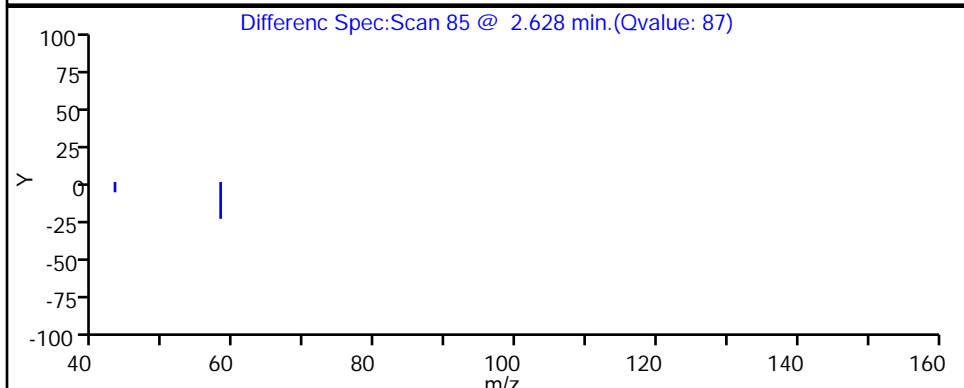
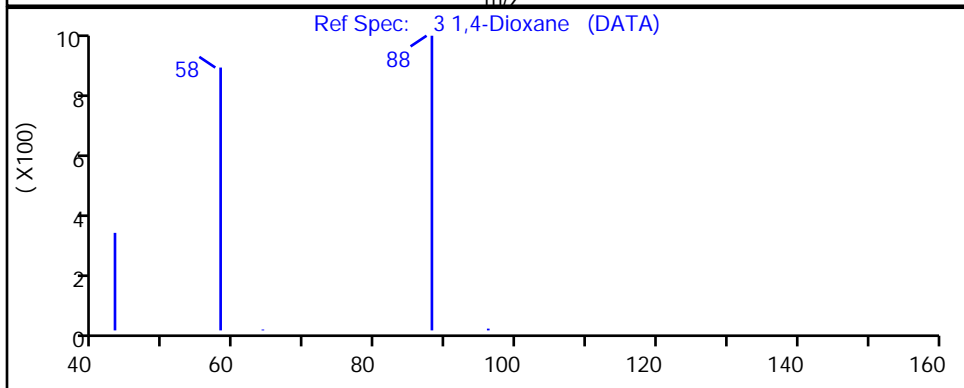
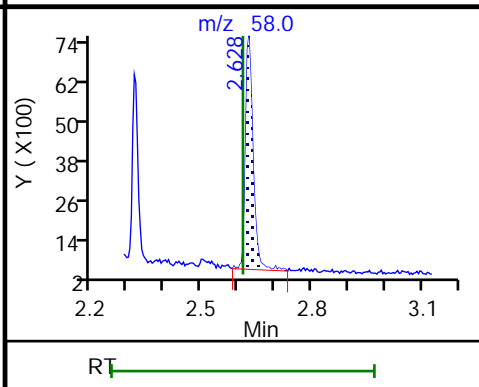
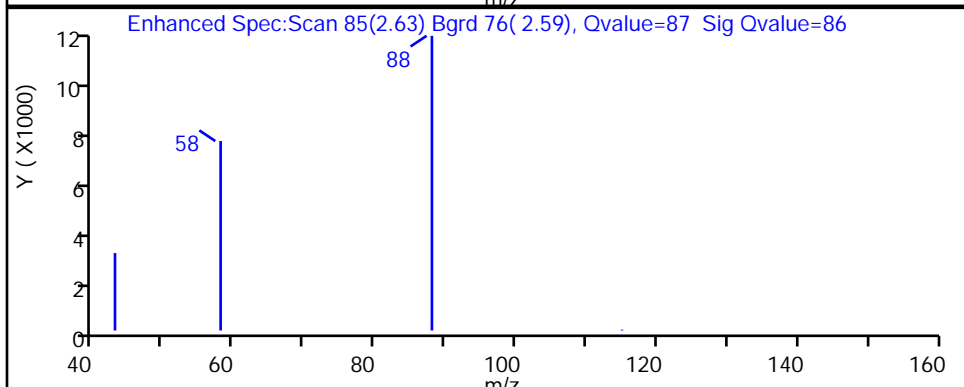
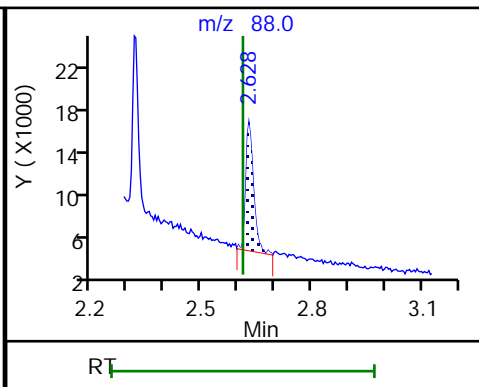
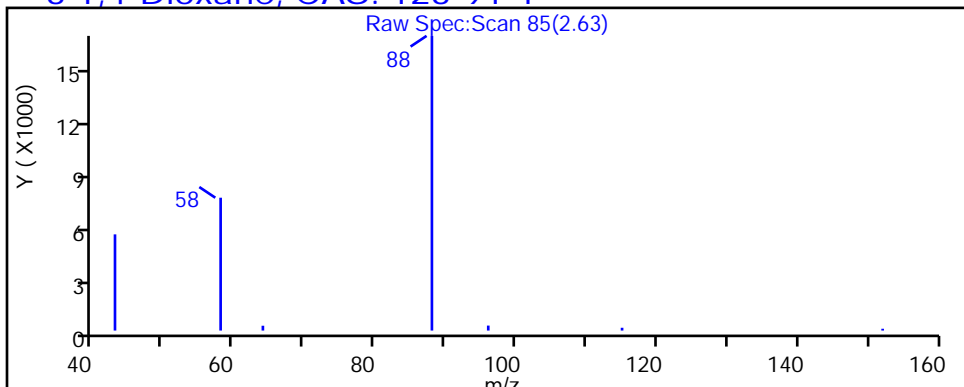
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151431.D

Injection Date: 21-Jul-2019 19:04:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-11-A

Lab Sample ID: 480-156213-11

Client ID: 356023-MW5B

Operator ID: bs

ALS Bottle#: 14

Worklist Smp#: 14

Injection Vol: 1.0 ul

Dil. Factor: 10.0000

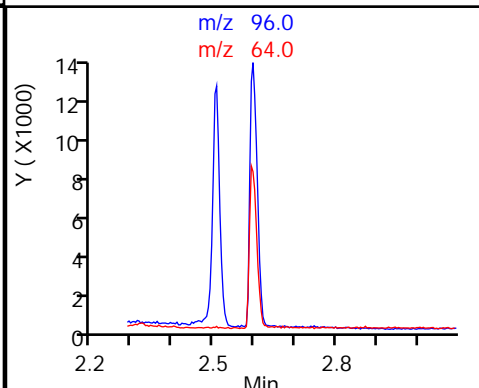
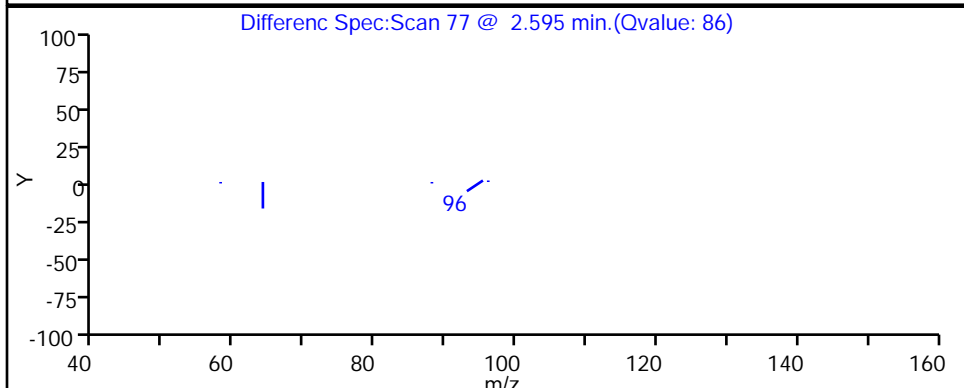
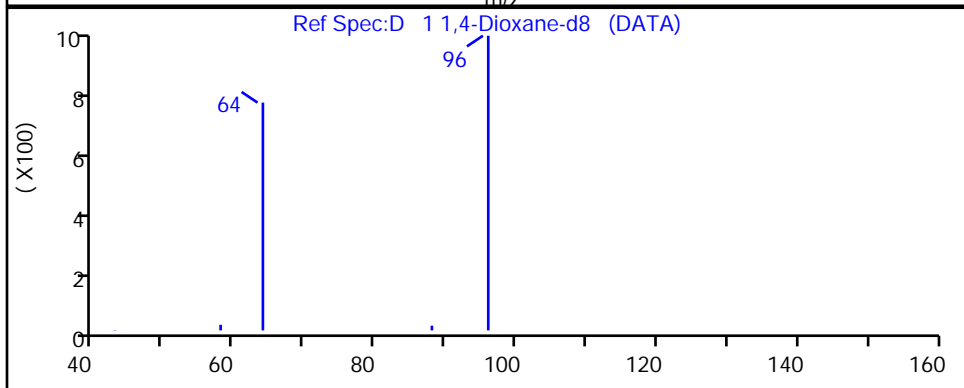
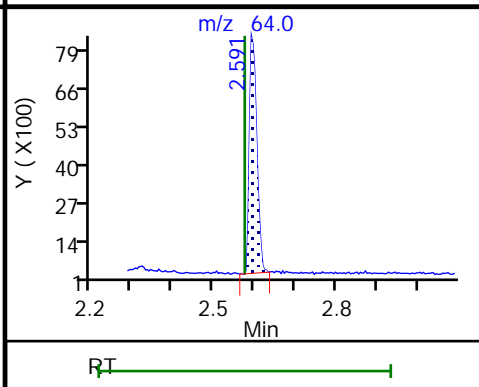
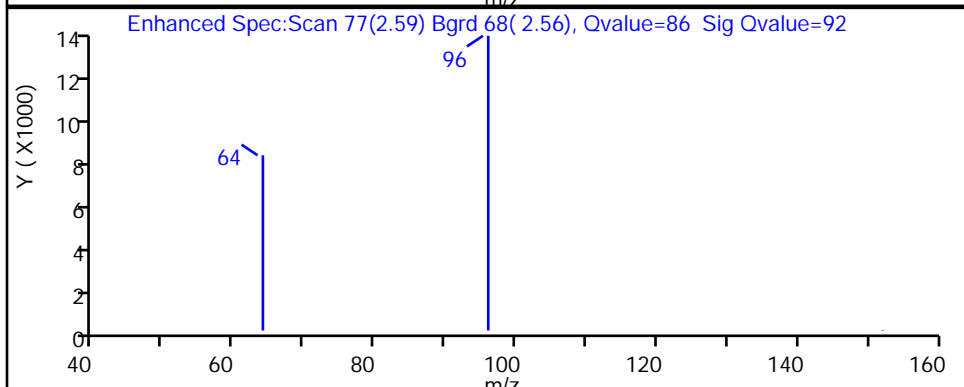
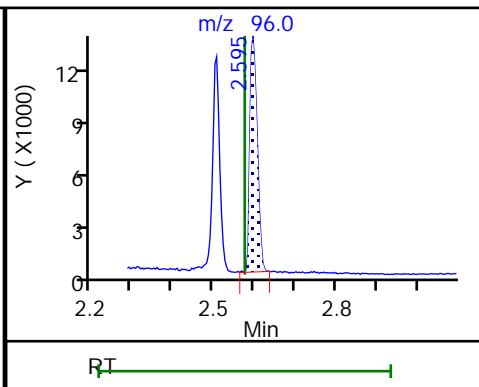
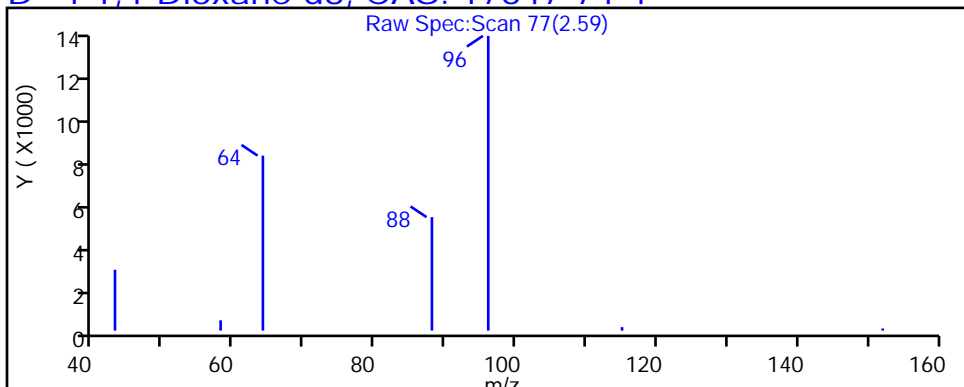
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-ERT4 Lab Sample ID: 480-156213-12
 Matrix: Water Lab File ID: U33151432.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 11:20
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 19:28
 Con. Extract Vol.: 1 (mL) Dilution Factor: 10
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	12	E	2.0	1.0

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	28		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151432.D
 Lims ID: 480-156213-A-12-A
 Client ID: 356023-ERT4
 Sample Type: Client
 Inject. Date: 21-Jul-2019 19:28:30 ALS Bottle#: 15 Worklist Smp#: 15
 Injection Vol: 1.0 ul Dil. Factor: 10.0000
 Sample Info: 15
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:37:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.591	2.575	0.016	93	13390	0.2780	27.8	
3 1,4-Dioxane	88	2.623	2.611	0.012	87	15877	1.21		E
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	96	417438	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151432.D

Injection Date: 21-Jul-2019 19:28:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-12-A

Lab Sample ID: 480-156213-12

Worklist Smp#: 15

Client ID: 356023-ERT4

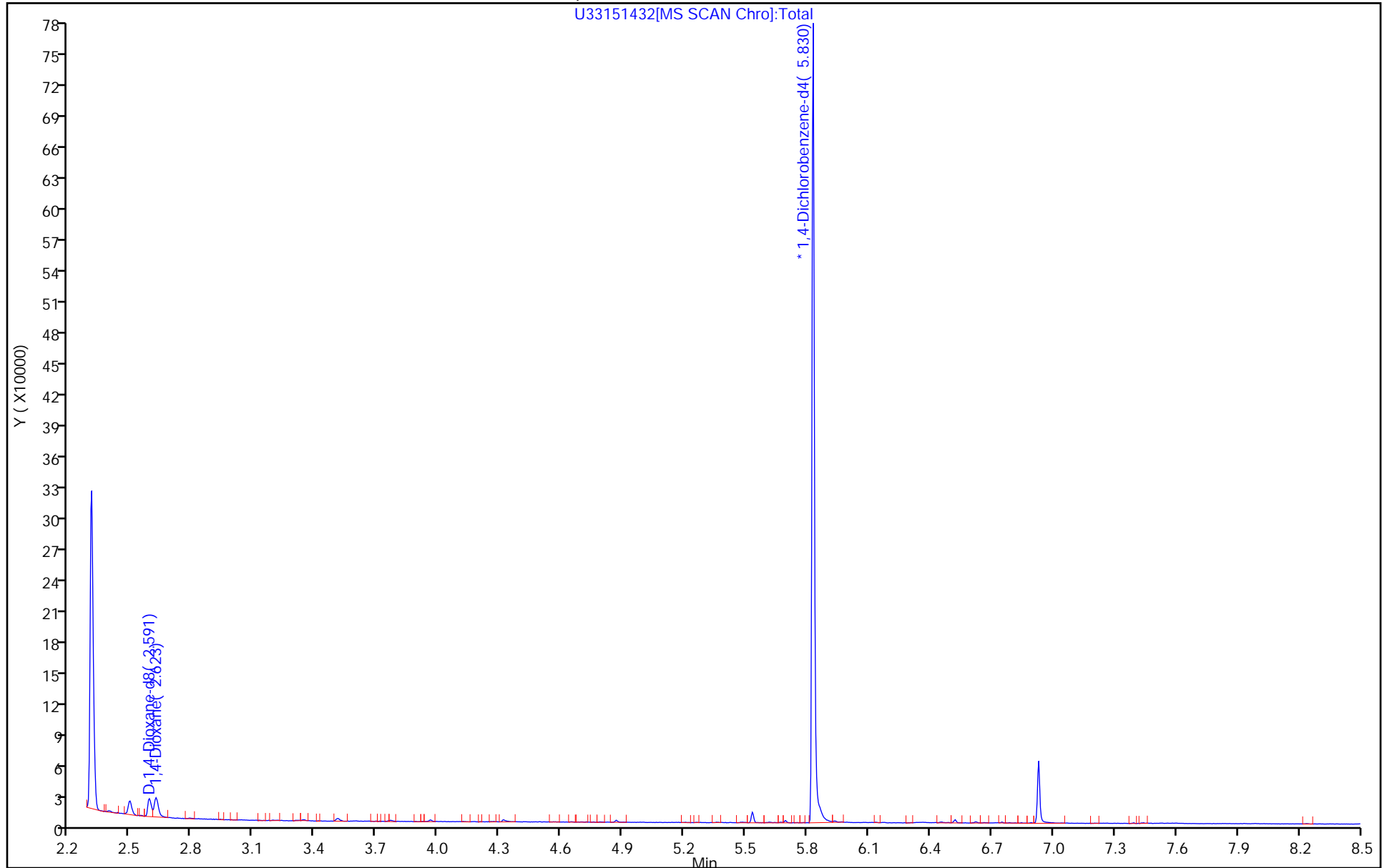
Injection Vol: 1.0 ul

Dil. Factor: 10.0000

ALS Bottle#: 15

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Euofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151432.D

Injection Date: 21-Jul-2019 19:28:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-12-A

Lab Sample ID: 480-156213-12

Client ID: 356023-ERT4

Operator ID: bs

ALS Bottle#: 15

Worklist Smp#: 15

Injection Vol: 1.0 ul

Dil. Factor: 10.0000

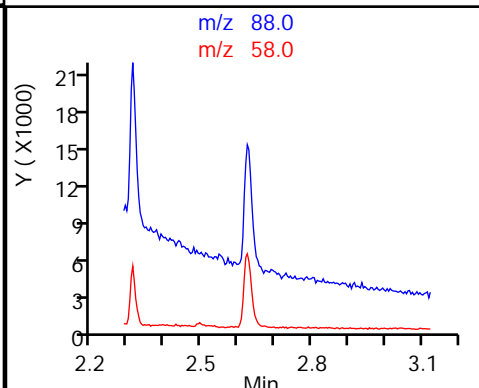
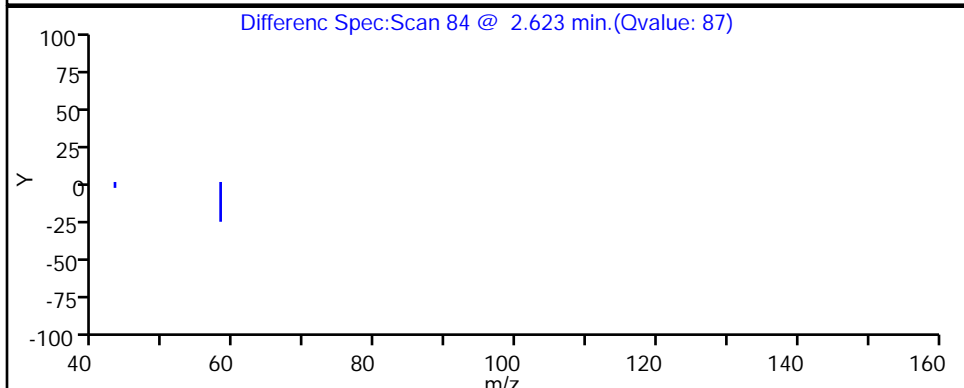
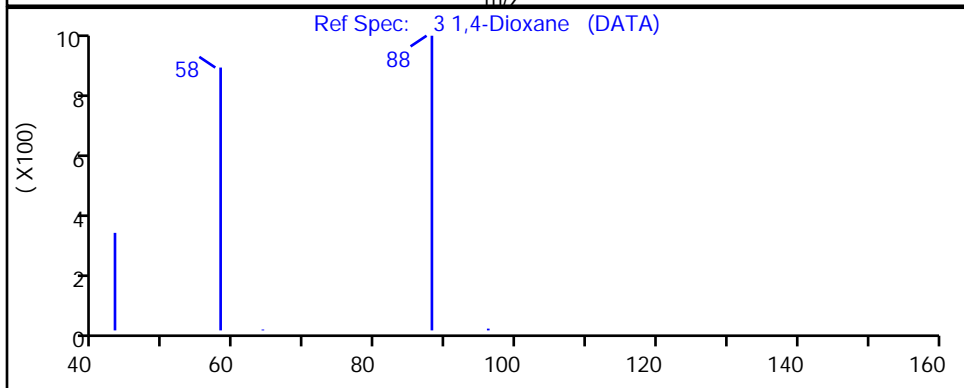
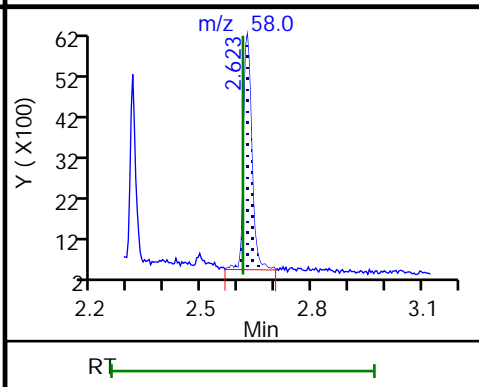
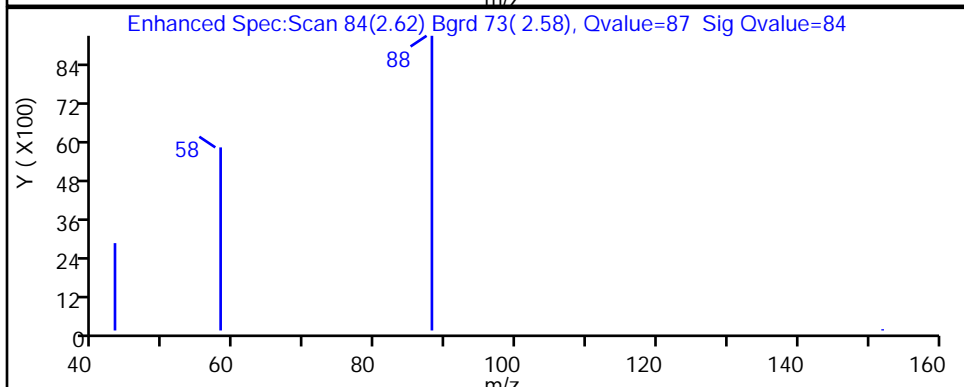
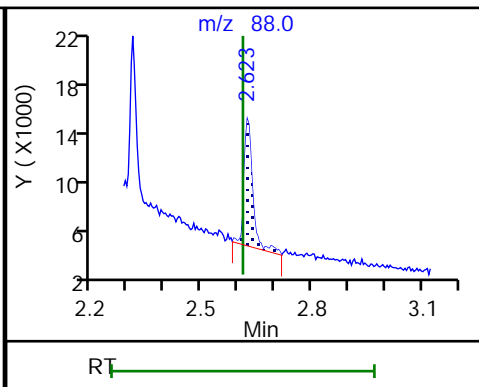
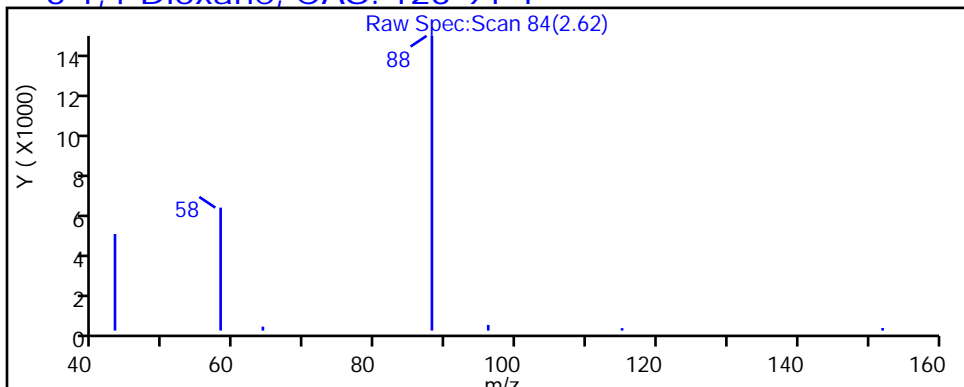
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151432.D

Injection Date: 21-Jul-2019 19:28:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-12-A

Lab Sample ID: 480-156213-12

Client ID: 356023-ERT4

Operator ID: bs

ALS Bottle#: 15

Worklist Smp#: 15

Injection Vol: 1.0 ul

Dil. Factor: 10.0000

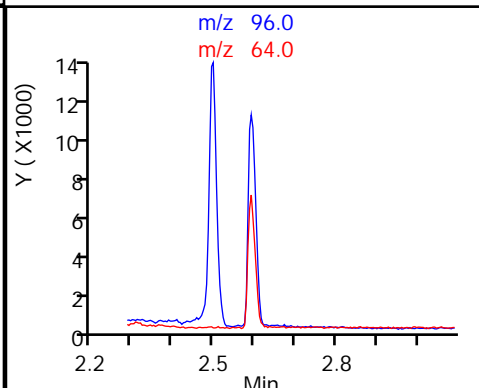
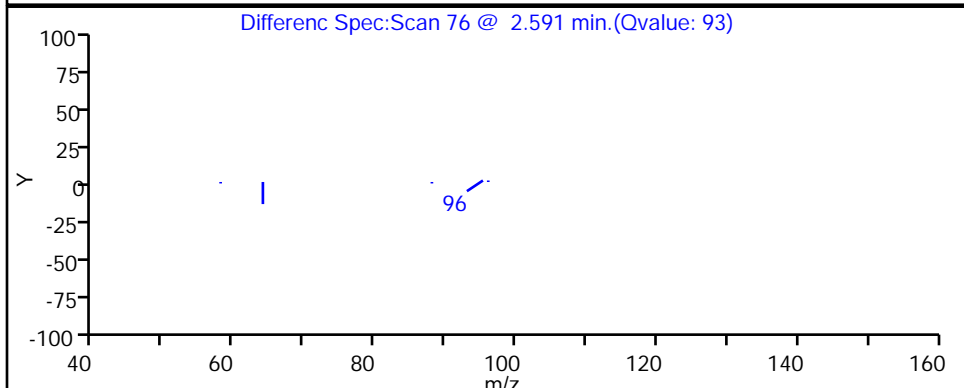
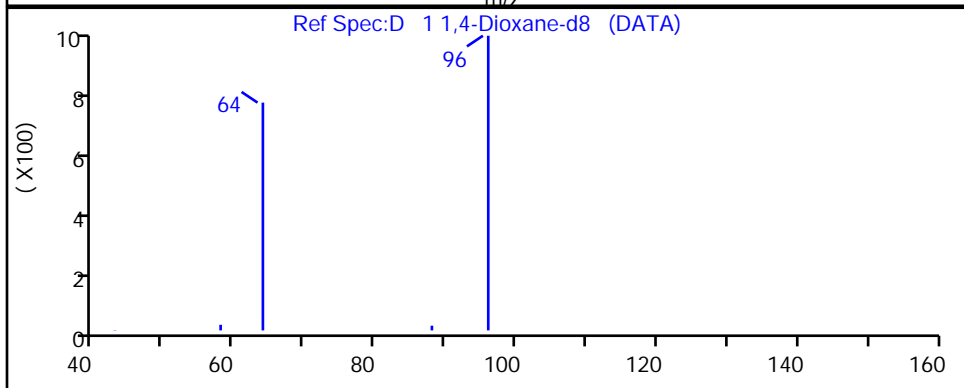
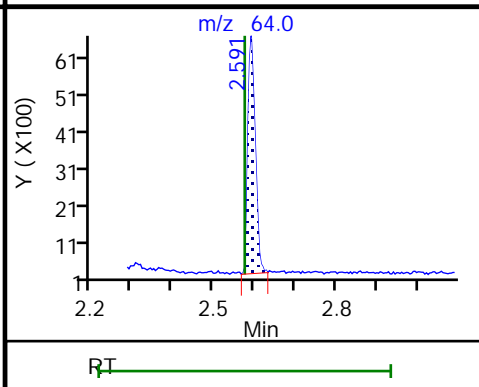
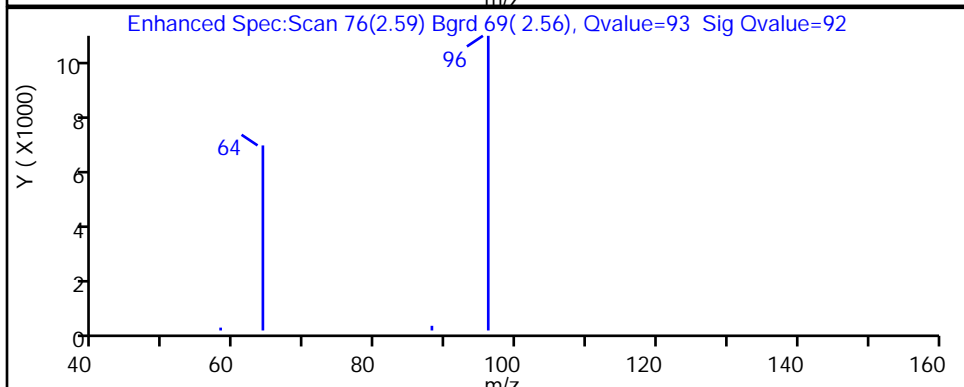
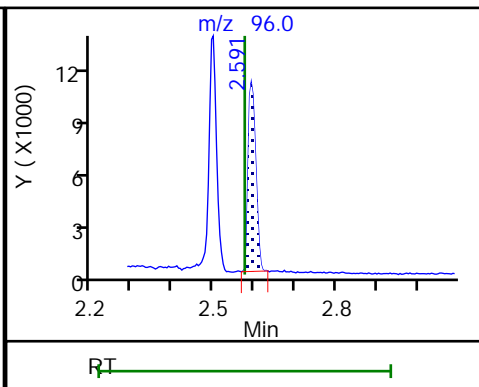
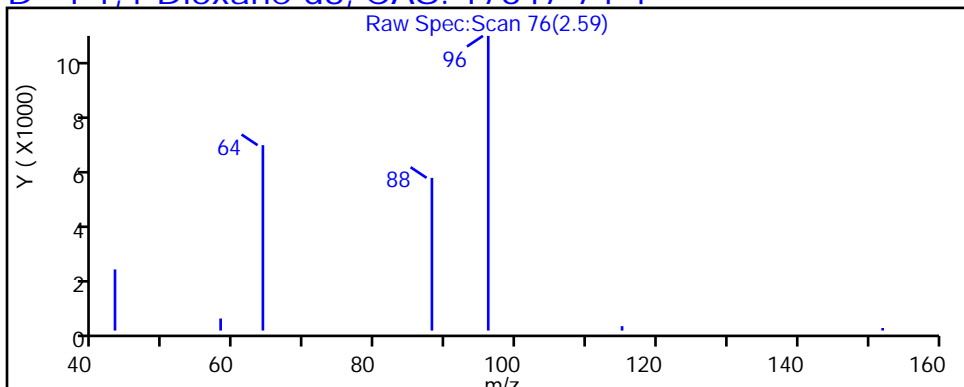
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW4 Lab Sample ID: 480-156213-13
 Matrix: Water Lab File ID: U33151433.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 14:47
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 19:51
 Con. Extract Vol.: 1 (mL) Dilution Factor: 5
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.4	E	1.0	0.50

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151433.D
 Lims ID: 480-156213-B-13-A
 Client ID: 356023-MW4
 Sample Type: Client
 Inject. Date: 21-Jul-2019 19:51:30 ALS Bottle#: 16 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 16
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:37:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.603	2.575	0.028	87	34629	0.7325	36.6	
3 1,4-Dioxane	88	2.636	2.611	0.025	86	21825	1.28		E
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	97	409746	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151433.D

Injection Date: 21-Jul-2019 19:51:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-13-A

Lab Sample ID: 480-156213-13

Worklist Smp#: 16

Client ID: 356023-MW4

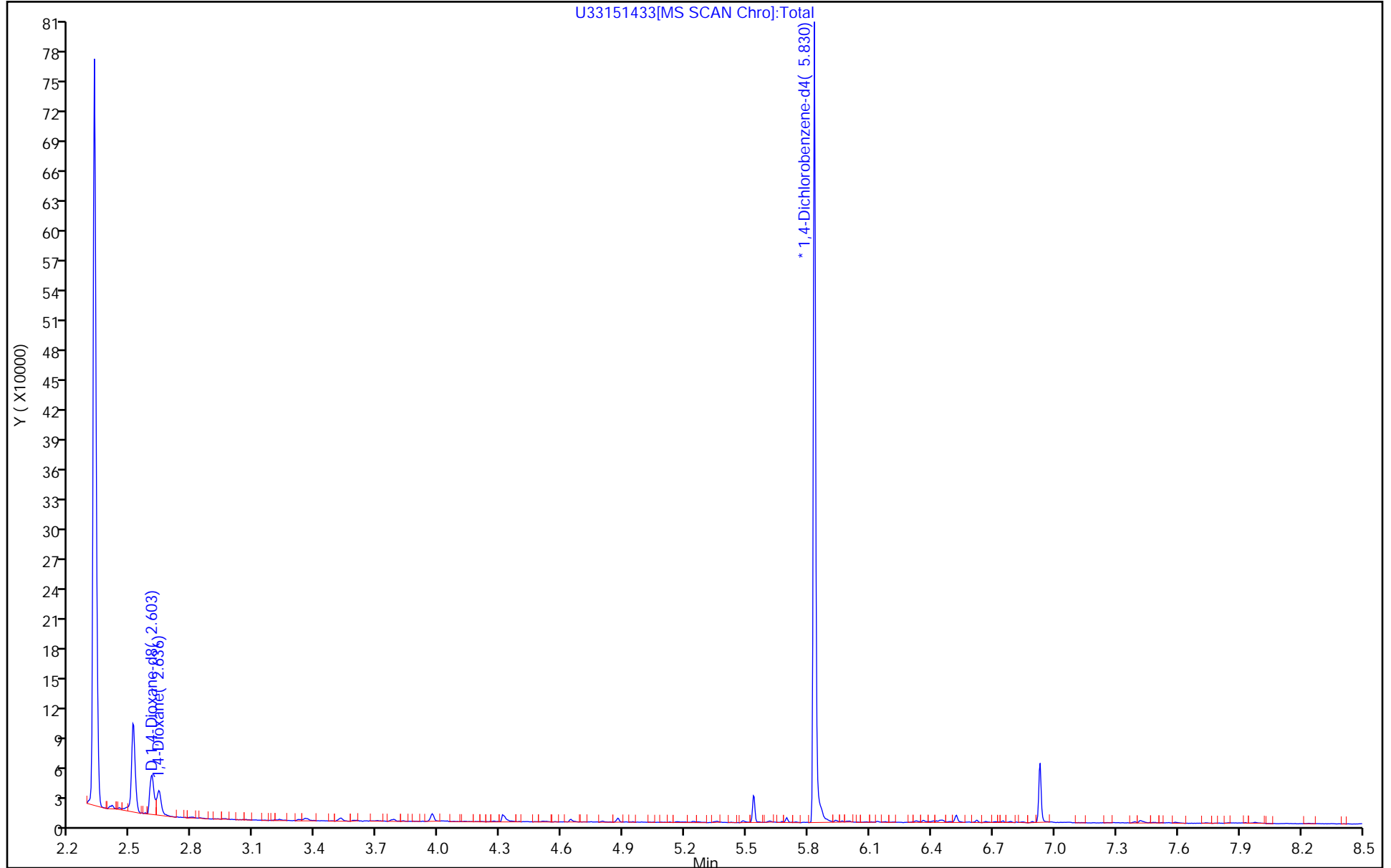
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 16

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151433.D

Injection Date: 21-Jul-2019 19:51:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-13-A

Lab Sample ID: 480-156213-13

Client ID: 356023-MW4

Operator ID: bs

ALS Bottle#: 16

Worklist Smp#: 16

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

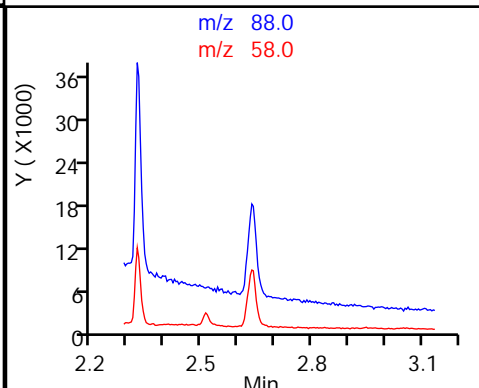
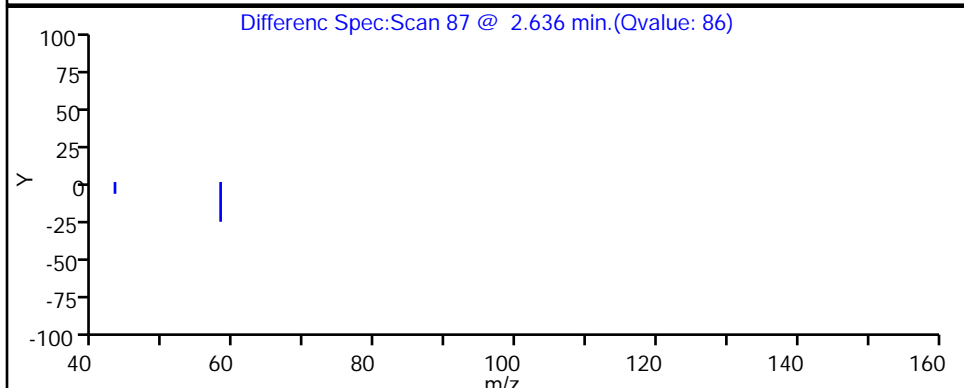
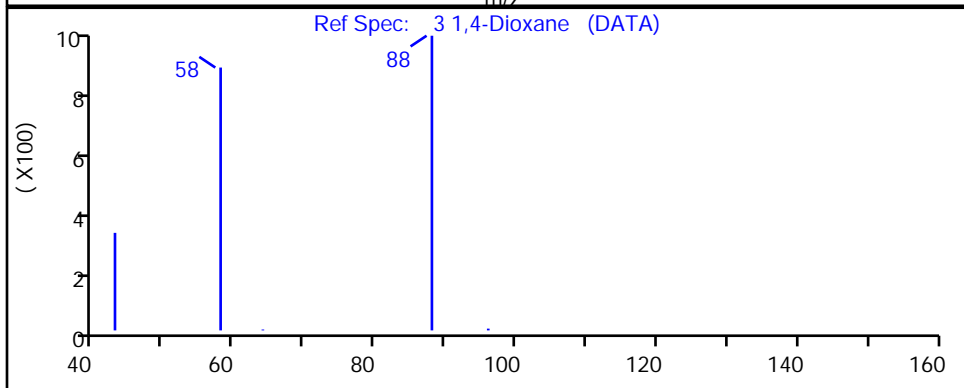
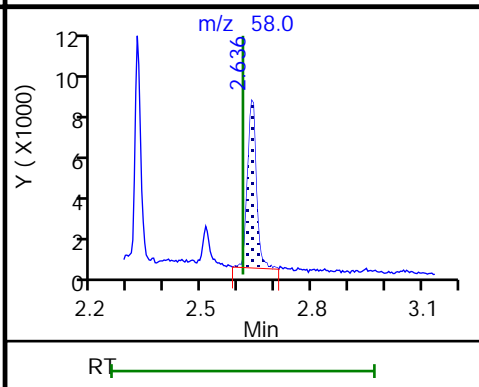
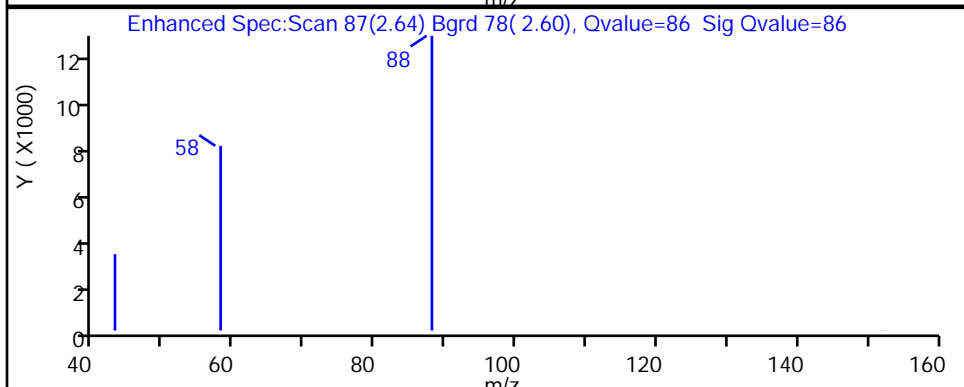
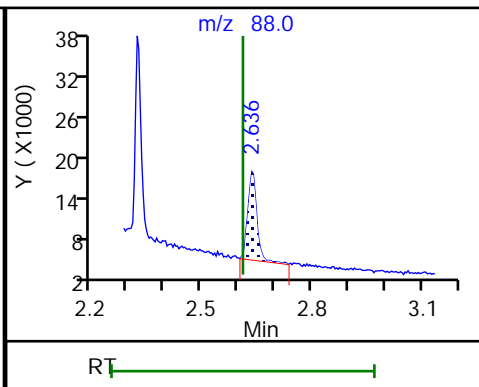
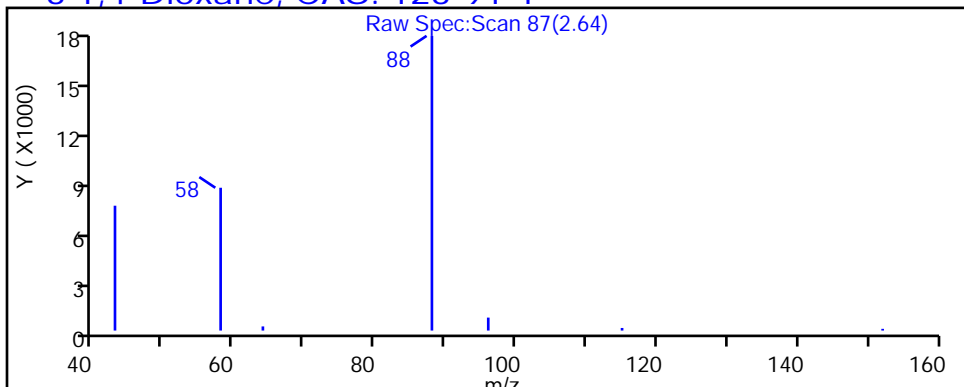
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151433.D

Injection Date: 21-Jul-2019 19:51:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-13-A

Lab Sample ID: 480-156213-13

Client ID: 356023-MW4

Operator ID: bs

ALS Bottle#: 16

Worklist Smp#: 16

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

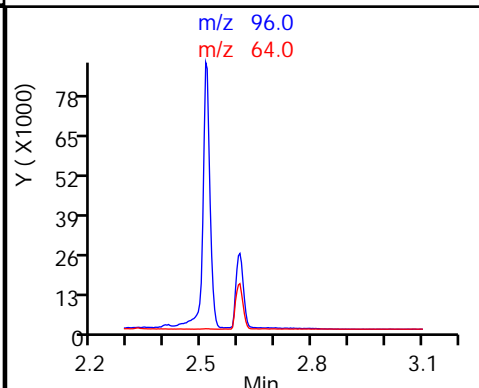
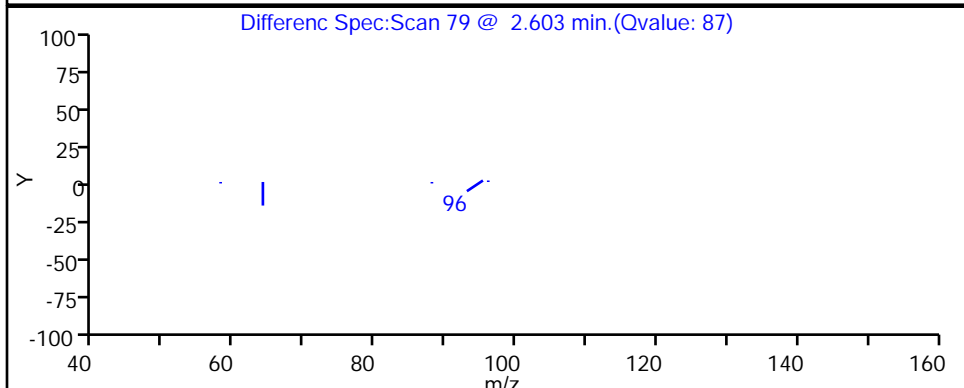
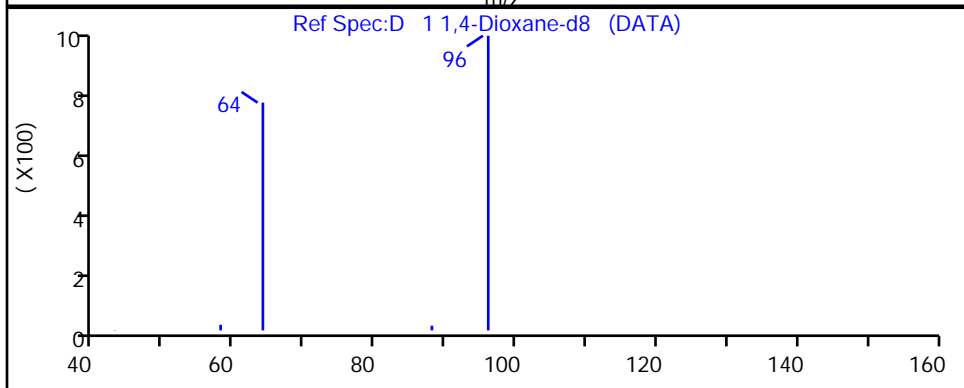
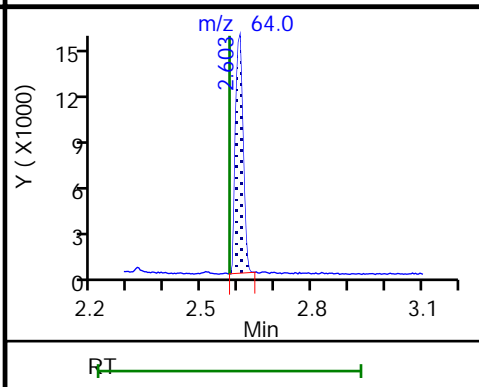
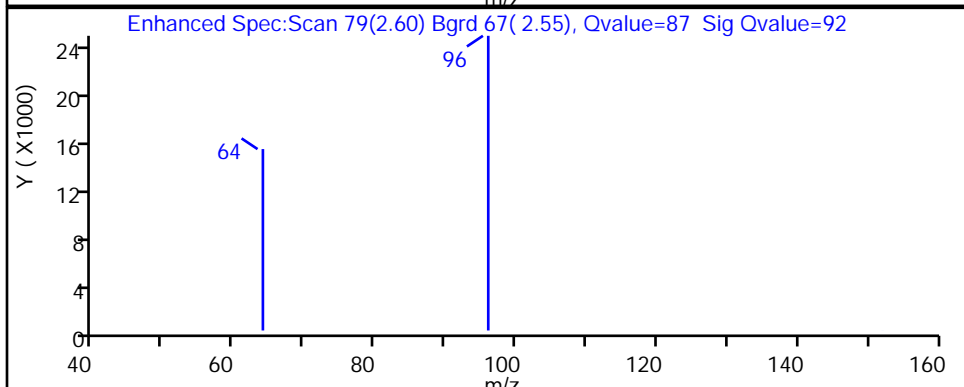
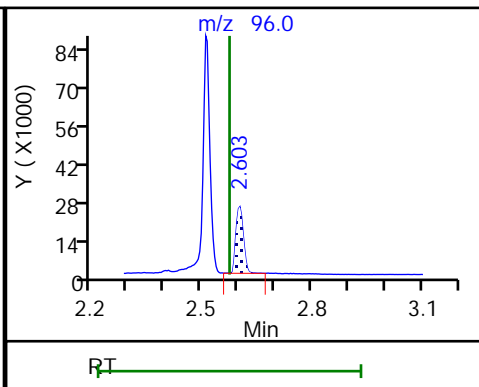
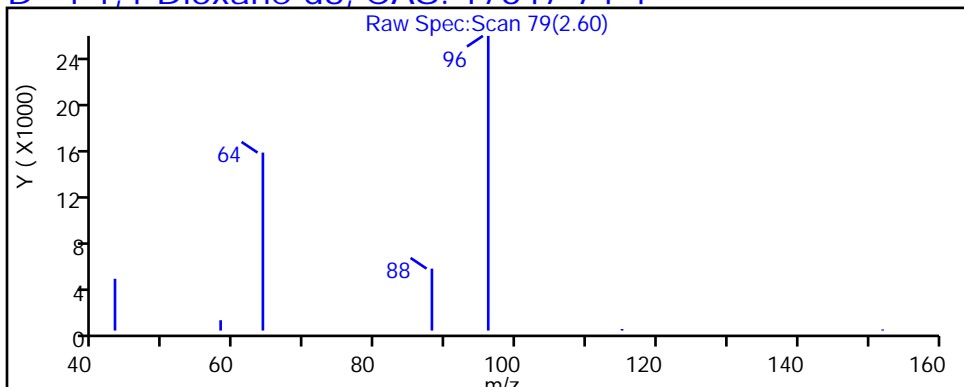
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B Lab Sample ID: 480-156213-14
 Matrix: Water Lab File ID: U33151388.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 13:15
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/18/2019 21:19
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482664 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.76		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	43		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151388.D
 Lims ID: 480-156213-A-14-B
 Client ID: 356023-MW6B
 Sample Type: Client
 Inject. Date: 18-Jul-2019 21:19:30 ALS Bottle#: 25 Worklist Smp#: 25
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 25
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 19-Jul-2019 16:36:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
----------	-----	-----------	---------------	---------------	---	----------	-----------------	------	-------

D 1 1,4-Dioxane-d8	96	2.656	2.558	0.098	87	214433	4.32	43.2	
3 1,4-Dioxane	88	2.697	2.615	0.082	84	15953	0.7576		
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	98	430382	4.00		

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151388.D

Injection Date: 18-Jul-2019 21:19:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-14-B

Lab Sample ID: 480-156213-14

Worklist Smp#: 25

Client ID: 356023-MW6B

Injection Vol: 1.0 ul

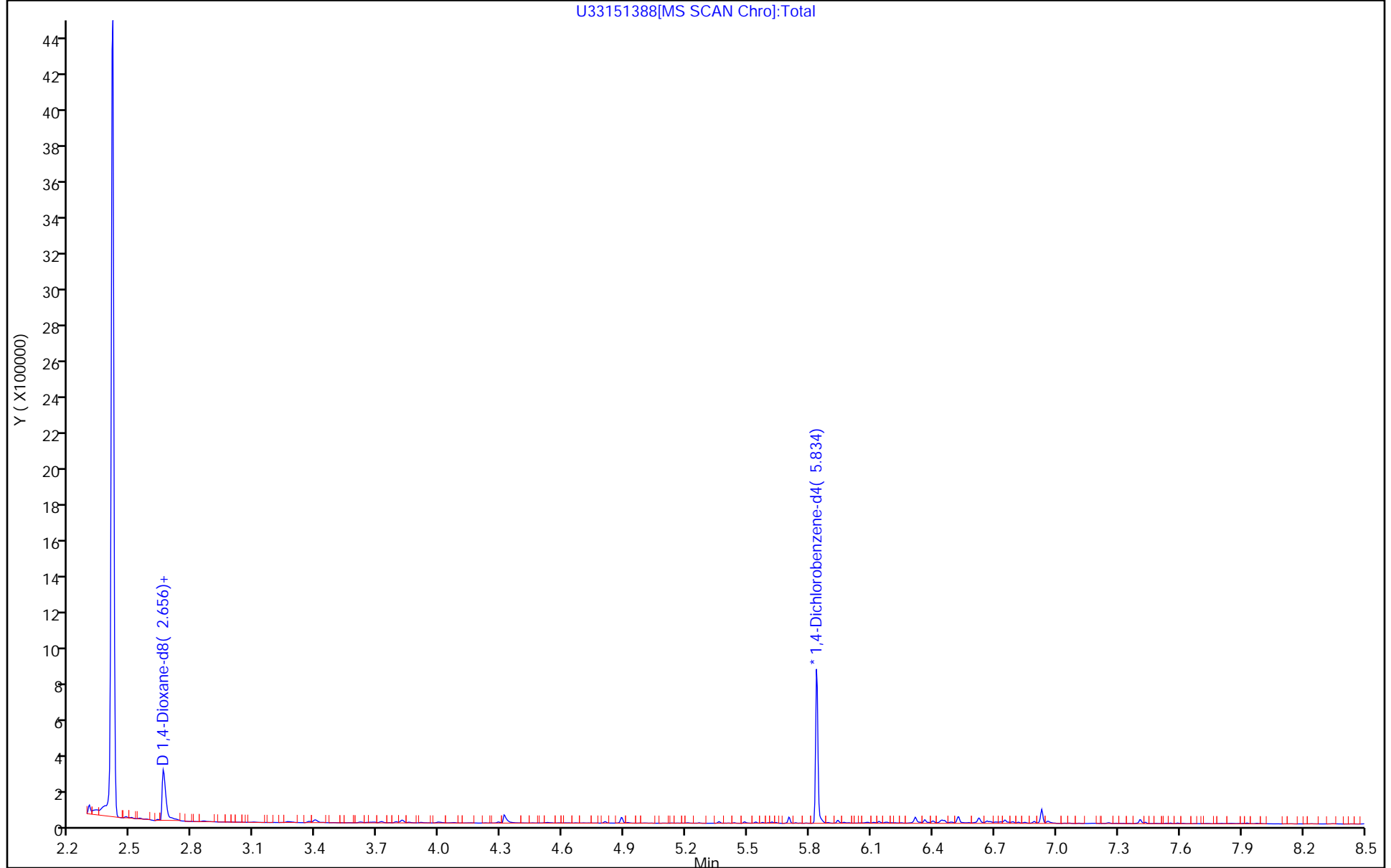
Dil. Factor: 1.0000

ALS Bottle#: 25

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

U33151388[MS SCAN Chrom]:Total



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151388.D

Injection Date: 18-Jul-2019 21:19:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-14-B

Lab Sample ID: 480-156213-14

Client ID: 356023-MW6B

Operator ID: bs

ALS Bottle#: 25

Worklist Smp#: 25

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

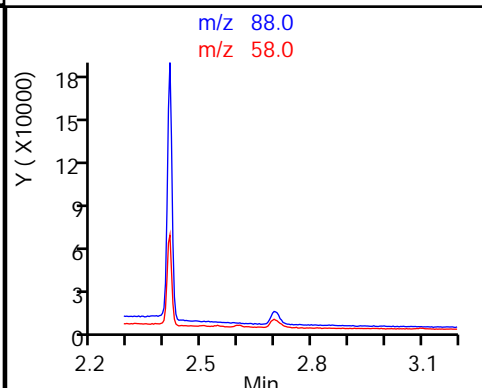
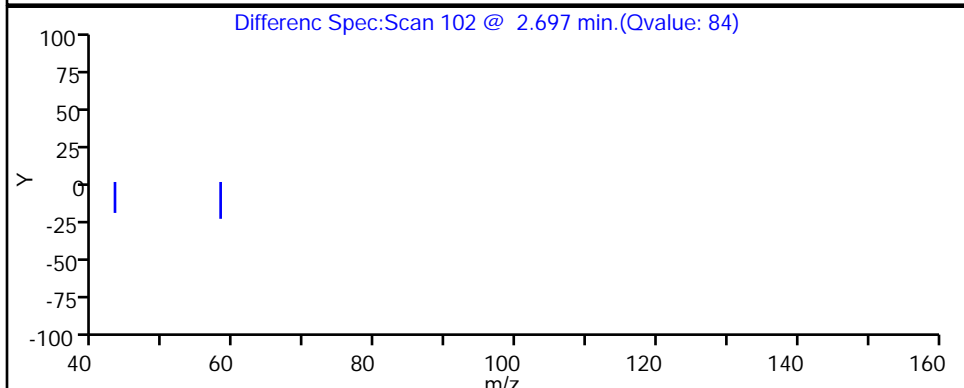
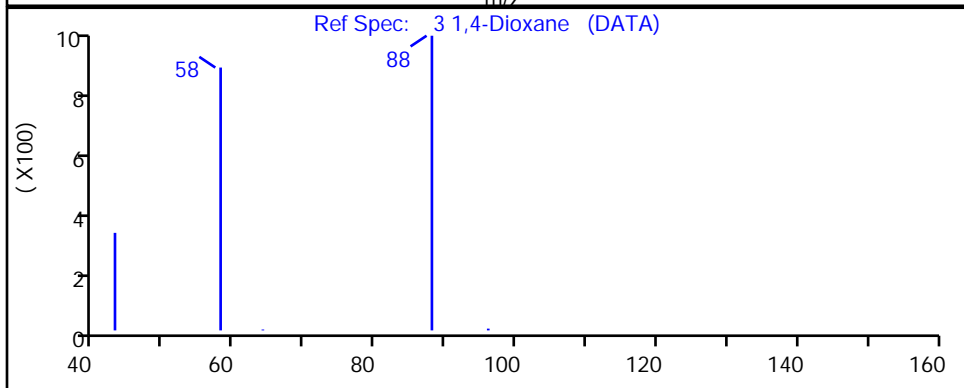
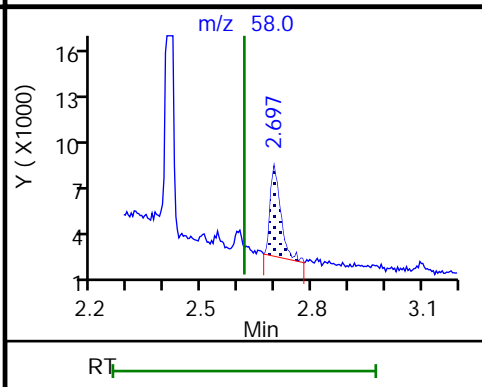
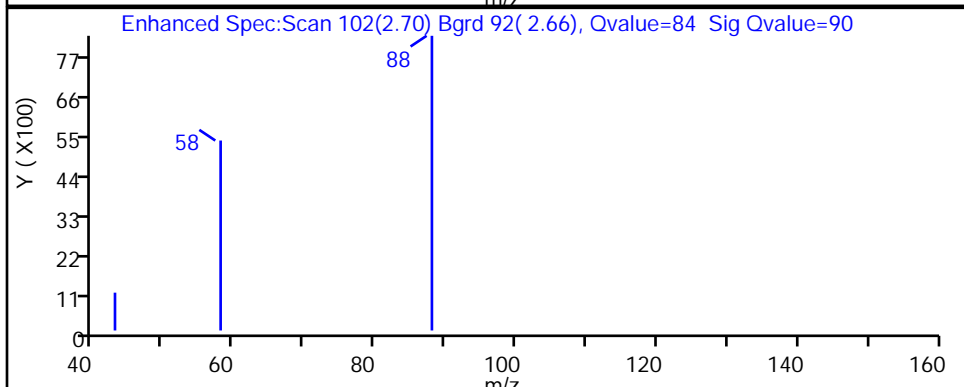
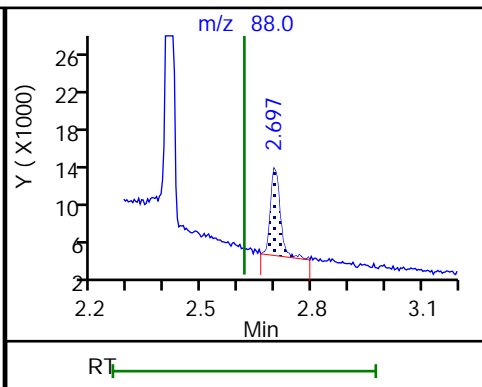
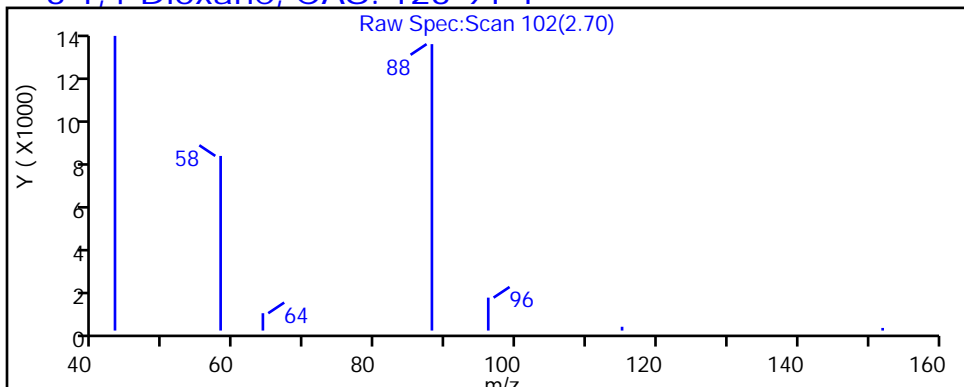
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151388.D

Injection Date: 18-Jul-2019 21:19:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-14-B

Lab Sample ID: 480-156213-14

Client ID: 356023-MW6B

Operator ID: bs

ALS Bottle#: 25

Worklist Smp#: 25

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

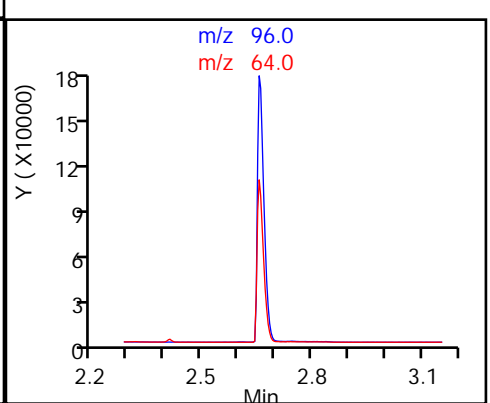
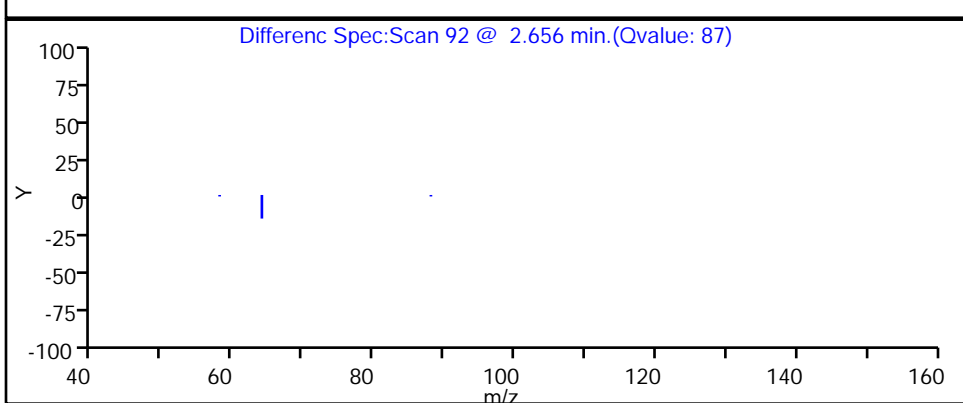
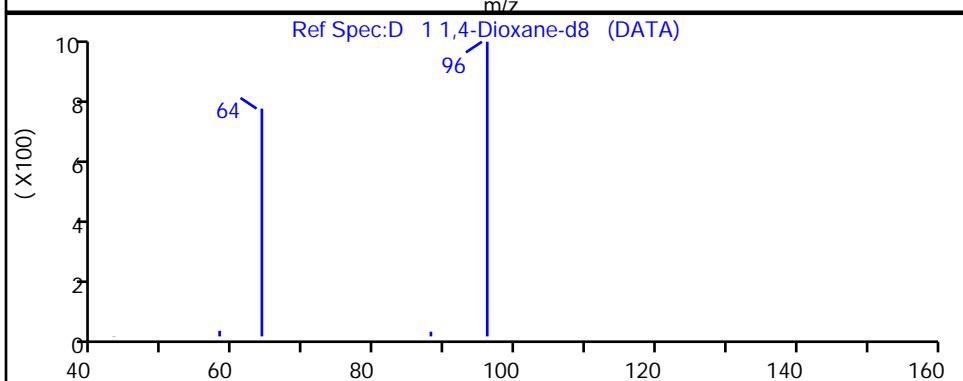
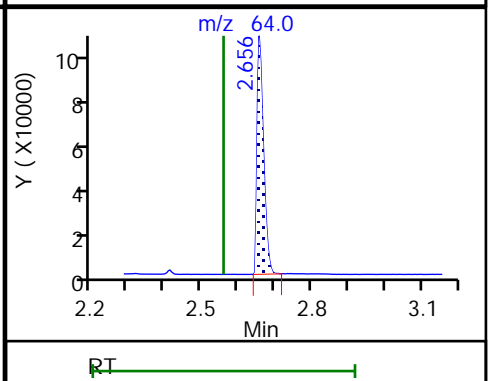
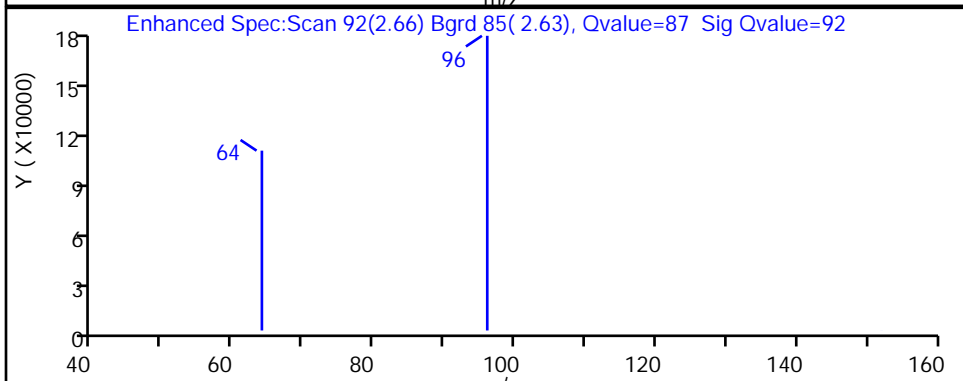
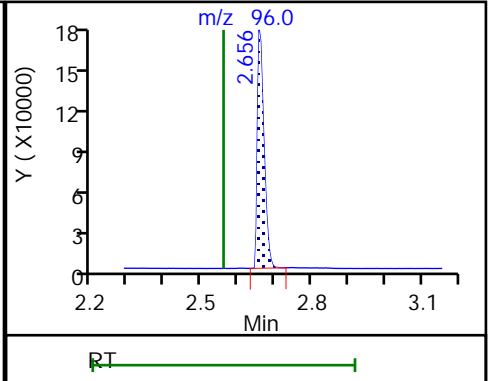
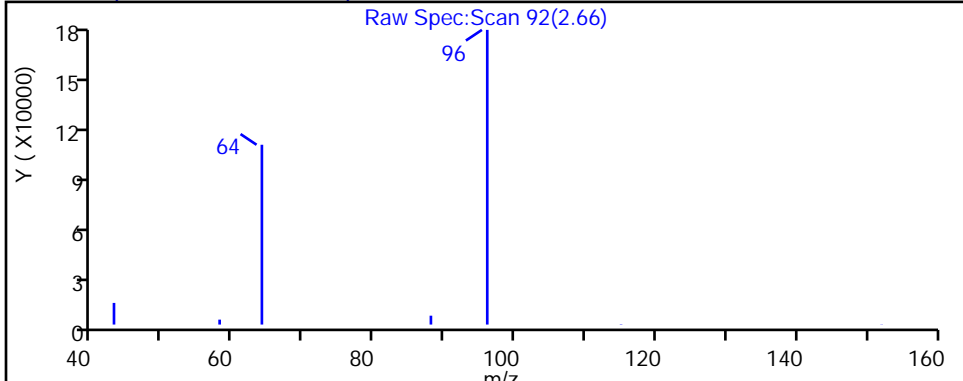
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW15B Lab Sample ID: 480-156213-15
 Matrix: Water Lab File ID: U33151434.D
 Analysis Method: 8270D SIM ID Date Collected: 07/12/2019 09:30
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 20:15
 Con. Extract Vol.: 1 (mL) Dilution Factor: 5
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	5.9		1.0	0.50

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	32		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151434.D
 Lims ID: 480-156213-A-15-A
 Client ID: 356023-MW15B
 Sample Type: Client
 Inject. Date: 21-Jul-2019 20:15:30 ALS Bottle#: 17 Worklist Smp#: 17
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 17
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:37:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.595	2.575	0.020	89	30616	0.6455	32.3	
3 1,4-Dioxane	88	2.627	2.611	0.016	86	17879	1.19		M
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	97	411083	4.00		

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151434.D

Injection Date: 21-Jul-2019 20:15:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-15-A

Lab Sample ID: 480-156213-15

Worklist Smp#: 17

Client ID: 356023-MW15B

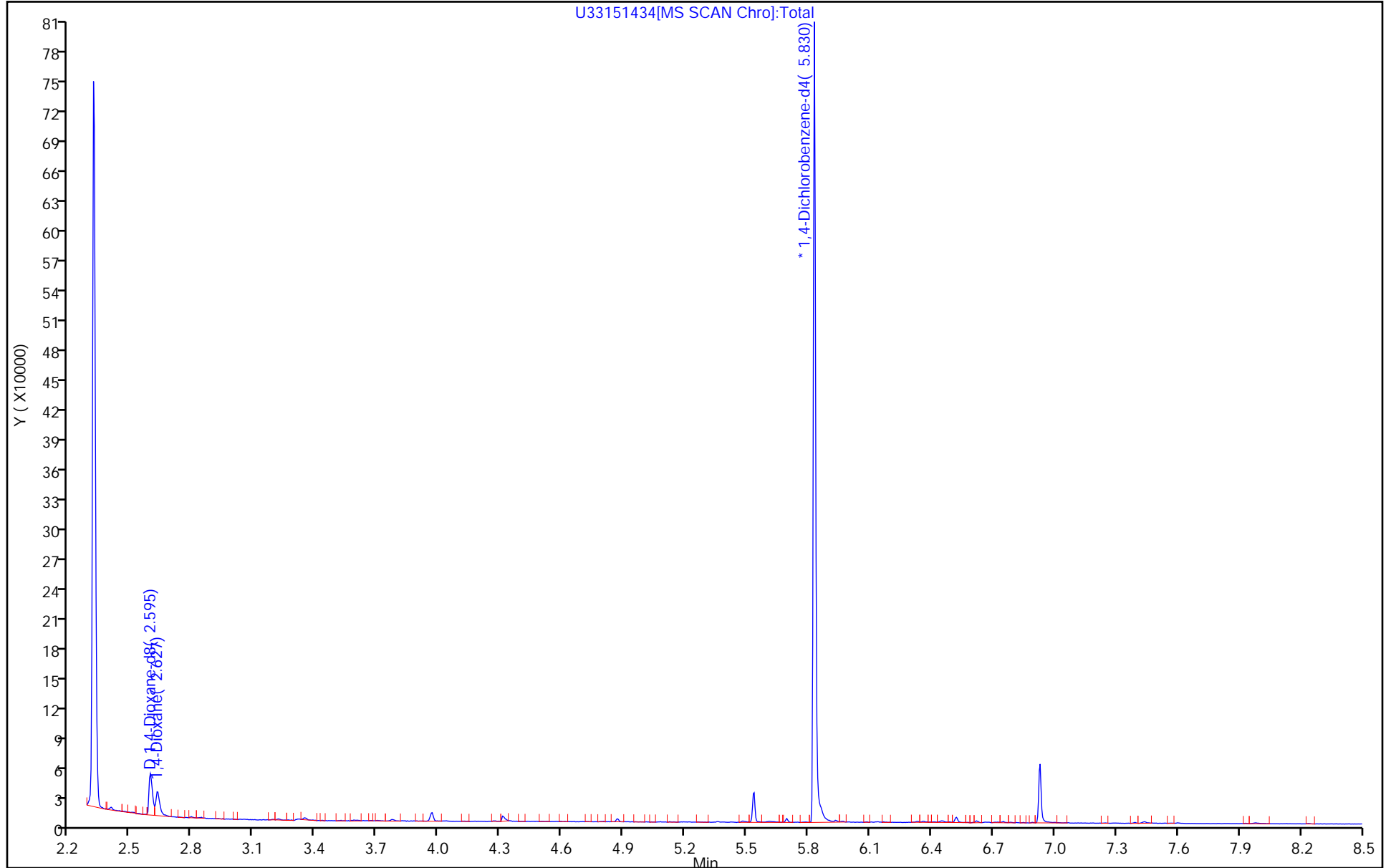
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 17

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151434.D

Injection Date: 21-Jul-2019 20:15:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-15-A

Lab Sample ID: 480-156213-15

Client ID: 356023-MW15B

Operator ID: bs

ALS Bottle#: 17

Worklist Smp#: 17

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

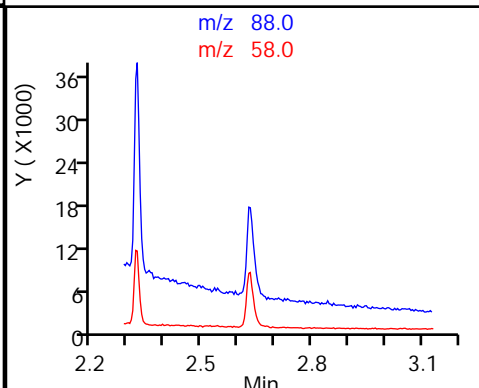
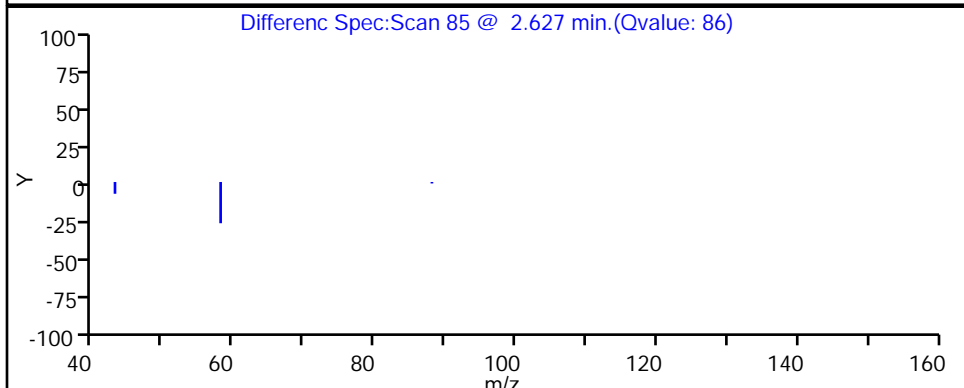
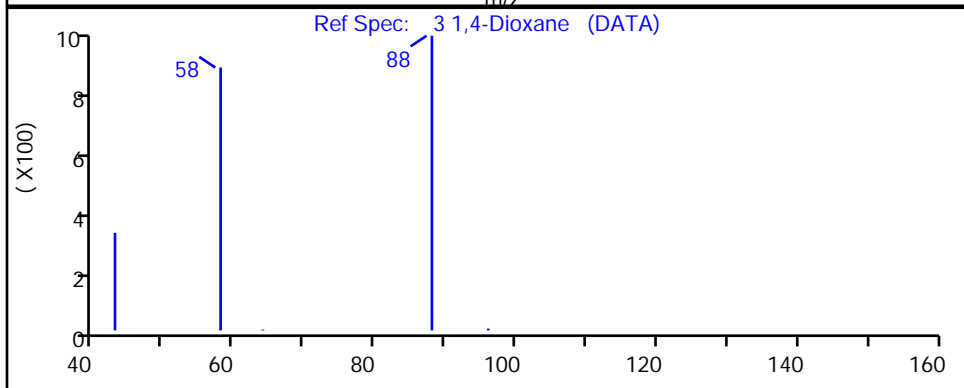
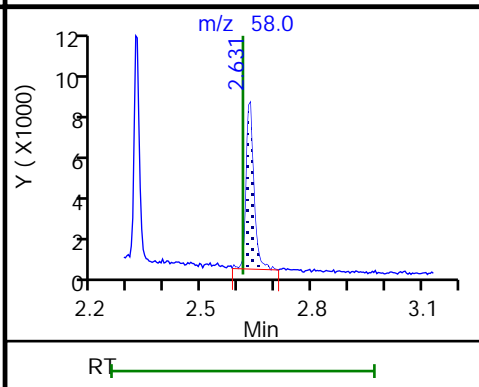
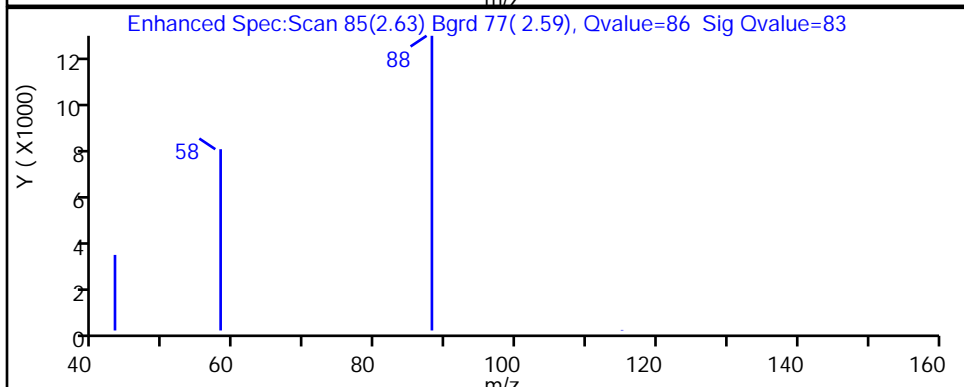
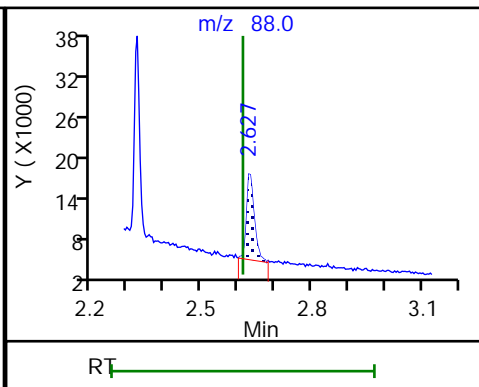
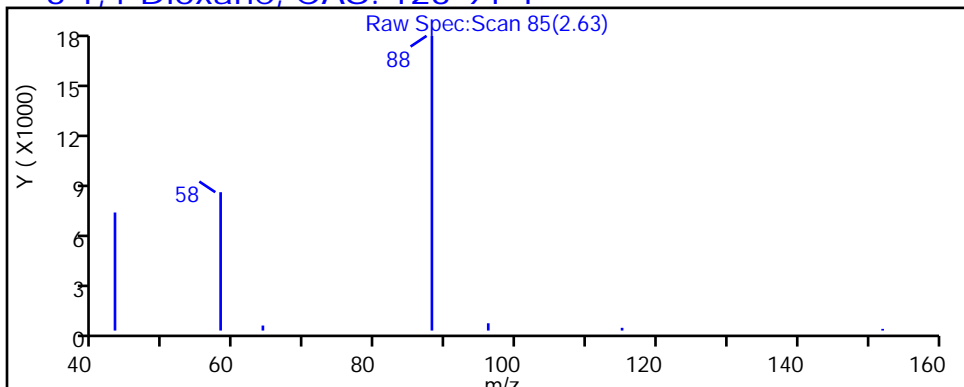
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151434.D

Injection Date: 21-Jul-2019 20:15:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-15-A

Lab Sample ID: 480-156213-15

Client ID: 356023-MW15B

Operator ID: bs

ALS Bottle#: 17

Worklist Smp#: 17

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

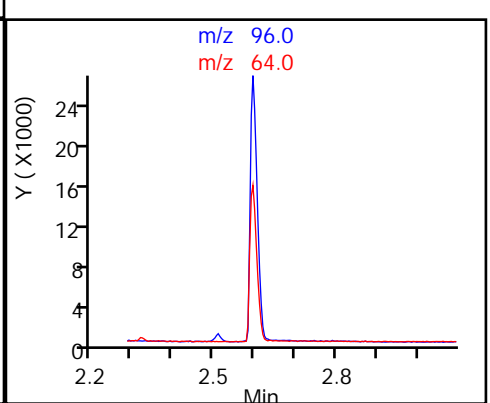
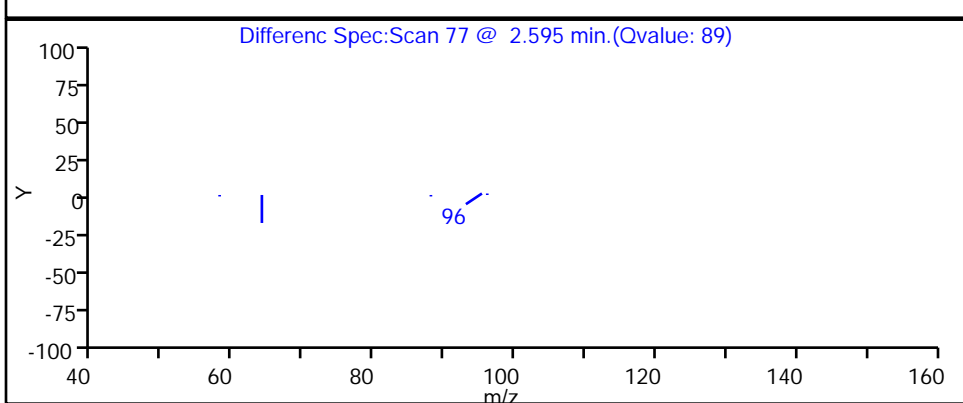
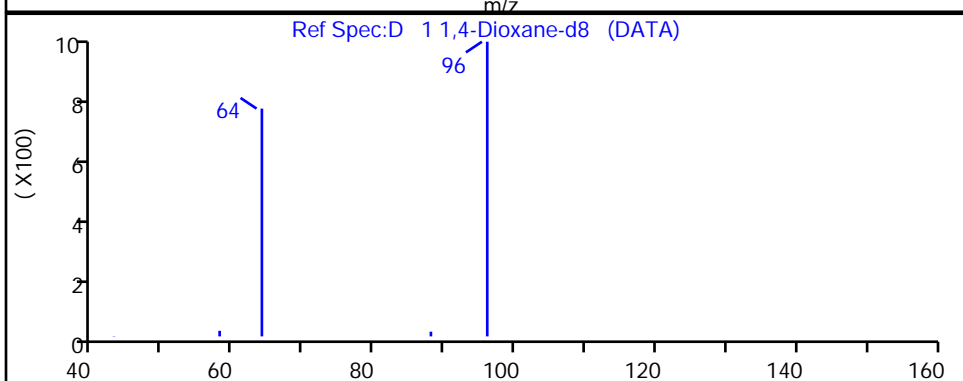
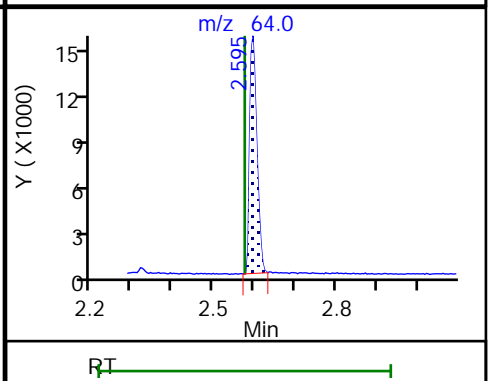
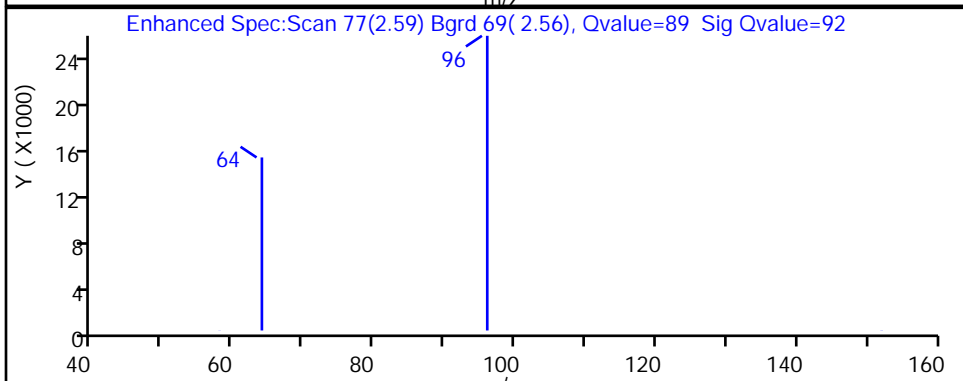
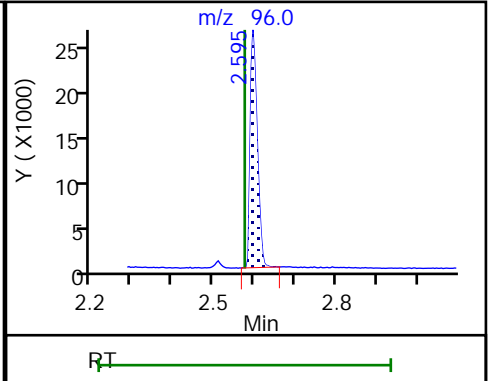
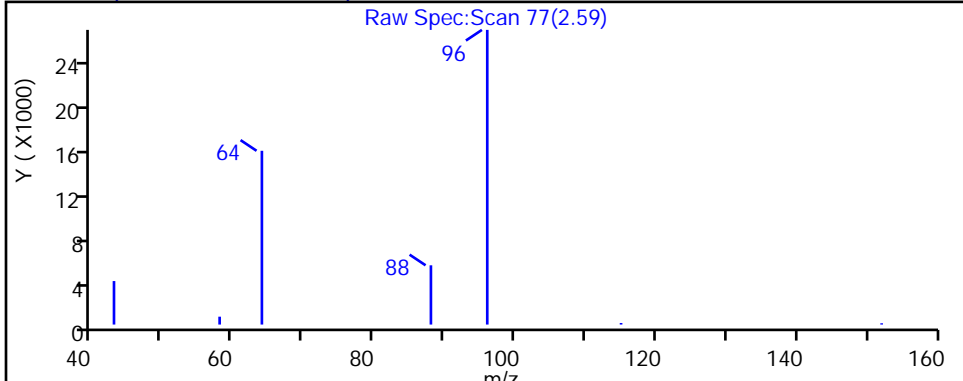
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Eurofins TestAmerica, Buffalo

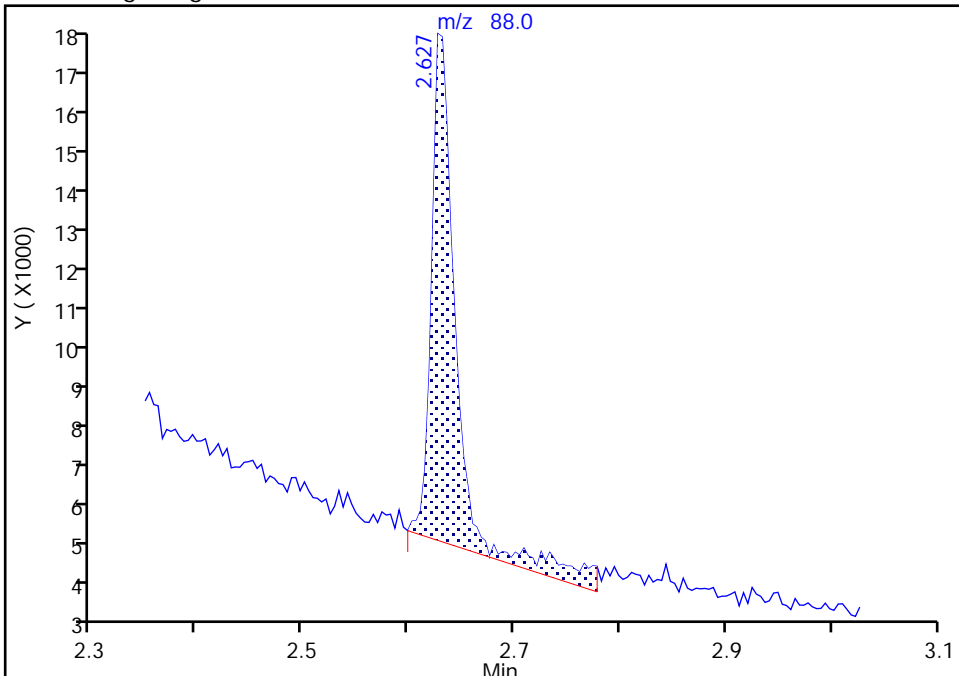
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151434.D
Injection Date: 21-Jul-2019 20:15:30 Instrument ID: HP5973U
Lims ID: 480-156213-A-15-A Lab Sample ID: 480-156213-15
Client ID: 356023-MW15B
Operator ID: bs ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

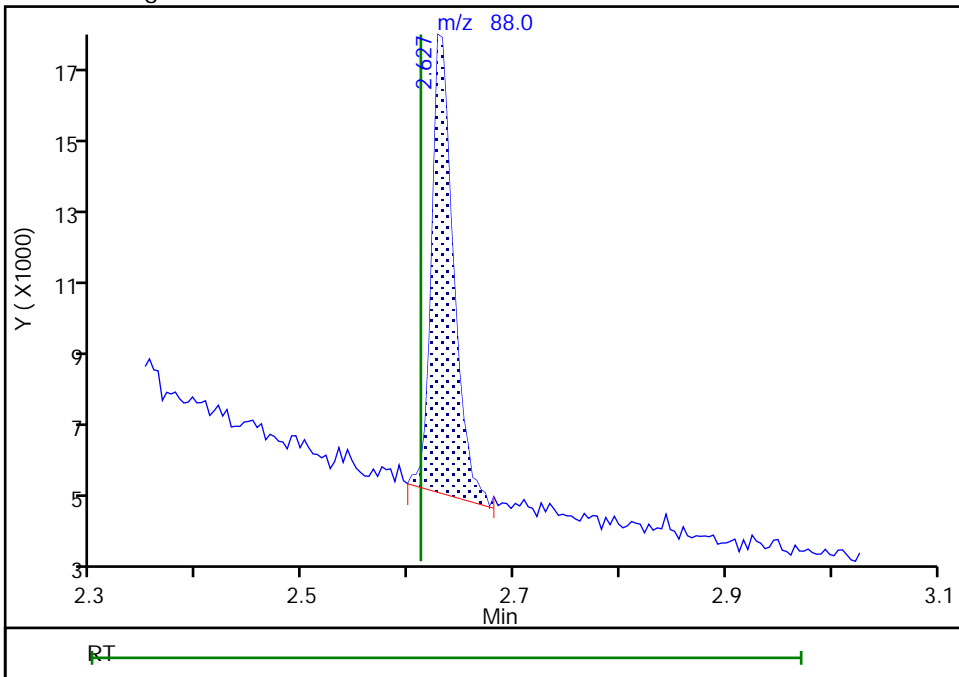
RT: 2.63
Area: 20131
Amount: 1.339128
Amount Units: ng/ul

Processing Integration Results



RT: 2.63
Area: 17879
Amount: 1.189323
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 22-Jul-2019 13:37:17
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-EB1 Lab Sample ID: 480-156213-16
 Matrix: Water Lab File ID: U33151406.D
 Analysis Method: 8270D SIM ID Date Collected: 07/12/2019 09:45
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/19/2019 04:32
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482665 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	33		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151406.D
 Lims ID: 480-156213-B-16-A
 Client ID: 356023-EB1
 Sample Type: Client
 Inject. Date: 19-Jul-2019 04:32:30 ALS Bottle#: 43 Worklist Smp#: 13
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 43
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:38:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.632	2.574	0.058	91	150546	3.25	32.5	
3 1,4-Dioxane	88		2.615				ND		U
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	96	401096	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151406.D

Injection Date: 19-Jul-2019 04:32:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-16-A

Lab Sample ID: 480-156213-16

Worklist Smp#: 13

Client ID: 356023-EB1

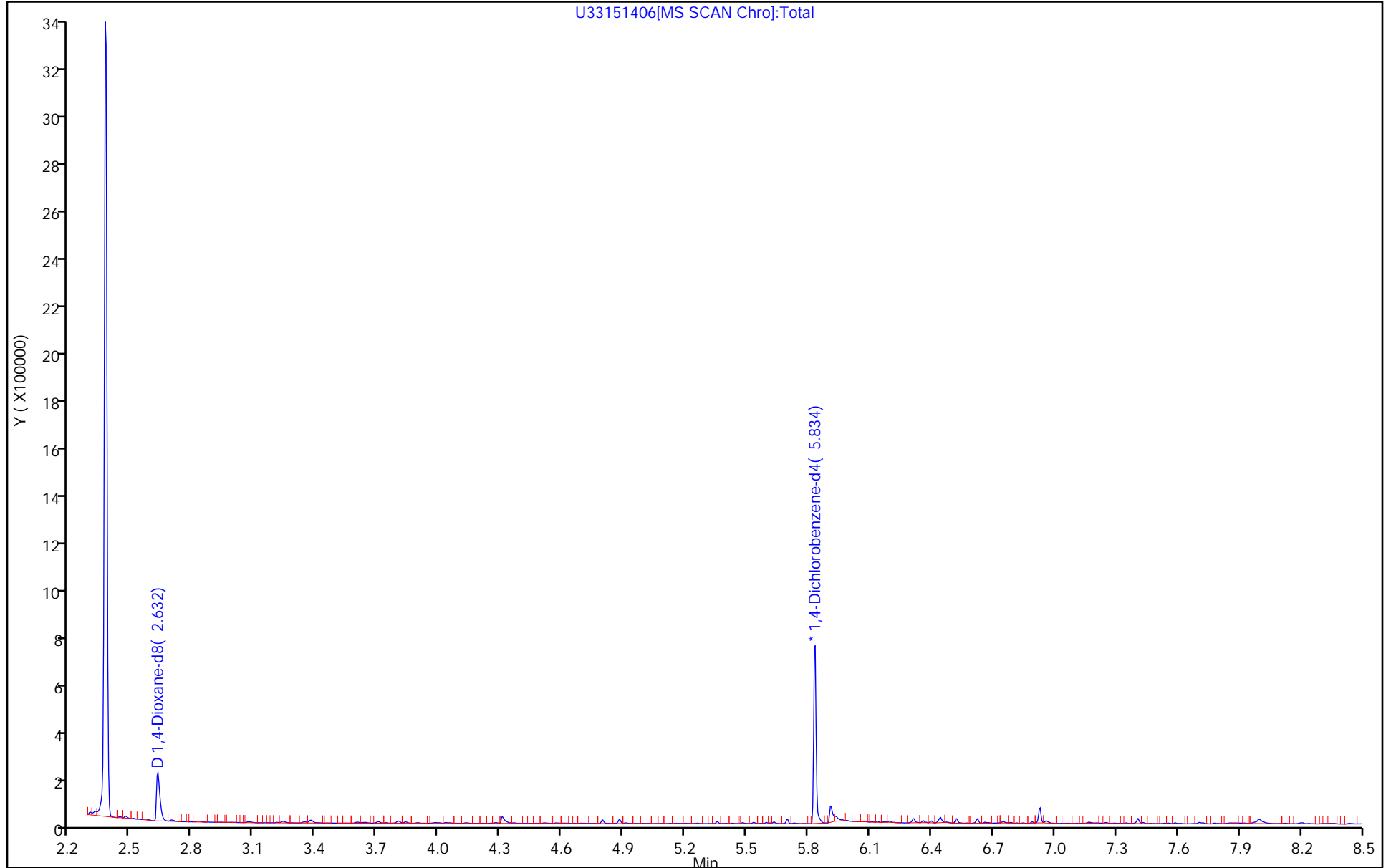
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 43

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151406.D

Injection Date: 19-Jul-2019 04:32:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-16-A

Lab Sample ID: 480-156213-16

Client ID: 356023-EB1

Operator ID: bs

ALS Bottle#: 43

Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

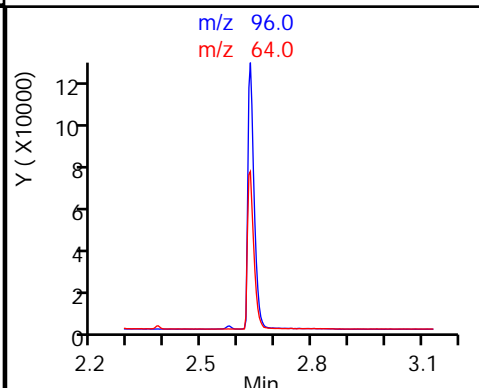
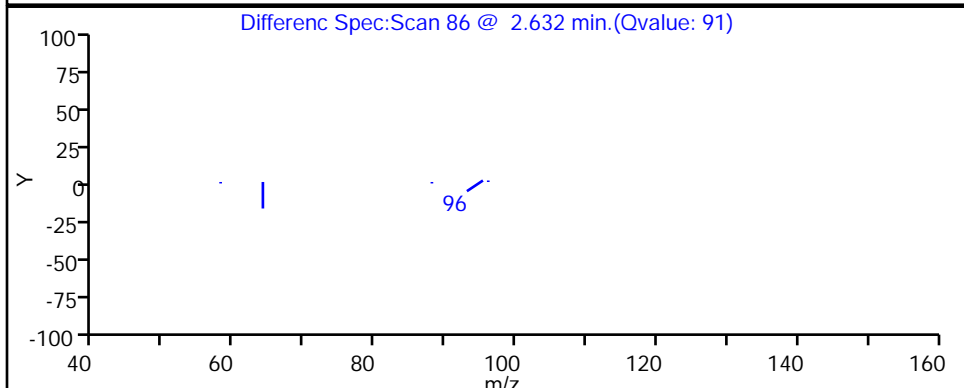
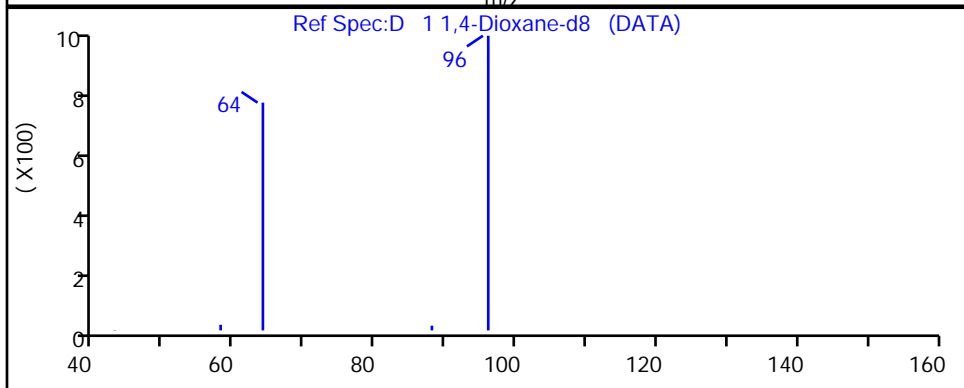
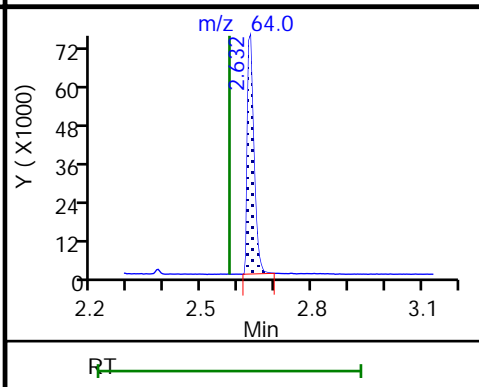
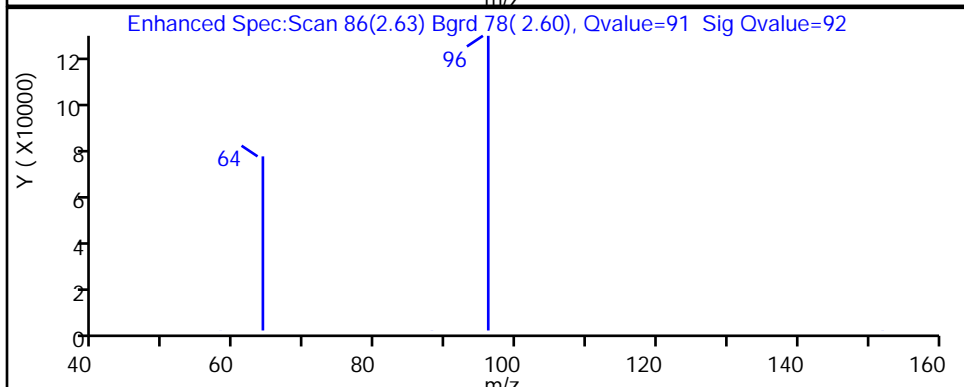
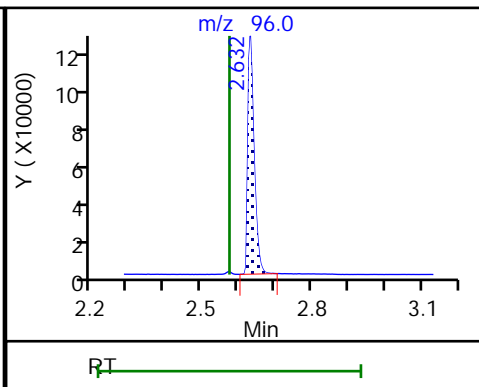
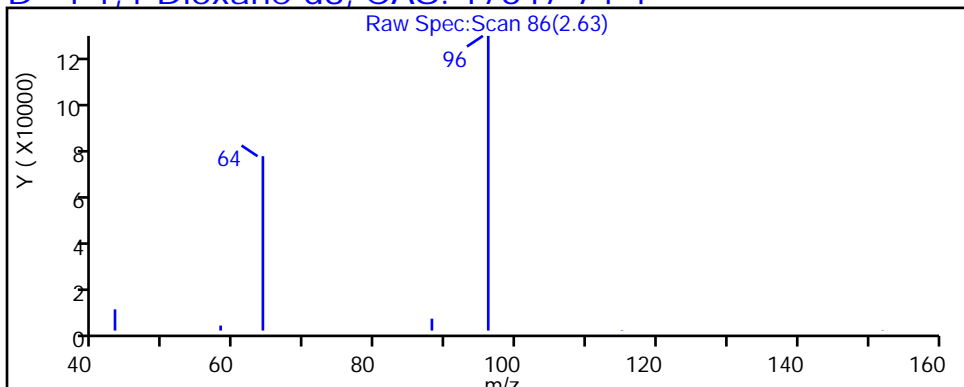
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151406.D

Injection Date: 19-Jul-2019 04:32:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-16-A

Lab Sample ID: 480-156213-16

Client ID: 356023-EB1

Operator ID: bs

ALS Bottle#: 43

Worklist Smp#: 13

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

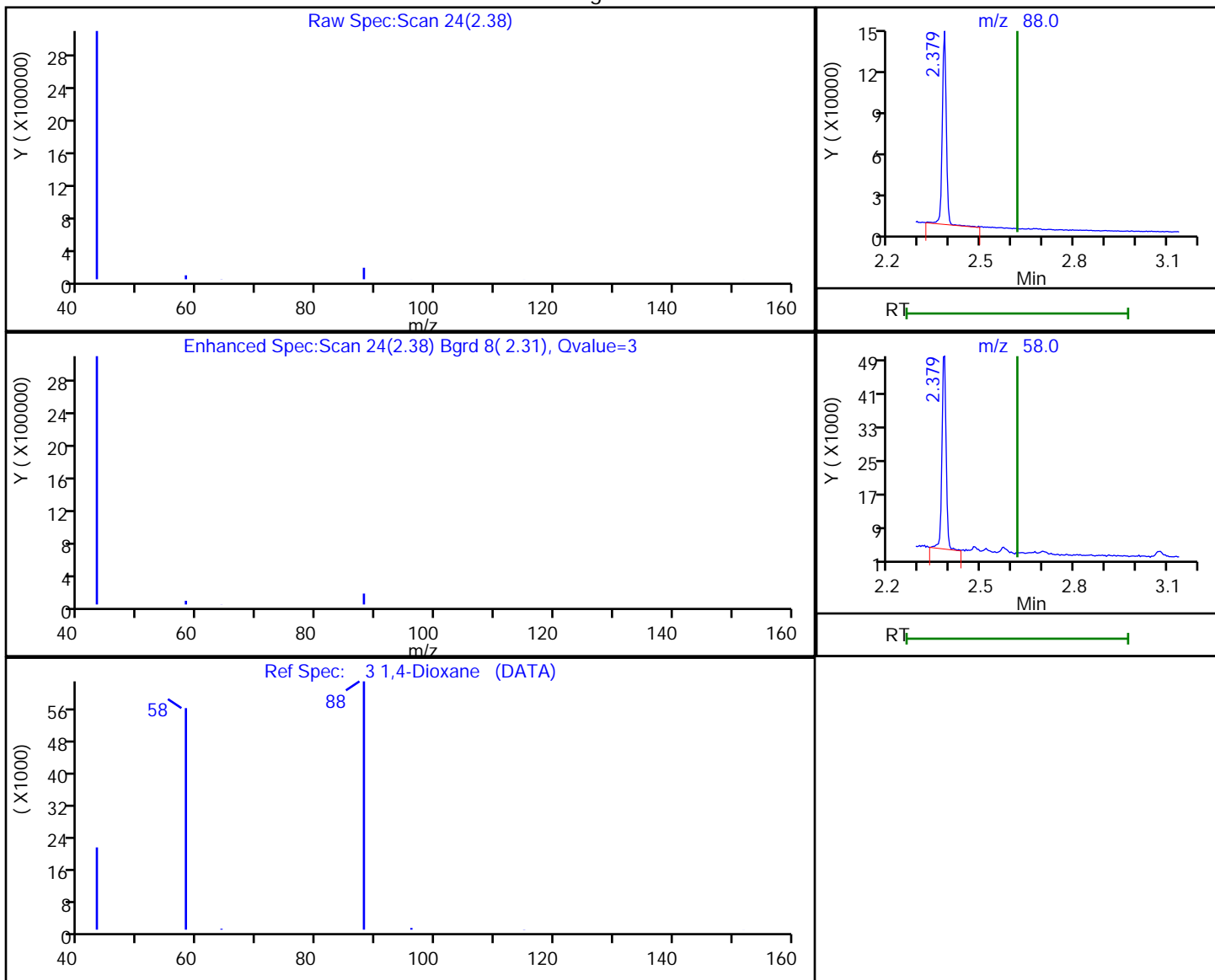
Column:

Detector

MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.38	88.00	123123	8.328083
2.38	58.00	43985	

Reviewer: schickr, 21-Jul-2019 13:38:50

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1B Lab Sample ID: 480-156213-17
 Matrix: Water Lab File ID: U33151407.D
 Analysis Method: 8270D SIM ID Date Collected: 07/12/2019 11:15
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/19/2019 04:56
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482665 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	43		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151407.D
 Lims ID: 480-156213-A-17-A
 Client ID: 356023-MW1B
 Sample Type: Client
 Inject. Date: 19-Jul-2019 04:56:30 ALS Bottle#: 44 Worklist Smp#: 14
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 44
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:38:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.656	2.574	0.082	88	202606	4.32	43.2	
3 1,4-Dioxane	88		2.615				ND		U
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	98	406825	4.00		

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151407.D

Injection Date: 19-Jul-2019 04:56:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-17-A

Lab Sample ID: 480-156213-17

Worklist Smp#: 14

Client ID: 356023-MW1B

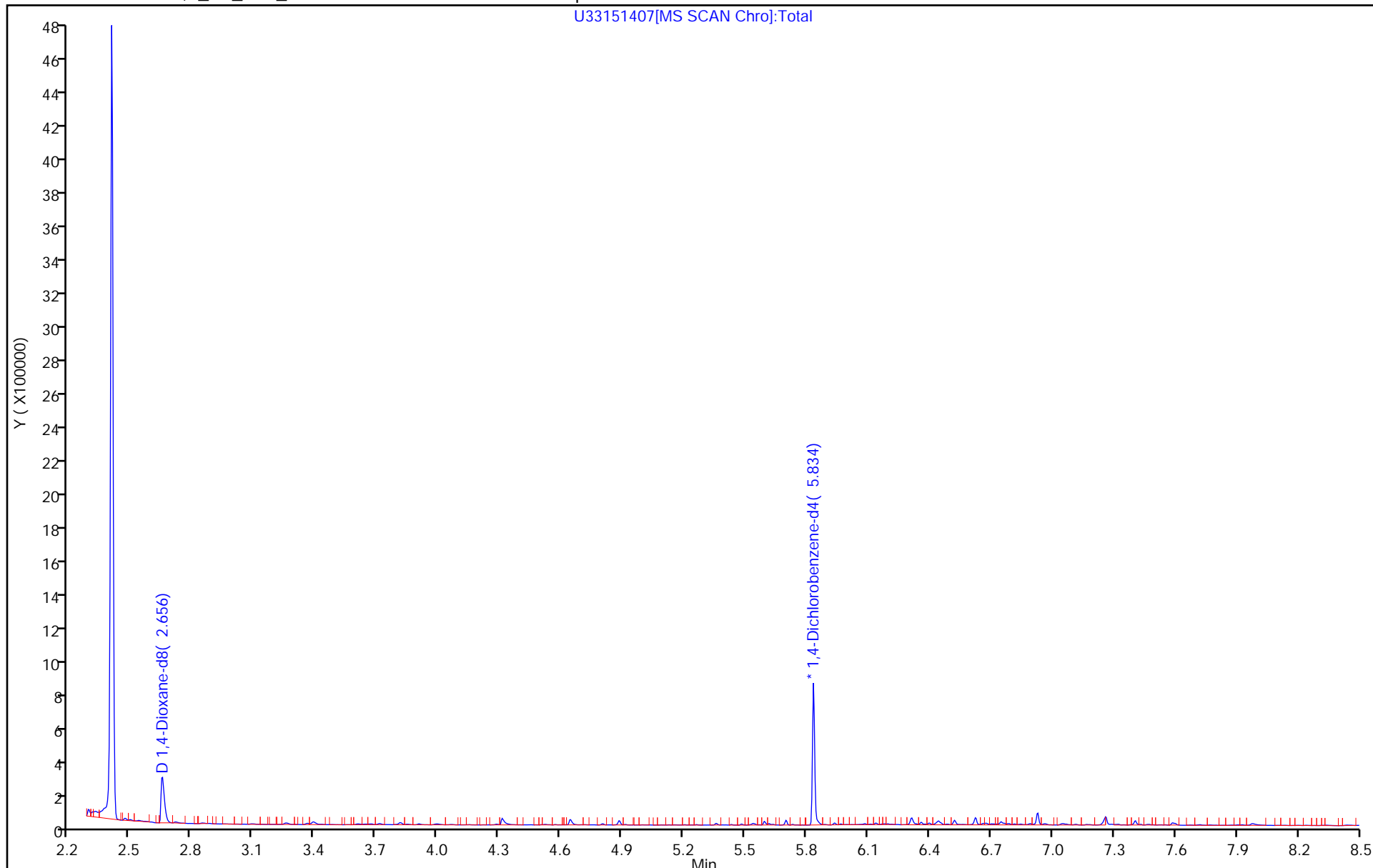
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 44

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151407.D

Injection Date: 19-Jul-2019 04:56:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-17-A

Lab Sample ID: 480-156213-17

Client ID: 356023-MW1B

Operator ID: bs

ALS Bottle#: 44

Worklist Smp#: 14

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

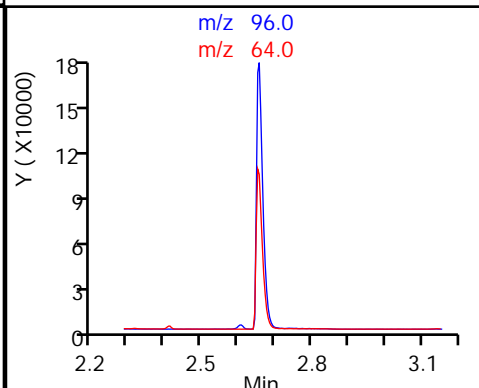
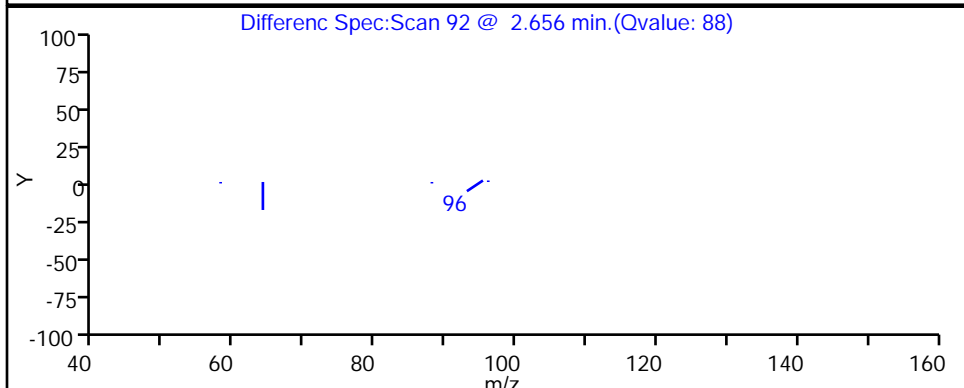
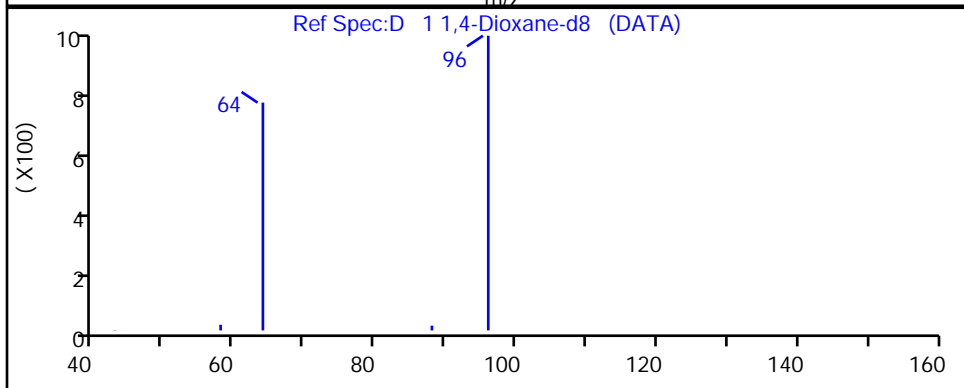
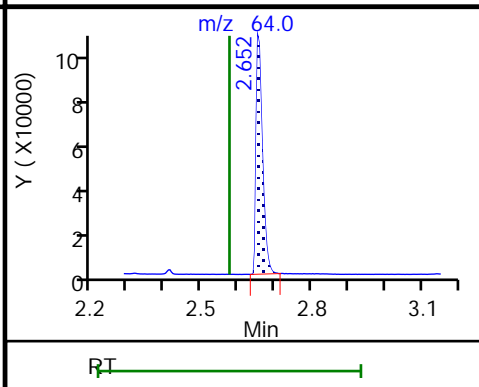
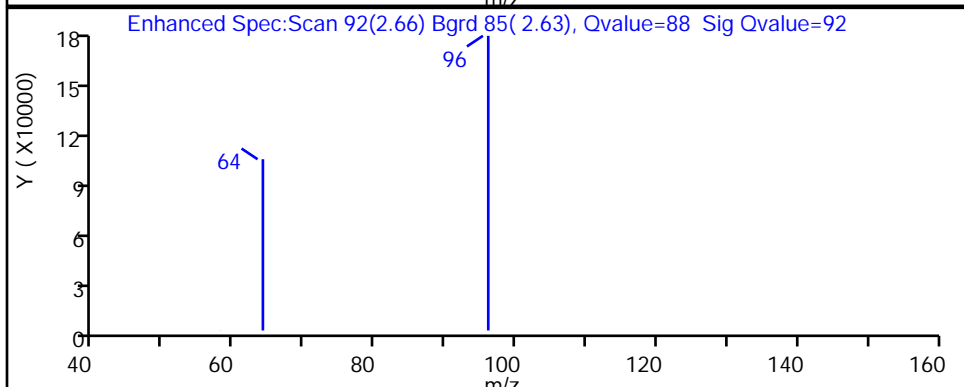
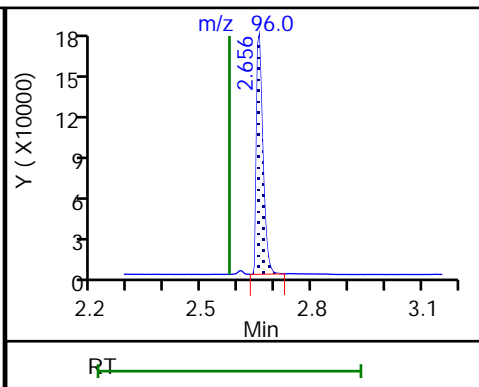
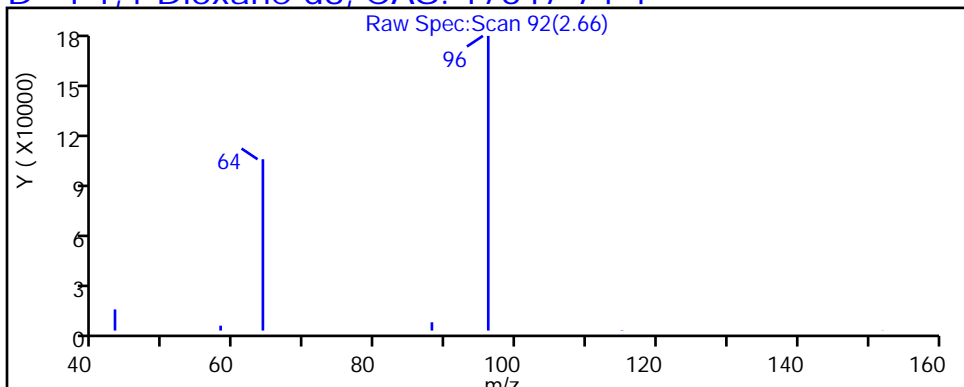
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Euofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151407.D

Injection Date: 19-Jul-2019 04:56:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-17-A

Lab Sample ID: 480-156213-17

Client ID: 356023-MW1B

Operator ID: bs

ALS Bottle#: 44

Worklist Smp#: 14

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 1,4_Dx_SIM_HP5973U

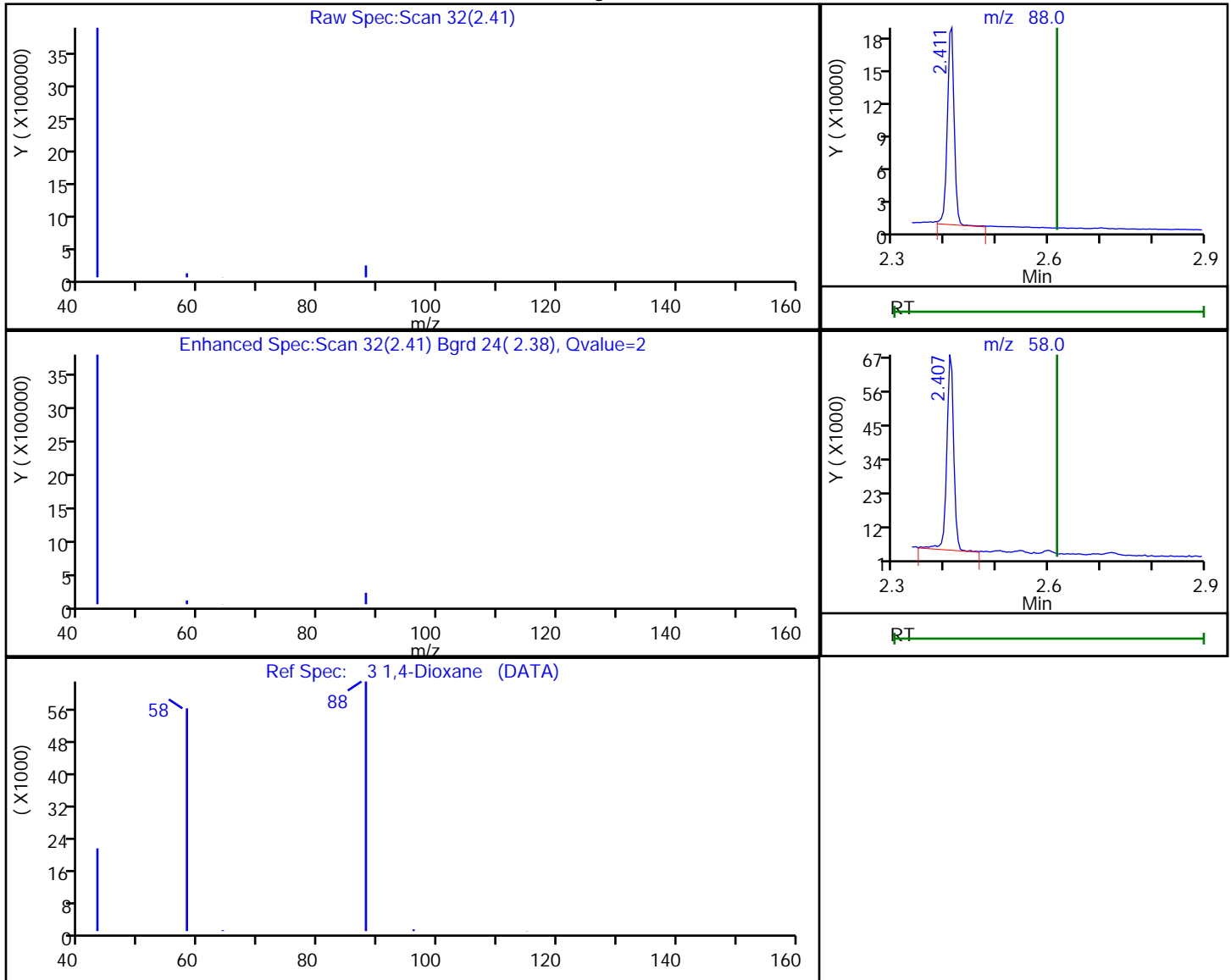
Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.41	88.00	160271	8.055226
2.41	58.00	59029	

Reviewer: schickr, 21-Jul-2019 13:38:53

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5R Lab Sample ID: 480-156213-18
 Matrix: Water Lab File ID: U33151435.D
 Analysis Method: 8270D SIM ID Date Collected: 07/12/2019 11:10
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/21/2019 20:38
 Con. Extract Vol.: 1 (mL) Dilution Factor: 5
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482965 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	6.1	E	1.0	0.50

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	37		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151435.D
 Lims ID: 480-156213-A-18-A
 Client ID: 356023-MW5R
 Sample Type: Client
 Inject. Date: 21-Jul-2019 20:38:30 ALS Bottle#: 18 Worklist Smp#: 18
 Injection Vol: 1.0 ul Dil. Factor: 5.0000
 Sample Info: 18
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 22-Jul-2019 13:37:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.599	2.575	0.024	93	34820	0.7462	37.3	
3 1,4-Dioxane	88	2.635	2.611	0.024	84	20825	1.22		E
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	97	404454	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151435.D

Injection Date: 21-Jul-2019 20:38:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-18-A

Lab Sample ID: 480-156213-18

Worklist Smp#: 18

Client ID: 356023-MW5R

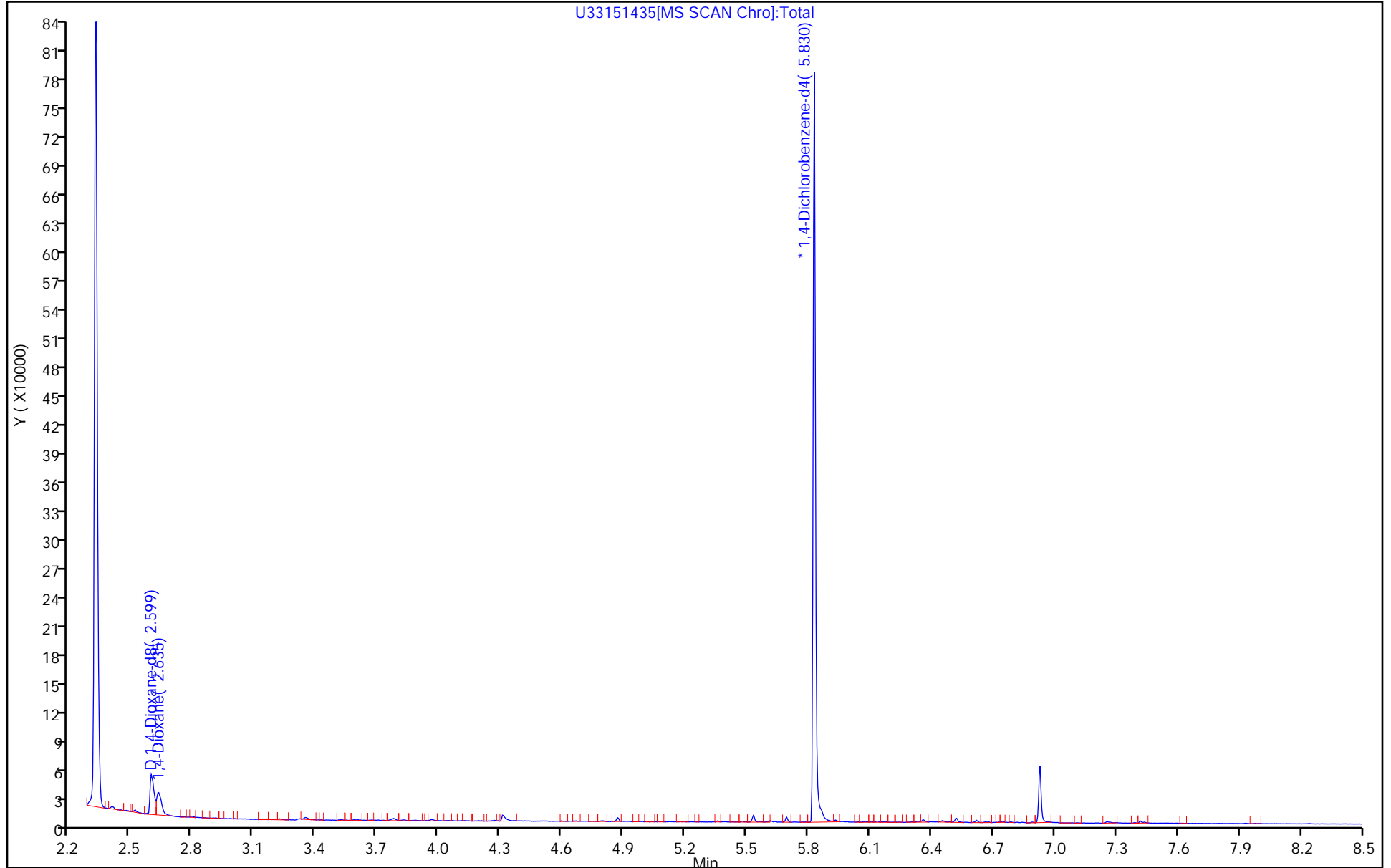
Injection Vol: 1.0 ul

Dil. Factor: 5.0000

ALS Bottle#: 18

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151435.D

Injection Date: 21-Jul-2019 20:38:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-18-A

Lab Sample ID: 480-156213-18

Client ID: 356023-MW5R

Operator ID: bs

ALS Bottle#: 18

Worklist Smp#: 18

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

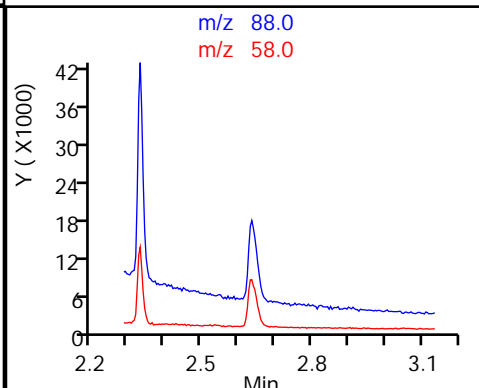
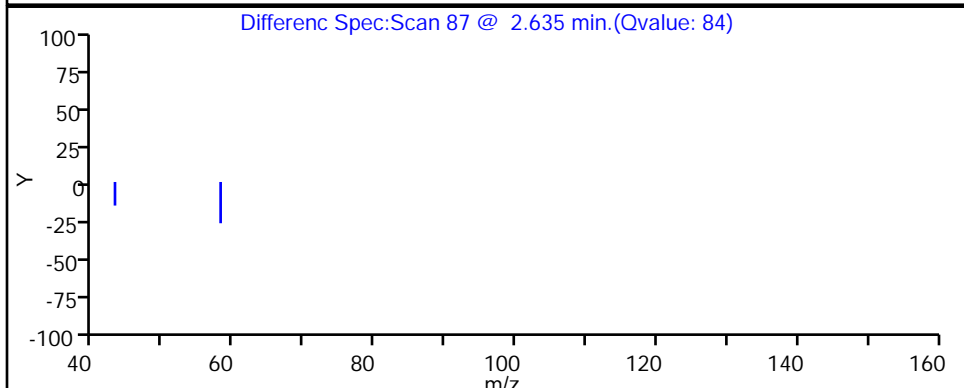
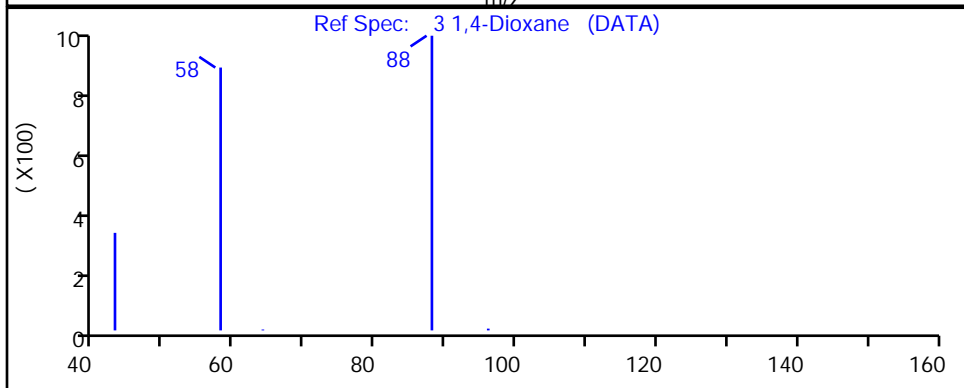
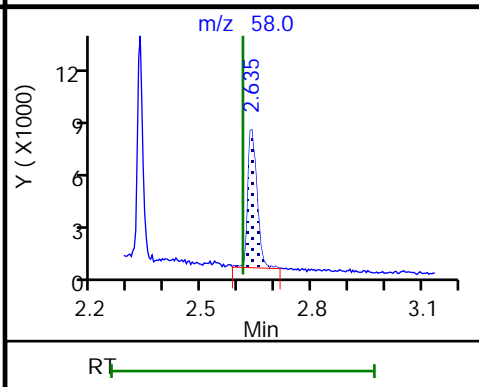
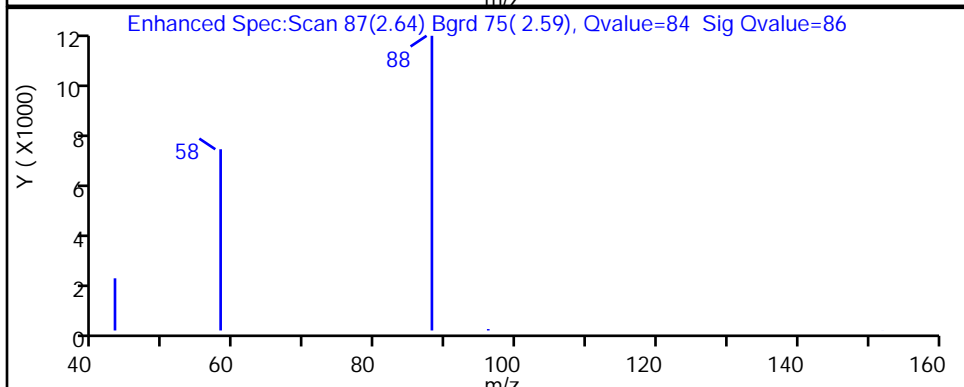
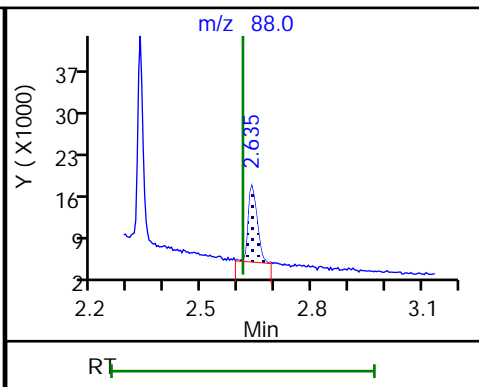
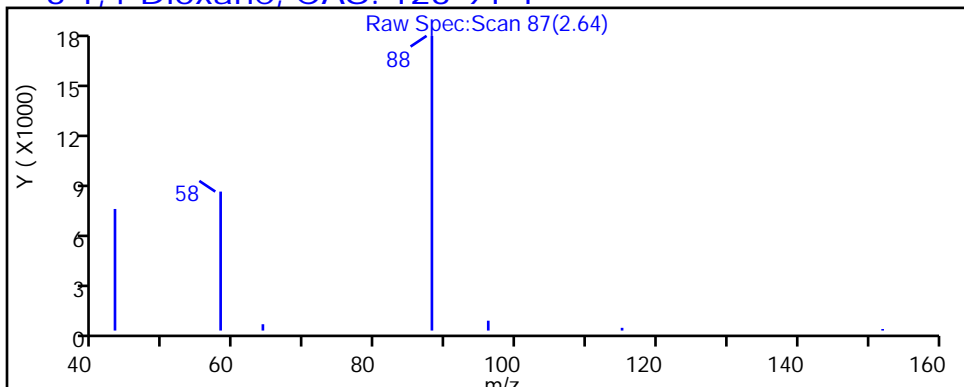
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151435.D

Injection Date: 21-Jul-2019 20:38:30

Instrument ID: HP5973U

Lims ID: 480-156213-A-18-A

Lab Sample ID: 480-156213-18

Client ID: 356023-MW5R

Operator ID: bs

ALS Bottle#: 18

Worklist Smp#: 18

Injection Vol: 1.0 ul

Dil. Factor: 5.0000

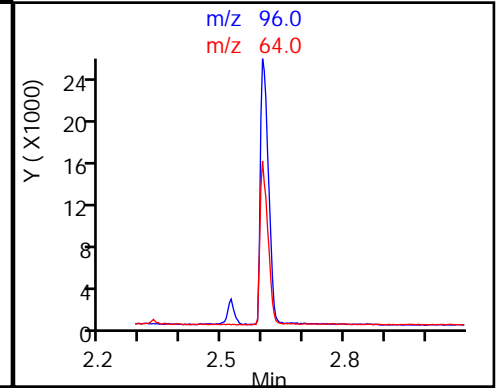
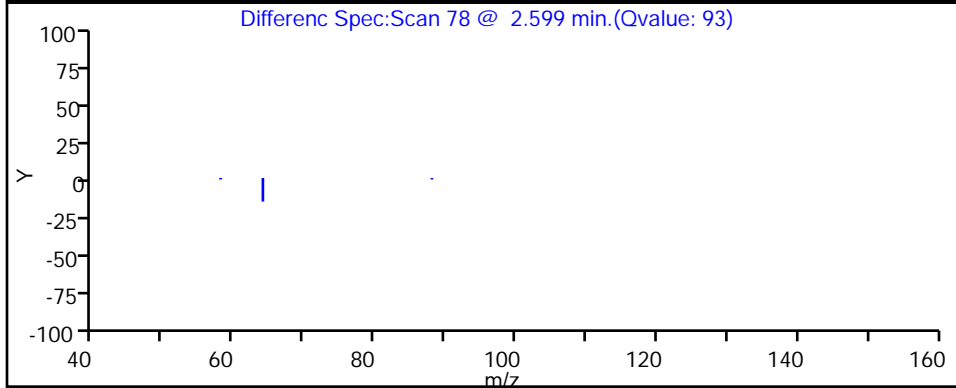
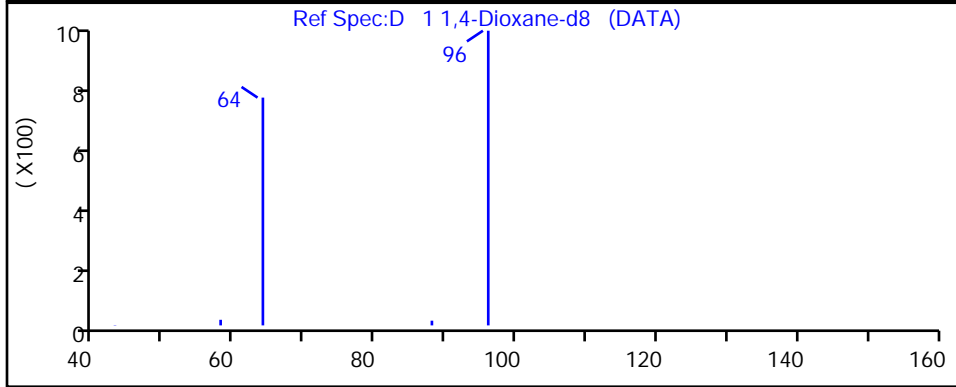
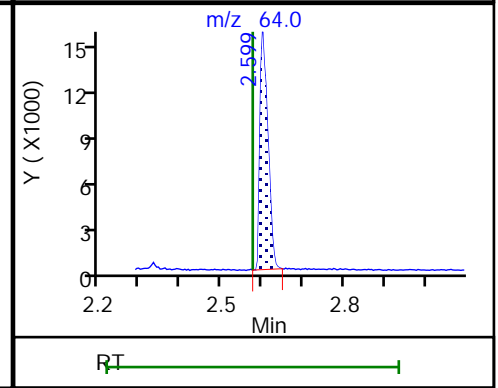
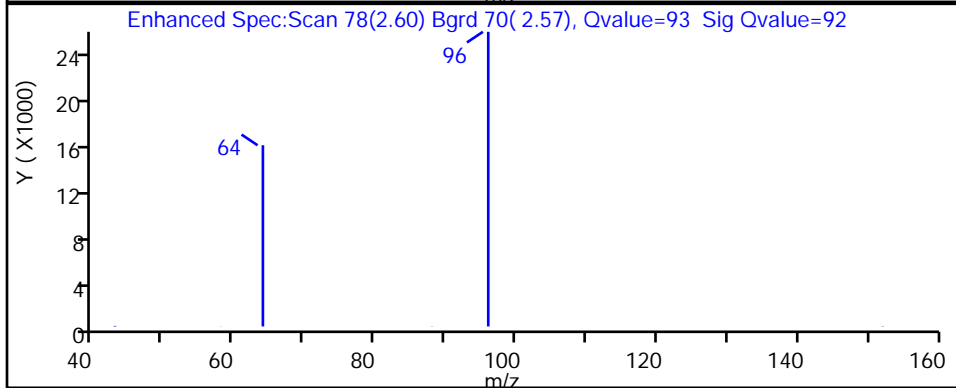
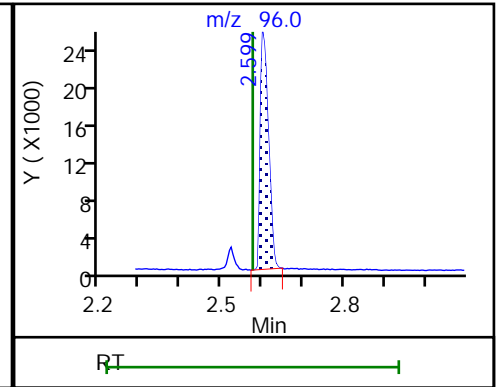
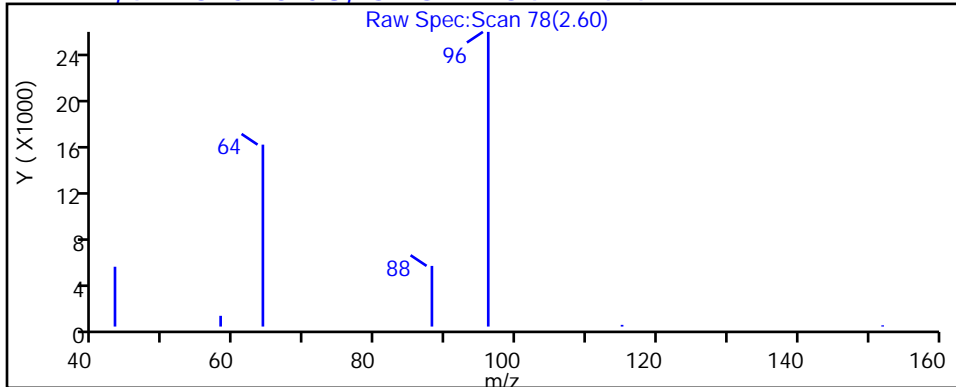
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW7R Lab Sample ID: 480-156213-19
 Matrix: Water Lab File ID: U33151409.D
 Analysis Method: 8270D SIM ID Date Collected: 07/12/2019 11:30
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/19/2019 05:43
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482665 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	2.3	E	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	41		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151409.D
 Lims ID: 480-156213-B-19-A
 Client ID: 356023-MW7R
 Sample Type: Client
 Inject. Date: 19-Jul-2019 05:43:30 ALS Bottle#: 46 Worklist Smp#: 16
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 46
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:39:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D 1 1,4-Dioxane-d8	96	2.656	2.574	0.082	89	202382	4.13	41.3	
3 1,4-Dioxane	88	2.693	2.615	0.077	86	45009	2.26		E
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	97	424529	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151409.D

Injection Date: 19-Jul-2019 05:43:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-19-A

Lab Sample ID: 480-156213-19

Worklist Smp#: 16

Client ID: 356023-MW7R

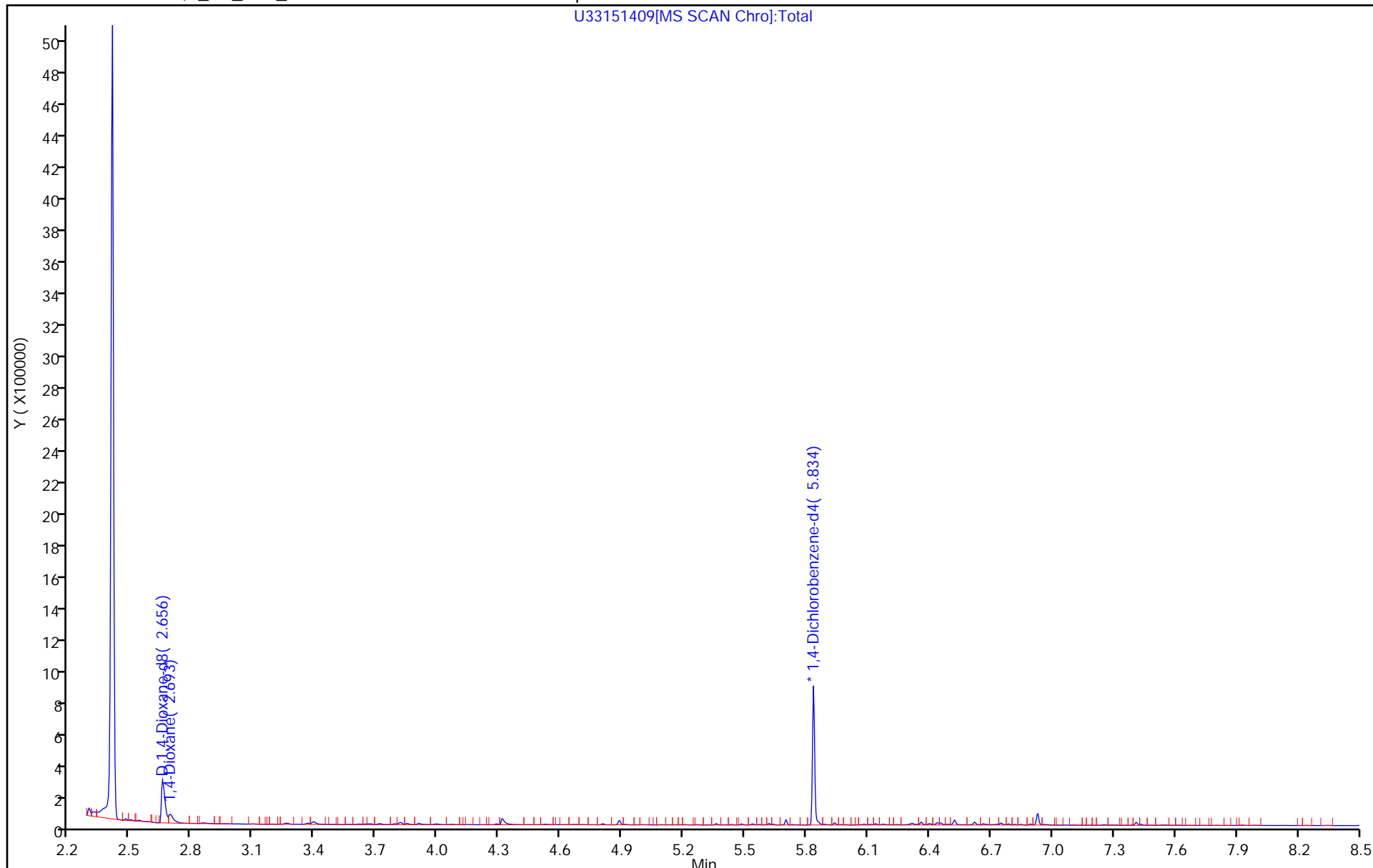
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 46

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151409.D

Injection Date: 19-Jul-2019 05:43:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-19-A

Lab Sample ID: 480-156213-19

Client ID: 356023-MW7R

Operator ID: bs

ALS Bottle#: 46

Worklist Smp#: 16

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

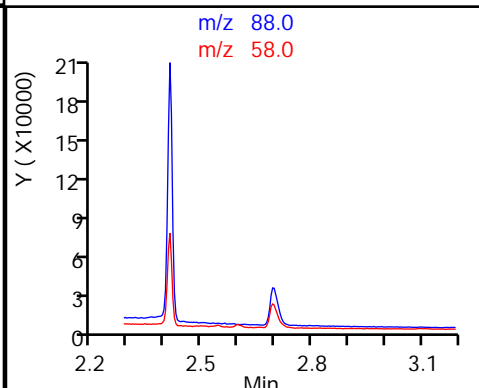
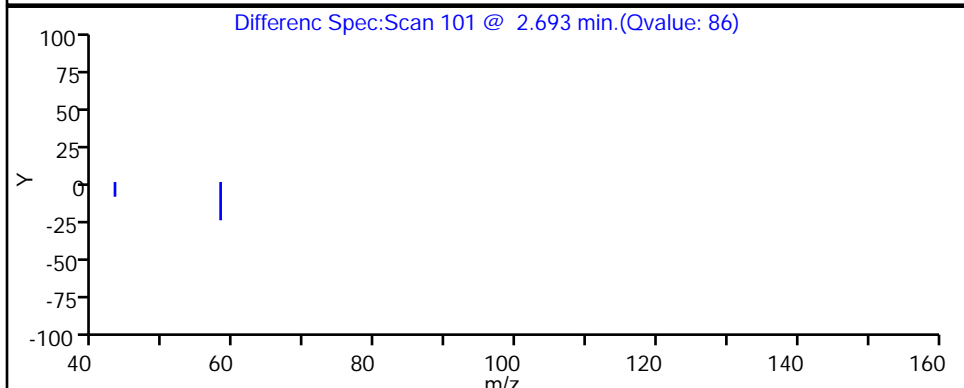
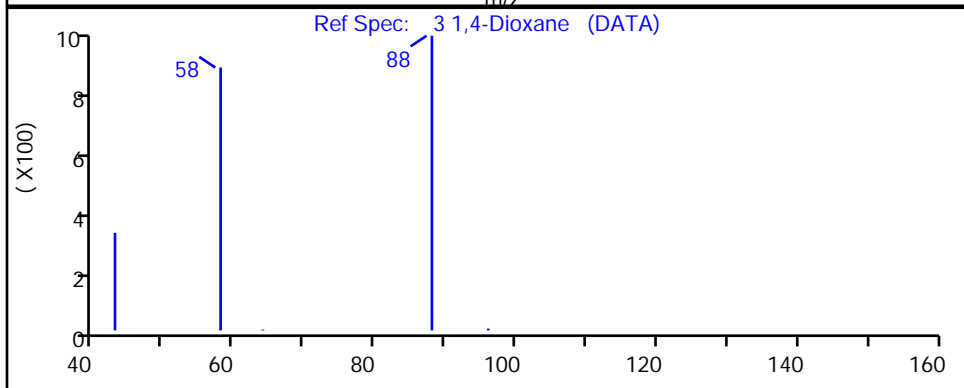
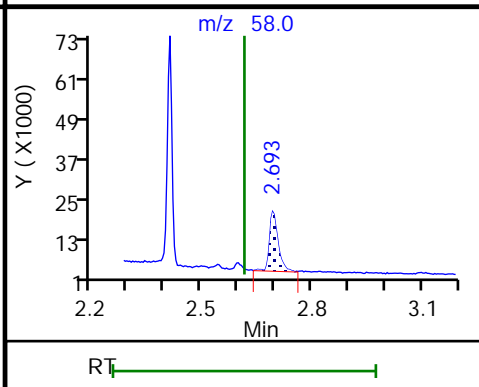
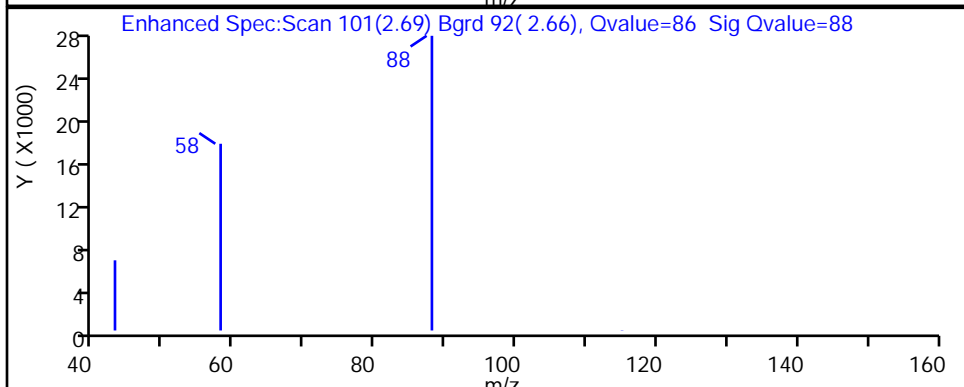
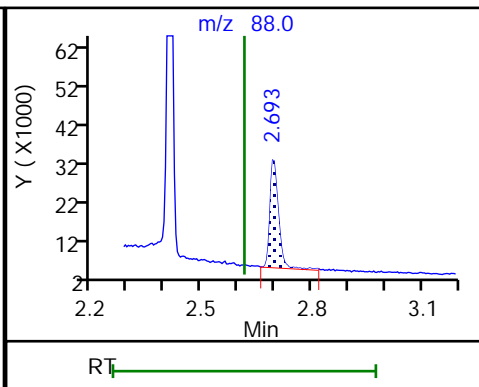
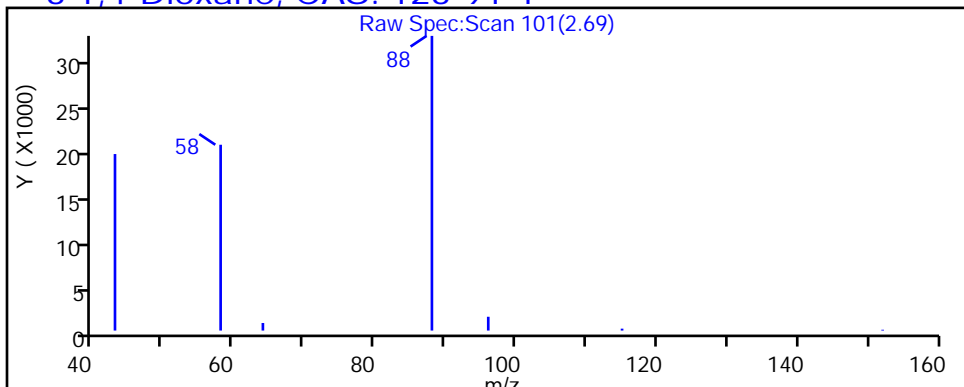
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151409.D

Injection Date: 19-Jul-2019 05:43:30

Instrument ID: HP5973U

Lims ID: 480-156213-B-19-A

Lab Sample ID: 480-156213-19

Client ID: 356023-MW7R

Operator ID: bs

ALS Bottle#: 46

Worklist Smp#: 16

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

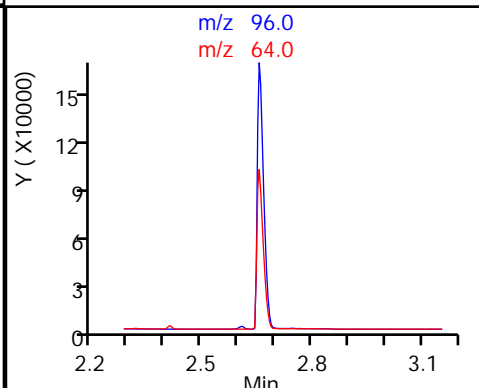
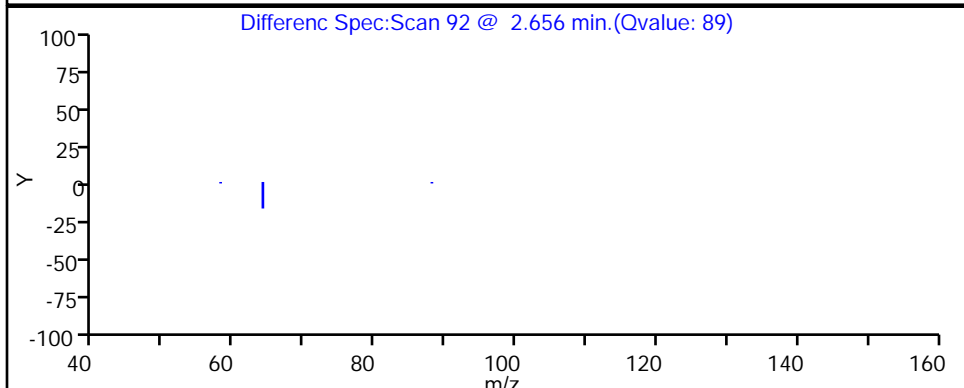
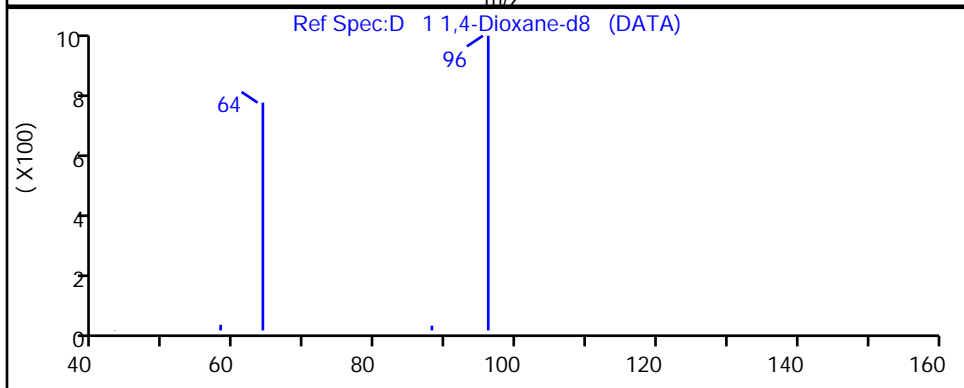
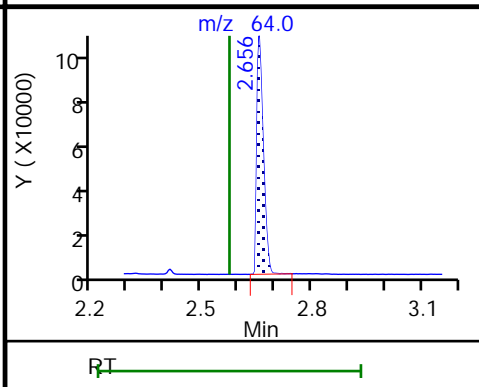
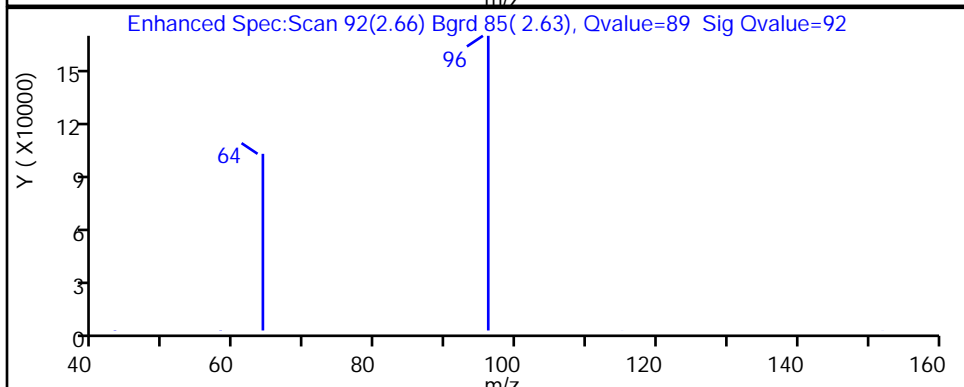
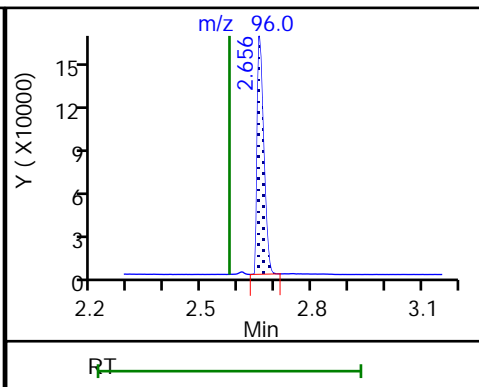
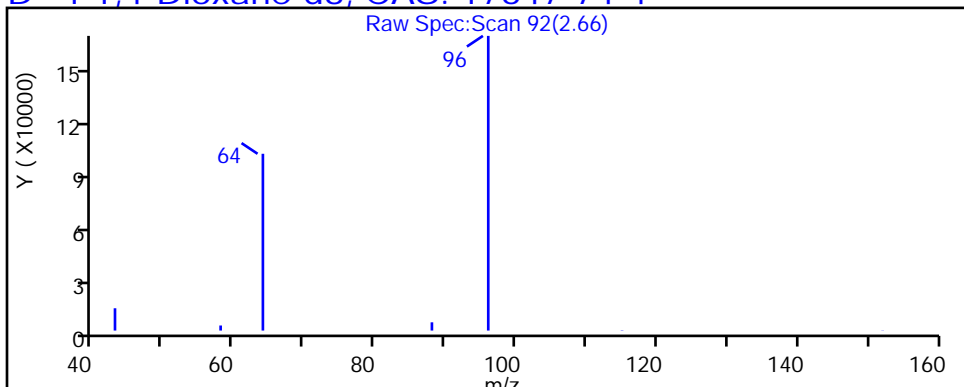
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1 Analy Batch No.: 480789

SDG No.: _____

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2019 14:45 Calibration End Date: 07/03/2019 16:46 Calibration ID: 37196

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-480789/3	U33151152.D
Level 2	IC 480-480789/4	U33151153.D
Level 3	ICIS 480-480789/5	U33151154.D
Level 4	IC 480-480789/6	U33151155.D
Level 5	IC 480-480789/7	U33151156.D
Level 6	IC 480-480789/8	U33151157.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								
1,4-Dioxane	1.0022 0.9793	0.9832	0.9554	0.9884	0.9838	AveID		0.9820			0.0100	1.6		20.0			
1,4-Dioxane-d8	0.4472 0.4656	0.4564	0.4700	0.4644	0.4653	Ave		0.4615			0.0100	1.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1 Analy Batch No.: 480789

SDG No.: _____

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2019 14:45 Calibration End Date: 07/03/2019 16:46 Calibration ID: 37196

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-480789/3	U33151152.D
Level 2	IC 480-480789/4	U33151153.D
Level 3	ICIS 480-480789/5	U33151154.D
Level 4	IC 480-480789/6	U33151155.D
Level 5	IC 480-480789/7	U33151156.D
Level 6	IC 480-480789/8	U33151157.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,4-Dioxane		AveID	8054 46881	16307	22392	31896	39349	0.200 1.20	0.400	0.600	0.800	1.00
1,4-Dioxane-d8	DCBd 4	Ave	80367 478715	165862	234379	322719	399959	2.00 12.0	4.00	6.00	8.00	10.0

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151152.D
 Lims ID: IC - SIM - 0.2
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 03-Jul-2019 14:45:30 ALS Bottle#: 93 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0082400-003
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 04-Jul-2019 11:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1011

First Level Reviewer: schickr Date: 04-Jul-2019 11:35:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.570	2.566	0.004	92	80367	2.00	1.94	
3 1,4-Dioxane	88	2.611	2.607	0.004	88	8054	0.2000	0.2041	M
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.834	0.000	96	359392	4.00	4.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_1,4SIM_WRK_00072 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00168 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151152.D

Injection Date: 03-Jul-2019 14:45:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: IC - SIM - 0.2

Worklist Smp#: 3

Client ID:

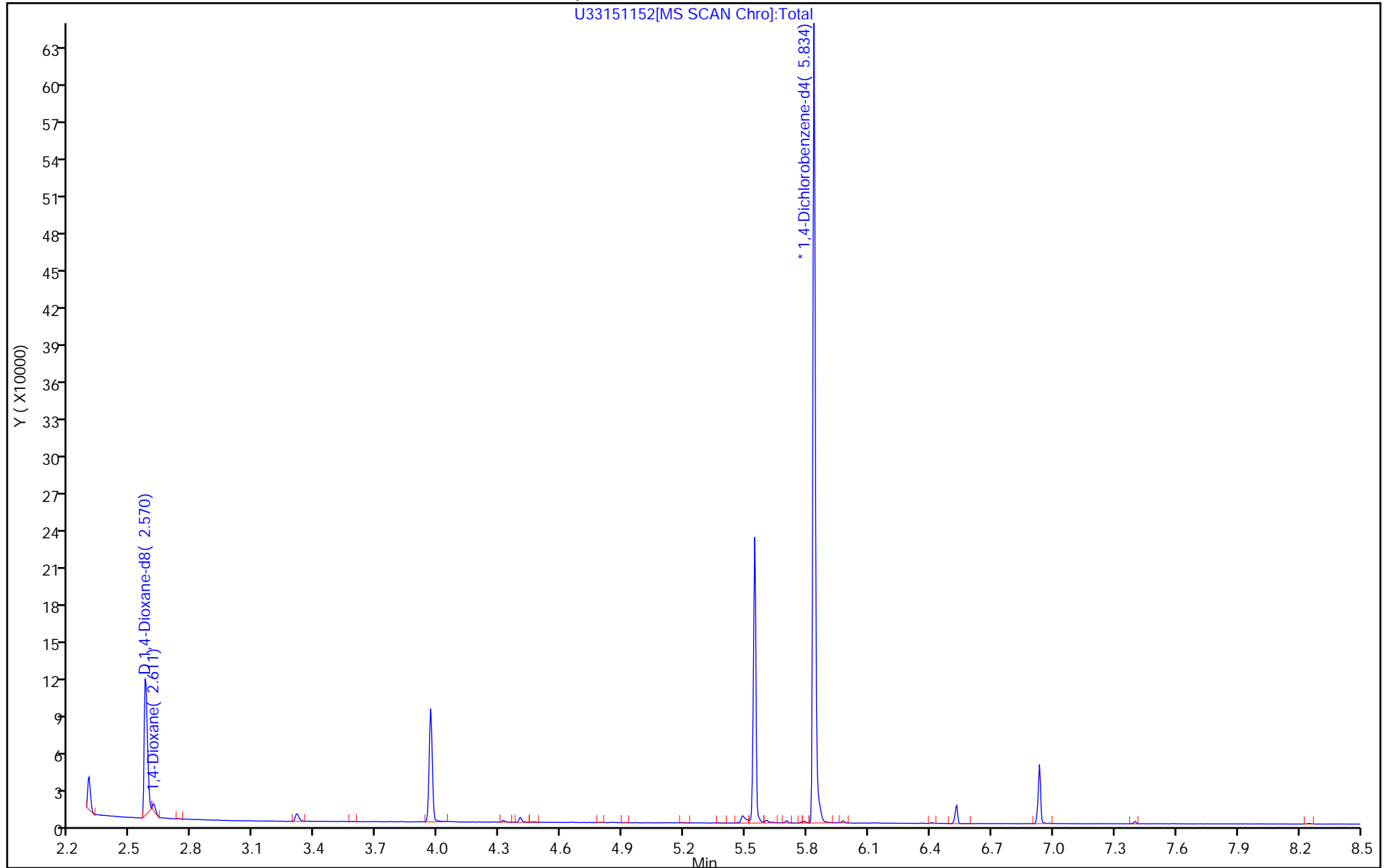
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 93

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Euofins TestAmerica, Buffalo

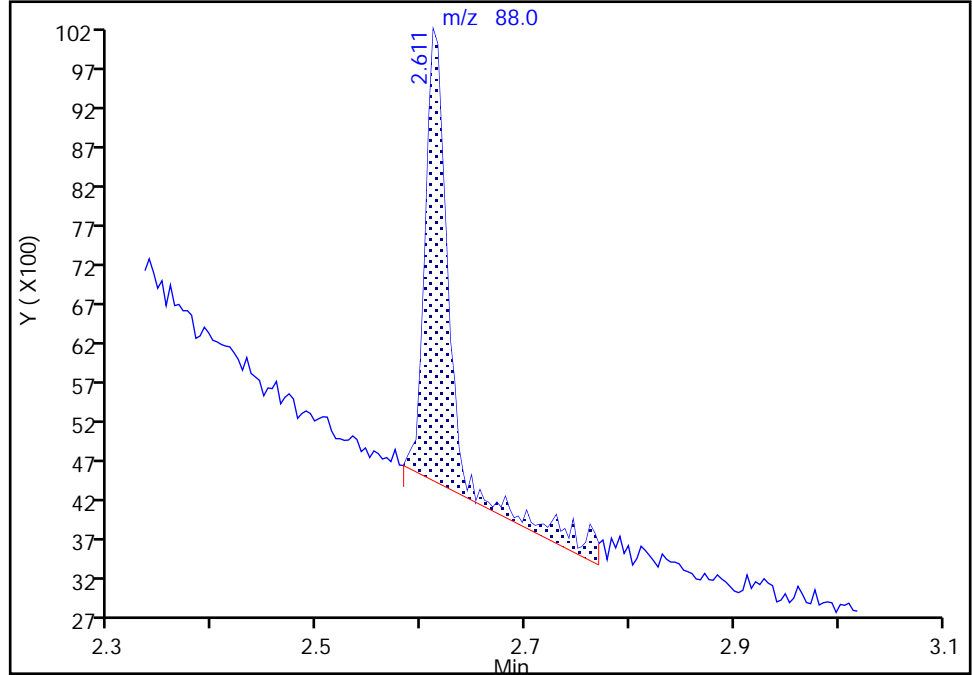
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151152.D
Injection Date: 03-Jul-2019 14:45:30 Instrument ID: HP5973U
Lims ID: IC - SIM - 0.2
Client ID:
Operator ID: bs ALS Bottle#: 93 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

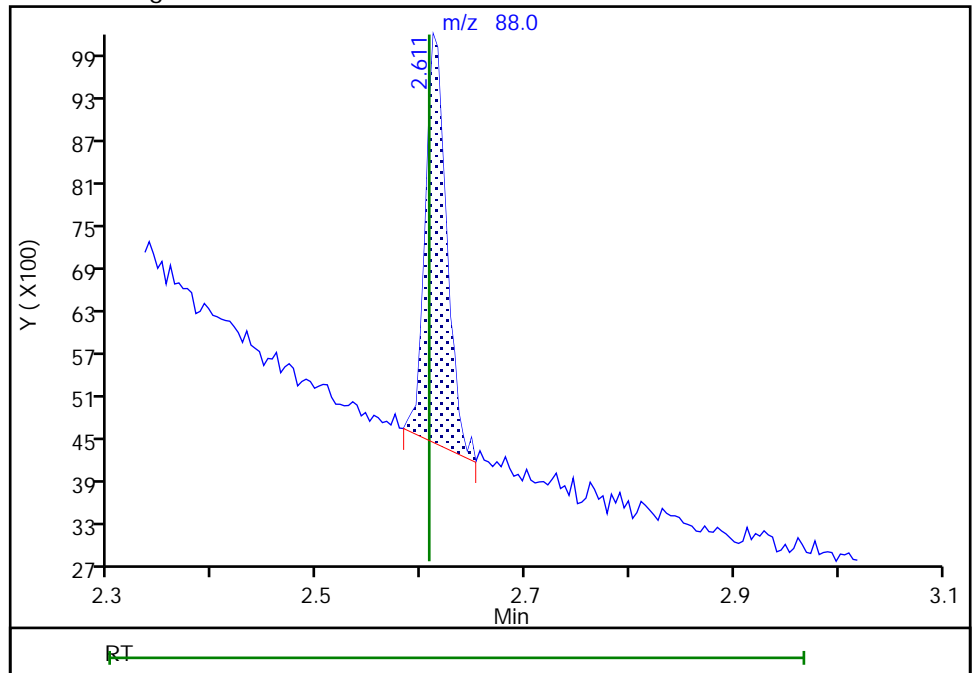
RT: 2.61
Area: 9238
Amount: 0.224027
Amount Units: ng/ul

Processing Integration Results



RT: 2.61
Area: 8054
Amount: 0.204098
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 04-Jul-2019 11:35:54
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151153.D
 Lims ID: IC - SIM - 0.4
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 03-Jul-2019 15:09:30 ALS Bottle#: 94 Worklist Smp#: 4
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0082400-004
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 04-Jul-2019 11:37:41 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1011

First Level Reviewer: schickr Date: 04-Jul-2019 11:36:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.570	2.566	0.004	94	165862	4.00	3.96	
3 1,4-Dioxane	88	2.611	2.607	0.004	87	16307	0.4000	0.4005	M
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.834	0.000	96	363378	4.00	4.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_1,4SIM_WRK_00073 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00168 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151153.D

Injection Date: 03-Jul-2019 15:09:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: IC - SIM - 0.4

Worklist Smp#: 4

Client ID:

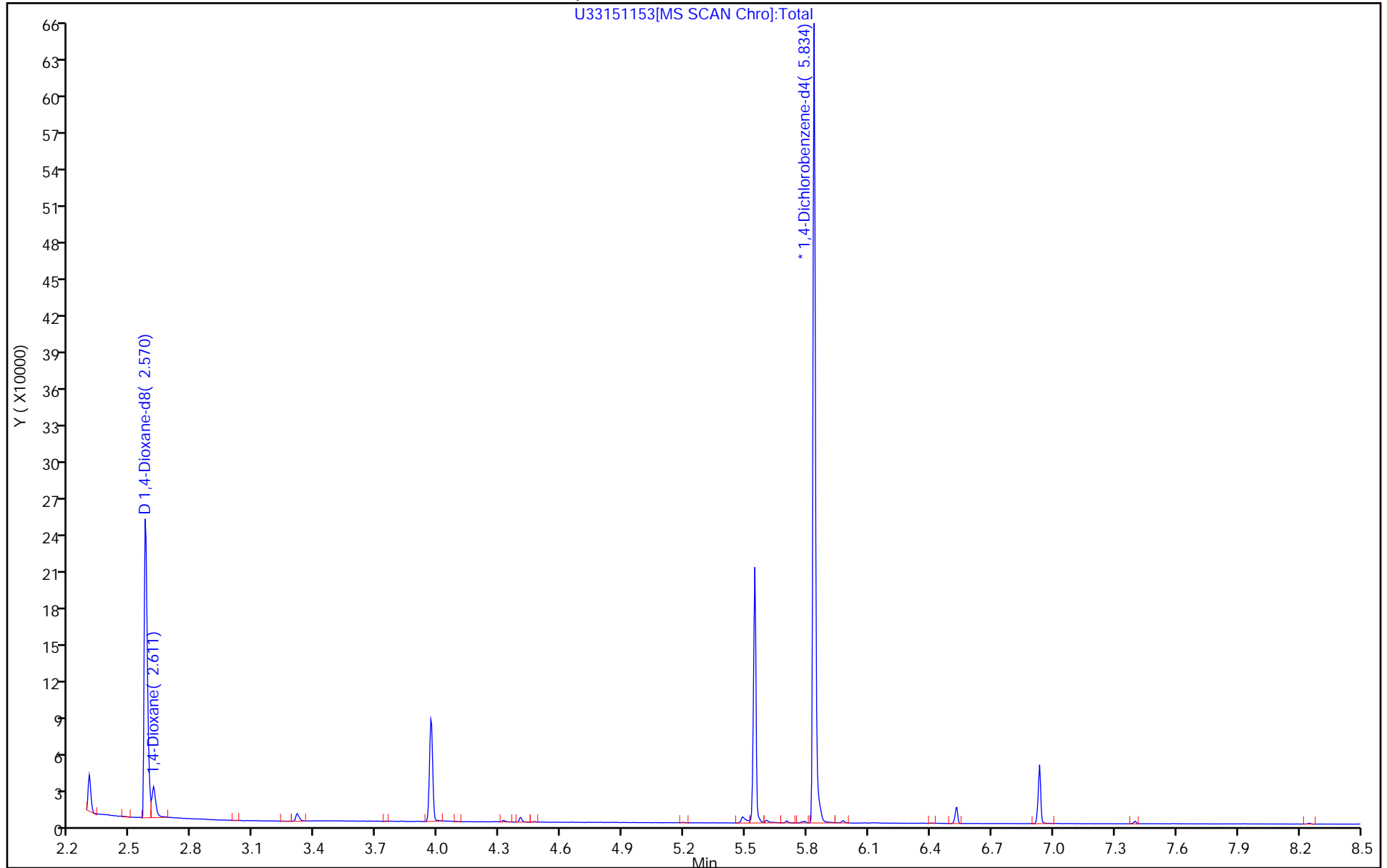
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 94

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

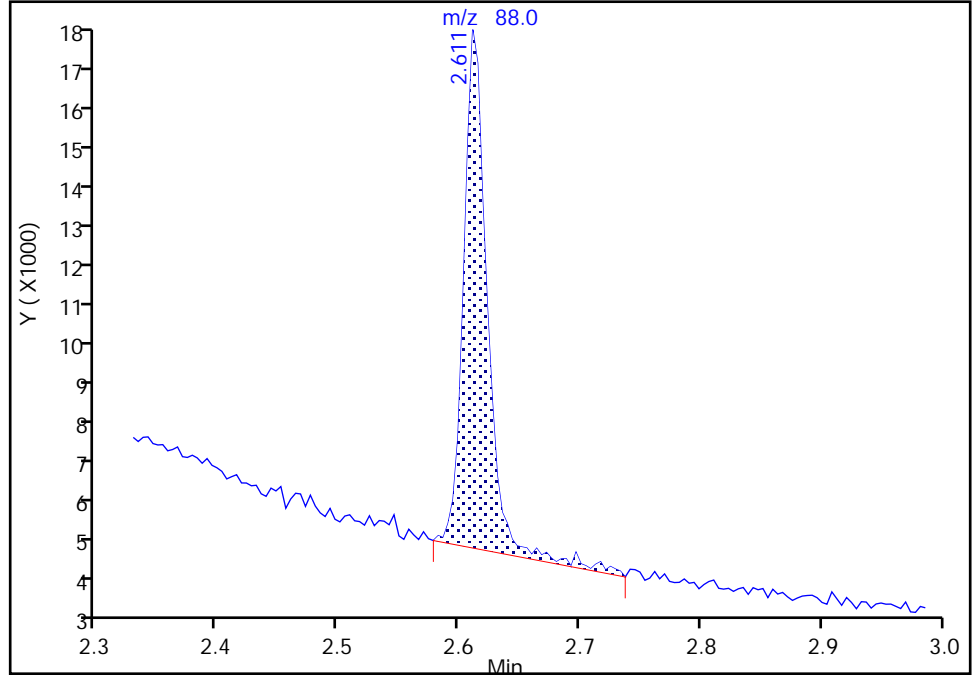
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151153.D
Injection Date: 03-Jul-2019 15:09:30 Instrument ID: HP5973U
Lims ID: IC - SIM - 0.4
Client ID:
Operator ID: bs ALS Bottle#: 94 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

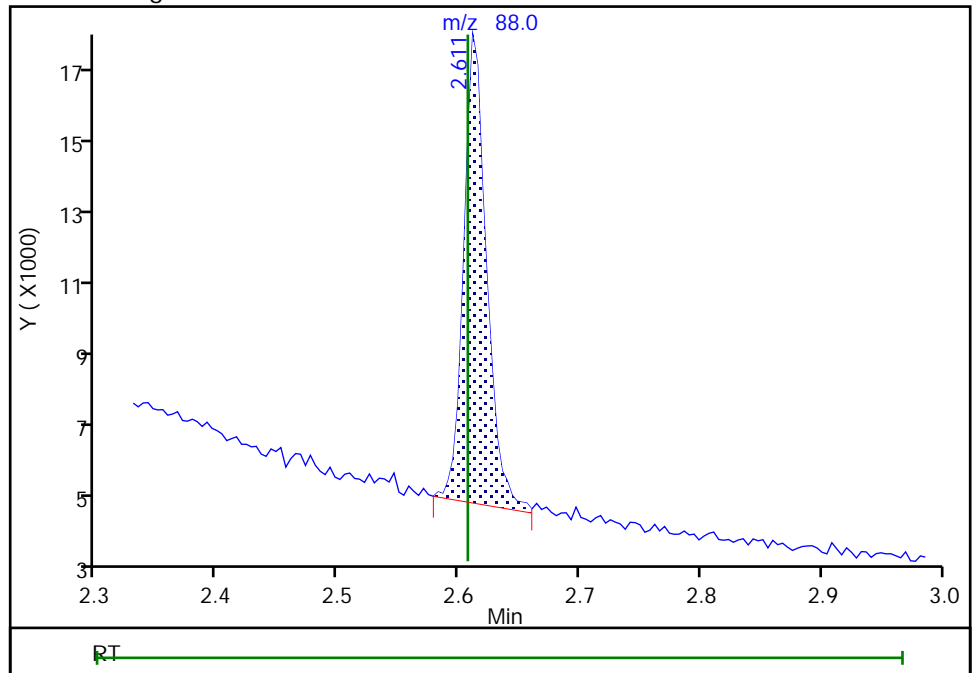
RT: 2.61
Area: 16986
Amount: 0.408970
Amount Units: ng/ul

Processing Integration Results



RT: 2.61
Area: 16307
Amount: 0.400463
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 04-Jul-2019 11:36:04
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151154.D
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 3
 Inject. Date: 03-Jul-2019 15:34:30 ALS Bottle#: 95 Worklist Smp#: 5
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0082400-005
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 04-Jul-2019 11:37:41 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1011

First Level Reviewer: schickr Date: 03-Jul-2019 16:07:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.566	2.566	0.000	90	234379	6.00	6.11	
3 1,4-Dioxane	88	2.607	2.607	0.000	85	22392	0.6000	0.5837	M
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.834	0.000	96	332481	4.00	4.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_1,4SIM_WRK_00074 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00168 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151154.D

Injection Date: 03-Jul-2019 15:34:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: ICIS

Worklist Smp#: 5

Client ID:

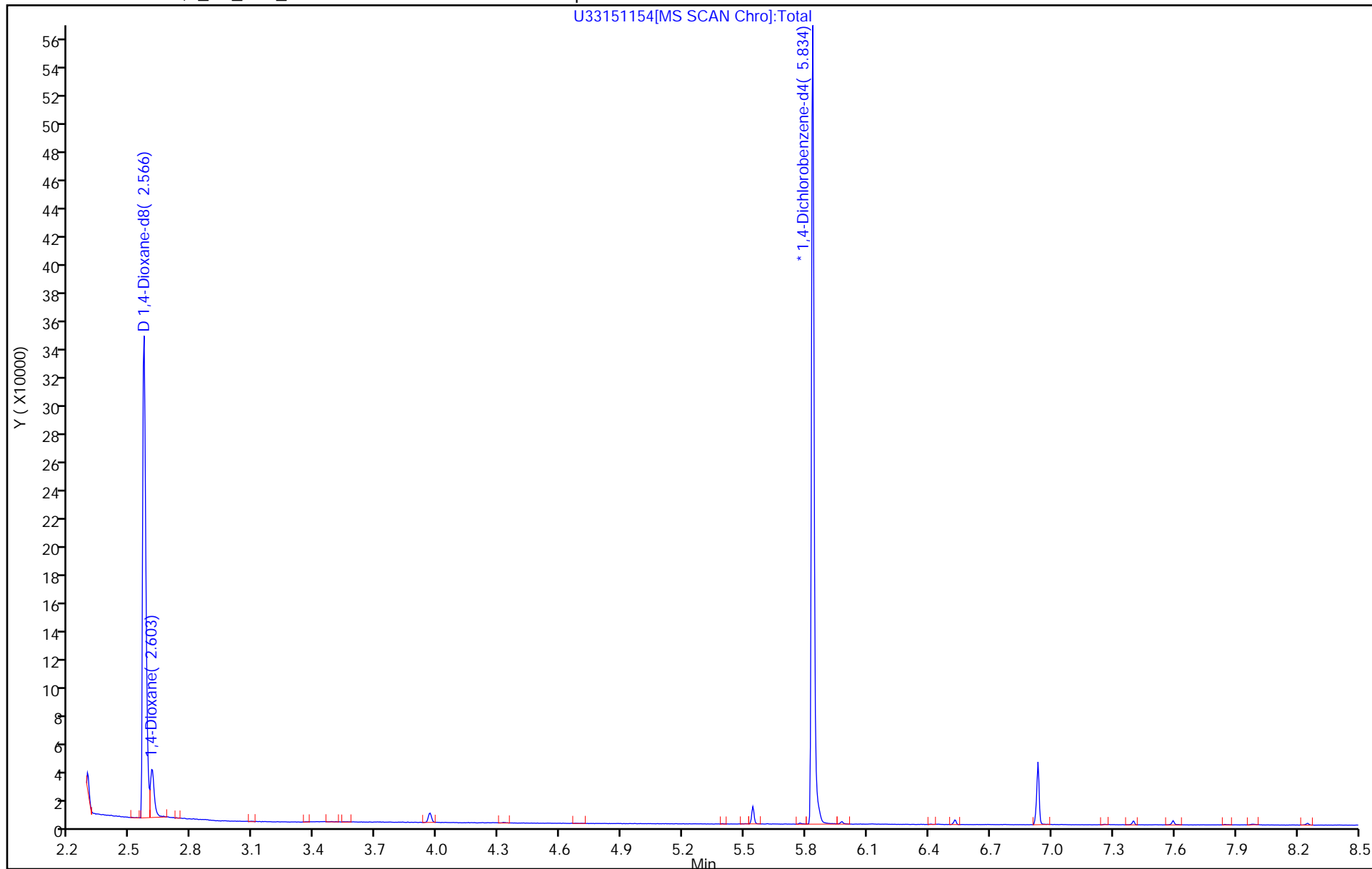
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 95

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

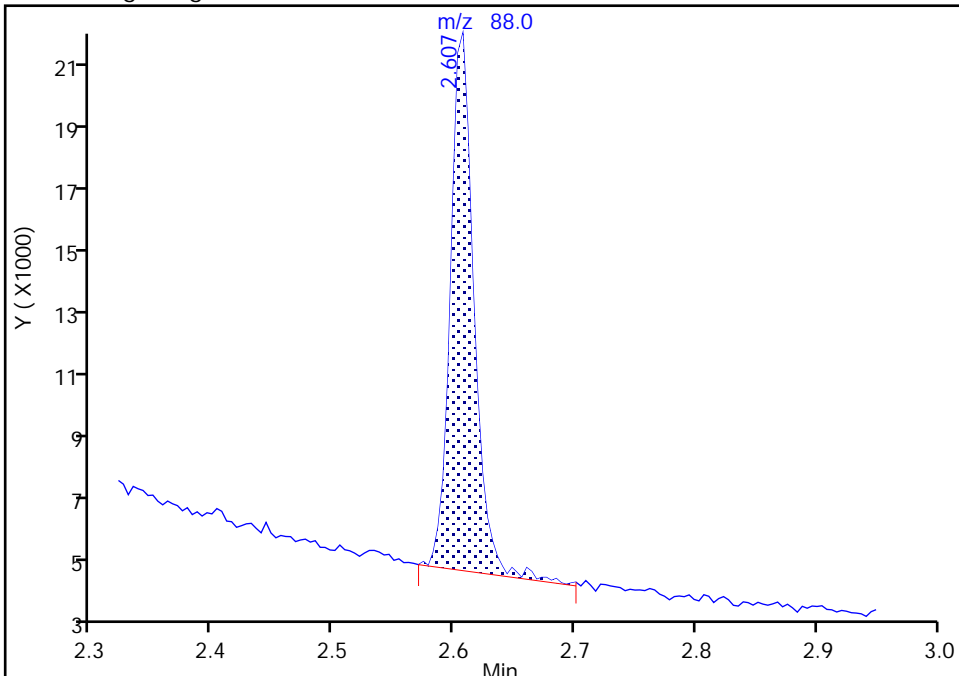
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151154.D
Injection Date: 03-Jul-2019 15:34:30 Instrument ID: HP5973U
Lims ID: ICIS
Client ID:
Operator ID: bs ALS Bottle#: 95 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

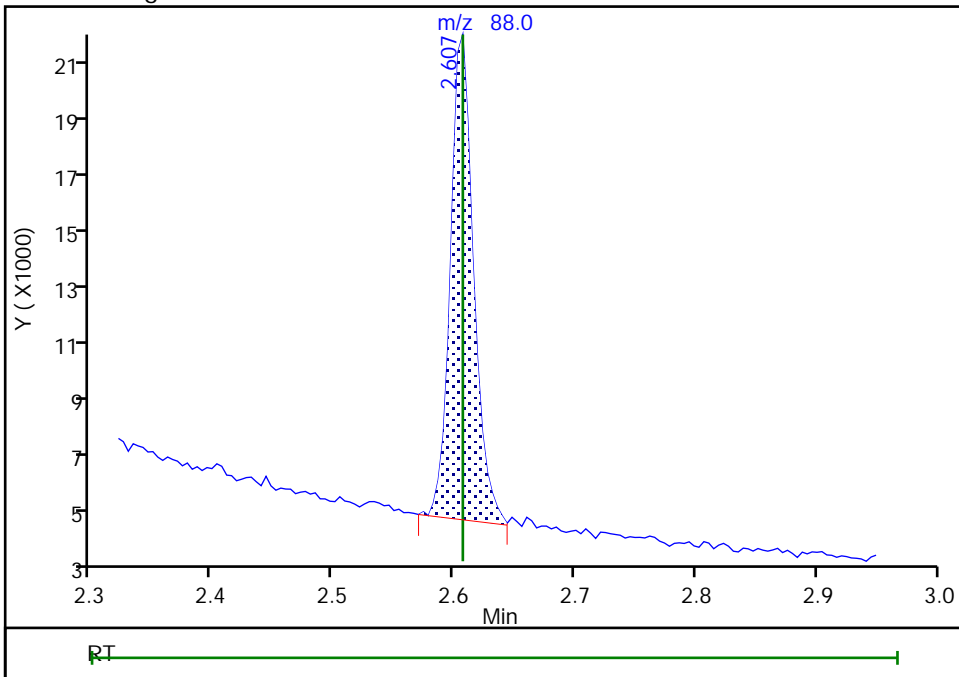
RT: 2.61
Area: 22853
Amount: 0.588073
Amount Units: ng/ul

Processing Integration Results



RT: 2.61
Area: 22392
Amount: 0.583715
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 04-Jul-2019 11:36:14
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151155.D
 Lims ID: IC - SIM - 0.8
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 03-Jul-2019 15:58:30 ALS Bottle#: 96 Worklist Smp#: 6
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0082400-006
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 04-Jul-2019 11:37:42 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1011

First Level Reviewer: schickr Date: 04-Jul-2019 11:36:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.570	2.566	0.004	90	322719	8.00	8.05	
3 1,4-Dioxane	88	2.611	2.607	0.004	86	31896	0.8000	0.8051	
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.834	0.000	96	347458	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00075 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00168 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151155.D

Injection Date: 03-Jul-2019 15:58:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: IC - SIM - 0.8

Worklist Smp#: 6

Client ID:

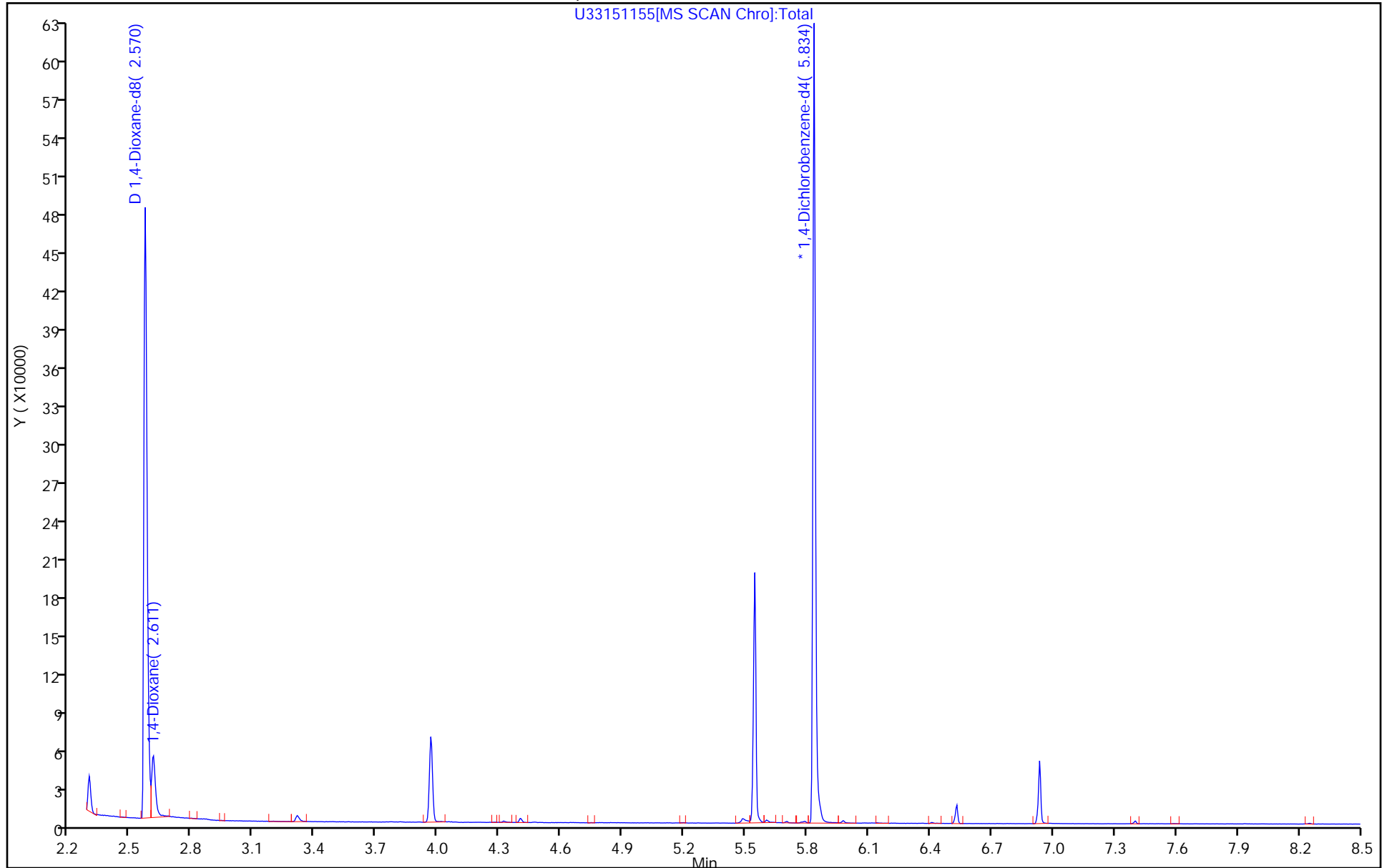
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 96

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151156.D
 Lims ID: IC - SIM - 1.0
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 03-Jul-2019 16:23:30 ALS Bottle#: 97 Worklist Smp#: 7
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0082400-007
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 04-Jul-2019 11:37:43 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1011

First Level Reviewer: schickr Date: 04-Jul-2019 11:36:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.566	2.566	0.000	90	399959	10.0	10.1	
3 1,4-Dioxane	88	2.607	2.607	0.000	86	39349	1.00	1.00	M
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.834	0.000	96	343815	4.00	4.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_1,4SIM_WRK_00076 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00168 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151156.D

Injection Date: 03-Jul-2019 16:23:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: IC - SIM - 1.0

Worklist Smp#: 7

Client ID:

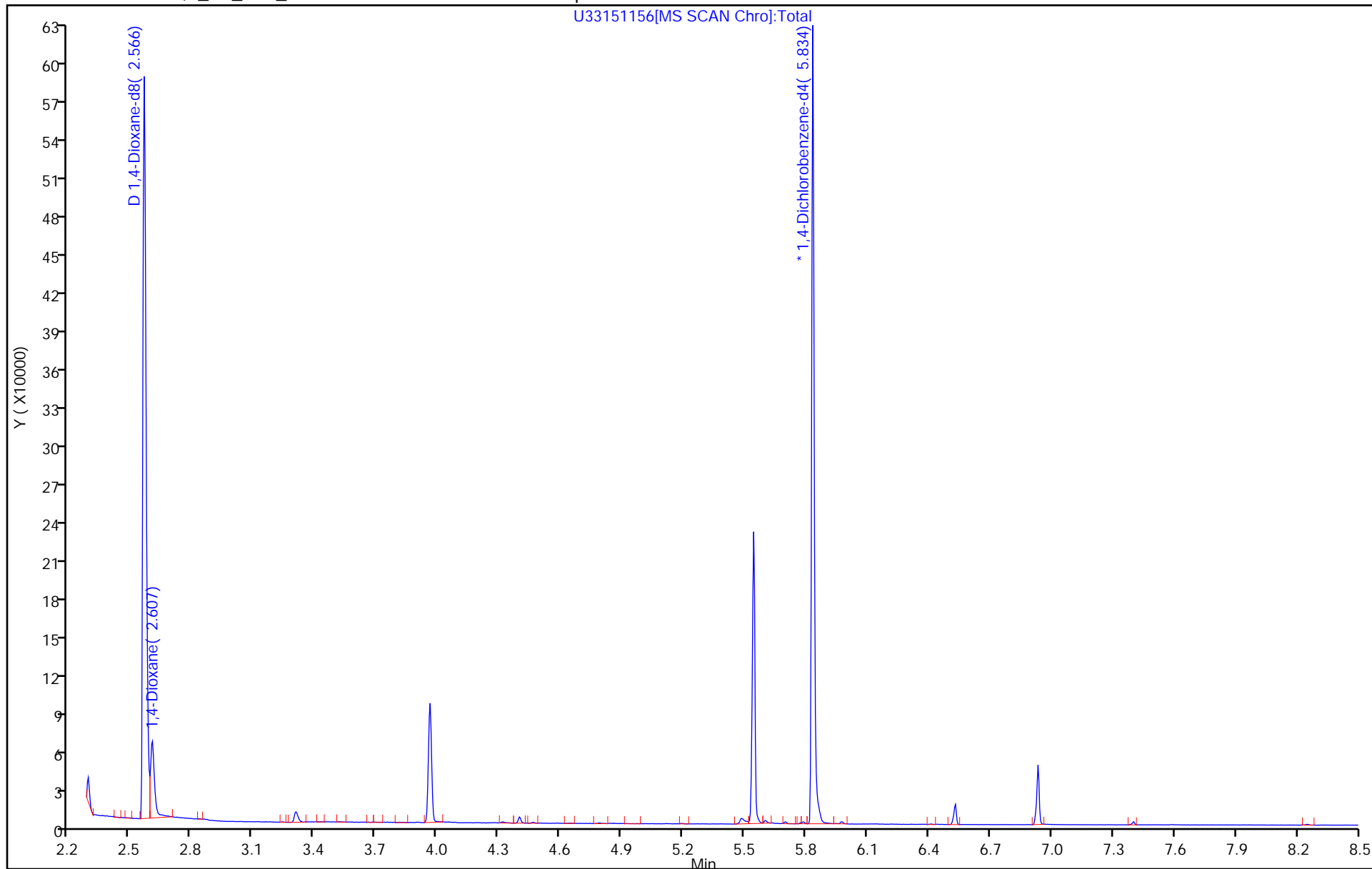
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 97

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

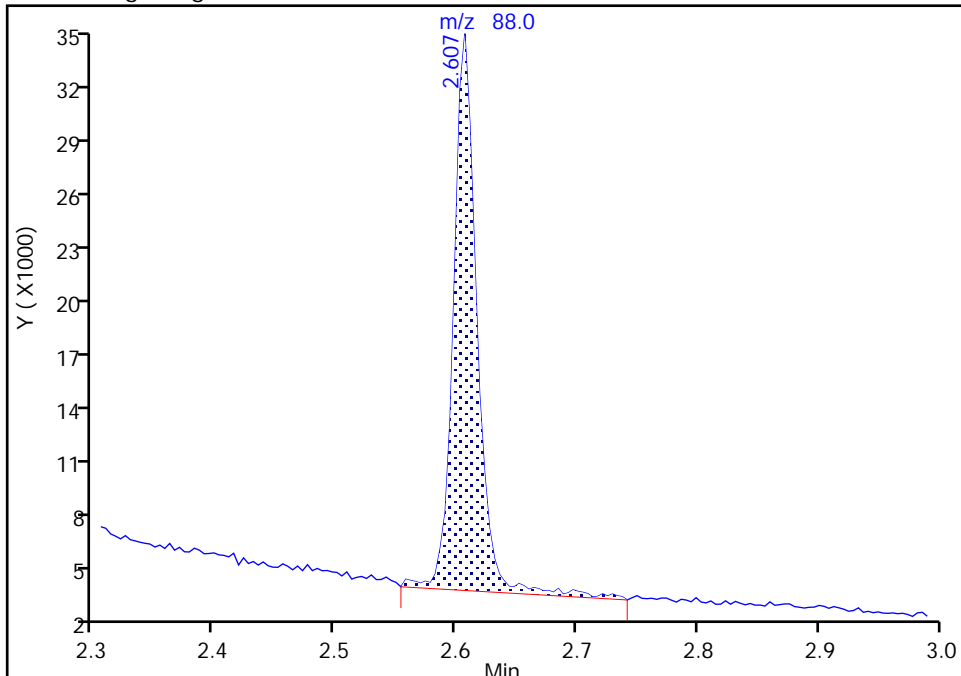
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151156.D
Injection Date: 03-Jul-2019 16:23:30 Instrument ID: HP5973U
Lims ID: IC - SIM - 1.0
Client ID:
Operator ID: bs ALS Bottle#: 97 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

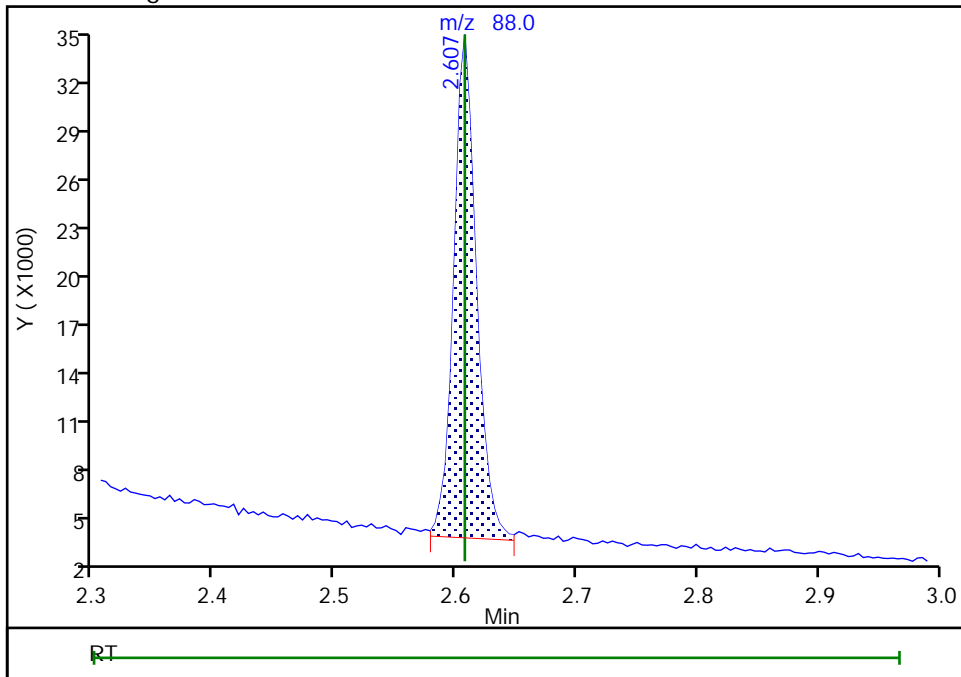
RT: 2.61
Area: 41242
Amount: 1.039953
Amount Units: ng/ul

Processing Integration Results



RT: 2.61
Area: 39349
Amount: 1.001828
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 04-Jul-2019 11:36:29
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Lims ID: IC - SIM - 1.2
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 03-Jul-2019 16:46:30 ALS Bottle#: 98 Worklist Smp#: 8
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0082400-008
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 04-Jul-2019 11:37:43 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1011

First Level Reviewer: schickr Date: 04-Jul-2019 11:36:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.570	2.566	0.004	91	478715	12.0	12.1	
3 1,4-Dioxane	88	2.611	2.607	0.004	85	46881	1.20	1.20	M
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.834	0.000	95	342707	4.00	4.00	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_1,4SIM_WRK_00077 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00168 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D

Injection Date: 03-Jul-2019 16:46:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: IC - SIM - 1.2

Worklist Smp#: 8

Client ID:

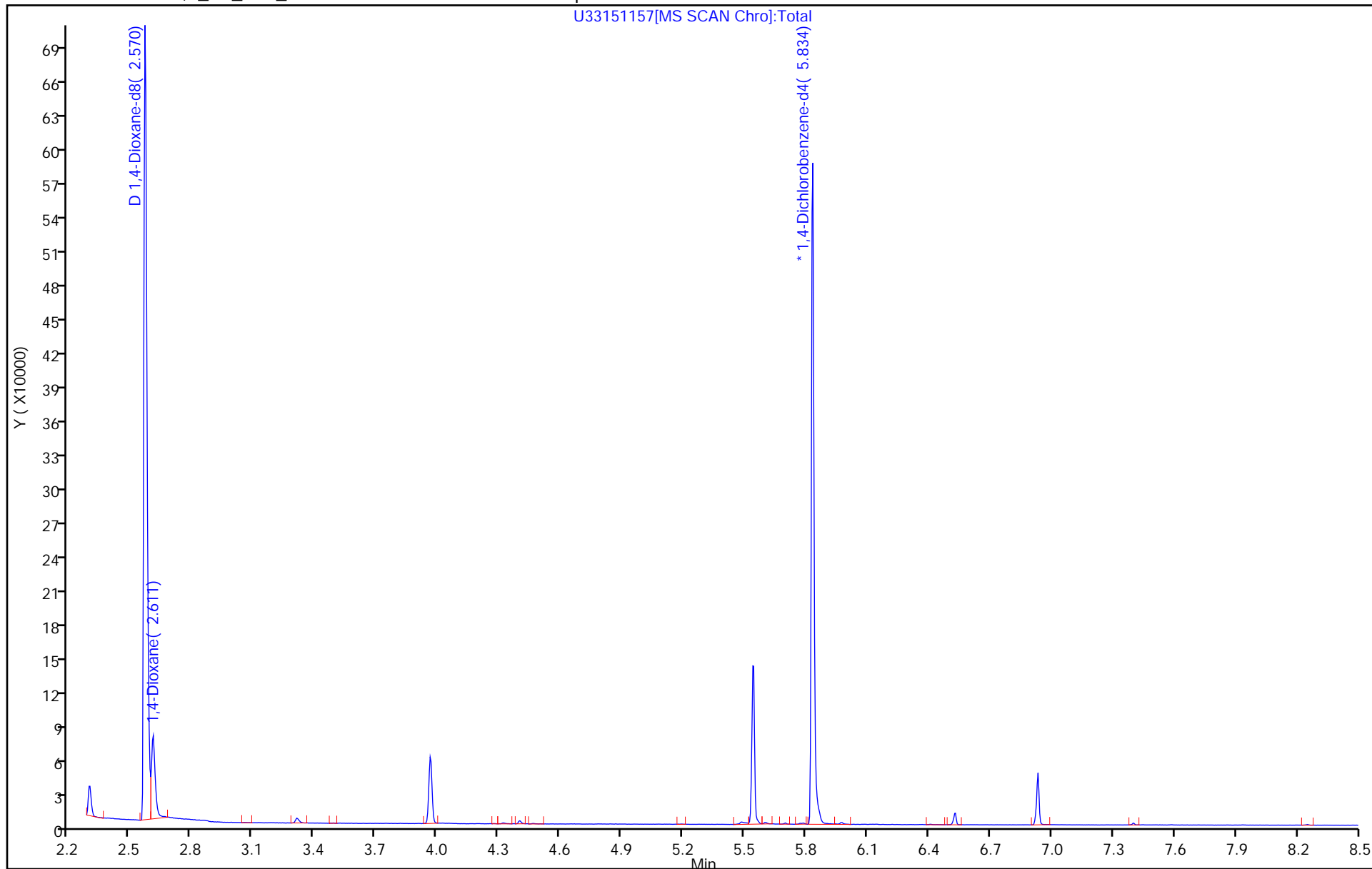
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 98

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

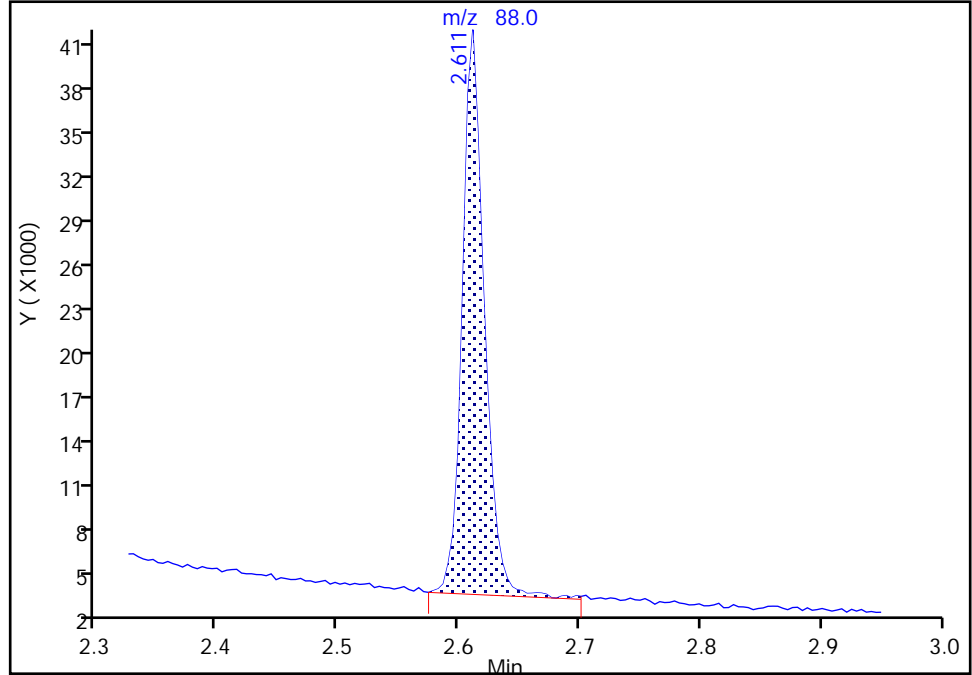
Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
Injection Date: 03-Jul-2019 16:46:30 Instrument ID: HP5973U
Lims ID: IC - SIM - 1.2
Client ID:
Operator ID: bs ALS Bottle#: 98 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Column: Detector MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Signal: 1

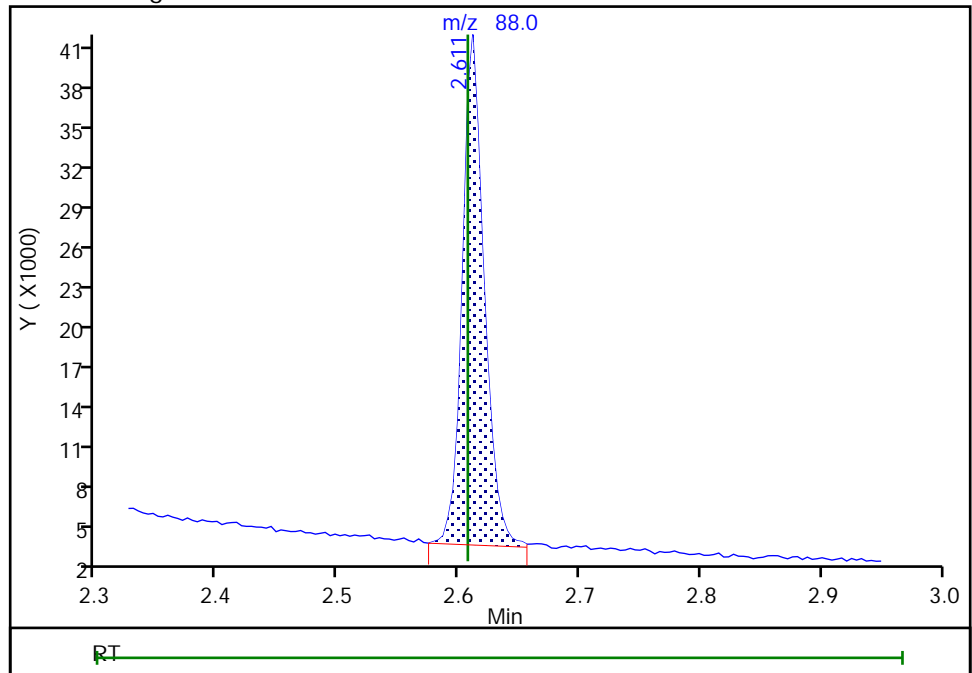
RT: 2.61
Area: 47347
Amount: 1.206576
Amount Units: ng/ul

Processing Integration Results



RT: 2.61
Area: 46881
Amount: 1.196675
Amount Units: ng/ul

Manual Integration Results



Reviewer: schickr, 04-Jul-2019 11:36:38
Audit Action: Split an Integrated Peak

Audit Reason: Peak Tail

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-482664/3 Calibration Date: 07/18/2019 12:41
 Instrument ID: HP5973U Calib Start Date: 07/03/2019 14:45
 GC Column: RXI-5Sil MS(0.5 ID: 0.25 (mm) Calib End Date: 07/03/2019 16:46
 Lab File ID: U33151366.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	AveID	0.9820	0.9874	0.0100	603	600	0.5	20.0
1,4-Dioxane-d8	Ave	0.4615	0.5214	0.0100	6780	6000	13.0	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151366.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 18-Jul-2019 12:41:30 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: ccvis
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 18-Jul-2019 13:01:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.574	2.558	0.016	92	432954	6.00	6.78	
3 1,4-Dioxane	88	2.615	2.615	0.000	86	42749	0.6000	0.6033	
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	97	553552	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00074 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151366.D

Injection Date: 18-Jul-2019 12:41:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

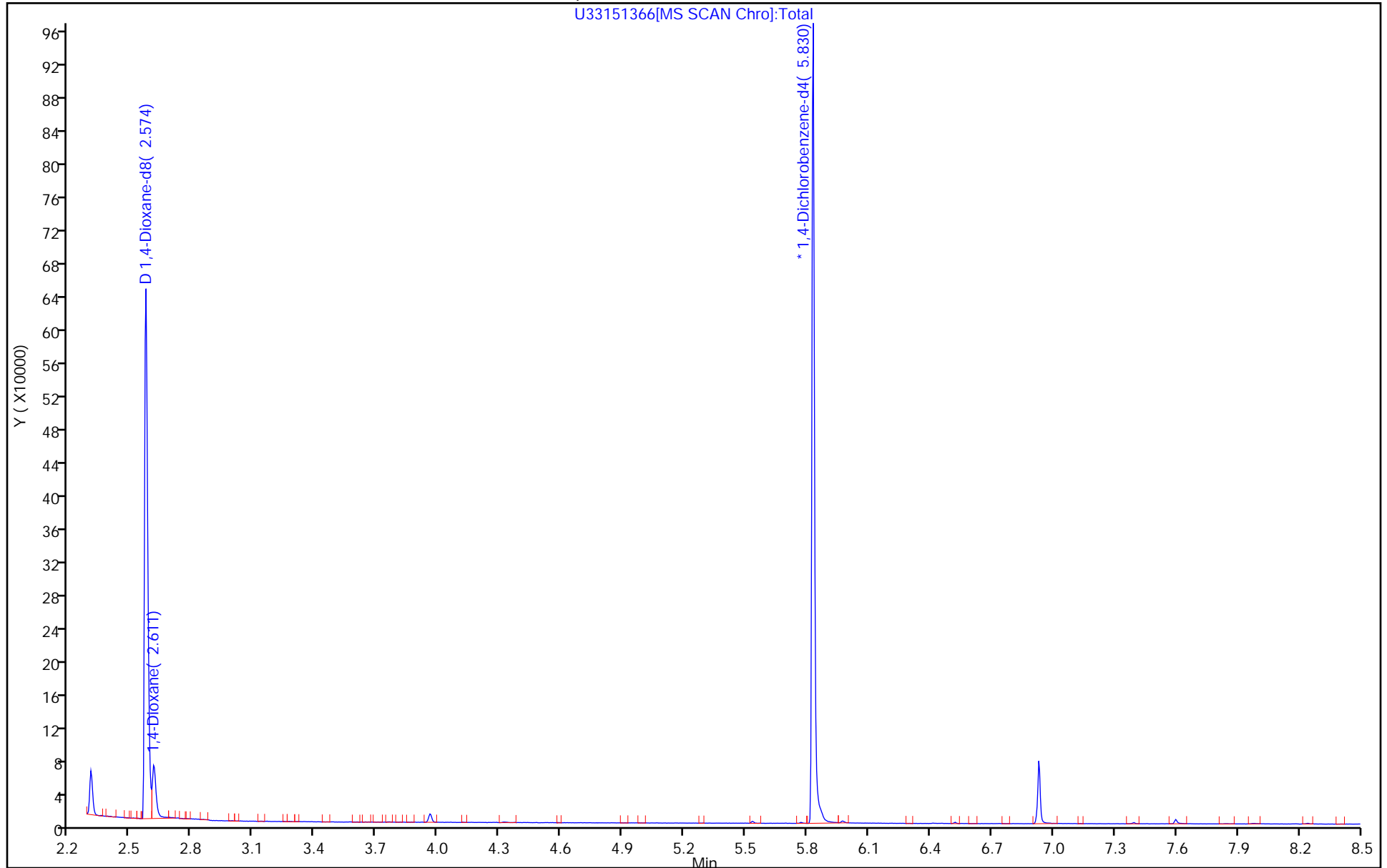
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 3

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-482665/3 Calibration Date: 07/19/2019 00:36
 Instrument ID: HP5973U Calib Start Date: 07/03/2019 14:45
 GC Column: RXI-5Sil MS(0.5 ID: 0.25 (mm) Calib End Date: 07/03/2019 16:46
 Lab File ID: U33151396.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	AveID	0.9820	0.9800	0.0100	599	600	-0.2	20.0
1,4-Dioxane-d8	Ave	0.4615	0.5385	0.0100	7000	6000	16.7	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151396.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 19-Jul-2019 00:36:30 ALS Bottle#: 33 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 33
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:45 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:36:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.575	2.574	0.001	90	432014	6.00	7.00	
3 1,4-Dioxane	88	2.615	2.615	0.000	87	42337	0.6000	0.5988	
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	96	534890	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00074 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151396.D

Injection Date: 19-Jul-2019 00:36:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

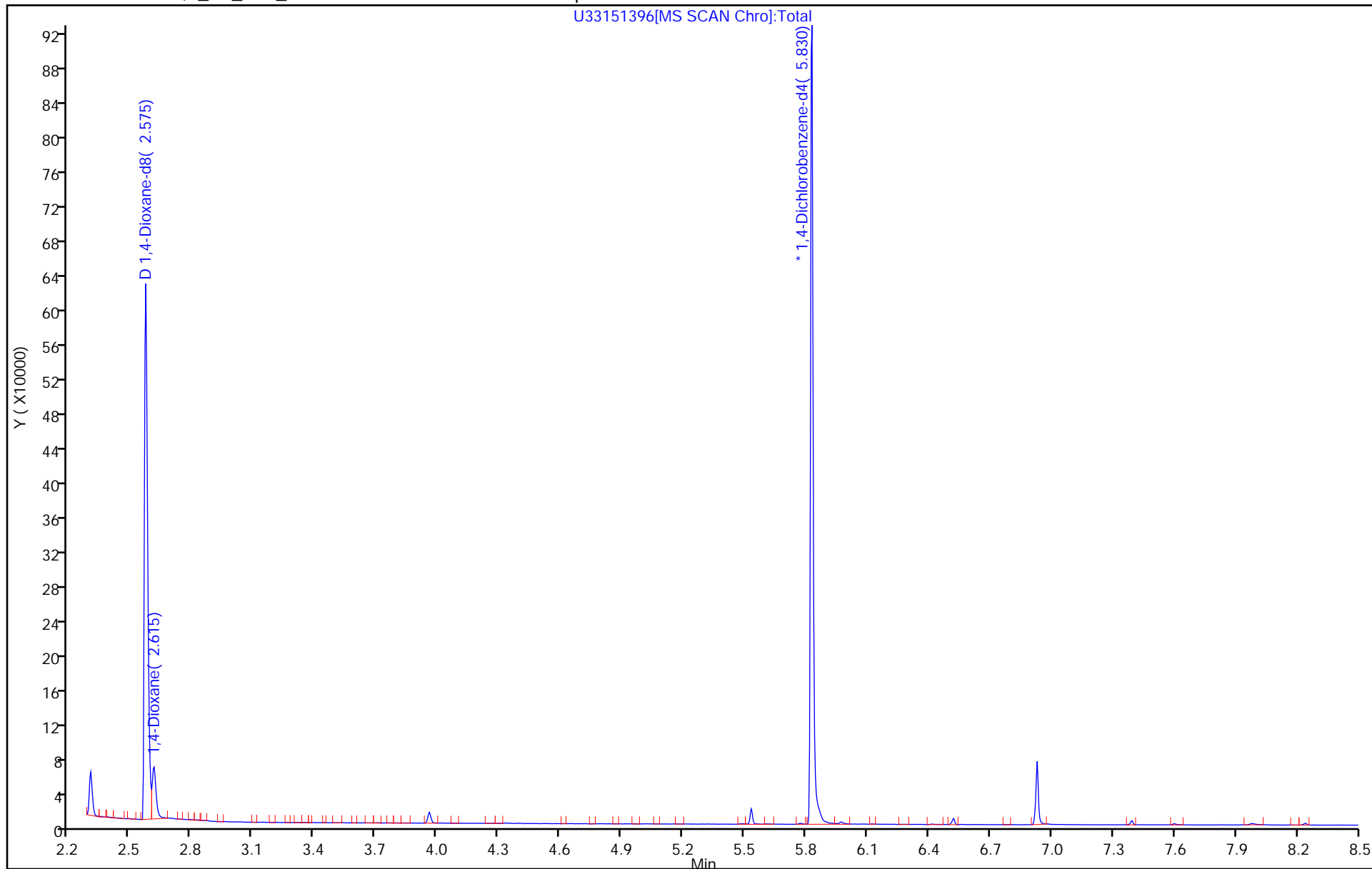
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 33

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVIS 480-482965/3 Calibration Date: 07/21/2019 14:38
 Instrument ID: HP5973U Calib Start Date: 07/03/2019 14:45
 GC Column: RXI-5Sil MS(0.5 ID: 0.25 (mm) Calib End Date: 07/03/2019 16:46
 Lab File ID: U33151420.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	AveID	0.9820	0.9682	0.0100	592	600	-1.4	20.0
1,4-Dioxane-d8	Ave	0.4615	0.5470	0.0100	7110	6000	18.5	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151420.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 21-Jul-2019 14:38:30 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: blank
 Operator ID: bs Instrument ID: HP5973U
 Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:40 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 21-Jul-2019 15:01:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.571	2.575	-0.005	90	402402	6.00	7.11	
3 1,4-Dioxane	88	2.611	2.611	0.000	87	38961	0.6000	0.5916	
* 2 1,4-Dichlorobenzene-d4	152	5.830	5.830	0.000	96	490415	4.00	4.00	

Reagents:

MB_1,4SIM_WRK_00074 Amount Added: 1.00 Units: mL
 MB_LLIS_WRK_00174 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151420.D

Injection Date: 21-Jul-2019 14:38:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

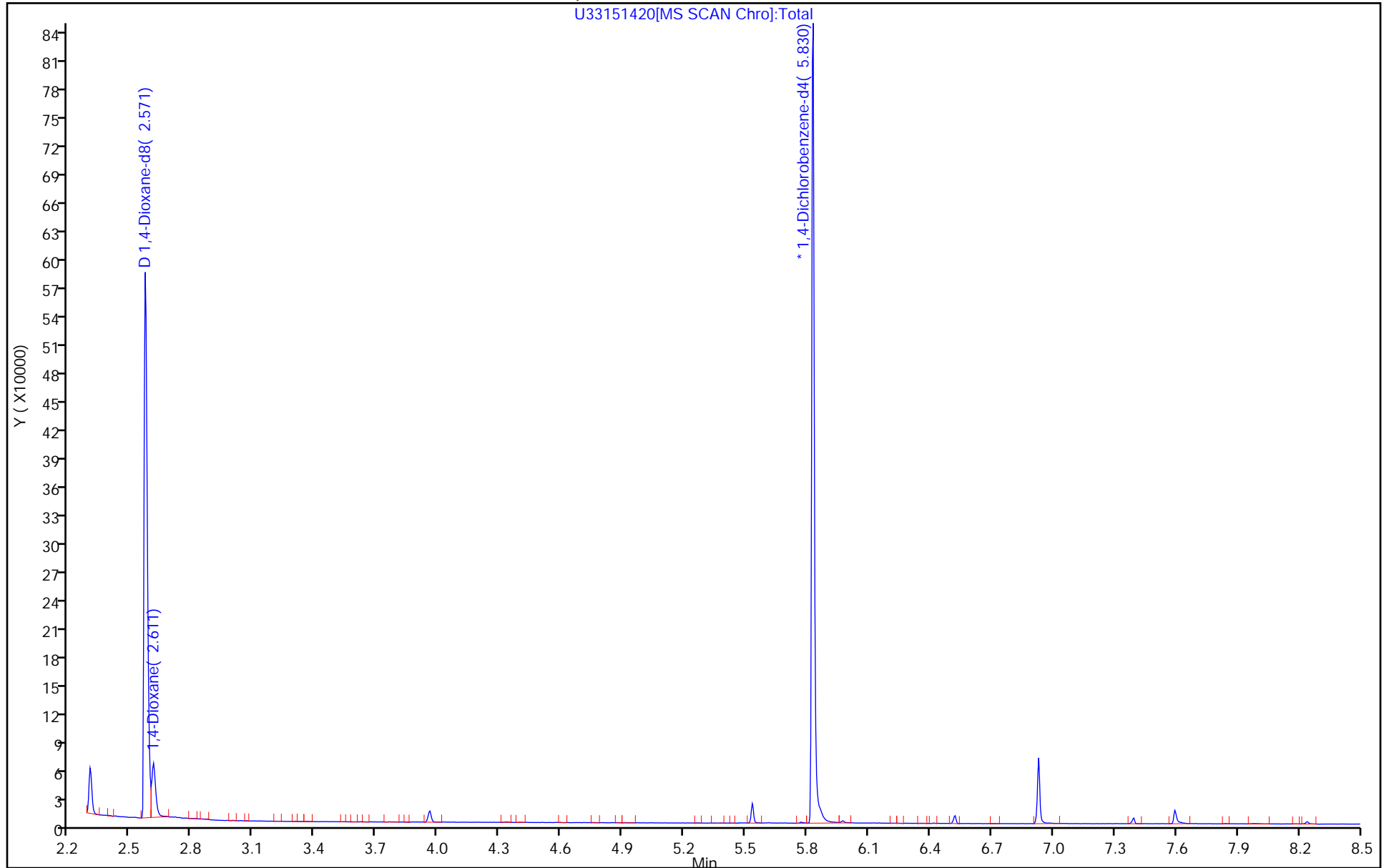
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 3

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151151.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 03-Jul-2019 14:17:30 ALS Bottle#: 92 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 480-0082400-002
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 04-Jul-2019 11:37:39 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: Deconvolution ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1011

First Level Reviewer: schickr Date: 03-Jul-2019 14:53:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 DFTPP									
7 4,4'-DDE	246	10.908	10.908	0.000	0	4793			NR
5 4,4'-DDD	235	11.197	11.197	0.000	96	29498			NR
6 4,4'-DDT	235	11.469	11.469	0.000	98	1009177	NR		NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

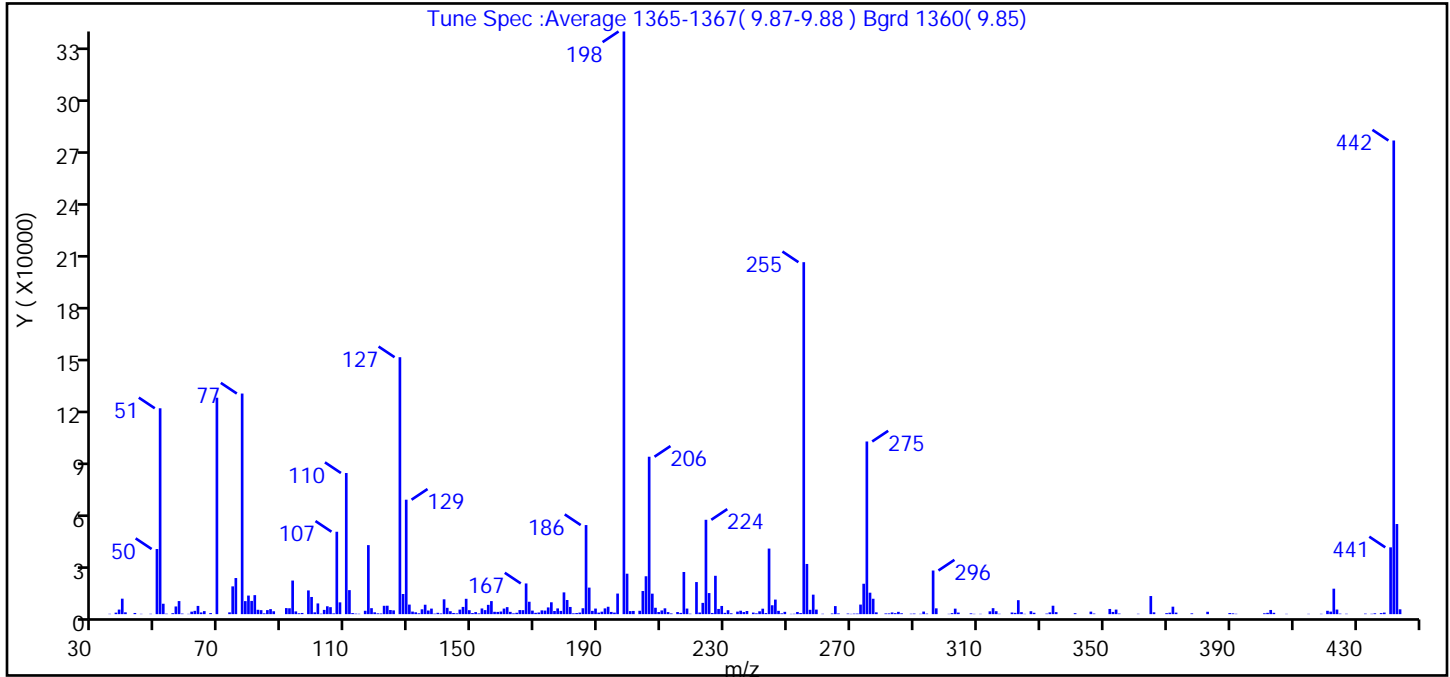
Reagents:

MB_DFTPP_WRK_00357 Amount Added: 1.00 Units: mL

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151151.D
 Injection Date: 03-Jul-2019 14:17:30 Instrument ID: HP5973U
 Lims ID: DFTPP
 Client ID:
 Operator ID: bs ALS Bottle#: 92 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
 Tune Method: DFTPP Method 8270D, BP 198

4 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (123.0)
51	10-80% of the base peak	35.3
68	<2% of mass 69	0.0 (0.0)
69	Present	37.1
70	<2% of mass 69	0.0 (0.0)
127	10-80% of the base peak	44.1
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-60% of the base peak	29.6
365	>1% of mass 198	3.1
441	present but <24% of mass 442	11.5 (14.1)
442	base peak, or >50% of 198	81.3
443	15-24% of mass 442	15.5 (19.0)

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151151.D\1,4_Dx_SIM_HP5973U.rslt\spc
 Injection Date: 03-Jul-2019 14:17:30
 Spectrum: Tune Spec :Average 1365-1367(9.87-9.88) Bgrd 1360(9.85)
 Base Peak: 198.00
 Minimum % Base Peak: 0
 Number of Points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	192	129.00	65904	203.00	1944	289.00	244
37.00	858	130.00	5501	204.00	13320	290.00	333
38.00	2630	131.00	1472	205.00	21816	292.00	203
39.00	8910	132.00	1057	206.00	90656	293.00	1485
40.00	1050	133.00	475	207.00	11798	294.00	300
43.00	673	134.00	2793	208.00	3673	296.00	25128
45.00	177	135.00	5421	209.00	1209	297.00	3342
48.00	211	136.00	2088	210.00	2135	301.00	177
50.00	37496	137.00	3199	211.00	3353	302.00	571
51.00	118552	138.00	294	212.00	1179	303.00	3165
52.00	5993	139.00	775	213.00	408	304.00	899
53.00	262	140.00	404	215.00	1218	308.00	457
55.00	552	141.00	8547	216.00	720	309.00	169
56.00	4425	142.00	3637	217.00	24272	311.00	178
57.00	7528	143.00	1677	218.00	3208	314.00	1622
58.00	327	144.00	667	219.00	252	315.00	3442
60.00	169	145.00	456	221.00	18480	316.00	1689
61.00	1433	146.00	2603	222.00	937	317.00	207
62.00	1899	147.00	4156	223.00	6485	321.00	942
63.00	4738	148.00	8837	224.00	54336	322.00	735
64.00	980	149.00	2284	225.00	12137	323.00	8042
65.00	1739	150.00	634	226.00	683	324.00	1150
67.00	617	151.00	1172	227.00	22088	325.00	177
69.00	124632	152.00	418	228.00	3003	327.00	1675
73.00	1030	153.00	3269	229.00	4715	328.00	789
74.00	15998	154.00	2321	230.00	750	332.00	323
75.00	20792	155.00	5355	231.00	2264	333.00	1022
77.00	127040	156.00	7514	232.00	495	334.00	4848
78.00	7497	157.00	1353	234.00	1449	335.00	1157
79.00	10697	158.00	1291	235.00	1976	341.00	554
80.00	7619	159.00	1499	236.00	1203	346.00	1449
81.00	10943	160.00	3214	237.00	1803	347.00	350
82.00	2519	161.00	4037	239.00	896	352.00	2989

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151151.D\1_4_Dx_SIM_HP5973U.rsl\spc

Injection Date: 03-Jul-2019 14:17:30

Spectrum: Tune Spec :Average 1365-1367(9.87-9.88) Bgrd 1360(9.85)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	2302	162.00	1319	240.00	479	353.00	1272
84.00	451	163.00	456	241.00	1644	354.00	2624
85.00	2325	164.00	790	242.00	3138	355.00	325
86.00	2902	165.00	2345	243.00	620	361.00	212
87.00	1656	166.00	2293	244.00	37768	365.00	10425
91.00	3483	167.00	17680	245.00	5118	366.00	1053
92.00	3390	168.00	7142	246.00	8381	370.00	575
93.00	19344	169.00	2035	247.00	1902	371.00	842
94.00	1581	170.00	760	248.00	467	372.00	4298
95.00	487	171.00	944	249.00	1327	373.00	874
96.00	685	172.00	2175	251.00	170	378.00	458
98.00	13664	173.00	2045	252.00	223	383.00	1367
99.00	9885	174.00	3868	253.00	1253	390.00	622
100.00	1028	175.00	6833	254.00	621	391.00	449
101.00	6175	176.00	1792	255.00	202688	392.00	213
102.00	277	177.00	3308	256.00	28904	401.00	503
103.00	2449	178.00	1854	257.00	2499	402.00	764
104.00	4533	179.00	12532	258.00	11228	403.00	2403
105.00	4016	180.00	8140	259.00	2616	404.00	771
106.00	432	181.00	4138	261.00	214	408.00	173
107.00	47456	182.00	470	264.00	368	415.00	177
108.00	6790	183.00	638	265.00	4639	419.00	191
110.00	81272	184.00	891	266.00	389	421.00	1932
111.00	13832	185.00	3398	269.00	345	422.00	1460
112.00	604	186.00	51304	270.00	167	423.00	14665
113.00	285	187.00	15280	271.00	305	424.00	2644
114.00	217	188.00	1889	272.00	329	425.00	293
116.00	1945	189.00	3220	273.00	5506	427.00	223
117.00	39752	190.00	879	274.00	17504	433.00	308
118.00	3440	191.00	1417	275.00	99432	435.00	210
119.00	1044	192.00	3324	276.00	12350	436.00	491
120.00	460	193.00	4259	277.00	8861	438.00	609
121.00	380	194.00	1269	278.00	1036	439.00	893
122.00	4807	195.00	883	281.00	410	441.00	38472

Report Date: 04-Jul-2019 11:37:39

Chrom Revision: 2.3 20-Jun-2019 20:50:56

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151151.D\1,4_Dx_SIM_HP5973U.rsl\sp

Injection Date: 03-Jul-2019 14:17:30

Spectrum: Tune Spec :Average 1365-1367(9.87-9.88) Bgrd 1360(9.85)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	4852	196.00	11858	282.00	421	442.00	272768
124.00	2370	198.00	335552	283.00	982	443.00	51896
125.00	2166	199.00	23296	284.00	571	444.00	2783
127.00	147968	200.00	1753	285.00	1328		
128.00	11599	201.00	1841	286.00	497		

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151151.D

Injection Date: 03-Jul-2019 14:17:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: bs

ALS Bottle#: 92

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

6 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

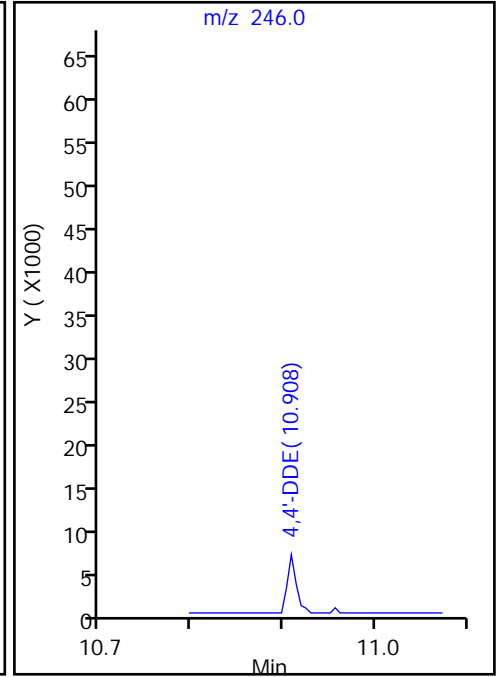
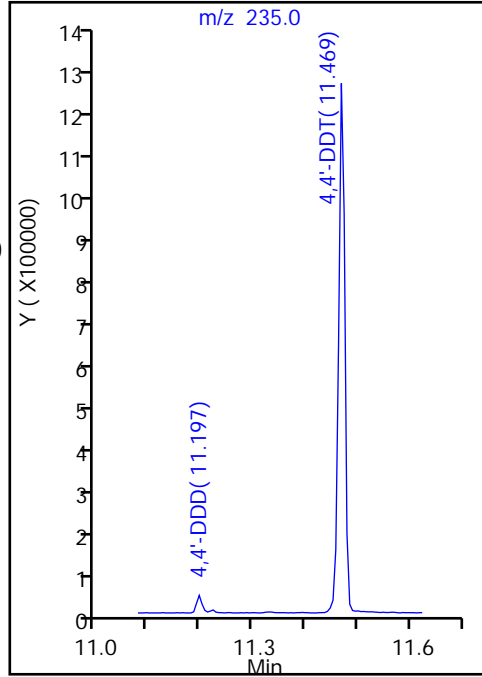
6 4,4'-DDT, Area = 1009177

5 4,4'-DDD, Area = 29498

7 4,4'-DDE, Area = 4793

%Breakdown: 3.29%, <= 20.00%

Passed



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151365.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 18-Jul-2019 12:13:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: dftpp
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:56 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: Deconvolution ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 18-Jul-2019 12:51:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 DFTPP									
7 4,4'-DDE	246	10.908	10.908	0.000	0	2650			NR
5 4,4'-DDD	235	11.197	11.197	0.000	1	4365			NR
6 4,4'-DDT	235	11.464	11.464	0.000	98	1758977	NR		NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

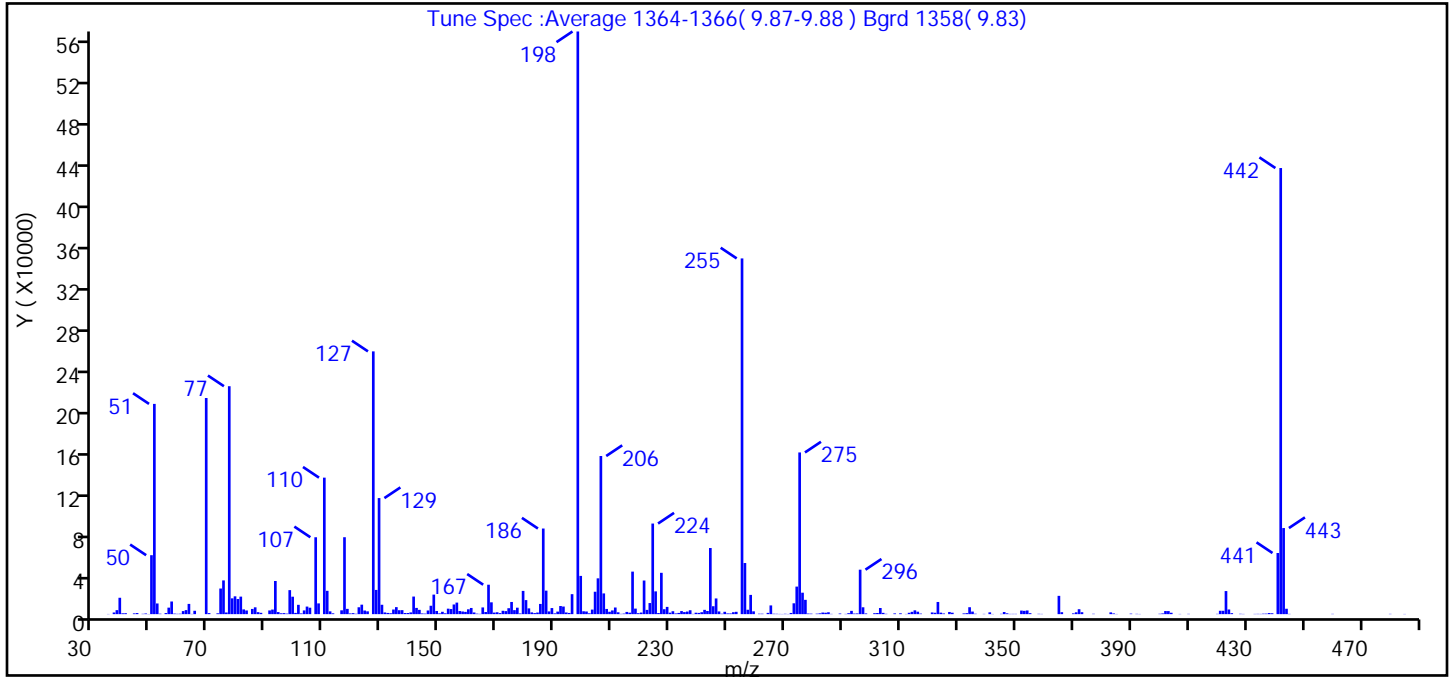
Reagents:

MB_DFTPP_WRK_00355 Amount Added: 1.00 Units: mL

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151365.D
 Injection Date: 18-Jul-2019 12:13:30 Instrument ID: HP5973U
 Lims ID: DFTPP
 Client ID:
 Operator ID: bs ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
 Tune Method: DFTPP Method 8270D, BP 198

4 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (130.6)
51	10-80% of the base peak	36.1
68	<2% of mass 69	0.0 (0.0)
69	Present	37.1
70	<2% of mass 69	0.2 (0.5)
127	10-80% of the base peak	45.1
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.6
275	10-60% of the base peak	27.8
365	>1% of mass 198	3.1
441	present but <24% of mass 442	10.5 (13.7)
442	base peak, or >50% of 198	76.6
443	15-24% of mass 442	14.8 (19.3)

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151365.D\1_4_Dx_SIM_HP5973U.rsl\spc
 Injection Date: 18-Jul-2019 12:13:30
 Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)
 Base Peak: 198.00
 Minimum % Base Peak: 0
 Number of Points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	183	134.00	4477	216.00	1429	308.00	717
37.00	1598	135.00	6801	217.00	41256	310.00	804
38.00	3874	136.00	3819	218.00	5370	312.00	184
39.00	15885	137.00	3885	219.00	924	313.00	1321
40.00	829	138.00	1087	220.00	1537	314.00	2242
41.00	929	139.00	1112	221.00	32616	315.00	3700
44.00	735	140.00	1682	222.00	4122	316.00	2365
45.00	1063	141.00	17064	223.00	10762	317.00	541
47.00	318	142.00	6053	224.00	87888	321.00	1644
48.00	644	143.00	4157	225.00	22088	322.00	1339
49.00	153	144.00	671	226.00	1064	323.00	11811
50.00	57184	145.00	516	227.00	40096	324.00	1440
51.00	203968	146.00	3543	228.00	4786	325.00	655
52.00	10357	147.00	8134	229.00	7031	327.00	2102
53.00	434	148.00	18960	230.00	1418	328.00	1395
55.00	1064	149.00	3033	231.00	2829	332.00	705
56.00	6302	150.00	778	232.00	686	333.00	975
57.00	12267	151.00	2286	233.00	1189	334.00	6716
58.00	538	152.00	825	234.00	2979	335.00	2491
59.00	326	153.00	5306	235.00	1991	336.00	398
60.00	419	154.00	4924	236.00	2488	339.00	243
61.00	2955	155.00	9372	237.00	3775	341.00	1759
62.00	3911	156.00	11192	238.00	237	342.00	178
63.00	9933	157.00	3010	239.00	1376	345.00	312
64.00	224	158.00	2562	240.00	1198	346.00	2057
65.00	3266	159.00	2198	241.00	1864	347.00	795
69.00	209664	160.00	4704	242.00	4172	348.00	244
70.00	1002	161.00	5993	243.00	3069	349.00	267
73.00	801	162.00	1620	244.00	64152	350.00	272
74.00	24848	163.00	473	245.00	7676	352.00	3448
75.00	32728	164.00	291	246.00	15224	353.00	3201
76.00	1605	165.00	6508	247.00	2622	354.00	3556
77.00	221120	166.00	2049	248.00	428	355.00	948

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151365.D\1_4_Dx_SIM_HP5973U.rslt\spc

Injection Date: 18-Jul-2019 12:13:30

Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	15322	167.00	28552	249.00	2285	358.00	313
79.00	17288	168.00	11468	250.00	703	359.00	225
80.00	14660	169.00	1500	251.00	693	365.00	17744
81.00	17000	170.00	1833	252.00	1880	366.00	1884
82.00	4601	171.00	1009	253.00	2264	370.00	756
83.00	3555	172.00	3257	255.00	345088	371.00	1776
85.00	5050	173.00	2931	256.00	49592	372.00	4780
86.00	6621	174.00	5749	257.00	4266	373.00	1875
87.00	1928	175.00	11814	258.00	18672	377.00	353
88.00	1288	176.00	3873	259.00	2733	383.00	1711
91.00	3591	177.00	6256	261.00	416	384.00	702
92.00	4442	178.00	671	262.00	423	385.00	179
93.00	32160	179.00	22552	264.00	1234	390.00	506
94.00	1997	180.00	13619	265.00	8466	392.00	283
95.00	842	181.00	5600	266.00	391	393.00	188
96.00	998	182.00	1696	267.00	334	400.00	369
97.00	532	183.00	1024	268.00	230	401.00	697
98.00	23296	184.00	1550	269.00	182	402.00	3011
99.00	16920	185.00	9899	270.00	341	403.00	2961
100.00	1212	186.00	83056	271.00	178	404.00	1354
101.00	9042	187.00	22800	272.00	1154	407.00	202
102.00	697	188.00	2642	273.00	10521	410.00	275
103.00	3611	189.00	5900	274.00	26720	420.00	285
104.00	7344	190.00	750	275.00	156864	421.00	3265
105.00	6245	191.00	2465	276.00	20808	422.00	3249
107.00	74584	192.00	7875	277.00	13880	423.00	22392
108.00	10427	193.00	7371	278.00	575	424.00	4510
110.00	132416	194.00	1614	279.00	478	425.00	955
111.00	22624	195.00	1158	281.00	466	428.00	332
112.00	2709	196.00	19384	282.00	786	429.00	212
113.00	796	198.00	565248	283.00	1546	433.00	231
116.00	3714	199.00	37096	284.00	1351	434.00	282
117.00	74624	200.00	2792	285.00	1830	435.00	244
118.00	5122	201.00	2565	286.00	250	436.00	464

Report Date: 19-Jul-2019 16:39:57

Chrom Revision: 2.3 15-Jul-2019 06:58:08

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151365.D\1,4_Dx_SIM_HP5973U.rslt\sp

Injection Date: 18-Jul-2019 12:13:30

Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 321

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	688	202.00	815	289.00	609	437.00	501
120.00	981	203.00	4420	291.00	232	438.00	1063
121.00	368	204.00	21736	292.00	934	439.00	860
122.00	6674	205.00	34736	293.00	3178	441.00	59304
123.00	9194	206.00	153408	294.00	566	442.00	432768
124.00	3498	207.00	20104	295.00	674	443.00	83520
125.00	2725	208.00	5044	296.00	43136	444.00	5227
127.00	254912	209.00	2302	297.00	6660	445.00	245
128.00	23488	210.00	3593	298.00	685	460.00	273
129.00	112592	211.00	6440	301.00	927	480.00	266
130.00	9093	212.00	1795	302.00	1117	485.00	186
131.00	1635	213.00	285	303.00	5956		
132.00	1173	214.00	542	304.00	1241		
133.00	867	215.00	2153	305.00	315		

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151365.D

Injection Date: 18-Jul-2019 12:13:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: bs

ALS Bottle#: 2

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

6 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

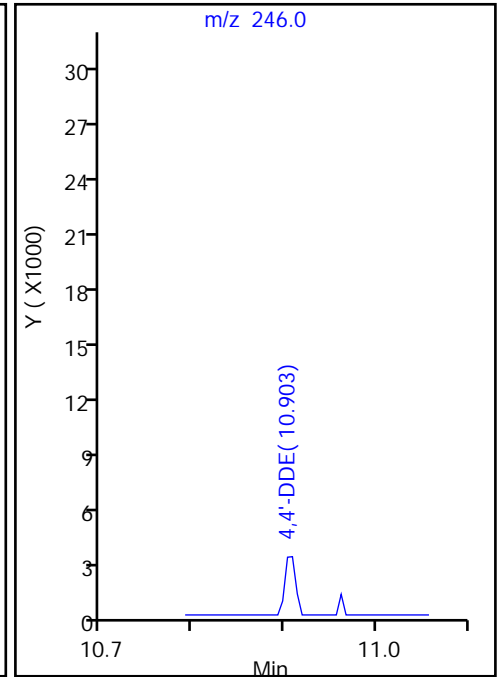
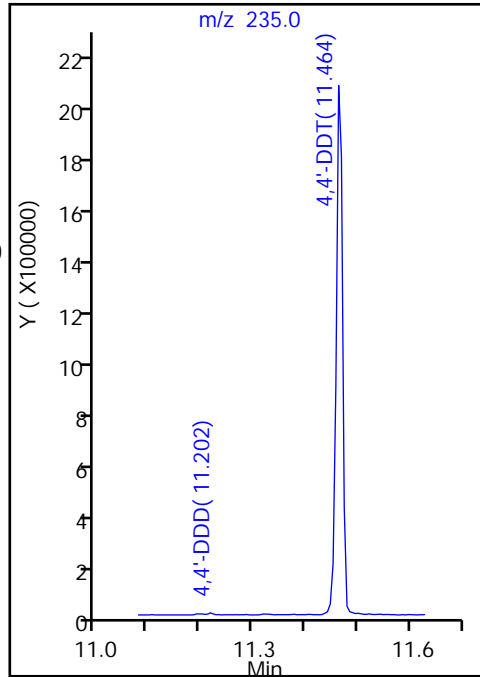
6 4,4'-DDT, Area = 1758977

5 4,4'-DDD, Area = 4365

7 4,4'-DDE, Area = 2650

%Breakdown: 0.40%, <= 20.00%

Passed



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151395.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 19-Jul-2019 00:08:30 ALS Bottle#: 32 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 32
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 21-Jul-2019 13:39:44 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: Deconvolution ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1025

First Level Reviewer: schickr Date: 21-Jul-2019 13:36:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 DFTPP									
7 4,4'-DDE	246	10.903	10.903	0.000	0	7359			NR
5 4,4'-DDD	235	11.192	11.192	0.000	97	53621			NR
6 4,4'-DDT	235	11.464	11.464	0.000	99	1557494	NR		NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

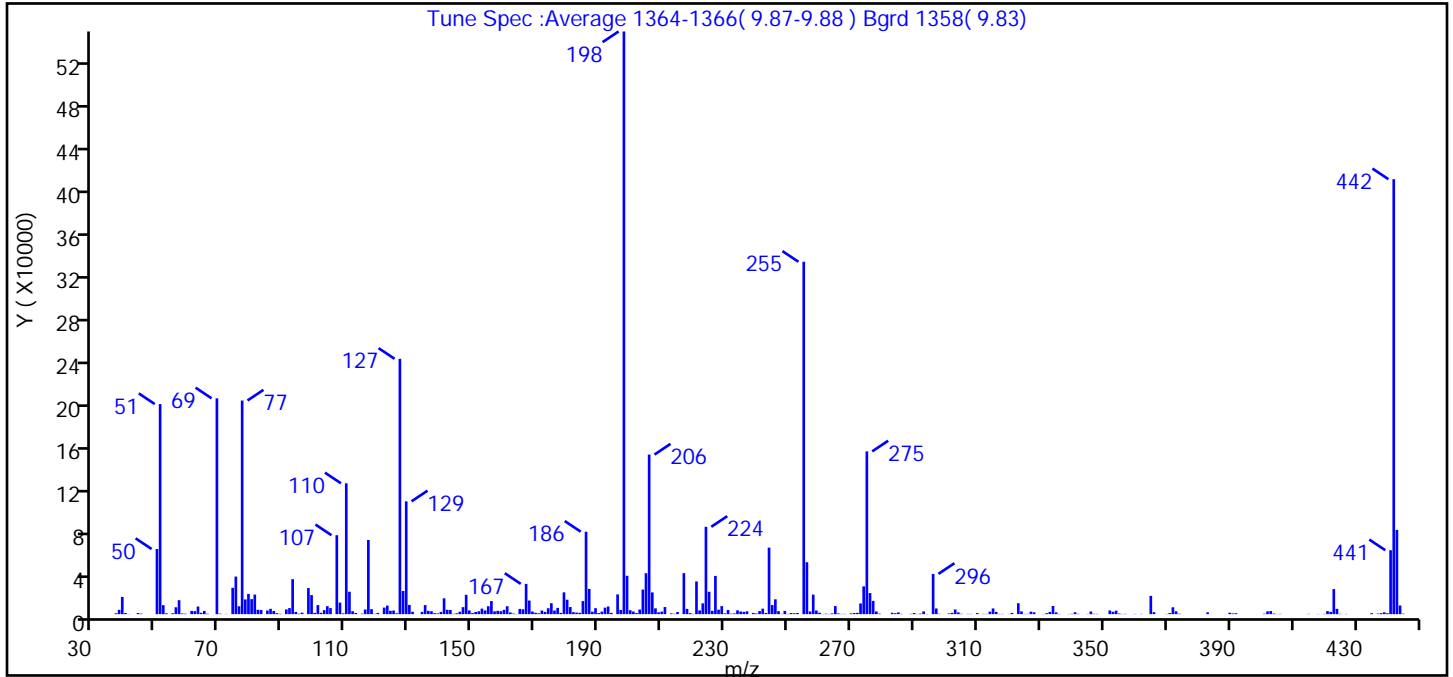
Reagents:

MB_DFTPP_WRK_00355 Amount Added: 1.00 Units: mL

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151395.D
 Injection Date: 19-Jul-2019 00:08:30 Instrument ID: HP5973U
 Lims ID: DFTPP
 Client ID:
 Operator ID: bs ALS Bottle#: 32 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
 Tune Method: DFTPP Method 8270D, BP 198

4 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (134.0)
51	10-80% of the base peak	36.1
68	<2% of mass 69	0.0 (0.0)
69	Present	37.0
70	<2% of mass 69	0.1 (0.2)
127	10-80% of the base peak	43.8
197	<2% of mass 198	0.7
199	5-9% of mass 198	6.6
275	10-60% of the base peak	27.9
365	>1% of mass 198	3.1
441	present but <24% of mass 442	11.0 (14.7)
442	base peak, or >50% of 198	74.6
443	15-24% of mass 442	14.5 (19.4)

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151395.D\1_4_Dx_SIM_HP5973U.rsl\spc
 Injection Date: 19-Jul-2019 00:08:30
 Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)
 Base Peak: 198.00
 Minimum % Base Peak: 0
 Number of Points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	843	134.00	2084	215.00	1999	307.00	235
38.00	4021	135.00	8465	217.00	38256	308.00	216
39.00	16058	136.00	3088	218.00	4939	310.00	990
40.00	1057	137.00	2691	219.00	995	312.00	260
41.00	136	138.00	951	220.00	263	313.00	196
44.00	1054	139.00	634	221.00	30520	314.00	2379
45.00	484	140.00	2080	222.00	3505	315.00	5329
50.00	60768	141.00	14763	223.00	10100	316.00	2087
51.00	196032	142.00	4122	224.00	81504	317.00	222
52.00	8338	143.00	3887	225.00	20888	318.00	216
53.00	817	144.00	306	226.00	3083	320.00	191
55.00	858	145.00	789	227.00	35680	321.00	1199
56.00	6426	146.00	2232	228.00	4141	323.00	10198
57.00	13042	147.00	6524	229.00	7490	324.00	2579
58.00	656	148.00	18008	230.00	730	325.00	236
59.00	438	149.00	3438	231.00	3929	326.00	240
61.00	3014	150.00	1005	232.00	457	327.00	2305
62.00	2800	151.00	2004	233.00	682	328.00	1664
63.00	7115	152.00	2664	234.00	3559	331.00	203
64.00	1274	153.00	5147	235.00	2446	332.00	864
65.00	2993	154.00	3504	236.00	2123	333.00	2118
66.00	448	155.00	7367	237.00	2641	334.00	7602
69.00	201408	156.00	12245	239.00	1136	335.00	1621
70.00	468	157.00	2635	240.00	635	336.00	177
72.00	182	158.00	3095	241.00	2874	339.00	178
73.00	3	159.00	2741	242.00	5110	340.00	351
74.00	24584	160.00	4038	243.00	1111	341.00	1778
75.00	35056	161.00	7378	244.00	62096	342.00	309
76.00	7373	162.00	1582	245.00	8492	345.00	215
77.00	199360	163.00	515	246.00	13868	346.00	2482
78.00	13747	164.00	181	247.00	2787	347.00	330
79.00	18880	165.00	4873	248.00	275	348.00	229
80.00	14012	166.00	4527	249.00	3033	352.00	3444

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151395.D\1_4_Dx_SIM_HP5973U.rslt\spc

Injection Date: 19-Jul-2019 00:08:30

Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	18240	167.00	28232	250.00	284	353.00	2240
82.00	4103	168.00	12695	251.00	1083	354.00	3259
83.00	3907	169.00	2423	252.00	819	355.00	592
85.00	3395	170.00	1316	253.00	1128	356.00	172
86.00	4975	171.00	776	255.00	328832	357.00	277
87.00	2934	172.00	3362	256.00	48440	360.00	212
88.00	938	173.00	2098	257.00	2519	362.00	220
89.00	343	174.00	5524	258.00	18248	365.00	17040
91.00	4401	175.00	10217	259.00	3369	366.00	1854
92.00	5631	176.00	3391	260.00	1345	370.00	198
93.00	32648	177.00	5820	261.00	207	371.00	1023
94.00	2125	178.00	1208	262.00	418	372.00	6399
95.00	454	179.00	20328	263.00	241	373.00	2687
96.00	1393	180.00	13459	264.00	700	374.00	417
98.00	24336	181.00	6619	265.00	7527	383.00	1682
99.00	17784	182.00	1837	266.00	655	390.00	1301
100.00	1196	183.00	1434	267.00	235	391.00	702
101.00	8483	184.00	1277	268.00	245	392.00	857
102.00	1274	185.00	12197	270.00	734	401.00	446
103.00	3742	186.00	76936	271.00	1021	402.00	2613
104.00	7444	187.00	23520	272.00	1236	403.00	2912
105.00	5651	188.00	2305	273.00	9954	404.00	589
107.00	73672	189.00	5576	274.00	25920	405.00	176
108.00	10782	190.00	1013	275.00	151872	406.00	268
109.00	704	191.00	2351	276.00	19736	415.00	252
110.00	122104	192.00	6068	277.00	12383	418.00	167
111.00	20896	193.00	7135	278.00	2529	420.00	241
112.00	2773	194.00	1200	279.00	506	421.00	2834
113.00	1155	196.00	18432	283.00	1280	422.00	2139
115.00	455	197.00	3971	284.00	861	423.00	23376
116.00	4329	198.00	543744	285.00	1590	424.00	4948
117.00	69176	199.00	35792	286.00	264	425.00	320
118.00	4666	200.00	3640	289.00	322	427.00	210
119.00	277	201.00	2450	290.00	1040	435.00	908

Report Date: 21-Jul-2019 13:39:45

Chrom Revision: 2.3 15-Jul-2019 06:58:08

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151395.D\1,4_Dx_SIM_HP5973U.rslt\sp

Injection Date: 19-Jul-2019 00:08:30

Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 313

m/z	Y	m/z	Y	m/z	Y	m/z	Y
120.00	1127	202.00	1004	291.00	215	437.00	549
122.00	6108	203.00	4301	292.00	532	438.00	951
123.00	7967	204.00	22920	293.00	2589	439.00	1681
124.00	3104	205.00	38200	294.00	189	440.00	891
125.00	3373	206.00	148928	296.00	37568	441.00	59664
126.00	827	207.00	20280	297.00	5306	442.00	405888
127.00	238272	208.00	5411	298.00	251	443.00	78600
128.00	21608	209.00	1698	301.00	603	444.00	8096
129.00	105272	210.00	2395	302.00	1193	445.00	435
130.00	8570	211.00	6641	303.00	4343		
131.00	2234	213.00	706	304.00	1606		
132.00	63	214.00	312	305.00	340		

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82721.b\U33151395.D

Injection Date: 19-Jul-2019 00:08:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: bs

ALS Bottle#: 32

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

6 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

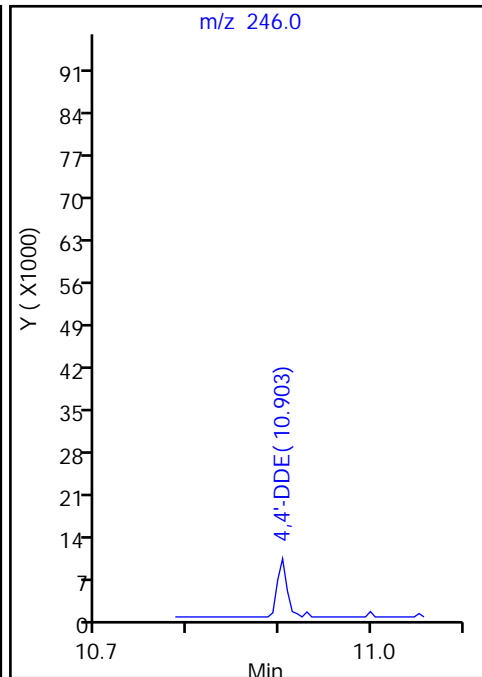
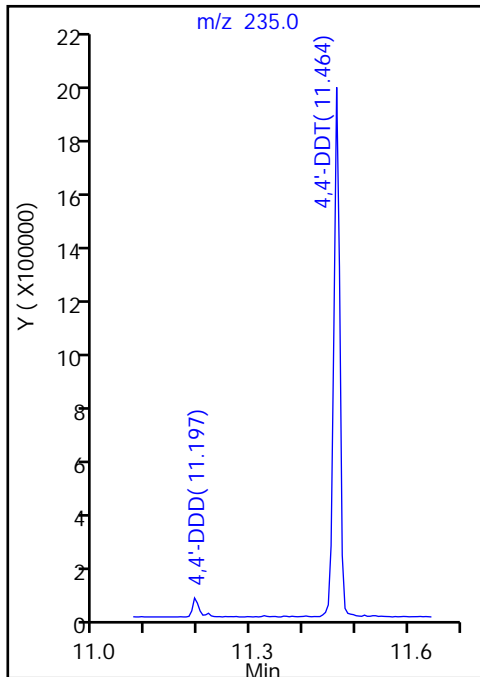
6 4,4'-DDT, Area = 1557494

5 4,4'-DDD, Area = 53621

7 4,4'-DDE, Area = 7359

%Breakdown: 3.77%, <= 20.00%

Passed



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151419.D
 Lims ID: DFTPP
 Client ID:
 Sample Type: DFTPP
 Inject. Date: 21-Jul-2019 14:10:30 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: dftpp
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 22-Jul-2019 13:37:38 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: Deconvolution ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1021

First Level Reviewer: schickr Date: 21-Jul-2019 15:01:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 DFTPP									
7 4,4'-DDE	246	10.903	10.903	0.000	0	6367			NR
5 4,4'-DDD	235	11.191	11.191	0.000	95	43559			NR
6 4,4'-DDT	235	11.464	11.464	0.000	98	1395132	NR		NR

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

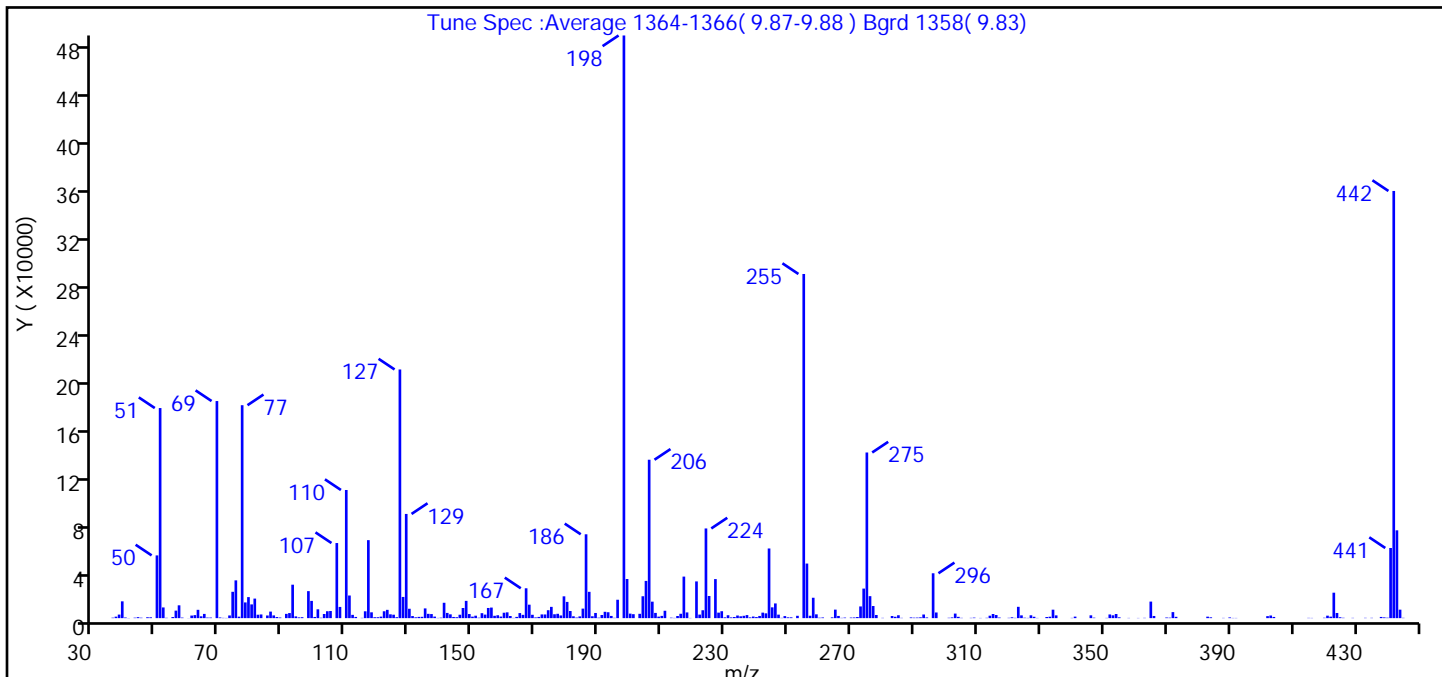
Reagents:

MB_DFTPP_WRK_00355 Amount Added: 1.00 Units: mL

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151419.D
 Injection Date: 21-Jul-2019 14:10:30 Instrument ID: HP5973U
 Lims ID: DFTPP
 Client ID:
 Operator ID: bs ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
 Tune Method: DFTPP Method 8270D, BP 198

4 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (136.4)
51	10-80% of the base peak	36.1
68	<2% of mass 69	0.0 (0.0)
69	Present	37.3
70	<2% of mass 69	0.1 (0.3)
127	10-80% of the base peak	42.7
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.7
275	10-60% of the base peak	28.4
365	>1% of mass 198	2.8
441	present but <24% of mass 442	12.0 (16.4)
442	base peak, or >50% of 198	73.3
443	15-24% of mass 442	15.1 (20.6)

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151419.D\1,4_Dx_SIM_HP5973U.rsl\spc
 Injection Date: 21-Jul-2019 14:10:30
 Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)
 Base Peak: 198.00
 Minimum % Base Peak: 0
 Number of Points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	388	125.00	2850	204.00	18200	294.00	576
37.00	1237	126.00	797	205.00	30944	296.00	37288
38.00	2956	127.00	206656	206.00	131648	297.00	4703
39.00	13967	128.00	17616	207.00	13696	301.00	304
40.00	535	129.00	86600	208.00	4351	302.00	595
41.00	119	130.00	7800	209.00	1255	303.00	3790
43.00	387	131.00	1729	210.00	1877	304.00	1091
44.00	817	132.00	686	211.00	6136	305.00	243
45.00	360	133.00	1050	213.00	396	308.00	233
47.00	741	134.00	1108	214.00	205	309.00	433
48.00	700	135.00	8092	215.00	1775	311.00	168
50.00	52144	136.00	3578	216.00	3637	313.00	270
51.00	174592	137.00	3400	217.00	34528	314.00	2027
52.00	8896	138.00	1283	218.00	4754	315.00	3444
53.00	279	139.00	186	219.00	169	316.00	2584
55.00	927	140.00	387	221.00	30528	317.00	496
56.00	6239	141.00	12775	222.00	2951	320.00	266
57.00	10659	142.00	4342	223.00	6567	321.00	698
58.00	454	143.00	3166	224.00	74536	322.00	241
60.00	78	144.00	987	225.00	18408	323.00	9408
61.00	2153	145.00	775	227.00	32456	324.00	2307
62.00	2515	146.00	2837	228.00	4574	325.00	365
63.00	6917	147.00	8431	229.00	5755	326.00	197
64.00	1515	148.00	14354	230.00	648	327.00	2379
65.00	3523	149.00	3408	231.00	2413	328.00	1138
66.00	469	150.00	1247	232.00	614	329.00	172
67.00	479	151.00	2038	233.00	944	332.00	930
69.00	180416	152.00	357	234.00	2182	333.00	1183
70.00	550	153.00	4126	235.00	1527	334.00	7035
71.00	229	154.00	2939	236.00	1947	335.00	2299
72.00	172	155.00	8454	237.00	2544	340.00	204
73.00	2236	156.00	8789	238.00	633	341.00	1267
74.00	21896	157.00	1957	239.00	1340	346.00	2340

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151419.D\1_4_Dx_SIM_HP5973U.rsl\spc

Injection Date: 21-Jul-2019 14:10:30

Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	31392	158.00	2402	240.00	889	347.00	403
76.00	1215	159.00	1314	241.00	1812	351.00	200
77.00	176960	160.00	4500	242.00	4575	352.00	3063
78.00	13062	161.00	4817	243.00	4000	353.00	2358
79.00	17480	162.00	1780	244.00	57896	354.00	3437
80.00	11424	163.00	197	245.00	8981	355.00	685
81.00	16246	164.00	1034	246.00	12222	358.00	186
82.00	2844	165.00	4209	247.00	2916	361.00	167
83.00	3069	166.00	2737	248.00	232	363.00	246
85.00	2212	167.00	24816	249.00	1706	365.00	13757
86.00	5442	168.00	11189	250.00	673	366.00	1799
87.00	2278	169.00	2787	251.00	669	370.00	528
88.00	926	170.00	591	253.00	1949	371.00	382
89.00	512	171.00	1027	255.00	286016	372.00	5009
91.00	3552	172.00	3097	256.00	45368	373.00	1099
92.00	4220	173.00	3057	257.00	1988	383.00	1225
93.00	27800	174.00	6591	258.00	16952	384.00	687
94.00	1452	175.00	9369	259.00	3163	388.00	206
95.00	627	176.00	3232	260.00	350	390.00	593
96.00	784	177.00	3614	261.00	557	391.00	173
98.00	22448	178.00	2234	264.00	644	392.00	168
99.00	14337	179.00	18128	265.00	7078	402.00	1666
100.00	991	180.00	13486	266.00	1823	403.00	2188
101.00	7347	181.00	5921	267.00	228	404.00	1000
102.00	320	182.00	1542	268.00	453	415.00	227
103.00	3452	183.00	479	270.00	476	416.00	185
104.00	5735	184.00	1458	271.00	559	420.00	329
105.00	5926	185.00	7918	272.00	921	421.00	2053
107.00	62416	186.00	69688	273.00	9729	422.00	1238
108.00	9319	187.00	21872	274.00	24560	423.00	21152
110.00	106496	188.00	1558	275.00	137664	424.00	4293
111.00	18816	189.00	4292	276.00	18272	425.00	726
112.00	2729	190.00	376	277.00	10074	426.00	305
113.00	1004	191.00	2619	278.00	2621	429.00	228

Report Date: 22-Jul-2019 13:37:39

Chrom Revision: 2.3 15-Jul-2019 06:58:08

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151419.D\1,4_Dx_SIM_HP5973U.rsl\sp

Injection Date: 21-Jul-2019 14:10:30

Spectrum: Tune Spec :Average 1364-1366(9.87-9.88) Bgrd 1358(9.83)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 308

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	223	192.00	5278	280.00	231	433.00	259
116.00	5692	193.00	4911	283.00	1767	435.00	258
117.00	64816	194.00	1841	284.00	1148	438.00	991
118.00	4839	195.00	272	285.00	2399	439.00	632
119.00	759	196.00	15295	286.00	241	440.00	376
120.00	767	198.00	484224	289.00	587	441.00	58296
121.00	1259	199.00	32528	290.00	395	442.00	355008
122.00	5719	200.00	3752	291.00	463	443.00	72984
123.00	6897	201.00	3294	292.00	673	444.00	7051
124.00	3173	203.00	3593	293.00	3023	445.00	268

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190721-82775.b\U33151419.D

Injection Date: 21-Jul-2019 14:10:30

Instrument ID: HP5973U

Lims ID: DFTPP

Client ID:

Operator ID: bs

ALS Bottle#: 2

Worklist Smp#: 2

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

6 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

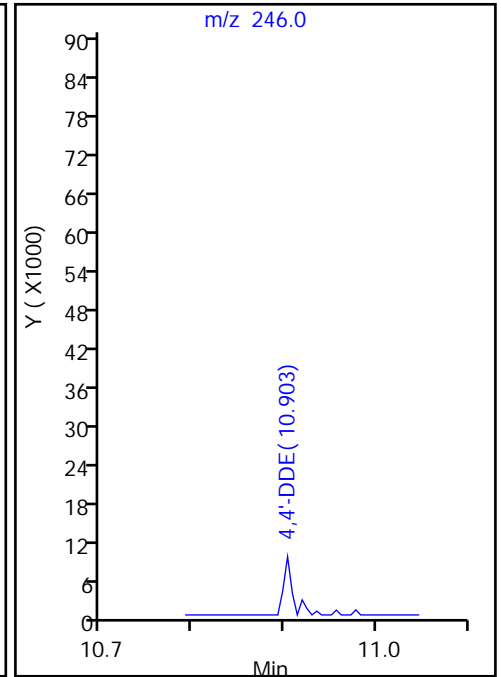
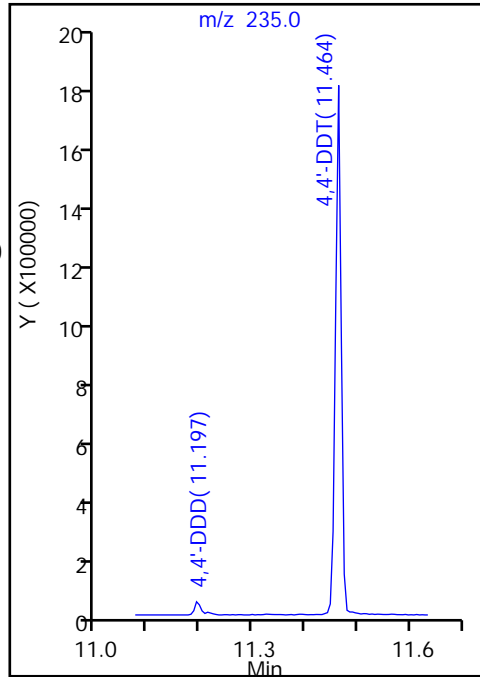
6 4,4'-DDT, Area = 1395132

5 4,4'-DDD, Area = 43559

7 4,4'-DDE, Area = 6367

%Breakdown: 3.45%, <= 20.00%

Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 480-482507/1-A
 Matrix: Water Lab File ID: U33151384.D
 Analysis Method: 8270D SIM ID Date Collected: _____
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/18/2019 19:44
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482664 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	ND		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	38		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151384.D
 Lims ID: MB 480-482507/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 18-Jul-2019 19:44:30 ALS Bottle#: 21 Worklist Smp#: 21
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 21
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 19-Jul-2019 16:36:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.656	2.558	0.098	90	208509	10.0	3.85	
3 1,4-Dioxane	88		2.615					ND	U
* 2 1,4-Dichlorobenzene-d4	152	5.834	5.830	0.004	98	469713	4.00	4.00	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151384.D

Injection Date: 18-Jul-2019 19:44:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: MB 480-482507/1-A

Worklist Smp#: 21

Client ID:

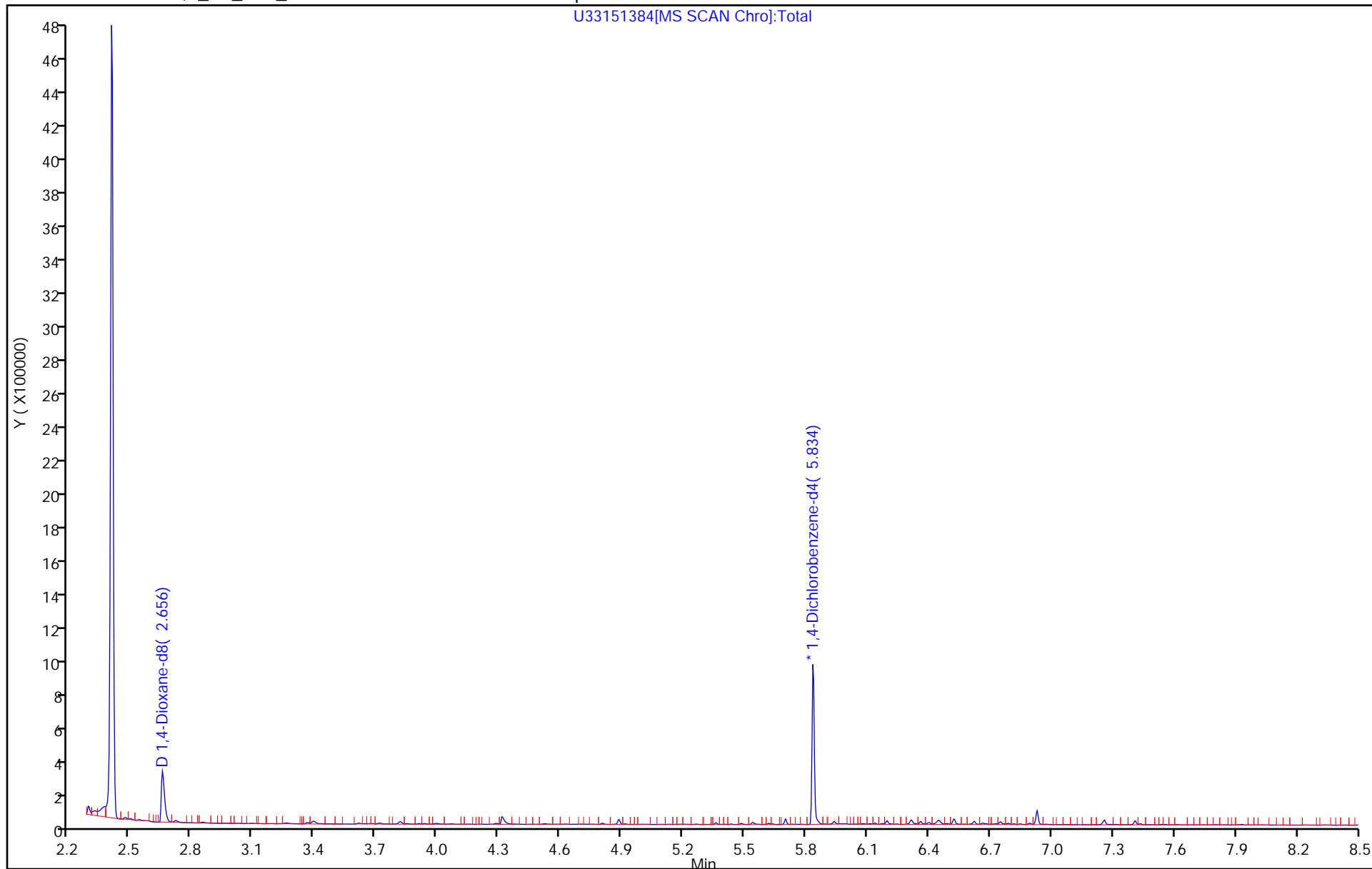
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 21

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151384.D

Injection Date: 18-Jul-2019 19:44:30

Instrument ID: HP5973U

Lims ID: MB 480-482507/1-A

Client ID:

Operator ID: bs

ALS Bottle#: 21

Worklist Smp#: 21

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

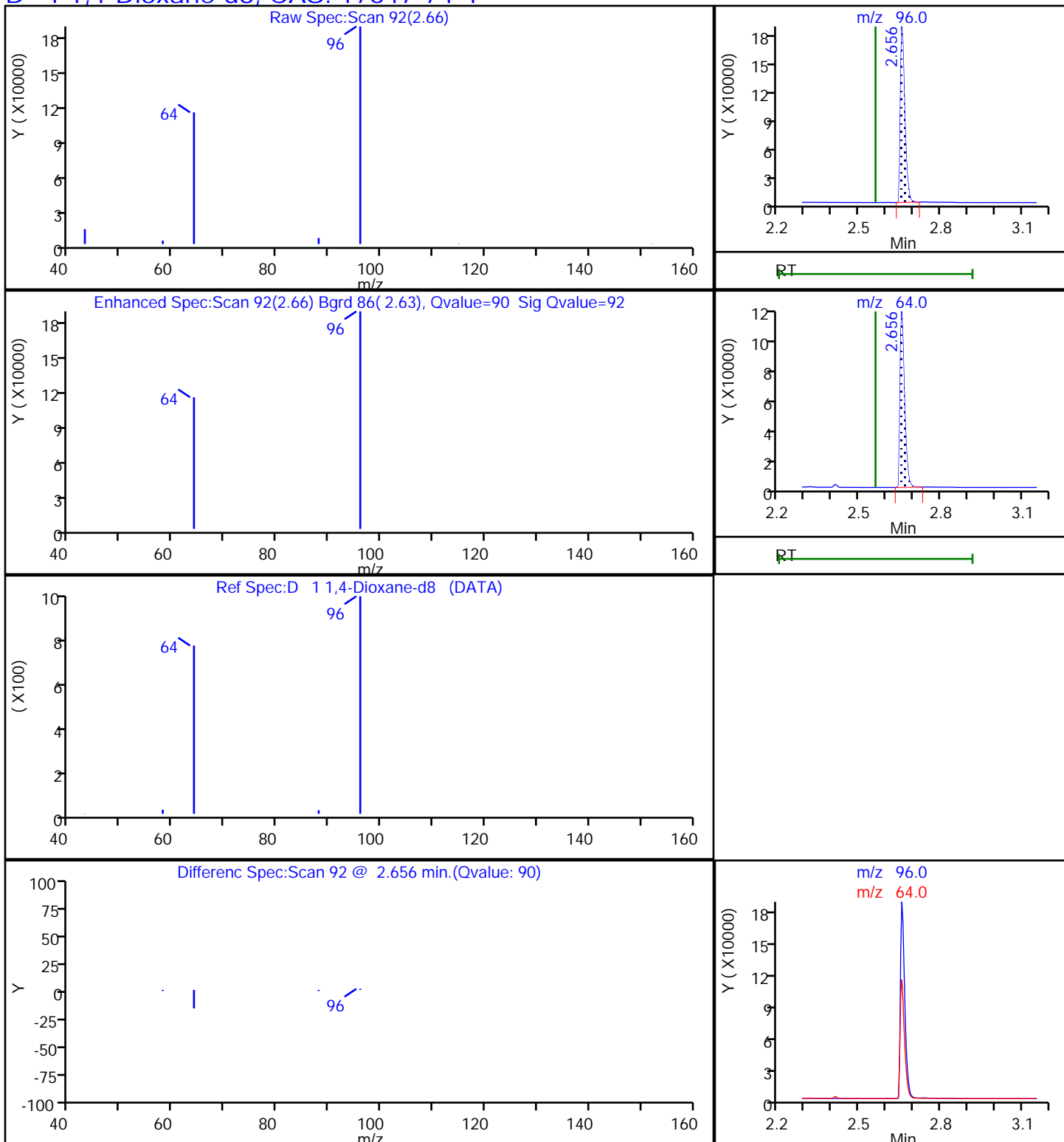
Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

Column:

Detector: MS SCAN

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151384.D

Injection Date: 18-Jul-2019 19:44:30

Instrument ID: HP5973U

Lims ID: MB 480-482507/1-A

Client ID:

Operator ID: bs

ALS Bottle#: 21

Worklist Smp#: 21

Injection Vol: 1.0 ul

Dil. Factor: 1.0000

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL

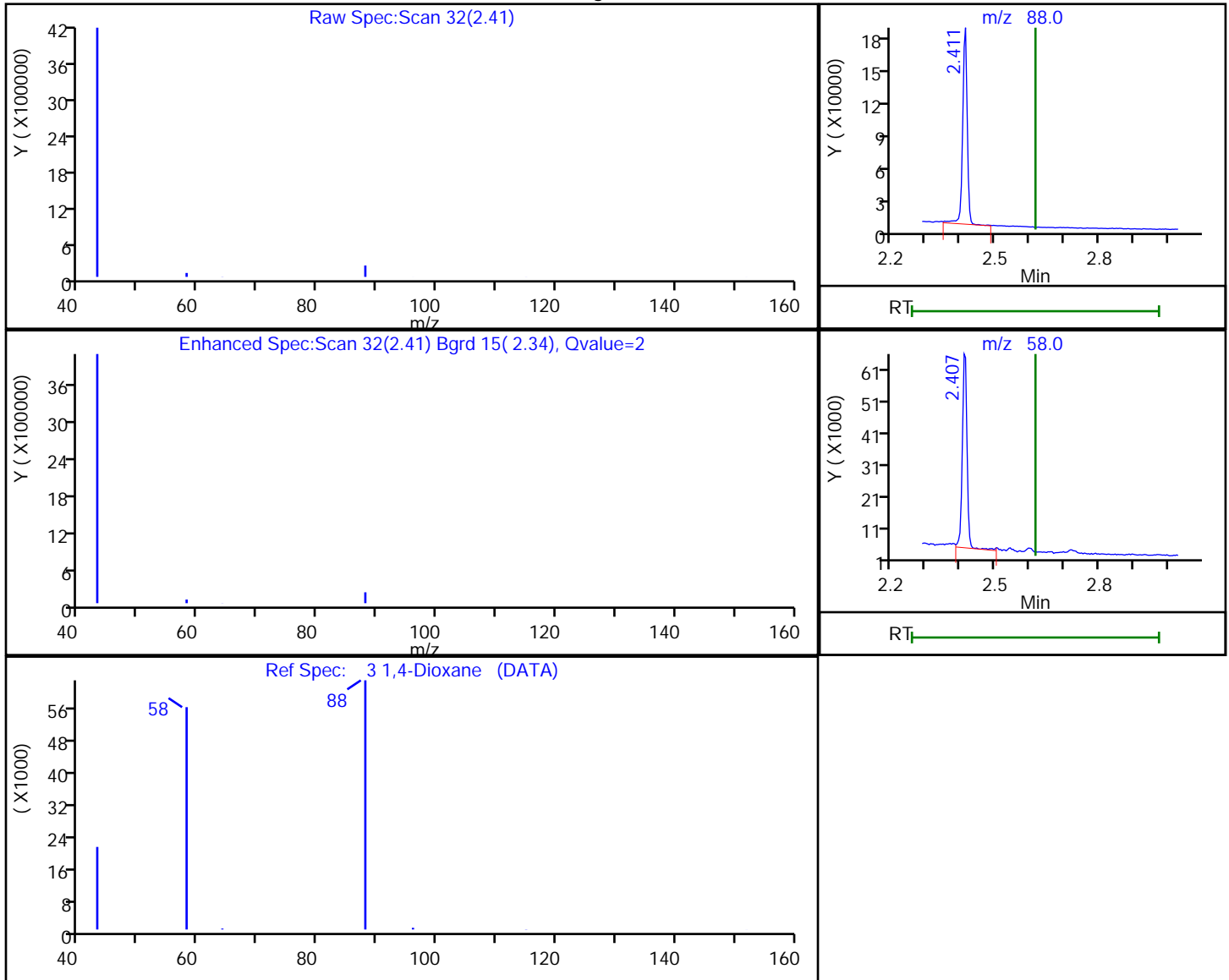
Column:

Detector

MS SCAN

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.41	88.00	167271	8.169038
2.41	58.00	59086	

Reviewer: schickr, 19-Jul-2019 16:36:20

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 480-482507/2-A
 Matrix: Water Lab File ID: U33151385.D
 Analysis Method: 8270D SIM ID Date Collected: _____
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/18/2019 20:08
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482664 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.15		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151385.D
 Lims ID: LCS 480-482507/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 18-Jul-2019 20:08:30 ALS Bottle#: 22 Worklist Smp#: 22
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 22
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 19-Jul-2019 16:36:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.697	2.558	0.139	89	187663	10.0	3.36	
3 1,4-Dioxane	88	2.737	2.615	0.122	84	21243	1.00	1.15	
* 2 1,4-Dichlorobenzene-d4	152	5.838	5.830	0.008	96	484580	4.00	4.00	

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151385.D

Injection Date: 18-Jul-2019 20:08:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: LCS 480-482507/2-A

Worklist Smp#: 22

Client ID:

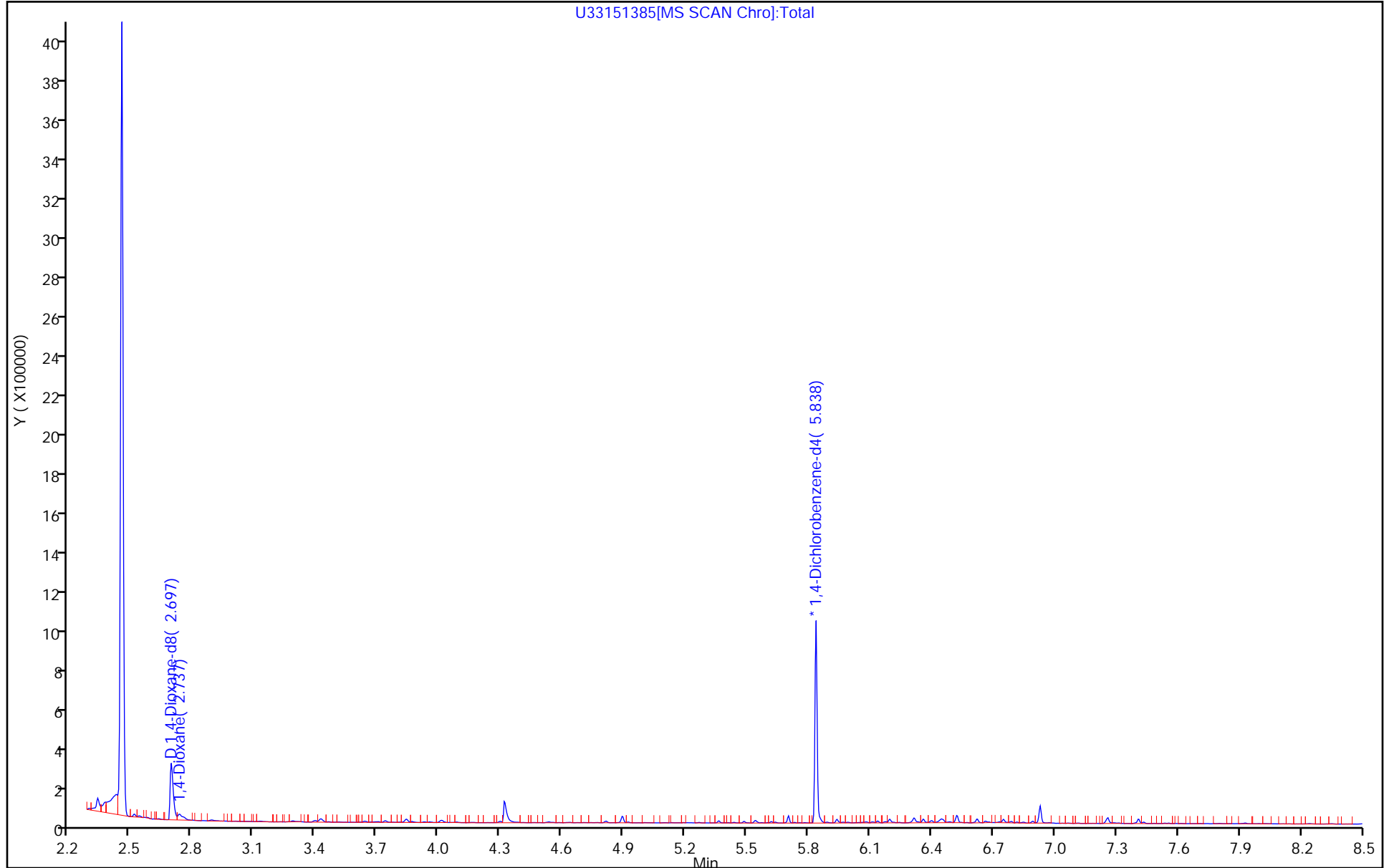
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 22

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MS Lab Sample ID: 480-156213-14 MS
 Matrix: Water Lab File ID: U33151386.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 13:15
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/18/2019 20:32
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482664 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.93		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151386.D
 Lims ID: 480-156213-A-14-A MS
 Client ID: 356023-MW6B
 Sample Type: MS
 Inject. Date: 18-Jul-2019 20:32:30 ALS Bottle#: 23 Worklist Smp#: 23
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 23
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 19-Jul-2019 16:36:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.684	2.558	0.126	92	175833	10.0	3.39	
3 1,4-Dioxane	88	2.725	2.615	0.110	85	33341	1.00	1.93	E
* 2 1,4-Dichlorobenzene-d4	152	5.838	5.830	0.008	96	449185	4.00	4.00	
7 4,4'-DDE	246		10.908					ND	
5 4,4'-DDD	235		11.197					ND	
6 4,4'-DDT	235		11.464					ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151386.D

Injection Date: 18-Jul-2019 20:32:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-A-14-A MS

Worklist Smp#: 23

Client ID: 356023-MW6B

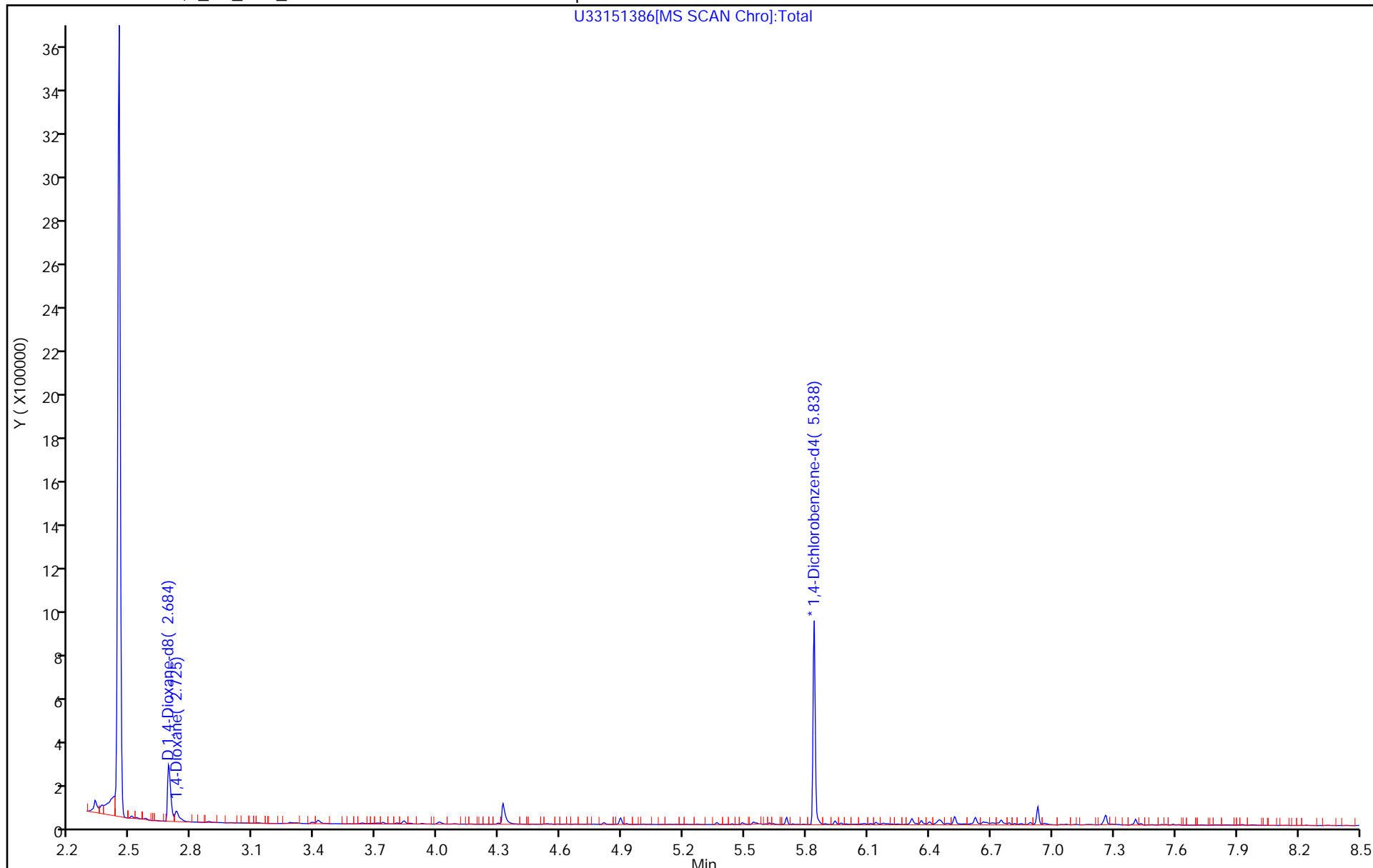
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 23

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MSD Lab Sample ID: 480-156213-14 MSD
 Matrix: Water Lab File ID: U33151387.D
 Analysis Method: 8270D SIM ID Date Collected: 07/11/2019 13:15
 Extract. Method: 3510C Date Extracted: 07/17/2019 15:17
 Sample wt/vol: 1000 (mL) Date Analyzed: 07/18/2019 20:55
 Con. Extract Vol.: 1 (mL) Dilution Factor: 1
 Injection Volume: 1 (uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 482664 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.90		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	38		15-110

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151387.D
 Lims ID: 480-156213-B-14-A MSD
 Client ID: 356023-MW6B
 Sample Type: MSD
 Inject. Date: 18-Jul-2019 20:55:30 ALS Bottle#: 24 Worklist Smp#: 24
 Injection Vol: 1.0 ul Dil. Factor: 1.0000
 Sample Info: 24
 Operator ID: bs Instrument ID: HP5973U
 Method: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\1,4_Dx_SIM_HP5973U.m
 Limit Group: MB - 8270D SIM ID ICAL
 Last Update: 19-Jul-2019 16:39:58 Calib Date: 03-Jul-2019 16:46:30
 Integrator: Picker ID Type: RT Order ID
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICAL File: \\chromna\Buffalo\ChromData\HP5973U\20190703-82400.b\U33151157.D
 Column 1 : Det: MS SCAN
 Process Host: CTX1015

First Level Reviewer: schickr Date: 19-Jul-2019 16:36:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.701	2.558	0.143	89	190067	10.0	3.76	
3 1,4-Dioxane	88	2.737	2.615	0.122	86	35371	1.00	1.90	E
* 2 1,4-Dichlorobenzene-d4	152	5.838	5.830	0.008	97	437747	4.00	4.00	
7 4,4'-DDE	246		10.908					ND	
5 4,4'-DDD	235		11.197					ND	
6 4,4'-DDT	235		11.464					ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

MB_LLIS_WRK_00172 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20190718-82720.b\U33151387.D

Injection Date: 18-Jul-2019 20:55:30

Instrument ID: HP5973U

Operator ID: bs

Lims ID: 480-156213-B-14-A MSD

Worklist Smp#: 24

Client ID: 356023-MW6B

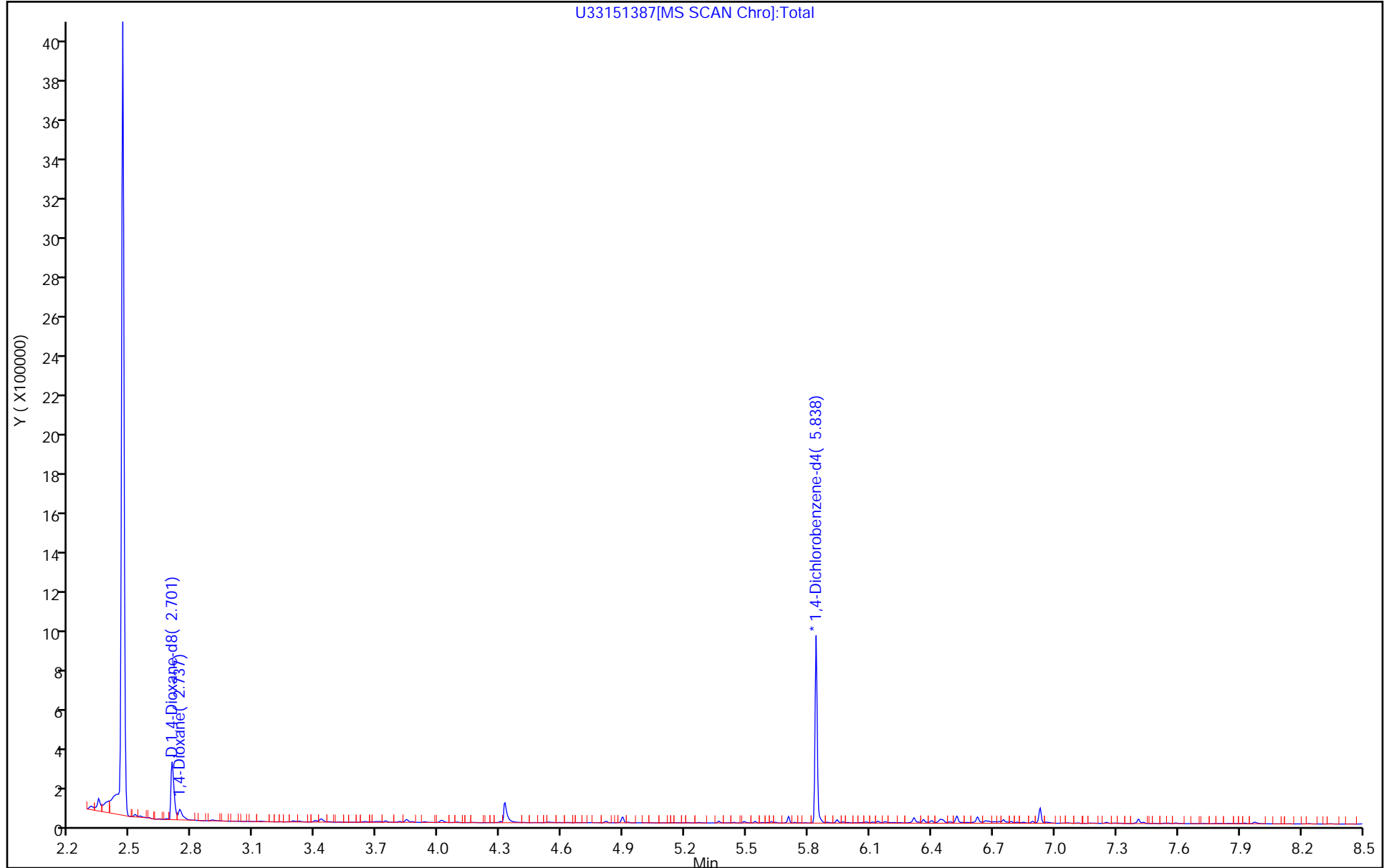
Injection Vol: 1.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 24

Method: 1,4_Dx_SIM_HP5973U

Limit Group: MB - 8270D SIM ID ICAL



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Instrument ID: HP5973U Start Date: 07/03/2019 14:17Analysis Batch Number: 480789 End Date: 07/03/2019 17:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-480789/2		07/03/2019 14:17	1	U33151151.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-480789/3		07/03/2019 14:45	1	U33151152.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-480789/4		07/03/2019 15:09	1	U33151153.D	RXI-5Sil MS(0.5 0.25 (mm))
ICIS 480-480789/5		07/03/2019 15:34	1	U33151154.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-480789/6		07/03/2019 15:58	1	U33151155.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-480789/7		07/03/2019 16:23	1	U33151156.D	RXI-5Sil MS(0.5 0.25 (mm))
IC 480-480789/8		07/03/2019 16:46	1	U33151157.D	RXI-5Sil MS(0.5 0.25 (mm))
ICV 480-480789/9		07/03/2019 17:10	1		RXI-5Sil MS(0.5 0.25 (mm))

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, BuffaloJob No.: 480-156213-1

SDG No.: _____

Instrument ID: HP5973UStart Date: 07/18/2019 12:13Analysis Batch Number: 482664End Date: 07/18/2019 23:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-482664/2		07/18/2019 12:13	1	U33151365.D	RXI-5Sil MS(0.5 0.25 (mm))
CCVIS 480-482664/3		07/18/2019 12:41	1	U33151366.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 13:04	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 13:27	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 13:51	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 14:14	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 14:38	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 15:01	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 15:25	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 15:48	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 16:12	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 16:36	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 16:59	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 17:23	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 17:46	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 18:10	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 18:33	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 18:57	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 19:20	1		RXI-5Sil MS(0.5 0.25 (mm))
MB 480-482507/1-A		07/18/2019 19:44	1	U33151384.D	RXI-5Sil MS(0.5 0.25 (mm))
LCS 480-482507/2-A		07/18/2019 20:08	1	U33151385.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-14 MS		07/18/2019 20:32	1	U33151386.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-14 MSD		07/18/2019 20:55	1	U33151387.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-14		07/18/2019 21:19	1	U33151388.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-1		07/18/2019 21:43	1	U33151389.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-2		07/18/2019 22:07	1	U33151390.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 22:31	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 22:55	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/18/2019 23:19	1		RXI-5Sil MS(0.5 0.25 (mm))

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Instrument ID: HP5973U Start Date: 07/19/2019 00:08

Analysis Batch Number: 482665 End Date: 07/19/2019 11:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-482665/2		07/19/2019 00:08	1	U33151395.D	RXI-5Sil MS(0.5 0.25 (mm))
CCVIS 480-482665/3		07/19/2019 00:36	1	U33151396.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 01:00	1		RXI-5Sil MS(0.5 0.25 (mm))
480-156213-7		07/19/2019 01:24	1	U33151398.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-8		07/19/2019 01:48	1	U33151399.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-9		07/19/2019 02:11	1	U33151400.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-10		07/19/2019 02:35	1	U33151401.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 02:58	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 03:22	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 03:45	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 04:09	1		RXI-5Sil MS(0.5 0.25 (mm))
480-156213-16		07/19/2019 04:32	1	U33151406.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-17		07/19/2019 04:56	1	U33151407.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 05:19	1		RXI-5Sil MS(0.5 0.25 (mm))
480-156213-19		07/19/2019 05:43	1	U33151409.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 06:06	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/19/2019 11:37	1		RXI-5Sil MS(0.5 0.25 (mm))

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Instrument ID: HP5973U Start Date: 07/21/2019 14:10

Analysis Batch Number: 482965 End Date: 07/21/2019 20:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-482965/2		07/21/2019 14:10	1	U33151419.D	RXI-5Sil MS(0.5 0.25 (mm))
CCVIS 480-482965/3		07/21/2019 14:38	1	U33151420.D	RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/21/2019 15:04	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/21/2019 15:28	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/21/2019 15:52	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/21/2019 16:16	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/21/2019 16:40	1		RXI-5Sil MS(0.5 0.25 (mm))
ZZZZZ		07/21/2019 17:05	1		RXI-5Sil MS(0.5 0.25 (mm))
480-156213-3		07/21/2019 17:29	5	U33151427.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-4		07/21/2019 17:53	5	U33151428.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-5		07/21/2019 18:17	10	U33151429.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-6		07/21/2019 18:40	5	U33151430.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-11		07/21/2019 19:04	10	U33151431.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-12		07/21/2019 19:28	10	U33151432.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-13		07/21/2019 19:51	5	U33151433.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-15		07/21/2019 20:15	5	U33151434.D	RXI-5Sil MS(0.5 0.25 (mm))
480-156213-18		07/21/2019 20:38	5	U33151435.D	RXI-5Sil MS(0.5 0.25 (mm))

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Batch Number: 482507 Batch Start Date: 07/17/19 15:16 Batch Analyst: Gruning, Anton TBatch Method: 3510C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	OP_SIM_LCS 00007	OP_SimSurr 00016
MB 480-482507/1		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU		1 mL
LCS 480-482507/2		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
480-156213-A-14 MS	356023-MW6B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
480-156213-B-14 MSD	356023-MW6B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
480-156213-A-14	356023-MW6B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-1	356023-MW8B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-2	356023-MW8BD	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-A-3	356023-MW16	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-4	356023-MW14B 150	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-5	356023-MW12B 190	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-6	356023-MW11B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-A-7	356023-MW11C	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-8	356023-MW1801	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-A-9	356023-MW1802	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-10	356023-MW1803	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-11	356023-MW5B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-A-12	356023-ERT4	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-13	356023-MW4	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-A-15	356023-MW15B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-16	356023-EB1	3510C, 8270D SIM ID	T	1000 mL	1 mL	6 SU	<2 SU		1 mL
480-156213-A-17	356023-MW1B	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL

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 SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156213-1

SDG No.: _____

Batch Number: 482507 Batch Start Date: 07/17/19 15:16 Batch Analyst: Gruning, Anton T

Batch Method: 3510C Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	OP_SIM LCS 00007	OP_SimSurr 00016
480-156213-A-18	356023-MW5R	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
480-156213-B-19	356023-MW7R	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL

Batch Notes	
Acid Used for pH Adjustment ID	5303999
Analyst ID - Concentration	AG, AP
Analyst ID - Extraction	AG, AP
Method/Fraction	3510C/8270D_SIM_MS_ID
Na2SO4 ID	5393118
Prep Solvent ID	5391690
Prep Solvent Volume Used	180 mL
Analyst ID - Spike Analyst	AG
Analyst ID - Spike Witness Analyst	AG
Sufficient Volume for Batch QC	Yes
Vial Lot Number	1709111094

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.

PFC_IDA

Fluorinated Alkyl Substances

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFBA #	PFPeA #	PFBS #	PFHxA #	PFHpA #	PFHxS #	M262FTS #	PFOA #
356023-MW8B	480-156213-1	92	92	87	93	93	88	89	80
356023-MW8BD	480-156213-2	76	80	93	80	83	89	104	79
356023-MW16	480-156213-3	94	90	90	90	95	88	95	82
356023-MW14B 150	480-156213-4	78	86	88	91	91	92	101	83
356023-MW12B 190	480-156213-5	75	82	86	91	91	88	98	81
356023-MW11B	480-156213-6	93	94	96	97	96	97	108	92
356023-MW11C	480-156213-7	87	95	97	94	95	91	101	90
356023-MW5B	480-156213-11	79	84	94	85	87	94	105	84
356023-ERT4	480-156213-12	76	90	95	89	92	90	99	86
356023-MW4	480-156213-13	69	85	89	88	90	88	103	90
356023-MW6B	480-156213-14	78	86	84	90	87	92	104	82
356023-MW15B	480-156213-15	81	87	92	88	96	94	105	91
356023-EB1	480-156213-16	97	94	89	94	95	89	99	90
356023-MW1B	480-156213-17	58	81	86	85	92	85	107	87
356023-MW5R	480-156213-18	84	85	89	82	90	87	101	80
356023-MW7R	480-156213-19	77	76	86	77	82	87	95	79
	MB 200-145382/1-A	94	92	90	95	93	89	101	89
	LCS 200-145382/2-A	104	102	96	100	100	93	102	87
356023-MW6B MS	480-156213-14 MS	82	88	93	88	90	94	104	85
356023-MW6B MSD	480-156213-14 MSD	83	86	101	89	92	90	109	81

QC LIMITS

PFBA = 13C4 PFBA	25-150
PFPeA = 13C5 PFPeA	25-150
PFBS = 13C3 PFBS	50-150
PFHxA = 13C2 PFHxA	50-150
PFHxS = 18O2 PFHxS	50-150
PFHpA = 13C4 PFHpA	50-150
M262FTS = M2-6:2 FTS	25-150
PFOA = 13C4 PFOA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFOS #	PFNA #	PFDA #	M282FTS #	PFOSA #	d3NMFOS #	PFUnA #	d5NEFOS #
356023-MW8B	480-156213-1	83	89	90	99	72	66	88	67
356023-MW8BD	480-156213-2	79	83	79	101	58	63	78	60
356023-MW16	480-156213-3	88	88	85	102	78	67	88	72
356023-MW14B 150	480-156213-4	83	83	84	104	75	63	84	64
356023-MW12B 190	480-156213-5	74	78	80	93	73	62	75	57
356023-MW11B	480-156213-6	94	94	91	97	85	74	88	71
356023-MW11C	480-156213-7	88	92	94	110	79	75	90	66
356023-MW5B	480-156213-11	80	90	85	97	68	62	75	62
356023-ERT4	480-156213-12	82	90	91	102	80	65	88	66
356023-MW4	480-156213-13	81	90	93	105	79	70	89	65
356023-MW6B	480-156213-14	83	80	89	96	74	61	79	64
356023-MW15B	480-156213-15	86	86	90	101	69	68	85	68
356023-EB1	480-156213-16	90	94	101	109	67	72	91	68
356023-MW1B	480-156213-17	81	85	92	109	77	69	87	69
356023-MW5R	480-156213-18	82	82	85	91	60	60	77	64
356023-MW7R	480-156213-19	80	78	76	103	55	57	76	59
	MB 200-145382/1-A	90	94	102	111	73	82	94	79
	LCS 200-145382/2-A	99	104	104	117	70	76	93	71
356023-MW6B MS	480-156213-14 MS	89	86	87	111	74	64	86	67
356023-MW6B MSD	480-156213-14 MSD	86	83	85	104	71	64	80	65

QC LIMITS

PFOS = 13C4 PFOS	50-150
PFNA = 13C5 PFNA	50-150
PFDA = 13C2 PFDA	50-150
M282FTS = M2-8:2 FTS	25-150
PFOSA = 13C8 FOSA	25-150
d3NMFOS = d3-NMeFOSAA	50-150
PFUnA = 13C2 PFUnA	50-150
d5NEFOS = d5-NEtFOSAA	50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM II
LCMS SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): C-18 ID: 4.6 (mm)

Client Sample ID	Lab Sample ID	PFDa #	PFTDA #
356023-MW8B	480-156213-1	81	63
356023-MW8BD	480-156213-2	78	66
356023-MW16	480-156213-3	85	66
356023-MW14B 150	480-156213-4	77	68
356023-MW12B 190	480-156213-5	66	60
356023-MW11B	480-156213-6	82	65
356023-MW11C	480-156213-7	78	65
356023-MW5B	480-156213-11	73	63
356023-ERT4	480-156213-12	78	61
356023-MW4	480-156213-13	78	60
356023-MW6B	480-156213-14	77	61
356023-MW15B	480-156213-15	82	64
356023-EB1	480-156213-16	76	61
356023-MW1B	480-156213-17	79	64
356023-MW5R	480-156213-18	72	61
356023-MW7R	480-156213-19	71	59
	MB 200-145382/1-A	96	65
	LCS 200-145382/2-A	79	59
356023-MW6B MS	480-156213-14 MS	83	67
356023-MW6B MSD	480-156213-14 MSD	87	63

PFDa = 13C2 PFDa
PFTDA = 13C2 PFTeDA

QC LIMITS
50-150
50-150

Column to be used to flag recovery values

FORM II 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: SC080119E003.d
 Lab ID: LCS 200-145382/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	40.0	41.6	104	50-150	
Perfluoropentanoic acid (PFPeA)	40.0	39.5	99	50-150	
Perfluorohexanoic acid (PFHxA)	40.0	40.7	102	70-130	
Perfluoroheptanoic acid (PFHpA)	40.0	43.2	108	70-130	
Perfluorooctanoic acid (PFOA)	40.0	42.8	107	70-130	
Perfluorononanoic acid (PFNA)	40.0	42.0	105	70-130	
Perfluorodecanoic acid (PFDA)	40.0	40.8	102	70-130	
Perfluoroundecanoic acid (PFUnA)	40.0	41.6	104	70-130	
Perfluorododecanoic acid (PFDoA)	40.0	42.4	106	70-130	
Perfluorotridecanoic acid (PFTriA)	40.0	45.0	112	70-130	
Perfluorotetradecanoic acid (PFTeA)	40.0	48.5	121	70-130	
Perfluorobutanesulfonic acid (PFBS)	35.4	36.5	103	70-130	
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.2	99	70-130	
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.0	102	50-150	
Perfluorodecanesulfonic acid (PFDS)	38.6	34.9	90	50-150	
Perfluorooctanesulfonic acid (PFOS)	37.1	40.9	110	70-130	
Perfluorooctanesulfonamide (FOSA)	40.0	42.1	105	50-150	
13C8 FOSA	100	69.9	70	25-150	
13C4 PFBA	100	104	104	25-150	
13C5 PFPeA	100	102	102	25-150	
13C2 PFHxA	100	100	100	50-150	
13C4 PFHpA	100	99.7	100	50-150	
13C4 PFOA	100	87.2	87	50-150	
13C5 PFNA	100	104	104	50-150	
13C2 PFDA	100	104	104	50-150	
13C2 PFUnA	100	93.0	93	50-150	
13C2 PFDoA	100	79.1	79	50-150	
13C2 PFTeDA	100	58.9	59	50-150	
13C3 PFBS	93.0	89.1	96	50-150	
18O2 PFHxS	94.6	87.7	93	50-150	
13C4 PFOS	95.6	95.1	99	50-150	
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	40.0	51.4	128	70-130	

Column to be used to flag recovery and RPD values
 FORM III 537 (modified)

FORM III
LCMS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: SC080119E003.d
 Lab ID: LCS 200-145382/2-A Client ID: _____

COMPOUND	SPIKE ADDED (ng/L)	LCS CONCENTRATION (ng/L)	LCS % REC	QC LIMITS REC	#
N-ethylperfluorooctanesulfonam idoacetic acid (NEtFOSAA)	40.0	52.6	132	70-130	*
d3-NMeFOSAA	100	75.8	76	50-150	
d5-NEtFOSAA	100	70.6	71	50-150	
6:2 FTS	37.9	32.5	86	50-150	
8:2 FTS	38.3	26.1	68	50-150	
M2-6:2 FTS	95.0	96.5	102	25-150	
M2-8:2 FTS	95.8	112	117	25-150	

Column to be used to flag recovery and RPD values
 FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: SC080119E016.d
 Lab ID: 480-156213-14 MS Client ID: 356023-MW6B MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	36.7	1.6 J	40.2	105	40-160	
Perfluoropentanoic acid (PFPeA)	36.7	2.0	38.9	101	40-160	
Perfluorohexanoic acid (PFHxA)	36.7	1.5 J	38.3	100	40-160	
Perfluoroheptanoic acid (PFHpA)	36.7	ND	41.0	112	40-160	
Perfluorooctanoic acid (PFOA)	36.7	0.92 J	37.9	101	40-160	
Perfluorononanoic acid (PFNA)	36.7	ND	36.9	101	40-160	
Perfluorodecanoic acid (PFDA)	36.7	ND	39.5	108	40-160	
Perfluoroundecanoic acid (PFUnA)	36.7	ND	35.6	97	40-160	
Perfluorododecanoic acid (PFDoA)	36.7	ND	37.8	103	40-160	
Perfluorotridecanoic acid (PFTriA)	36.7	ND	42.7	116	40-160	
Perfluorotetradecanoic acid (PFTeA)	36.7	ND	44.5	121	40-160	
Perfluorobutanesulfonic acid (PFBS)	32.4	ND	32.5	100	40-160	
Perfluorohexanesulfonic acid (PFHxS)	33.4	ND	33.4	100	40-160	
Perfluoroheptanesulfonic Acid (PFHpS)	34.9	ND	38.3	110	40-160	
Perfluorodecanesulfonic acid (PFDS)	35.4	ND	35.1	99	40-160	
Perfluorooctanesulfonic acid (PFOS)	34.0	ND	38.4	113	40-160	
Perfluorooctanesulfonamide (FOSA)	36.7	ND	42.6	116	40-160	
13C8 FOSA	91.7	65	67.9	74	25-150	
13C4 PFBA	91.7	69	75.3	82	25-150	
13C5 PFPeA	91.7	76	80.9	88	25-150	
13C2 PFHxA	91.7	79	80.3	88	50-150	
13C4 PFHpA	91.7	77	82.2	90	50-150	
13C4 PFOA	91.7	72	77.7	85	50-150	
13C5 PFNA	91.7	70	79.3	86	50-150	
13C2 PFDA	91.7	78	79.5	87	50-150	
13C2 PFUnA	91.7	69	78.8	86	50-150	
13C2 PFDoA	91.7	68	76.4	83	50-150	
13C2 PFTeDA	91.7	53	61.2	67	50-150	
13C3 PFBS	85.3	69	79.2	93	50-150	
18O2 PFHxS	86.7	76	81.3	94	50-150	
13C4 PFOS	87.6	70	78.2	89	50-150	
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	36.7	ND	43.6	119	40-160	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: SC080119E016.d
 Lab ID: 480-156213-14 MS Client ID: 356023-MW6B MS

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC	QC LIMITS REC	#
N-ethylperfluorooctanesulfonam idoacetic acid (NEtFOSAA)	36.7	ND	45.7	125	40-160	
d3-NMeFOSAA	91.7	54	59.1	64	50-150	
d5-NEtFOSAA	91.7	56	61.9	67	50-150	
6:2 FTS	34.8	ND	26.9	77	40-160	
8:2 FTS	35.1	ND	25.6	73	40-160	
M2-6:2 FTS	87.1	87	90.8	104	25-150	
M2-8:2 FTS	87.8	81	97.7	111	25-150	

Column to be used to flag recovery and RPD values
 FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: SC080119E017.d

Lab ID: 480-156213-14 MSD Client ID: 356023-MW6B MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Perfluorobutanoic acid (PFBA)	34.7	38.4	106	5	30	40-160	
Perfluoropentanoic acid (PFPeA)	34.7	39.1	107	0	30	40-160	
Perfluorohexanoic acid (PFHxA)	34.7	38.0	105	1	20	40-160	
Perfluoroheptanoic acid (PFHpA)	34.7	38.5	111	6	20	40-160	
Perfluorooctanoic acid (PFOA)	34.7	39.7	112	5	20	40-160	
Perfluorononanoic acid (PFNA)	34.7	39.3	113	6	20	40-160	
Perfluorodecanoic acid (PFDA)	34.7	39.1	112	1	20	40-160	
Perfluoroundecanoic acid (PFUnA)	34.7	33.6	97	6	20	40-160	
Perfluorododecanoic acid (PFDoA)	34.7	35.3	102	7	20	40-160	
Perfluorotridecanoic acid (PFTriA)	34.7	34.9	100	20	20	40-160	
Perfluorotetradecanoic acid (PFTeA)	34.7	43.5	125	2	20	40-160	
Perfluorobutanesulfonic acid (PFBS)	30.7	30.1	98	8	20	40-160	
Perfluorohexanesulfonic acid (PFHxS)	31.6	33.8	107	1	20	40-160	
Perfluoroheptanesulfonic Acid (PFHpS)	33.1	40.9	124	7	30	40-160	
Perfluorodecanesulfonic acid (PFDS)	33.5	34.1	102	3	30	40-160	
Perfluorooctanesulfonic acid (PFOS)	32.2	37.3	116	3	20	40-160	
Perfluorooctanesulfonamide (FOSA)	34.7	41.4	119	3	30	40-160	
13C8 FOSA	86.9	61.6	71			25-150	
13C4 PFBA	86.9	71.7	83			25-150	
13C5 PFPeA	86.9	75.0	86			25-150	
13C2 PFHxA	86.9	76.9	89			50-150	
13C4 PFHpA	86.9	80.1	92			50-150	
13C4 PFOA	86.9	70.5	81			50-150	
13C5 PFNA	86.9	71.8	83			50-150	
13C2 PFDA	86.9	73.6	85			50-150	
13C2 PFUnA	86.9	69.1	80			50-150	
13C2 PFDoA	86.9	76.0	87			50-150	
13C2 PFTeDA	86.9	54.7	63			50-150	
13C3 PFBS	80.8	81.9	101			50-150	
18O2 PFHxS	82.2	74.2	90			50-150	
13C4 PFOS	83.0	71.5	86			50-150	
N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA)	34.7	43.0	124	1	20	40-160	

Column to be used to flag recovery and RPD values

FORM III 537 (modified)

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: SC080119E017.d
 Lab ID: 480-156213-14 MSD Client ID: 356023-MW6B MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
N-ethylperfluorooctanesulfonam idoacetic acid (NEtFOSAA)	34.7	43.5	125	5	20	40-160	
d3-NMeFOSAA	86.9	55.9	64			50-150	
d5-NEtFOSAA	86.9	56.7	65			50-150	
6:2 FTS	32.9	25.4	77	6	30	40-160	
8:2 FTS	33.3	25.6	77	0	30	40-160	
M2-6:2 FTS	82.5	90.1	109			25-150	
M2-8:2 FTS	83.2	86.6	104			25-150	

Column to be used to flag recovery and RPD values
 FORM III 537 (modified)

FORM IV
LCMS METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab File ID: SC080119E002.d Lab Sample ID: MB 200-145382/1-A
 Matrix: Water Date Extracted: 07/23/2019 10:21
 Instrument ID: LC812 Date Analyzed: 08/02/2019 03:57
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 200-145382/2-A	SC080119E00 3.d	08/02/2019 04:05
356023-MW8B	480-156213-1	SC080119E00 4.d	08/02/2019 04:13
356023-MW8BD	480-156213-2	SC080119E00 5.d	08/02/2019 04:21
356023-MW16	480-156213-3	SC080119E00 6.d	08/02/2019 04:29
356023-MW14B 150	480-156213-4	SC080119E00 7.d	08/02/2019 04:37
356023-MW12B 190	480-156213-5	SC080119E00 8.d	08/02/2019 04:45
356023-MW11B	480-156213-6	SC080119E00 9.d	08/02/2019 04:53
356023-MW11C	480-156213-7	SC080119E01 0.d	08/02/2019 05:01
356023-MW5B	480-156213-11	SC080119E01 1.d	08/02/2019 05:09
356023-ERT4	480-156213-12	SC080119E01 3.d	08/02/2019 05:25
356023-MW4	480-156213-13	SC080119E01 4.d	08/02/2019 05:33
356023-MW6B	480-156213-14	SC080119E01 5.d	08/02/2019 05:41
356023-MW6B MS	480-156213-14 MS	SC080119E01 6.d	08/02/2019 05:49
356023-MW6B MSD	480-156213-14 MSD	SC080119E01 7.d	08/02/2019 05:57
356023-MW15B	480-156213-15	SC080119E01 8.d	08/02/2019 06:06
356023-EB1	480-156213-16	SC080119E01 9.d	08/02/2019 06:14
356023-MW1B	480-156213-17	SC080119E02 0.d	08/02/2019 06:22
356023-MW5R	480-156213-18	SC080119E02 1.d	08/02/2019 06:30
356023-MW7R	480-156213-19	SC080119E02 2.d	08/02/2019 06:38

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: ICIS 200-145525/20 Date Analyzed: 07/26/2019 11:18
 Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm)
 Lab File ID (Standard): SC072619A020.d Heated Purge: (Y/N) N
 Calibration ID: 42108

	13PFOA		AREA #	RT #	AREA #	RT #
	AREA #	RT #				
INITIAL CALIBRATION MID-POINT	5272519	3.44				
UPPER LIMIT	7908779	3.64				
LOWER LIMIT	2636260	3.24				
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 200-145525/24		4870975	3.44			

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
 RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 537 (MODIFIED)

FORM VIII
LCMS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Sample No.: CCV 200-145757/3 Date Analyzed: 08/01/2019 14:34
 Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm)
 Lab File ID (Standard): SC080119A003.d Heated Purge: (Y/N) N
 Calibration ID: 42108

	13PFOA		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
12/24 HOUR STD	5017980	3.28						
UPPER LIMIT	7526970	3.48						
LOWER LIMIT	2508990	3.08						
LAB SAMPLE ID	CLIENT SAMPLE ID							
CCV 200-145761/1		4736674	3.36					
MB 200-145382/1-A		4005864	3.35					
LCS 200-145382/2-A		3897003	3.36					
480-156213-1	356023-MW8B	3901672	3.35					
480-156213-2	356023-MW8BD	3662065	3.35					
480-156213-3	356023-MW16	4481285	3.36					
480-156213-4	356023-MW14B 150	4152473	3.36					
480-156213-5	356023-MW12B 190	3991536	3.35					
480-156213-6	356023-MW11B	3951300	3.36					
480-156213-7	356023-MW11C	3823047	3.36					
480-156213-11	356023-MW5B	4189298	3.36					
CCV 200-145761/12		4523669	3.36					
480-156213-12	356023-ERT4	3750236	3.35					
480-156213-13	356023-MW4	3960360	3.36					
480-156213-14	356023-MW6B	4417701	3.36					
480-156213-14 MS	356023-MW6B MS	4360226	3.36					
480-156213-14 MSD	356023-MW6B MSD	4149672	3.36					
480-156213-15	356023-MW15B	4110045	3.37					
480-156213-16	356023-EB1	4067662	3.37					
480-156213-17	356023-MW1B	4020529	3.37					
480-156213-18	356023-MW5R	3846735	3.36					
480-156213-19	356023-MW7R	4091619	3.37					
CCV 200-145761/24		4510697	3.37					

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
 RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8B Lab Sample ID: 480-156213-1
 Matrix: Water Lab File ID: SC080119E004.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 13:20
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 292.2 (mL) Date Analyzed: 08/02/2019 04:13
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.7	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.54
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.65
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.78
335-67-1	Perfluorooctanoic acid (PFOA)	0.56	J	1.7	0.54
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.66
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.45
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.50
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.51
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.79
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.42
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.68
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.81
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.77
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.53	J	1.7	0.52
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.6	8.6
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.3
27619-97-2	6:2 FTS	ND		17	3.9
39108-34-4	8:2 FTS	ND		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8B Lab Sample ID: 480-156213-1
 Matrix: Water Lab File ID: SC080119E004.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 13:20
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 292.2 (mL) Date Analyzed: 08/02/2019 04:13
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	72		25-150
STL00992	13C4 PFBA	92		25-150
STL01893	13C5 PFPeA	92		25-150
STL00993	13C2 PFHxA	93		50-150
STL01892	13C4 PFHpA	93		50-150
STL00990	13C4 PFOA	80		50-150
STL00995	13C5 PFNA	89		50-150
STL00996	13C2 PFDA	90		50-150
STL00997	13C2 PFUnA	88		50-150
STL00998	13C2 PFDoA	81		50-150
STL02116	13C2 PFTeDA	63		50-150
STL02337	13C3 PFBS	87		50-150
STL00994	18O2 PFHxS	88		50-150
STL00991	13C4 PFOS	83		50-150
STL02118	d3-NMeFOSAA	66		50-150
STL02117	d5-NEtFOSAA	67		50-150
STL02279	M2-6:2 FTS	89		25-150
STL02280	M2-8:2 FTS	99		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
 Lims ID: 480-156213-F-1-A
 Client ID: 356023-MW8B
 Sample Type: Client
 Inject. Date: 02-Aug-2019 04:13:25 ALS Bottle#: 51 Worklist Smp#: 4
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-1-A
 Misc. Info.: 200-0037095-004 Plate: 1 Rack: 4
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:35:59
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.507	3399477	46.2	92.5	10830	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.708	1.699	0.009	1.005	14849	0.2370		2.4		M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.616	3181008	46.1	92.1	7540	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.054	2.067	-0.013	0.994	7975	0.1295		0.5		M
D 47 13C3 PFBS	301.90 > 80.00	2.080	2.080	0.0	0.620	2756744	40.6	87.4	524379	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.093	2.093	0.0	1.006	12104	0.2008	Target=1.90	16.9		
298.90 > 99.00	2.093	2.093	0.0	1.006	7555		1.60(0.95-2.85)	7.7		
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.733	3182696	46.4	92.8	6935	
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.873	1658736	41.7	88.3	6061	
D 9 13C4 PFHpA	367.00 > 322.00	2.928	2.928	0.0	0.873	3127057	46.5	93.1	7102	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	9933	0.2149	Target=3.37	13.8		
399.00 > 99.00	2.939	2.928	0.011	1.004	3786		2.62(1.69-5.06)	4.0		M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.928	2.928	0.0	1.000	4621	0.0789	Target=3.76	1.5		M
363.00 > 169.00	2.928	2.928	0.0	1.000	1442		3.20(1.88-5.65)	5.7		M
D 12 M2-6:2 FTS	429.00 > 81.00	3.344	3.335	0.009	0.997	349543	42.3	89.0	783	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfoni	427.00 > 407.00	3.344	3.336	0.008	1.000	16790	1.33		26.3	
D 14 13C4 PFOA	417.00 > 372.00	3.354	3.344	0.010	1.000	2850594	40.2		80.3	9330
16 Perfluoroheptanesulfonic acid	449.00 > 80.00	3.344	3.345	-0.001	0.903	1190	0.0358	Target=4.80	5.5	M
	449.00 > 99.00	3.344	3.345	-0.001	0.903	509		2.34(2.40-7.20)	2.9	M
15 Perfluorooctanoic acid	413.00 > 369.00	3.354	3.355	-0.001	1.000	20319	0.3275	Target=2.84	2.5	M
	413.00 > 169.00	3.354	3.355	-0.001	1.000	8377		2.43(1.42-4.25)	22.9	M
* 62 13C2 PFOA	415.00 > 370.00	3.354	3.355	-0.001		3901672	50.0			11847
D 18 13C4 PFOS	503.00 > 80.00	3.705	3.695	0.010	1.105	1317548	39.8		83.3	4714
17 Perfluorooctanesulfonic acid	499.00 > 80.00	3.705	3.703	0.002	1.000	8141	0.3120	Target=4.33	26.7	M
	499.00 > 99.00	3.695	3.703	-0.008	0.997	1417		5.75(2.16-6.49)	3.4	M
D 19 13C5 PFNA	468.00 > 423.00	3.725	3.715	0.010	1.111	2883564	44.5		89.1	10273
20 Perfluorononanoic acid	463.00 > 419.00	3.735	3.723	0.012	1.003	3986	0.0763	Target=8.15	1.6	M
	463.00 > 169.00	3.735	3.723	0.012	1.003	712		5.60(4.08-12.23)	9.9	M
D 23 13C2 PFDA	515.00 > 470.00	4.036	4.036	0.0	1.204	2337591	45.1		90.3	8126
D 26 M2-8:2 FTS	529.00 > 81.00	4.049	4.036	0.013	1.207	360359	47.2		98.6	916
24 Perfluorodecanoic acid	513.00 > 469.00	4.049	4.047	0.002	1.003	3097	0.0684	Target=9.58	1.5	M
	513.00 > 169.00	4.049	4.047	0.002	1.003	636		4.87(4.79-14.37)	7.1	M
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	4.061	4.047	0.014	1.003	530	0.0527		6.5	M
D 21 13C8 FOSA	506.00 > 78.00	4.074	4.061	0.013	1.215	2143018	36.0		72.1	4417
22 Perfluorooctanesulfonamide	498.00 > 78.00	4.074	4.072	0.002	1.000	3729	0.0953		21.9	M
D 27 d3-NMeFOSAA	573.00 > 419.00	4.178	4.178	0.0	1.246	217474	32.9		65.8	1983
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	4.099	4.187	-0.088	0.981	471	0.1431		0.7	M
D 30 13C2 PFUnA	565.00 > 520.00	4.308	4.296	0.012	1.285	2077073	44.0		88.1	13404
31 Perfluoroundecanoic acid	563.00 > 519.00	4.308	4.307	0.001	1.000	5742	0.1611	Target=7.95	2.4	M
	563.00 > 169.00	4.308	4.307	0.001	1.000	947		6.06(3.98-11.93)	10.4	M
D 32 d5-NEtFOSAA	589.00 > 419.00	4.320	4.308	0.012	1.288	245352	33.3		66.6	991

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 36 13C2 PFDaA										
615.00 > 570.00	4.550	4.537	0.013	1.357	2064268	40.7		81.3	8249	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.537	4.549	-0.012	0.997	3823	0.0906	Target=7.49		0.5	M
613.00 > 169.00	4.550	4.549	0.001	1.000	618		6.19(3.75-11.24)		9.0	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.483	2201305	31.5		63.0	7531	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.972	4.972	0.0	1.000	563	0.0961	Target=1.02		6.1	
713.00 > 219.00	4.972	4.972	0.0	1.000	449		1.25(0.51-1.54)		8.1	M

QC Flag Legend

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d

Injection Date: 02-Aug-2019 04:13:25

Instrument ID: LC812

Lims ID: 480-156213-F-1-A

Lab Sample ID: 200-156213-1

Client ID: 356023-MW8B

Operator ID: lc812tech

ALS Bottle#: 51

Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

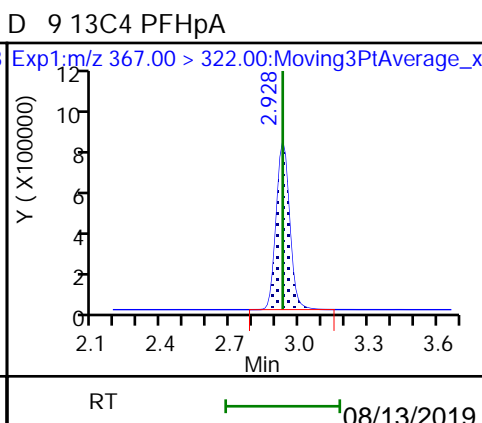
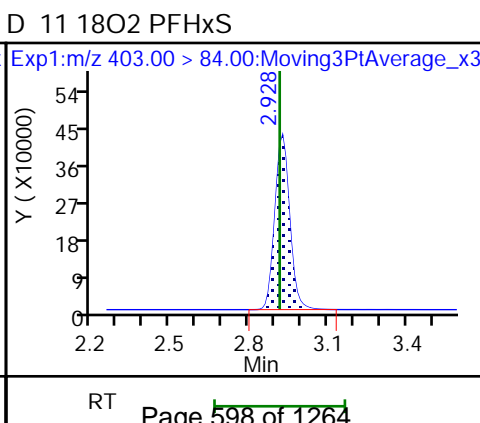
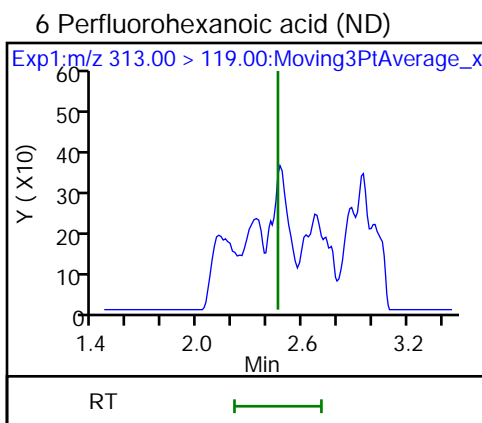
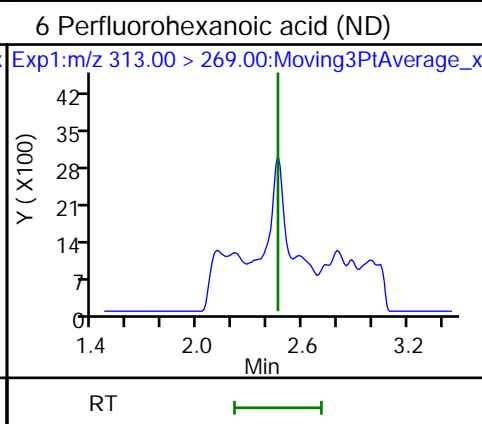
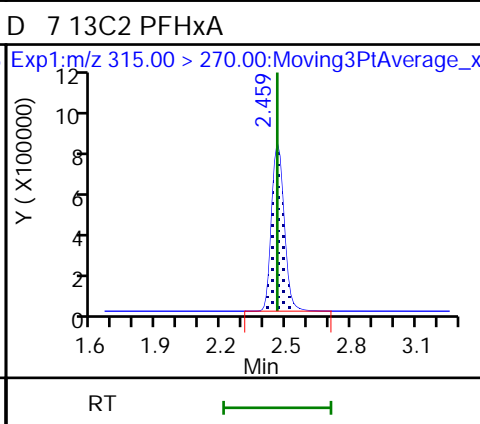
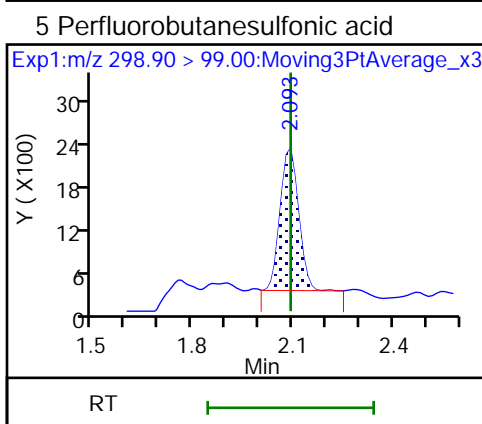
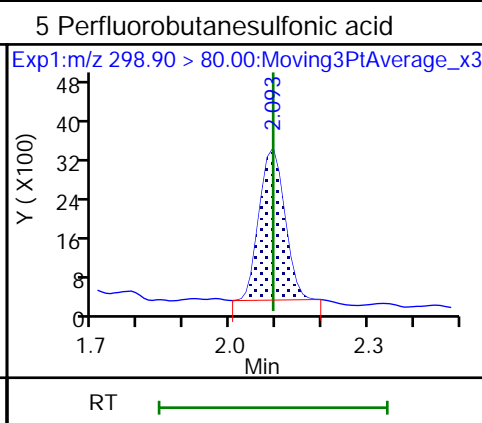
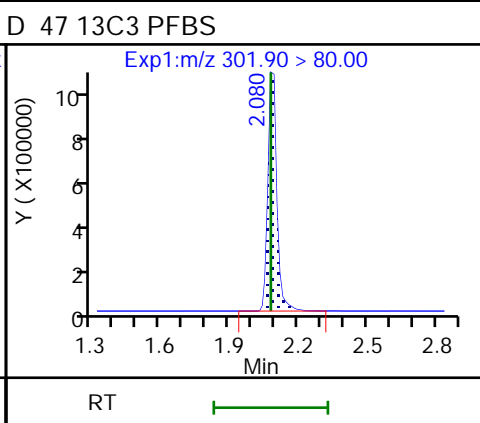
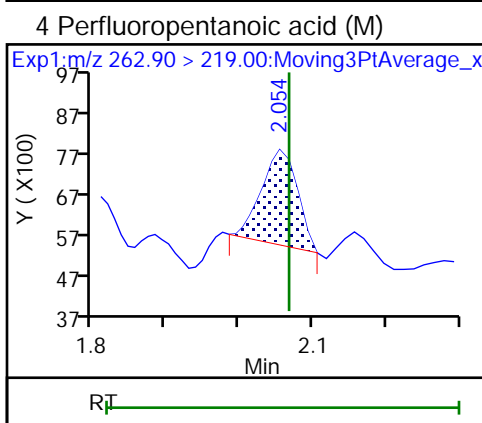
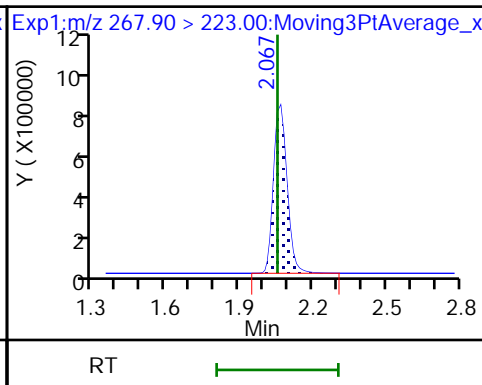
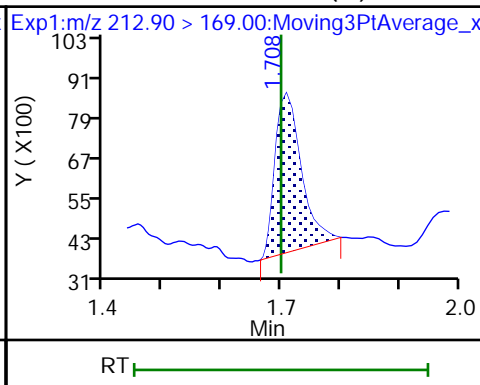
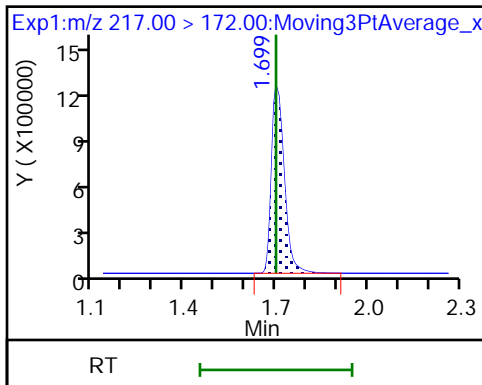
Method: PFC_LC812

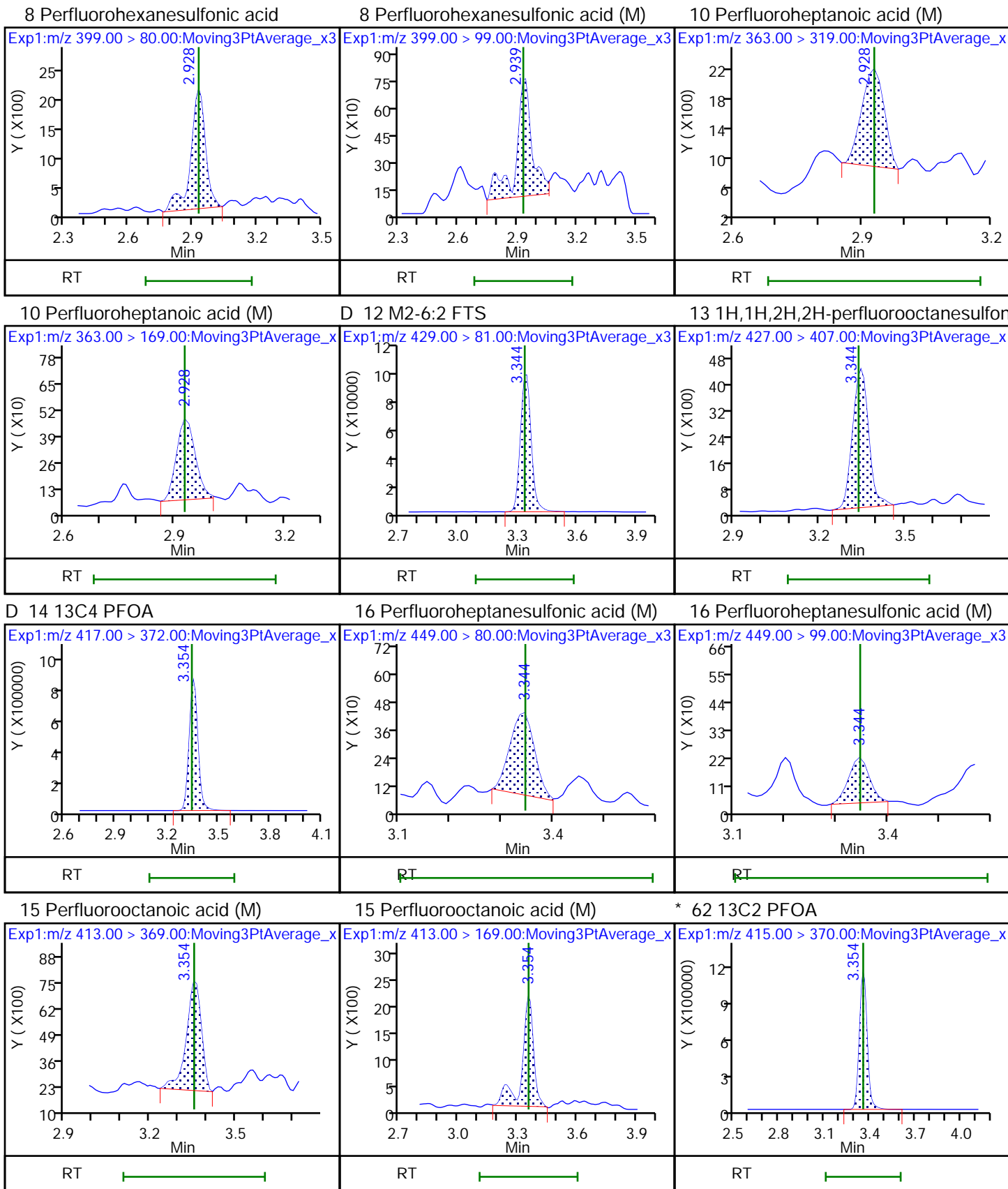
Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

D 3 13C5 PFPeA

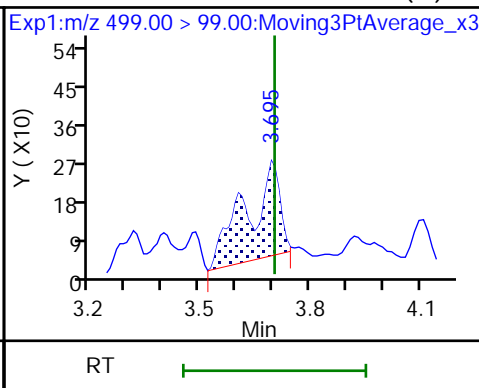
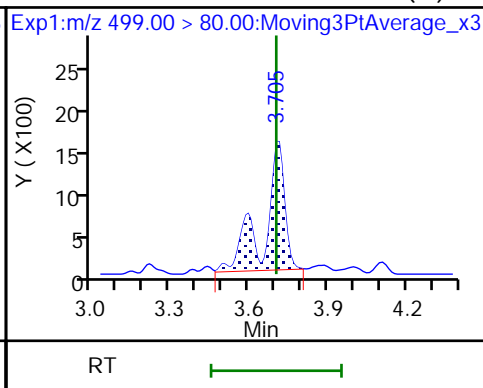
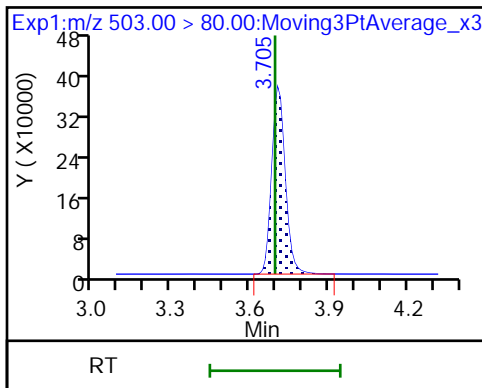




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

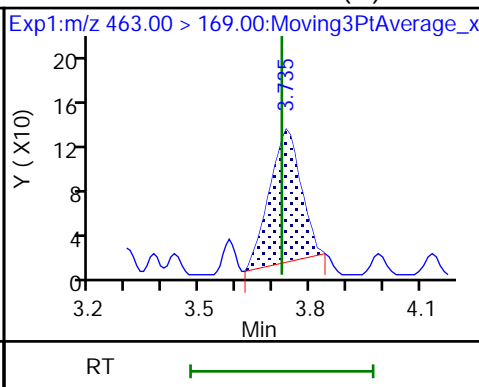
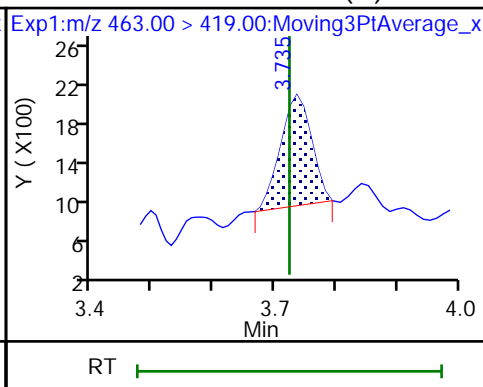
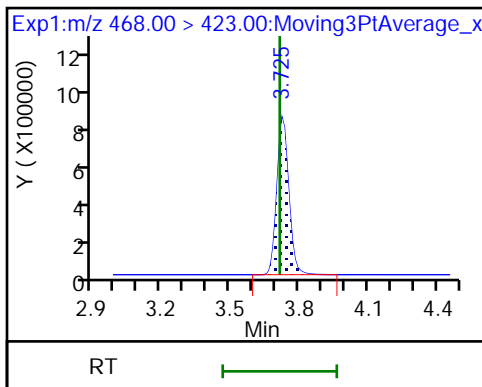
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (M)

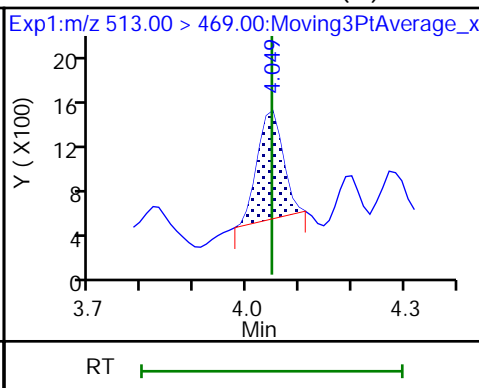
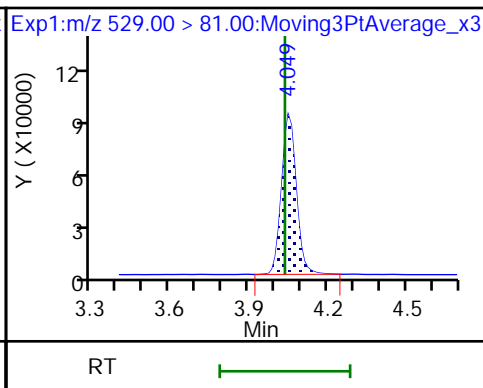
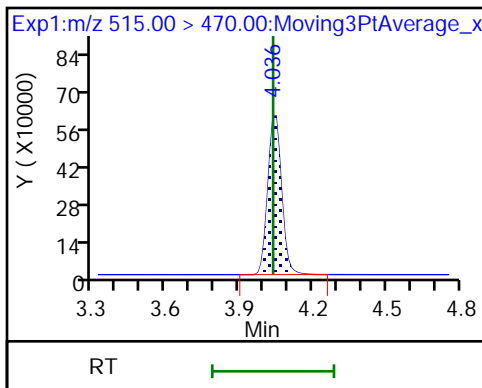
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

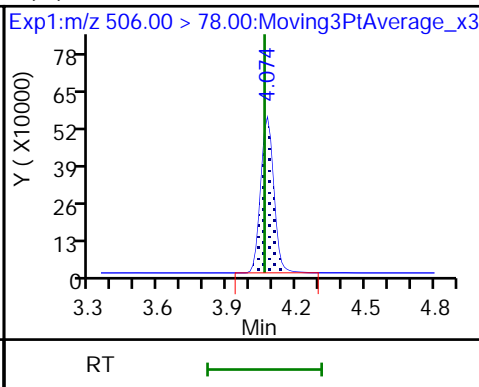
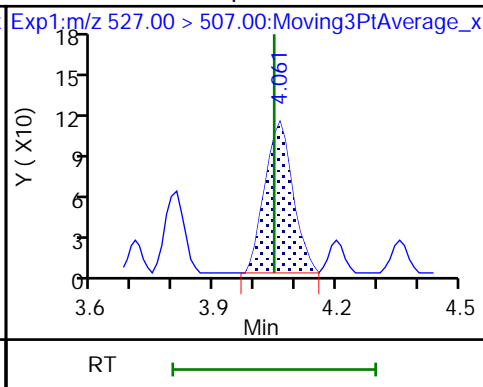
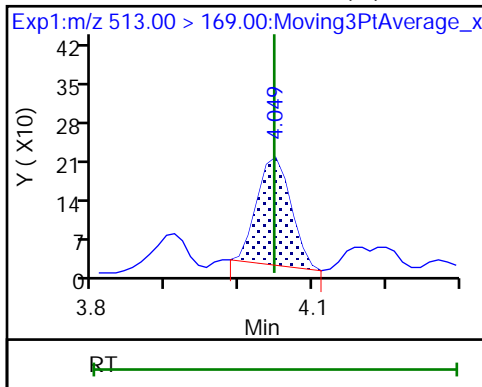
24 Perfluorodecanoic acid (M)



24 Perfluorodecanoic acid (M)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

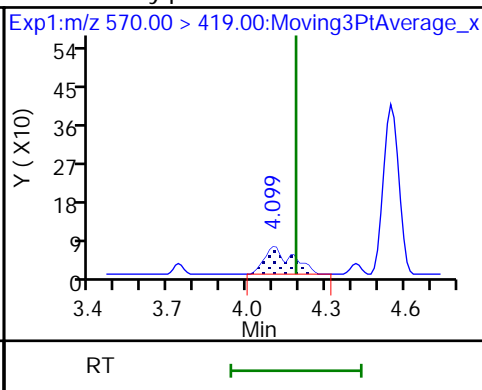
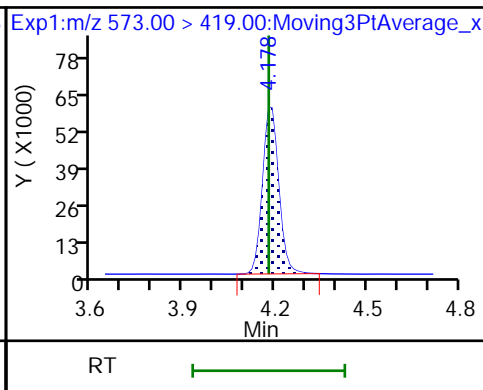
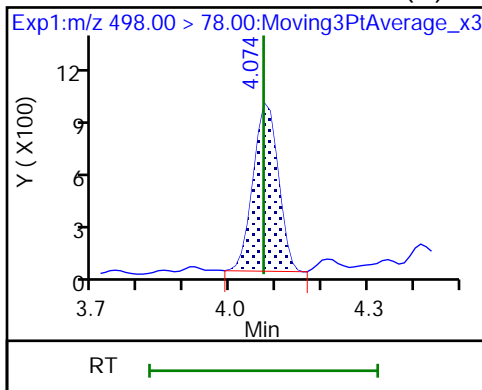
D 27 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

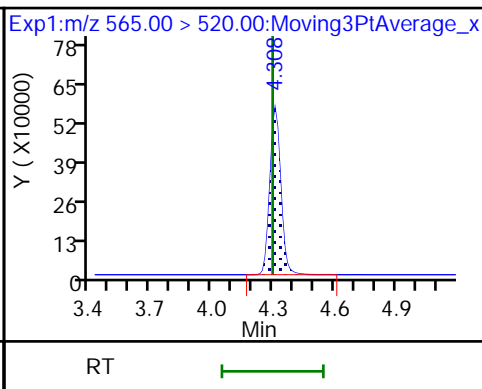
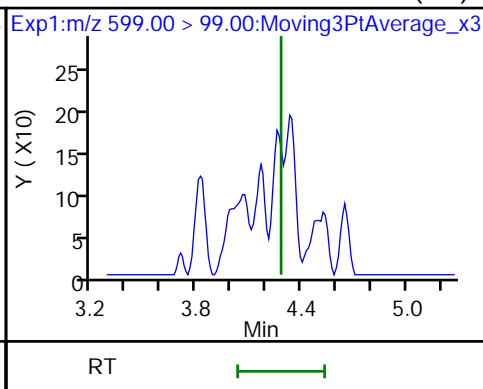
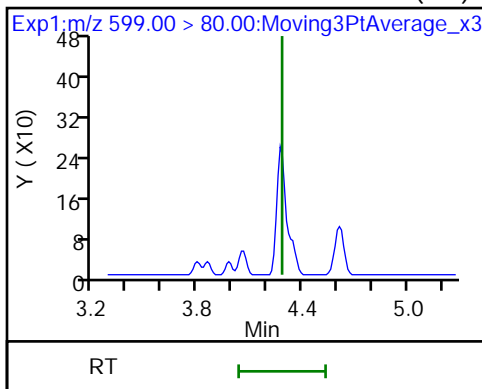
28 N-methylperfluorooctanesulfonamido (M)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

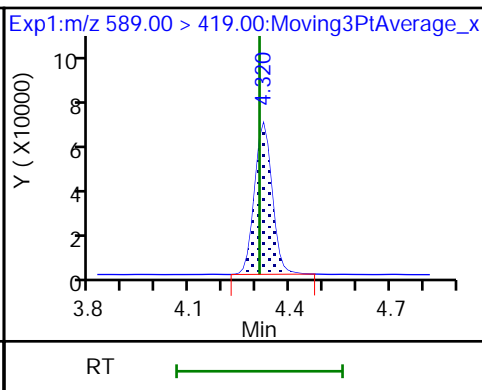
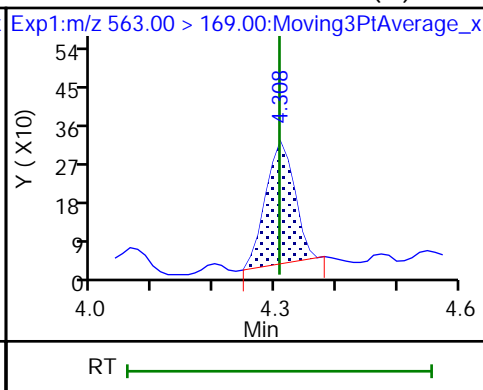
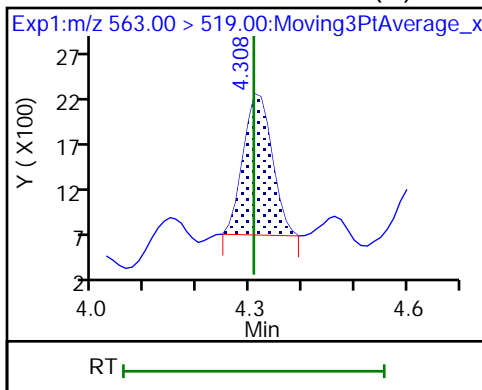
D 30 13C2 PFUoA



31 Perfluoroundecanoic acid (M)

31 Perfluoroundecanoic acid (M)

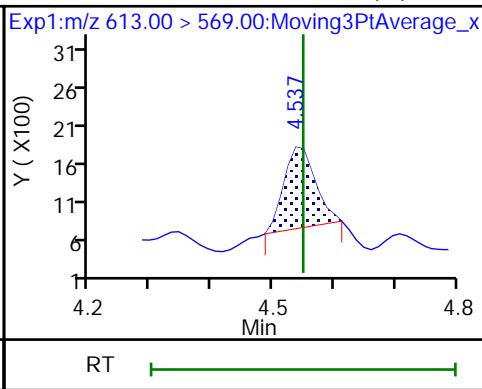
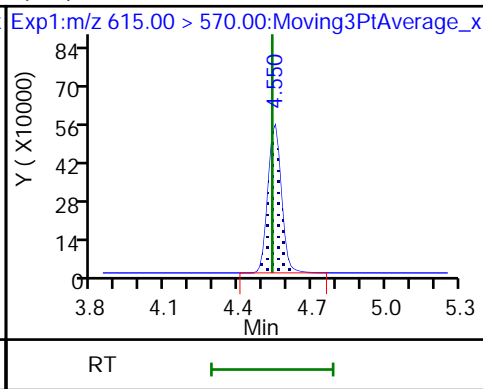
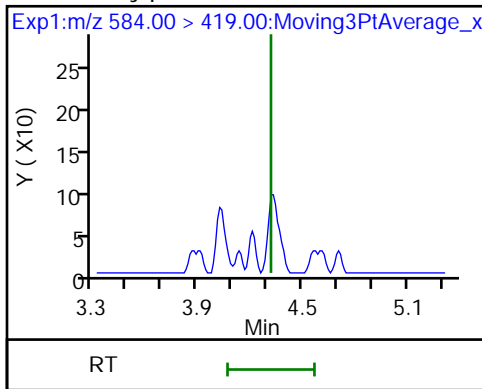
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 33 13C2 PFDoA

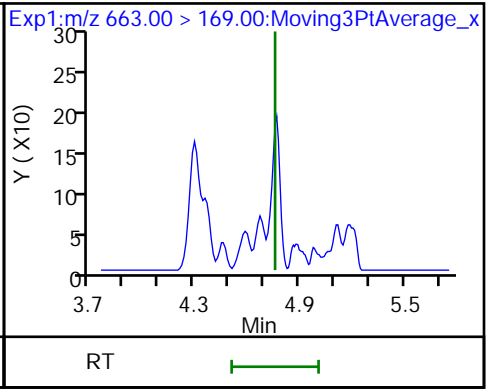
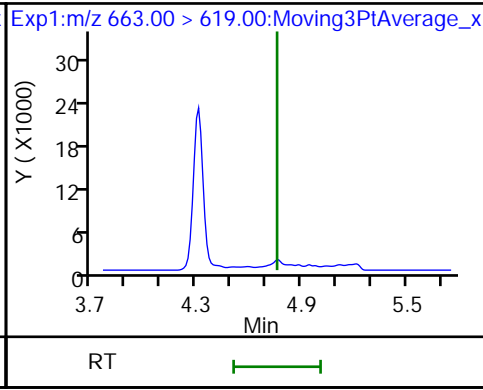
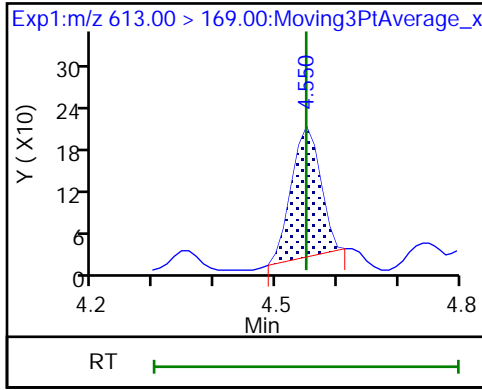
37 Perfluorododecanoic acid (M)



37 Perfluorododecanoic acid (M)

41 Perfluorotridecanoic acid (ND)

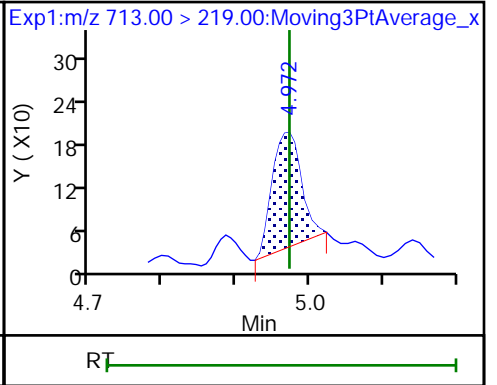
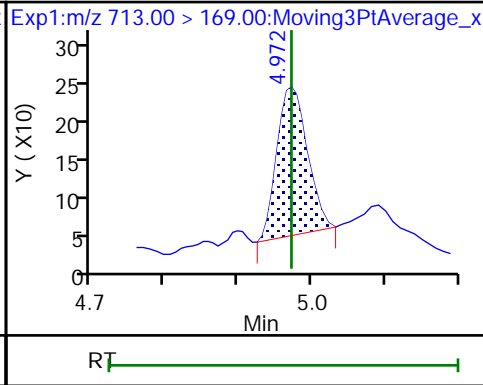
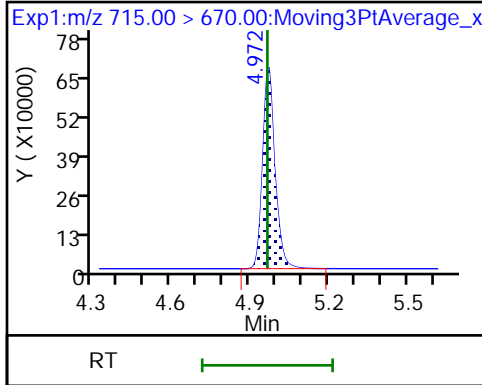
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)



Eurofins TestAmerica, Burlington

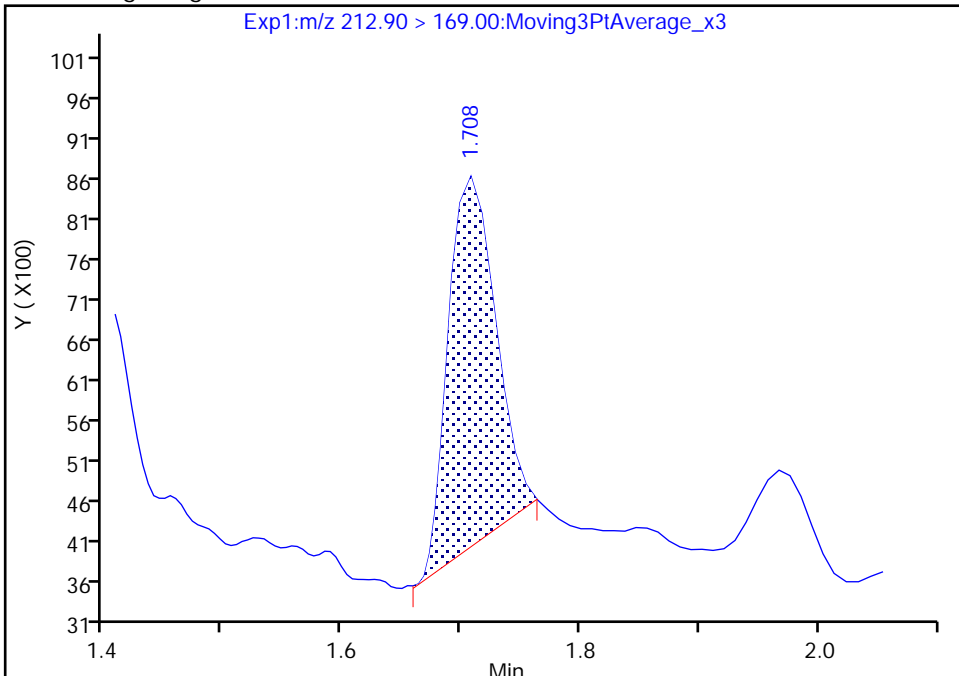
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

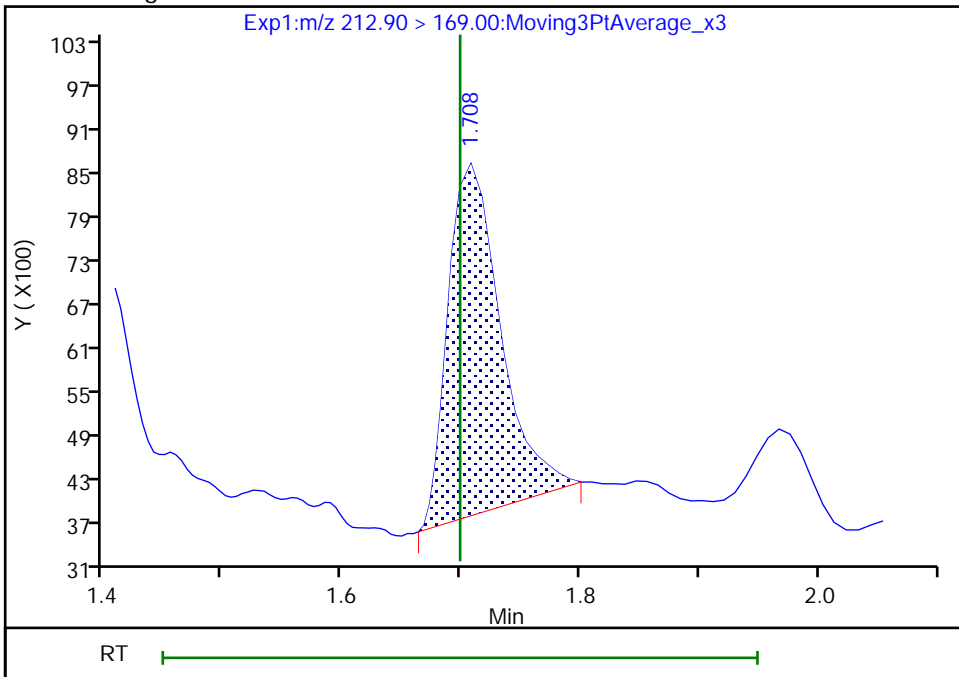
RT: 1.71
Area: 12705
Amount: 0.202752
Amount Units: ng/ml

Processing Integration Results



RT: 1.71
Area: 14849
Amount: 0.236967
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:31:22
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

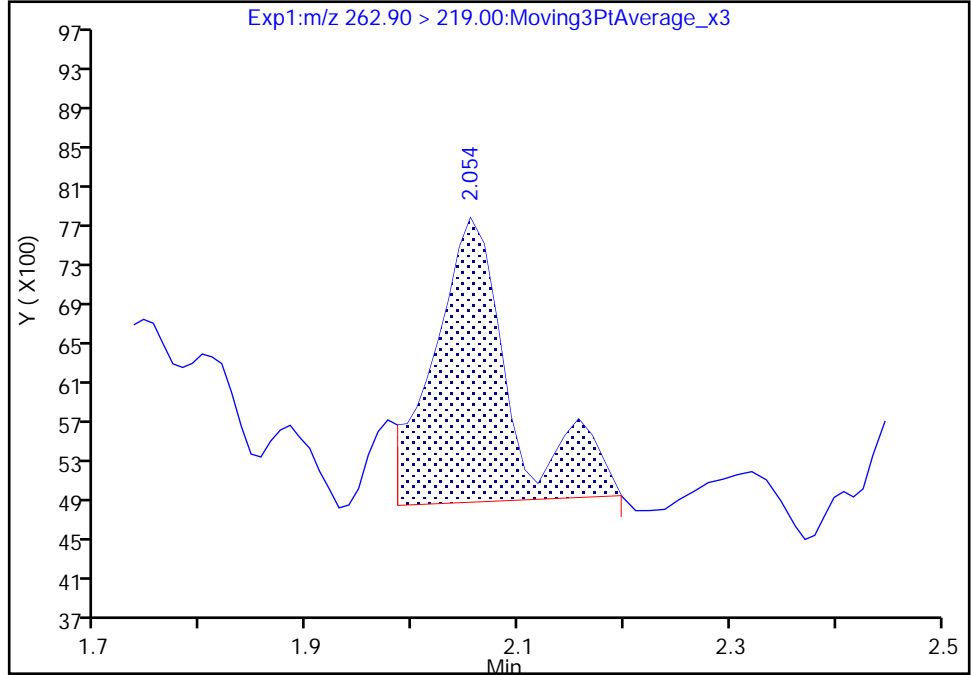
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

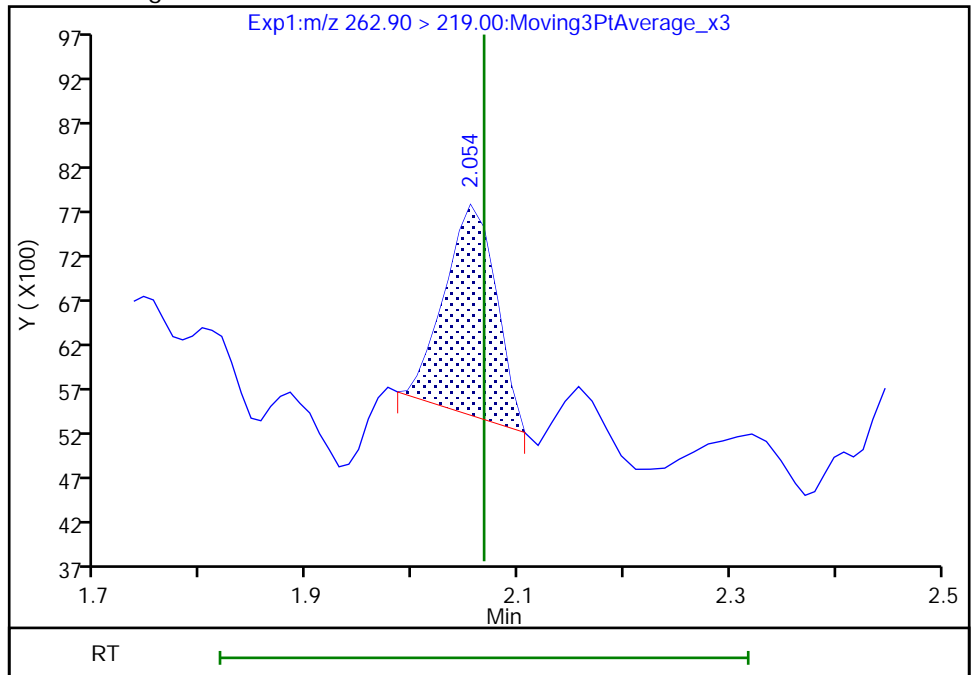
RT: 2.05
Area: 14384
Amount: 0.233647
Amount Units: ng/ml

Processing Integration Results



RT: 2.05
Area: 7975
Amount: 0.129542
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:31:31
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

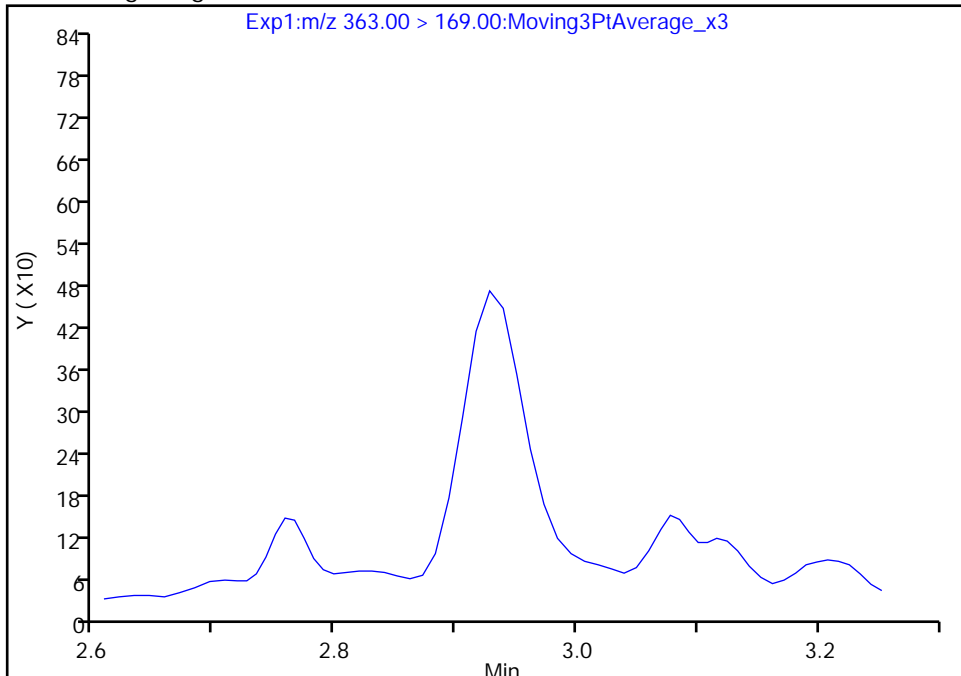
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

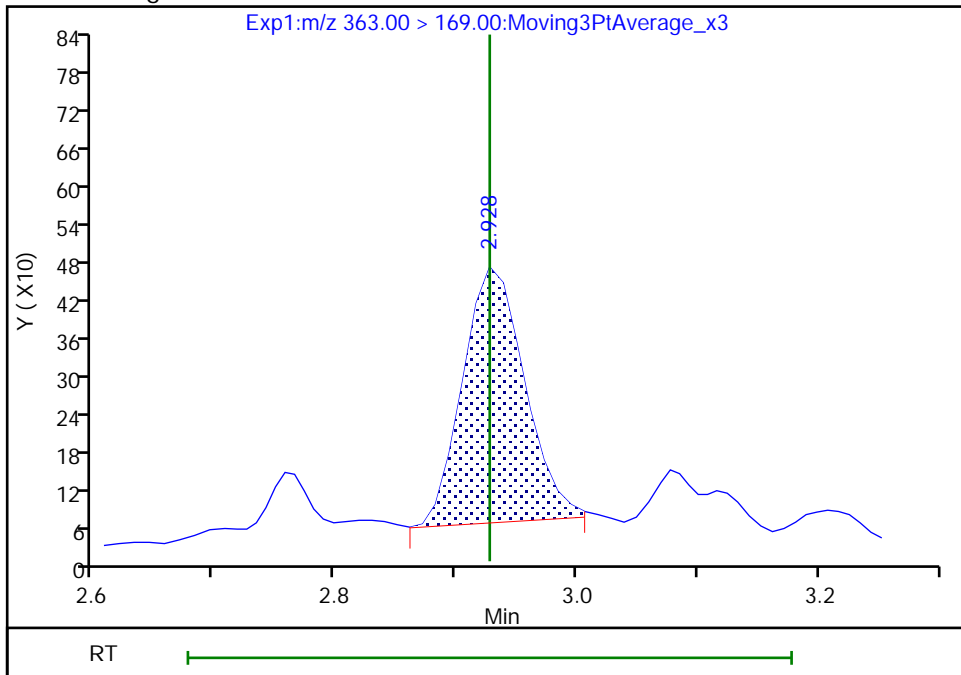
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 1442
Amount: 0.078885
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:32:40
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

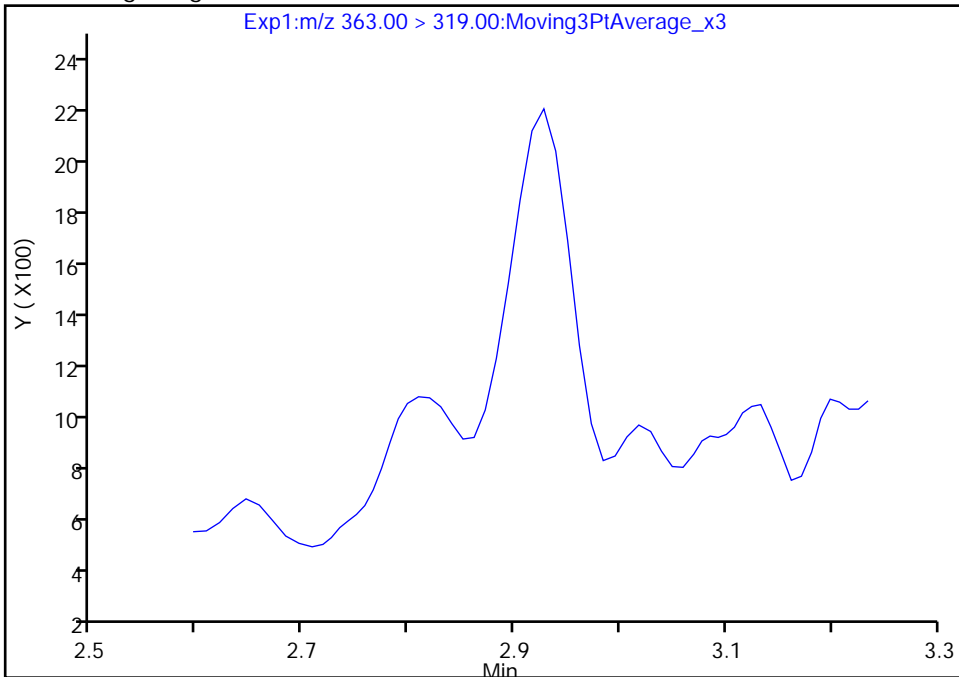
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

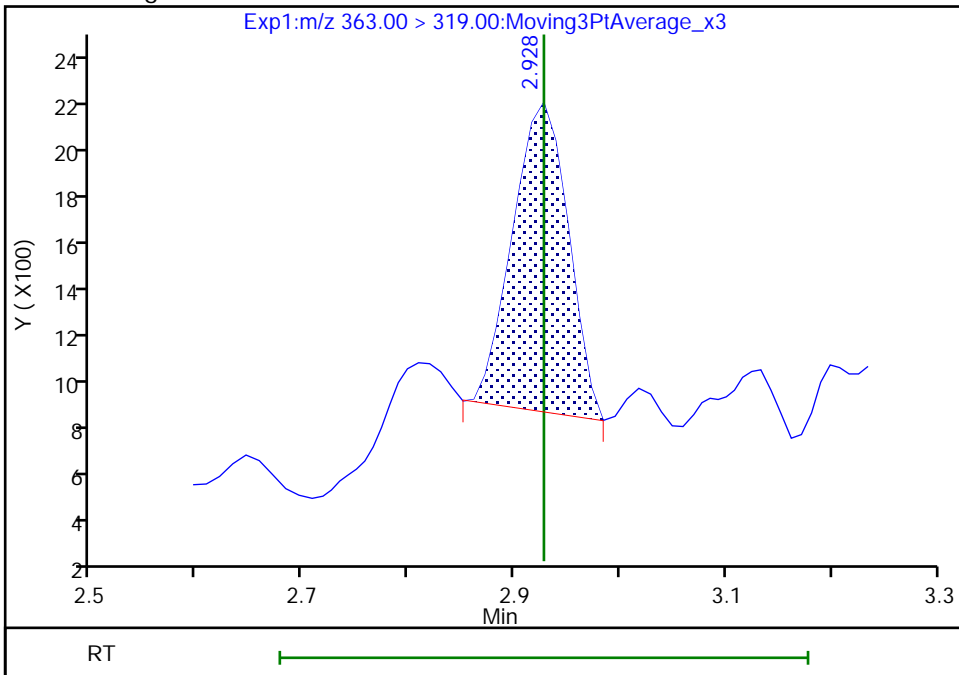
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 4621
Amount: 0.078885
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

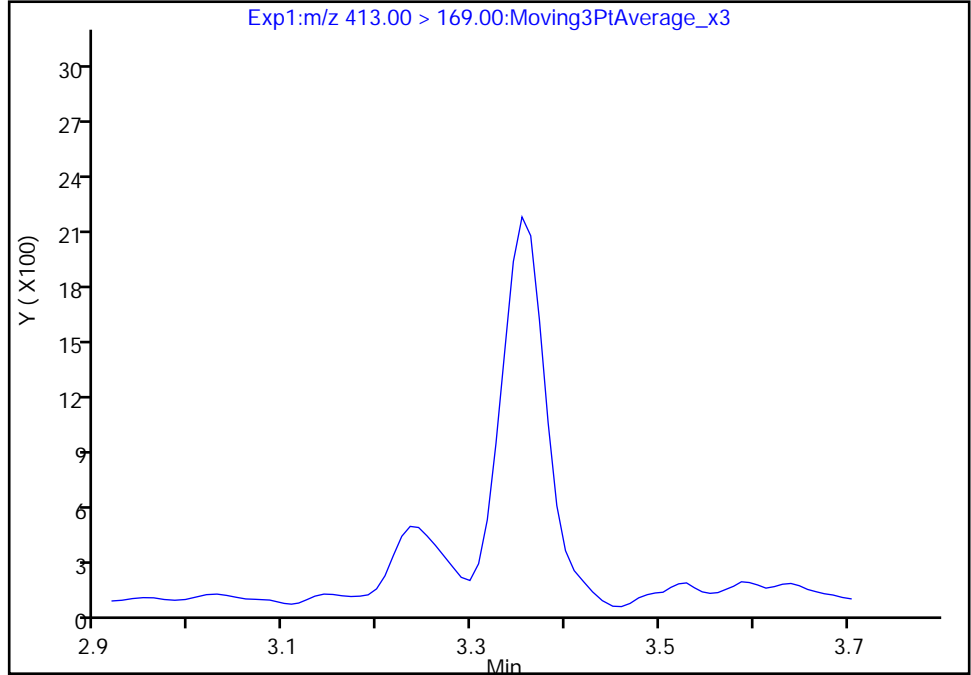
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

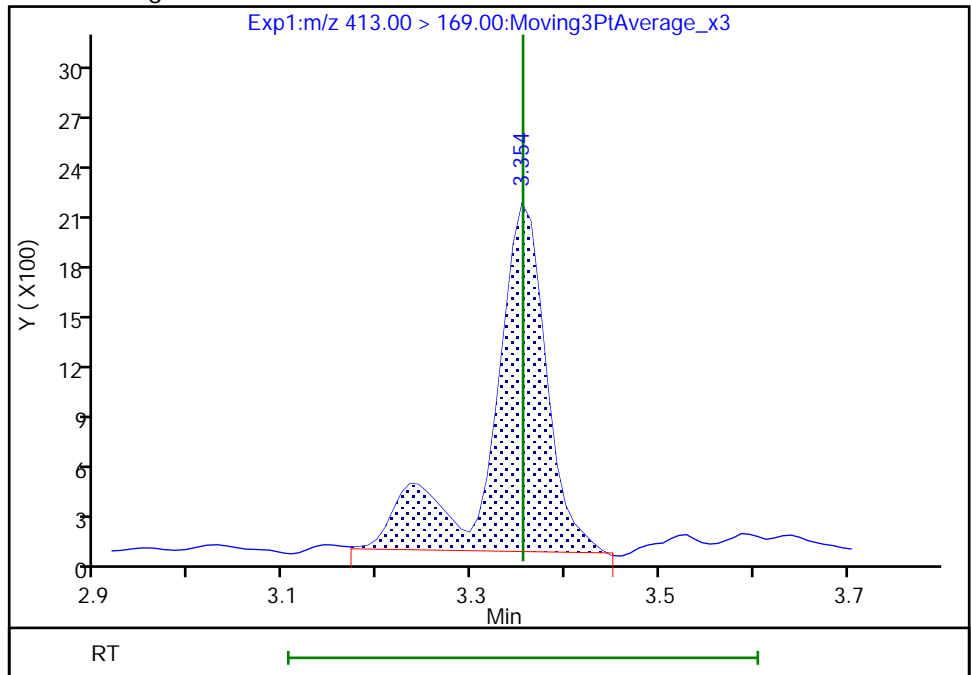
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.35
Area: 8377
Amount: 0.327535
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:33:11
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

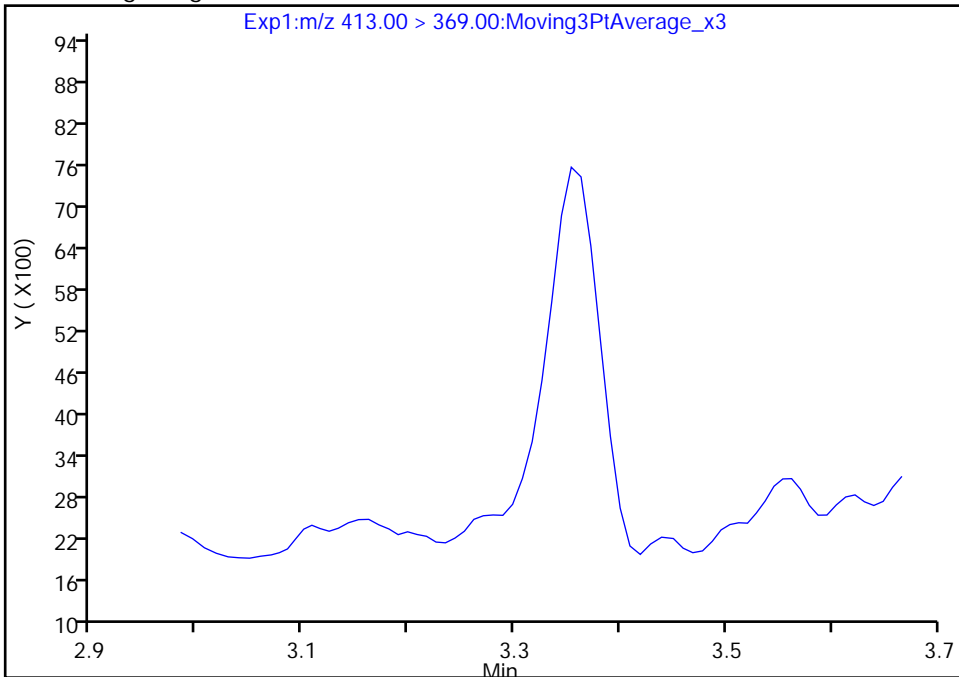
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

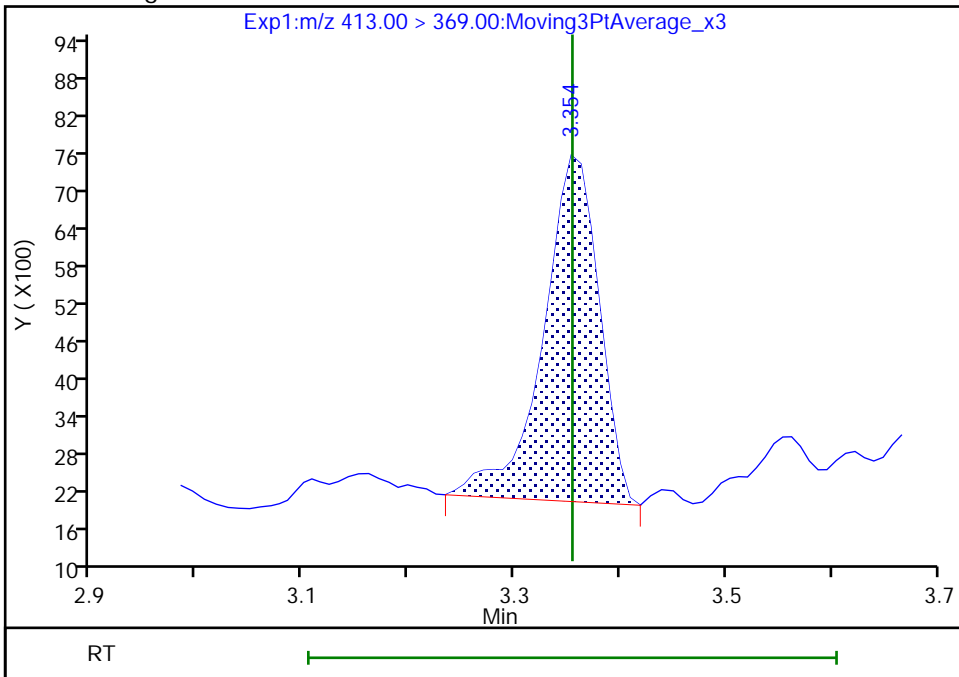
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.35
Area: 20319
Amount: 0.327535
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

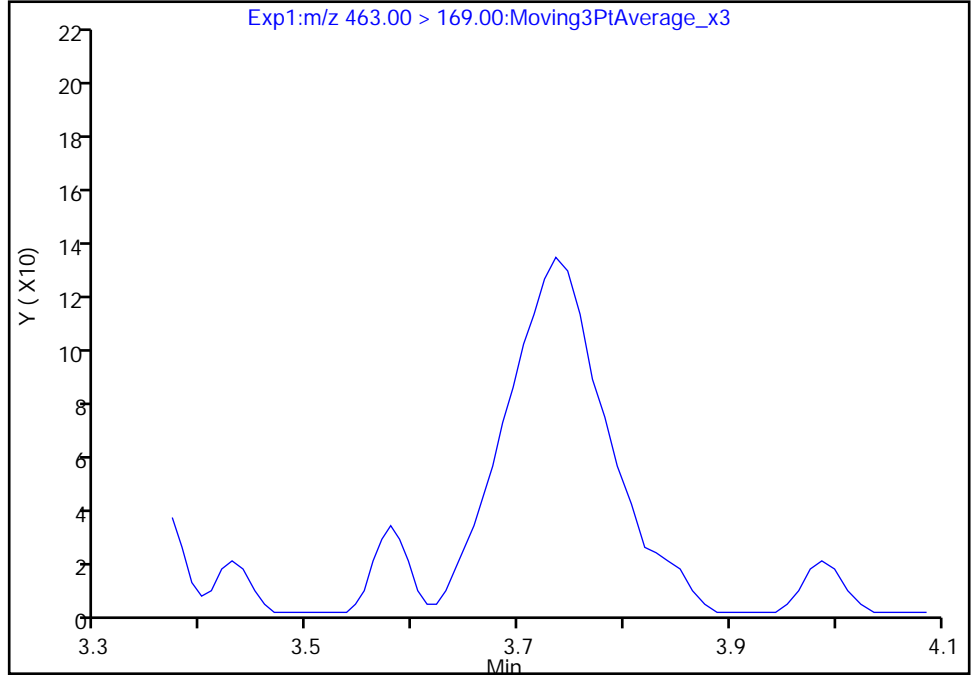
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

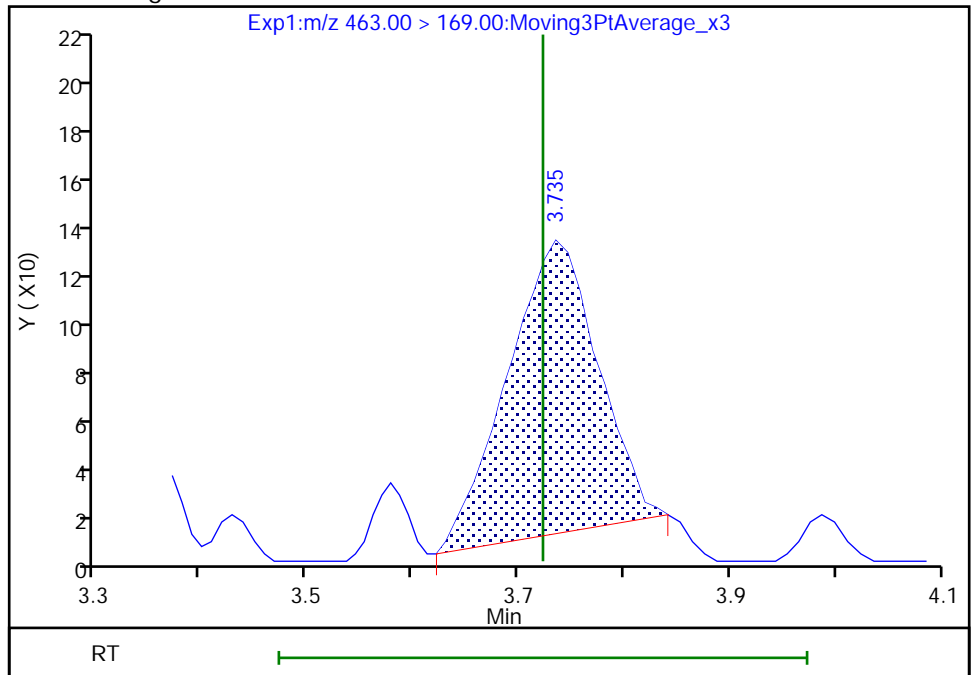
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.74
Area: 712
Amount: 0.076295
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:33:59

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

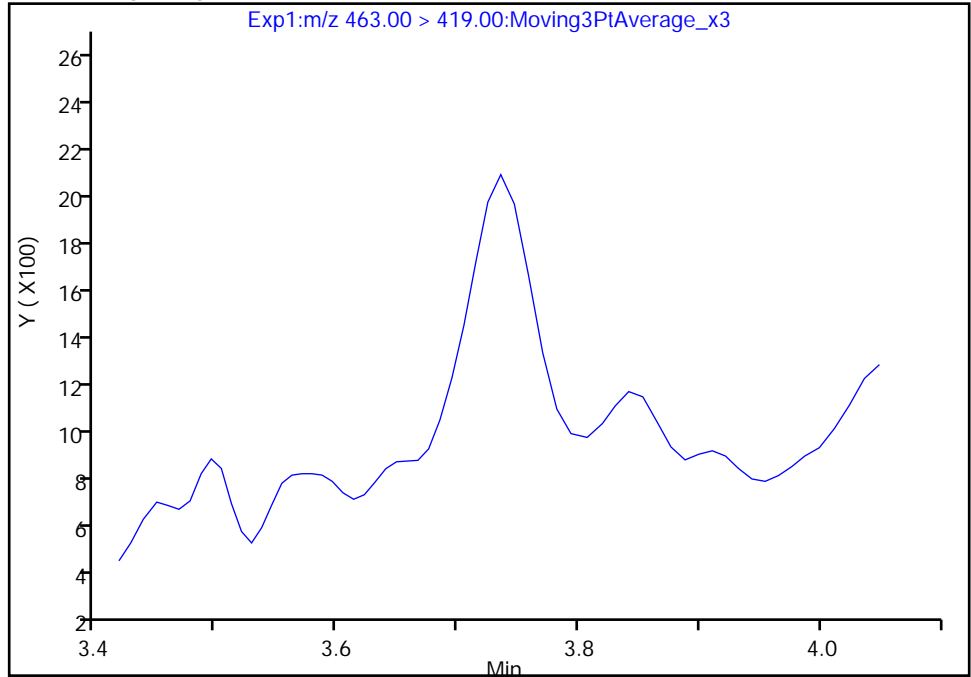
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

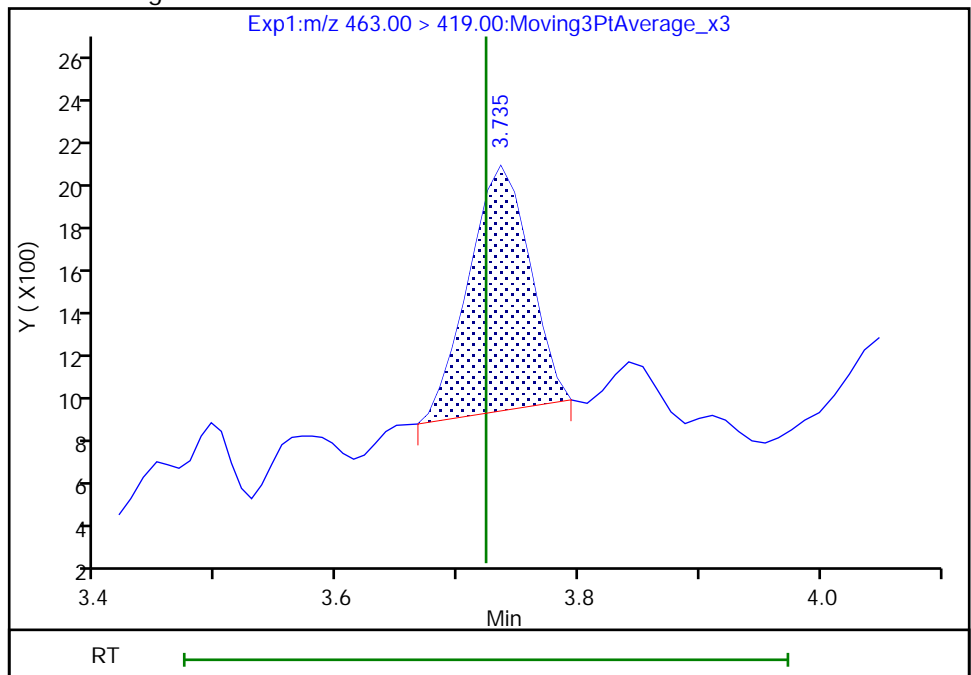
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.74
Area: 3986
Amount: 0.076295
Amount Units: ng/ml



Euofins TestAmerica, Burlington

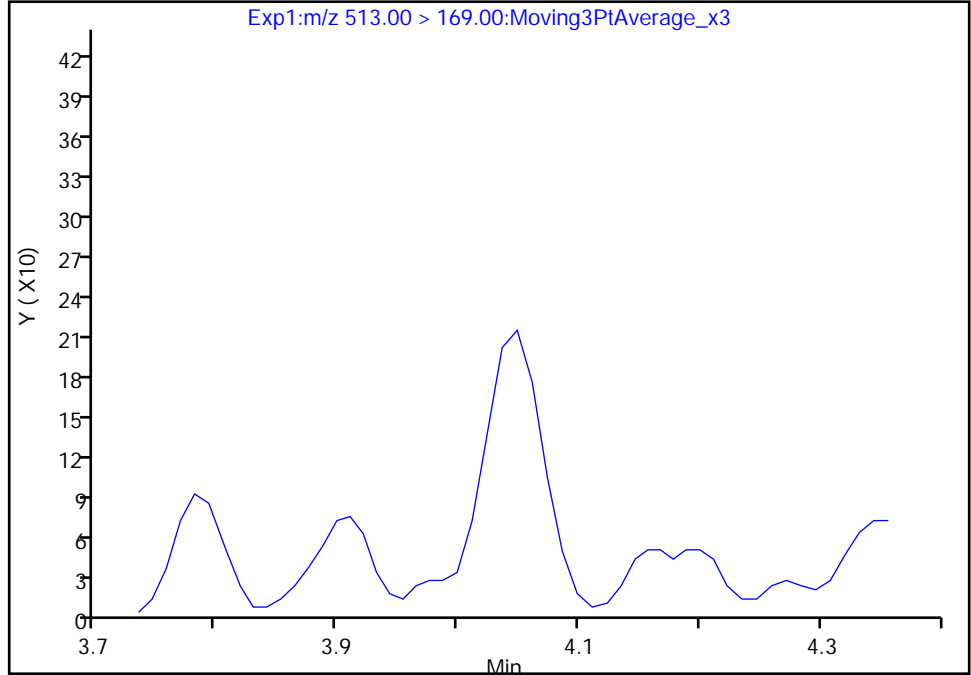
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

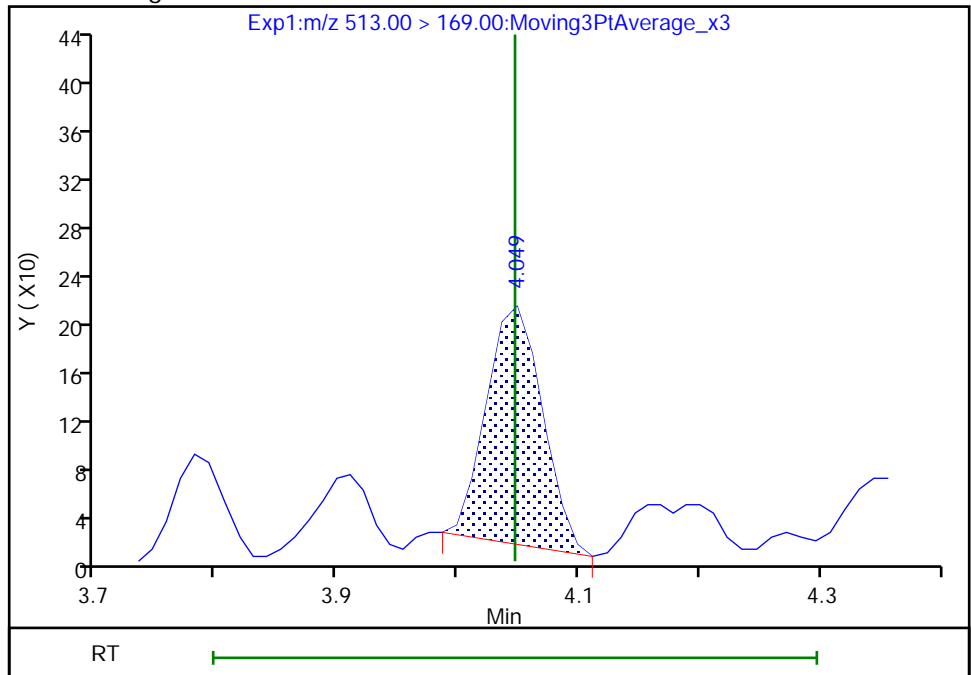
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 636
Amount: 0.068420
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:34:12
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

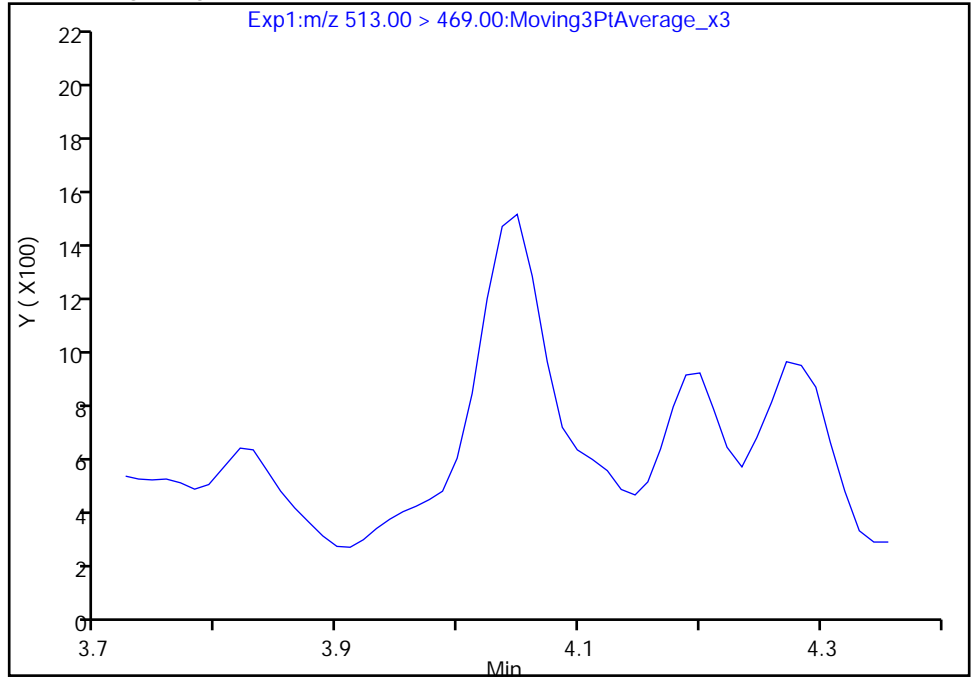
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

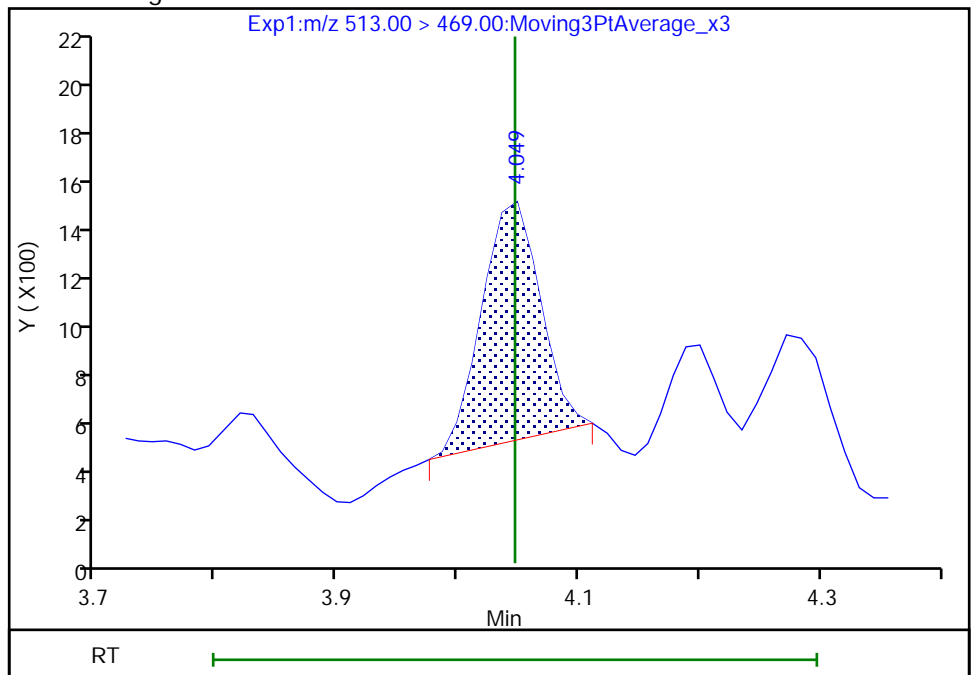
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 3097
Amount: 0.068420
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

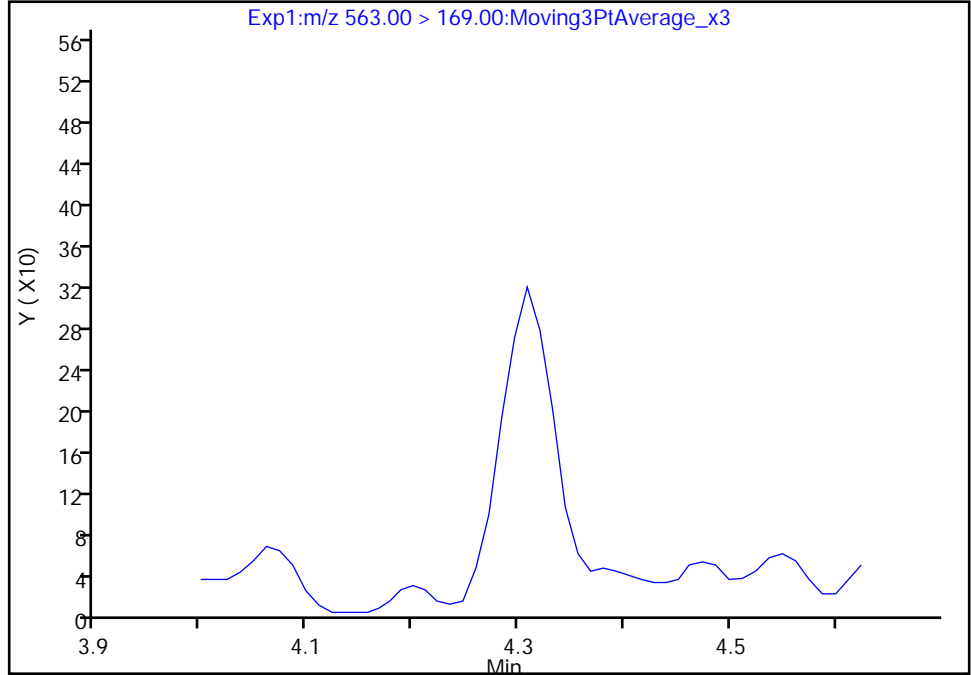
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

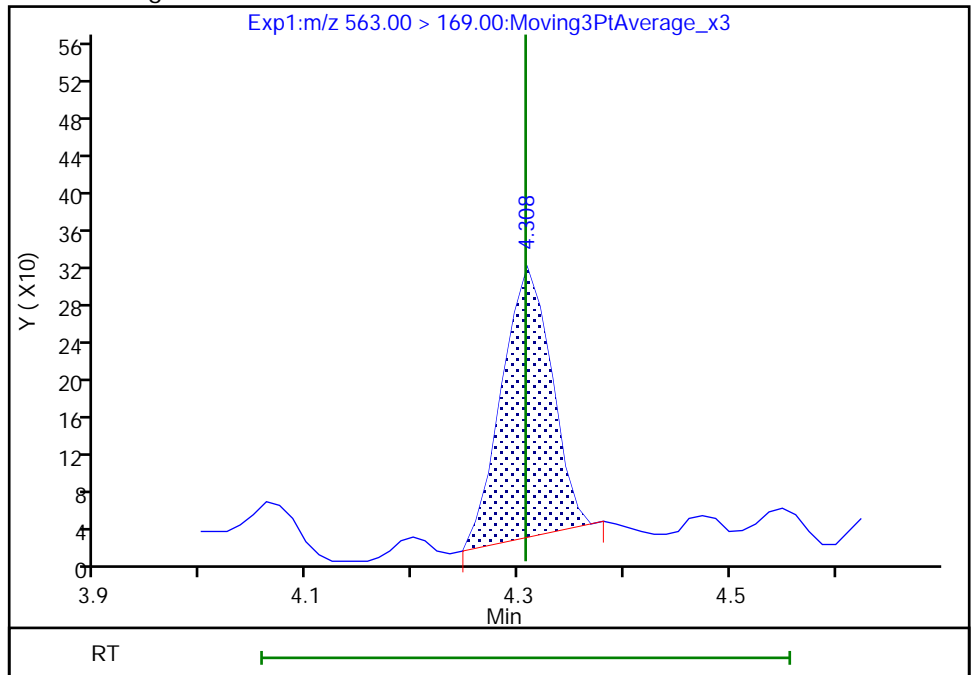
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 947
Amount: 0.161090
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:34:49
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

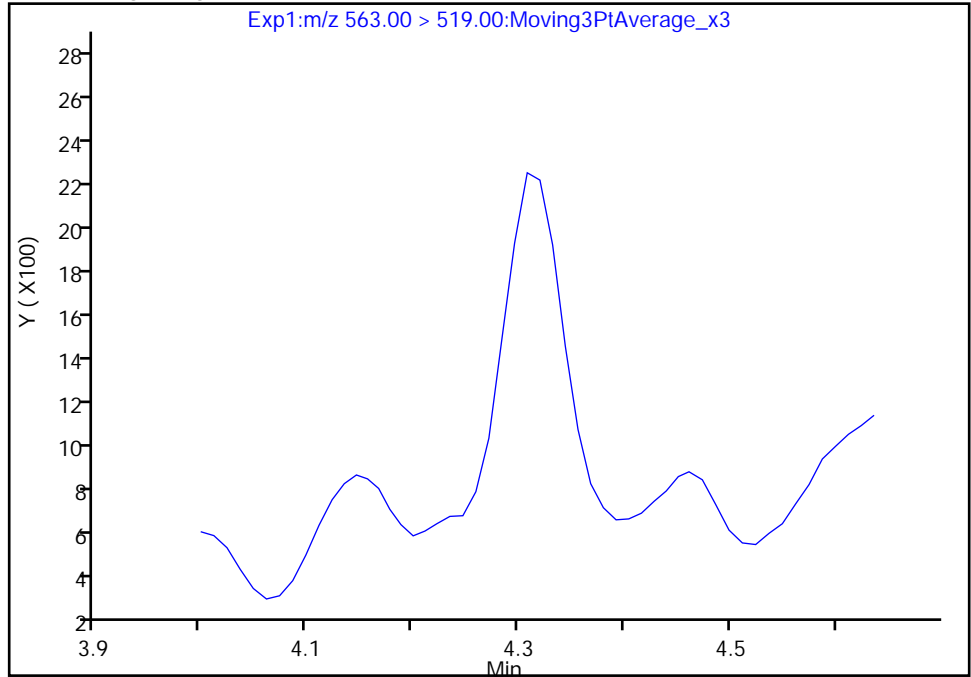
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

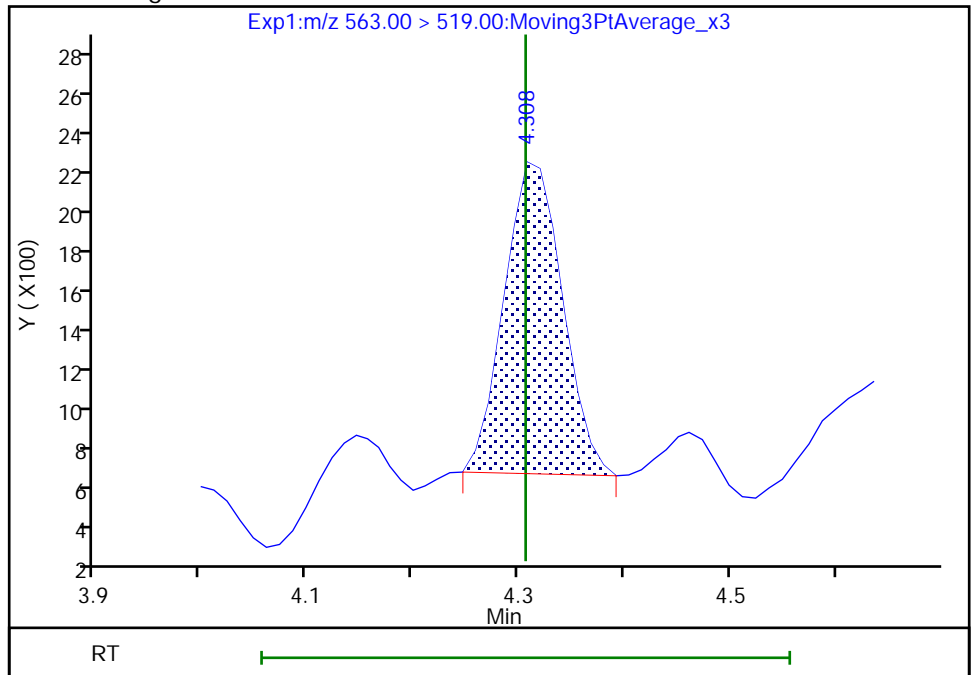
Not Detected
Expected RT: 4.31

Processing Integration Results



RT: 4.31
Area: 5742
Amount: 0.161090
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:34:49

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

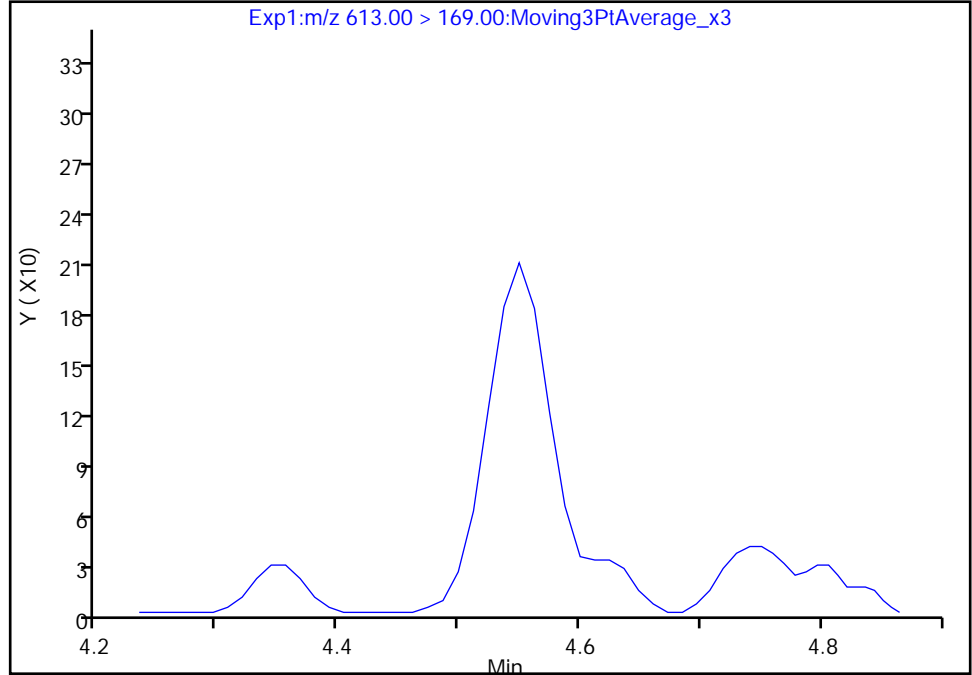
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

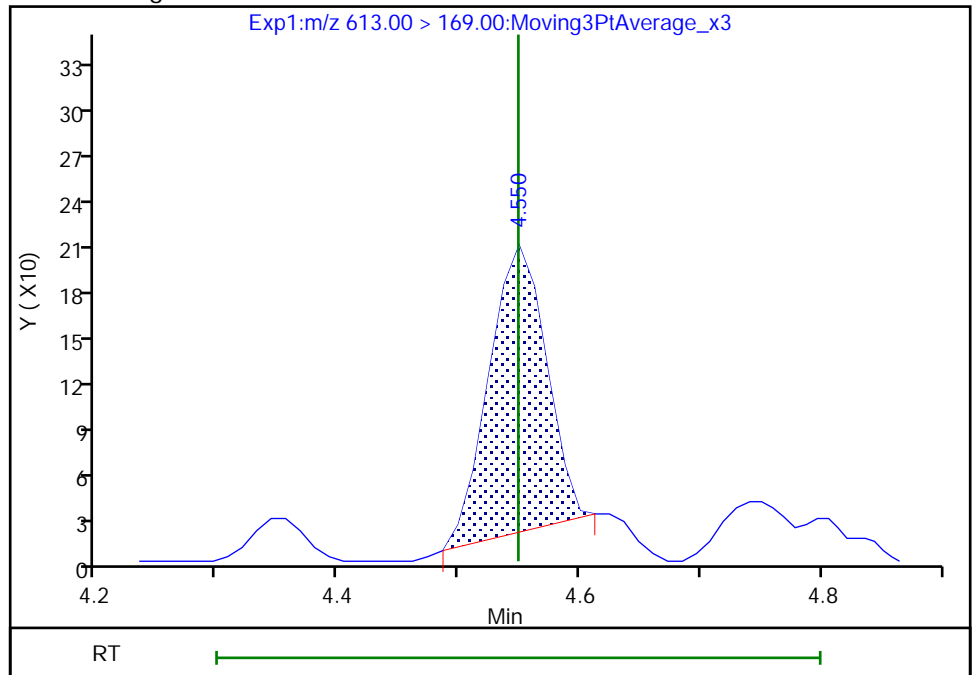
Not Detected
Expected RT: 4.55

Processing Integration Results



Manual Integration Results

RT: 4.55
Area: 618
Amount: 0.090575
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:35:20
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

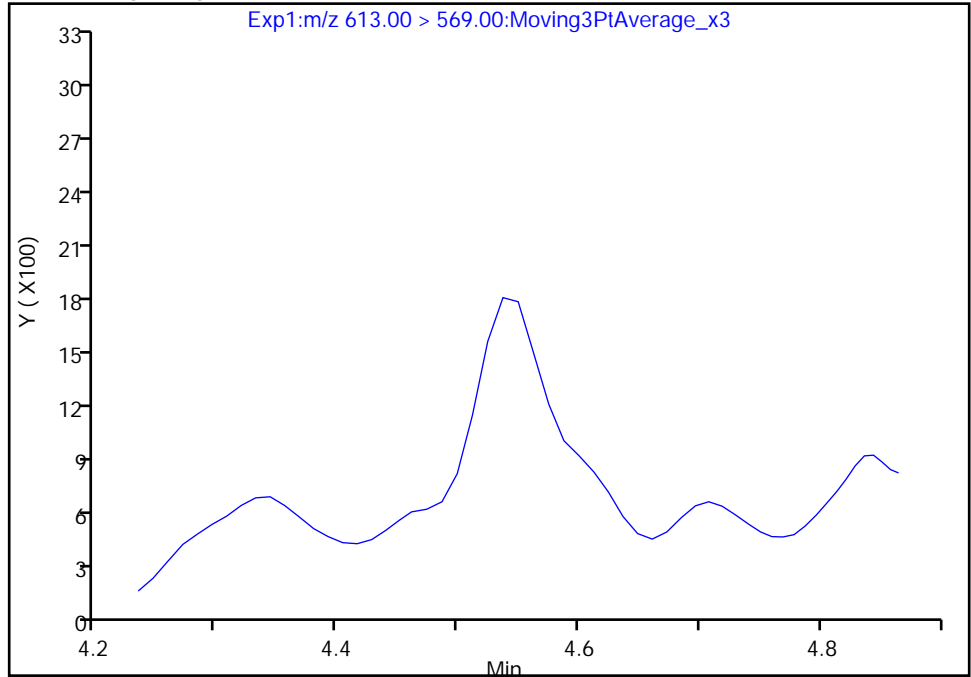
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

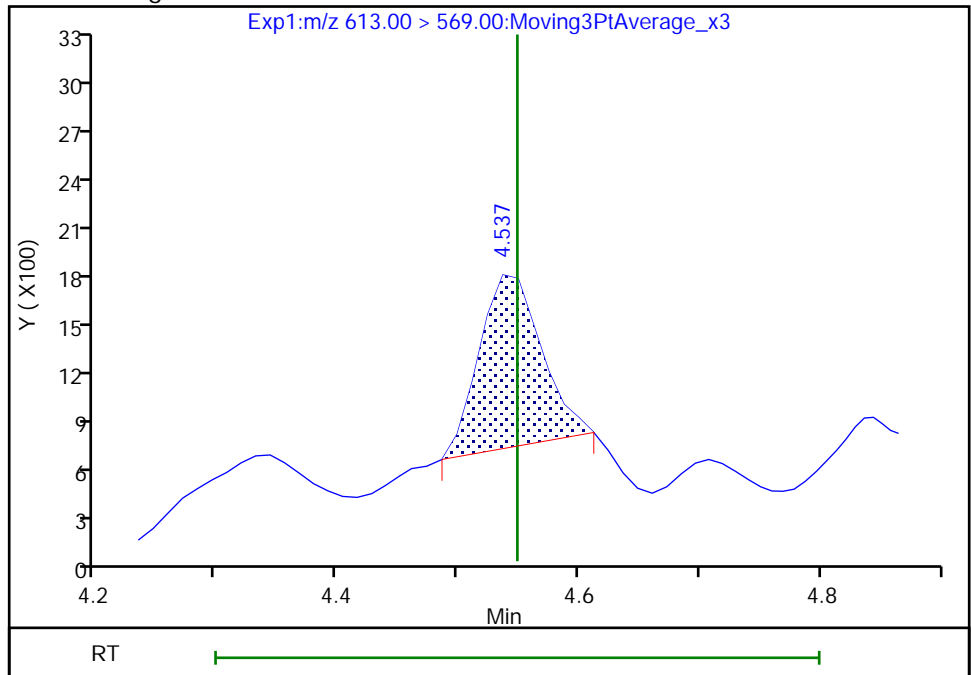
Not Detected
Expected RT: 4.55

Processing Integration Results



RT: 4.54
Area: 3823
Amount: 0.090575
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:35:20

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

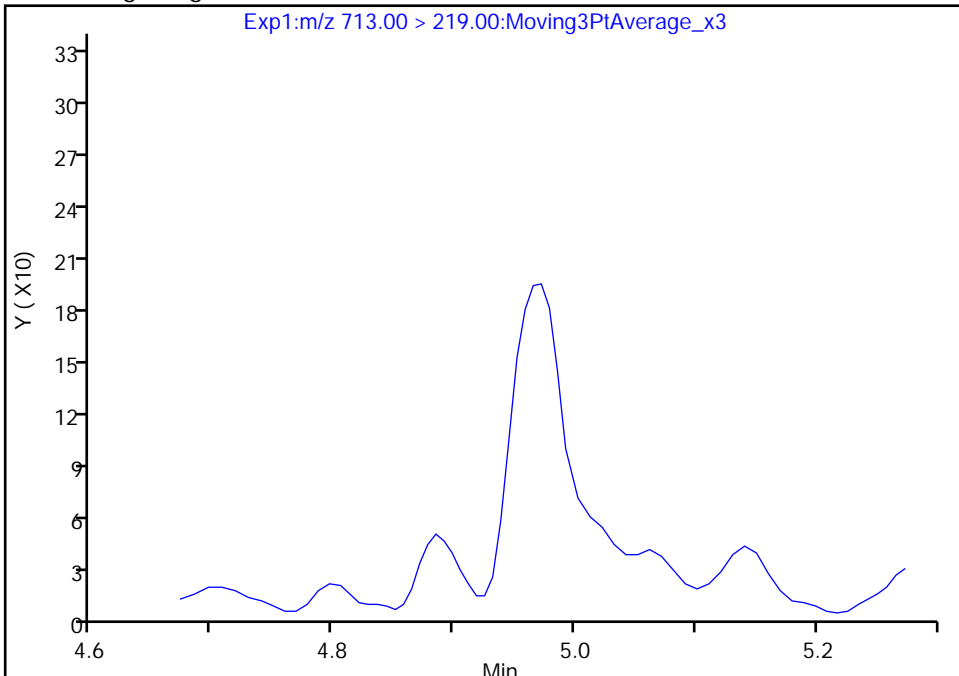
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

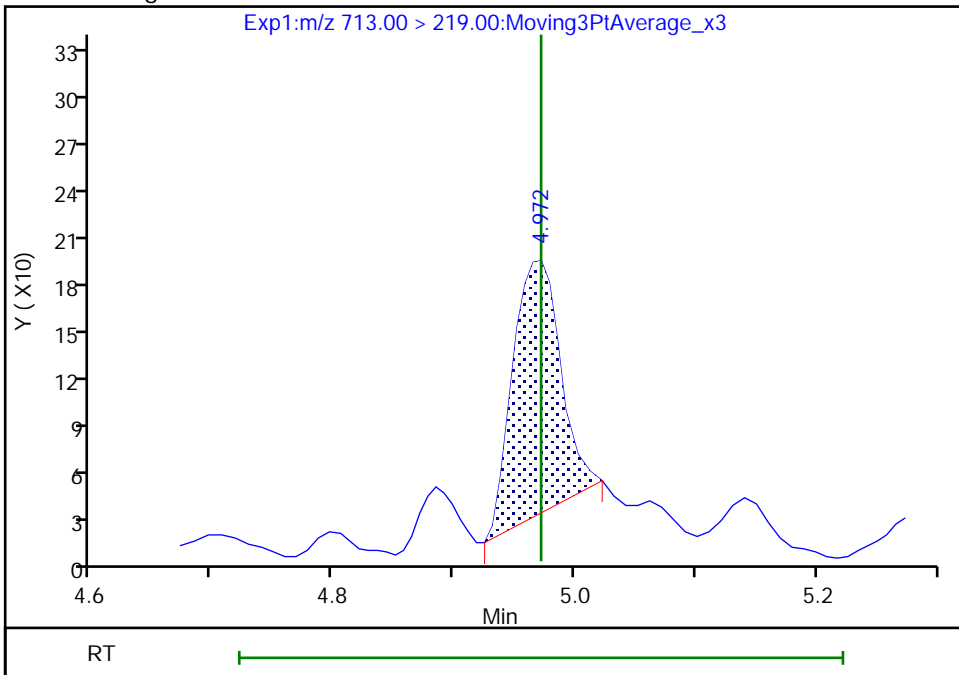
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 449
Amount: 0.096061
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:35:41
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

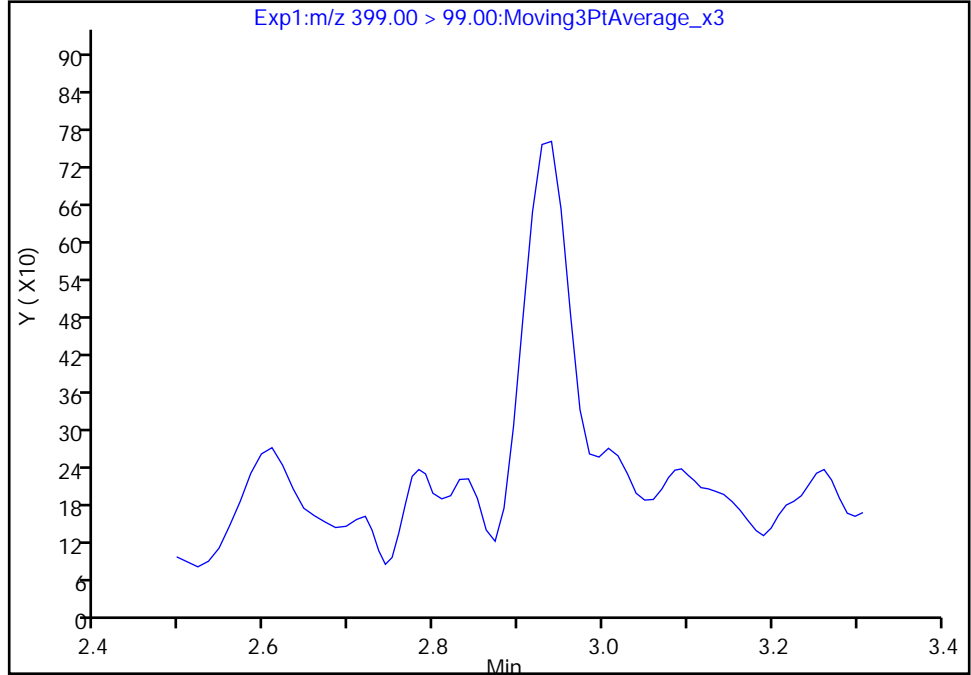
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

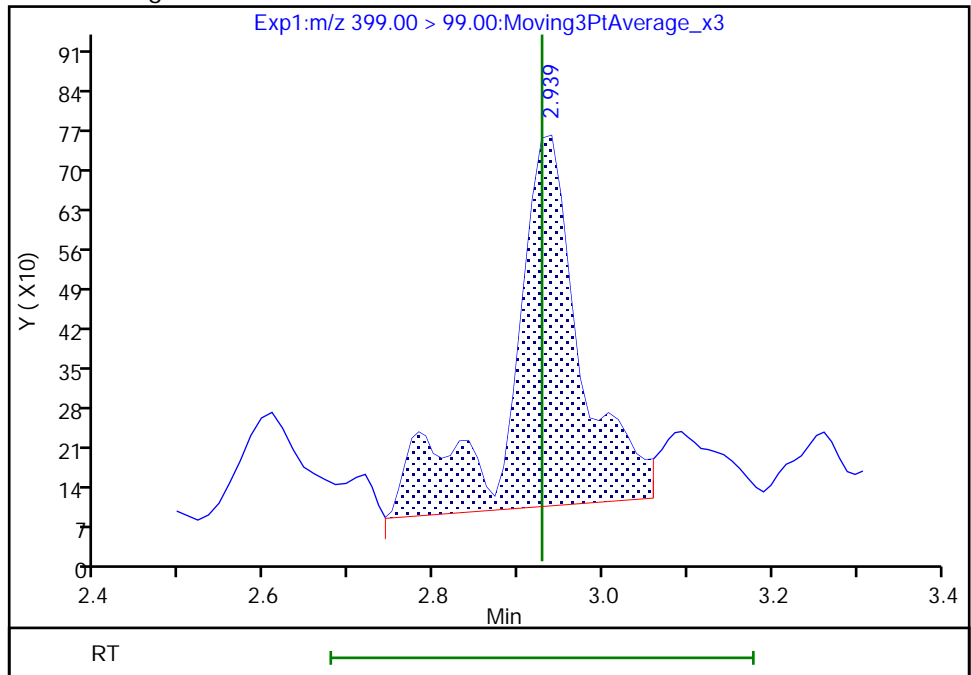
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 3786
Amount: 0.214940
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:32:33
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

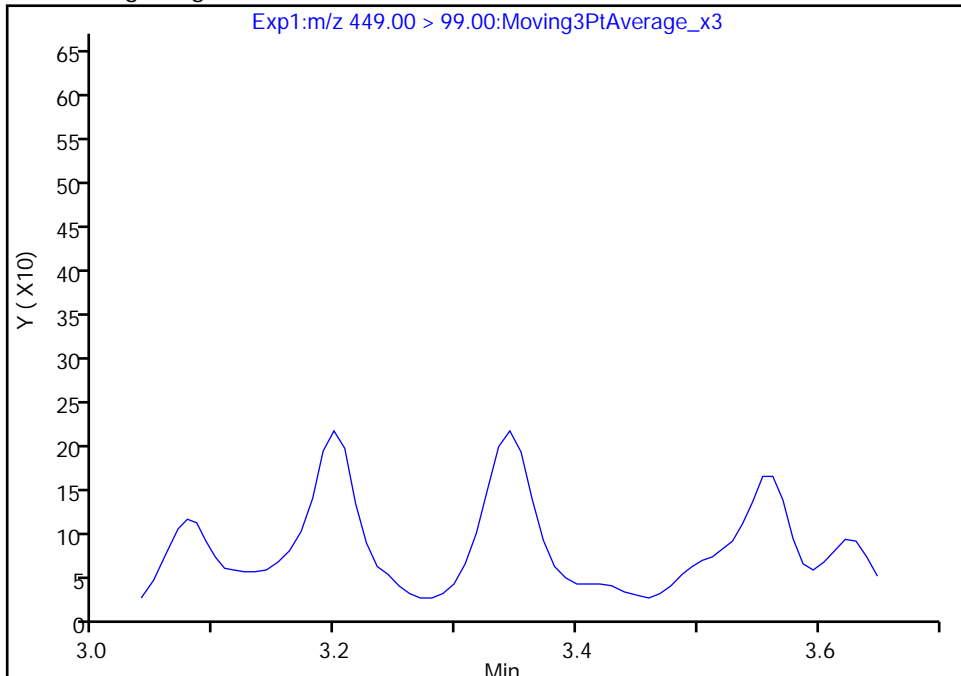
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

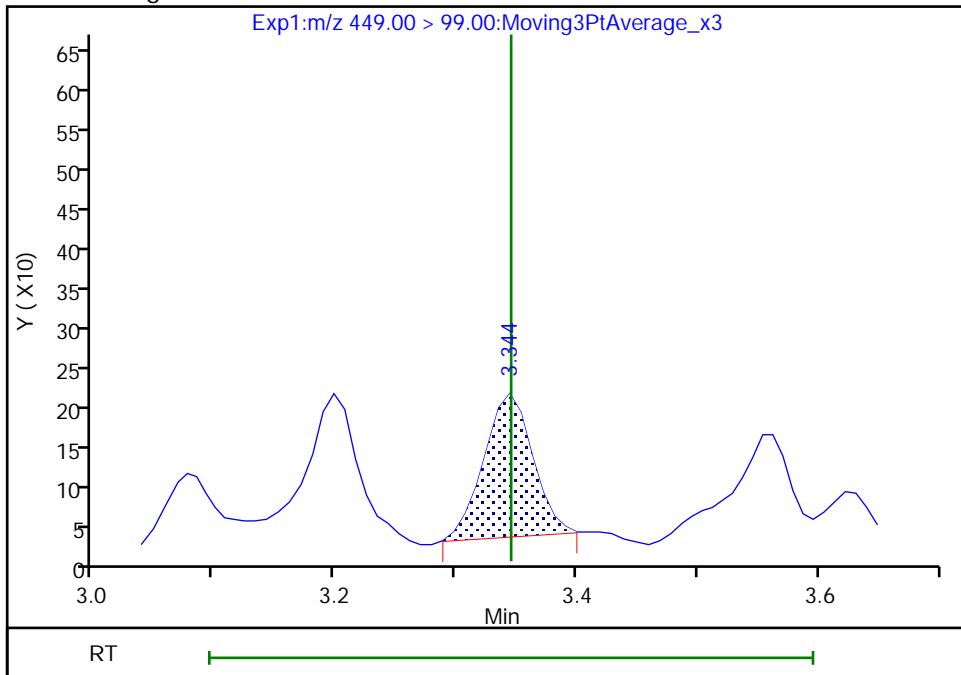
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.34
Area: 509
Amount: 0.035841
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:32:58
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

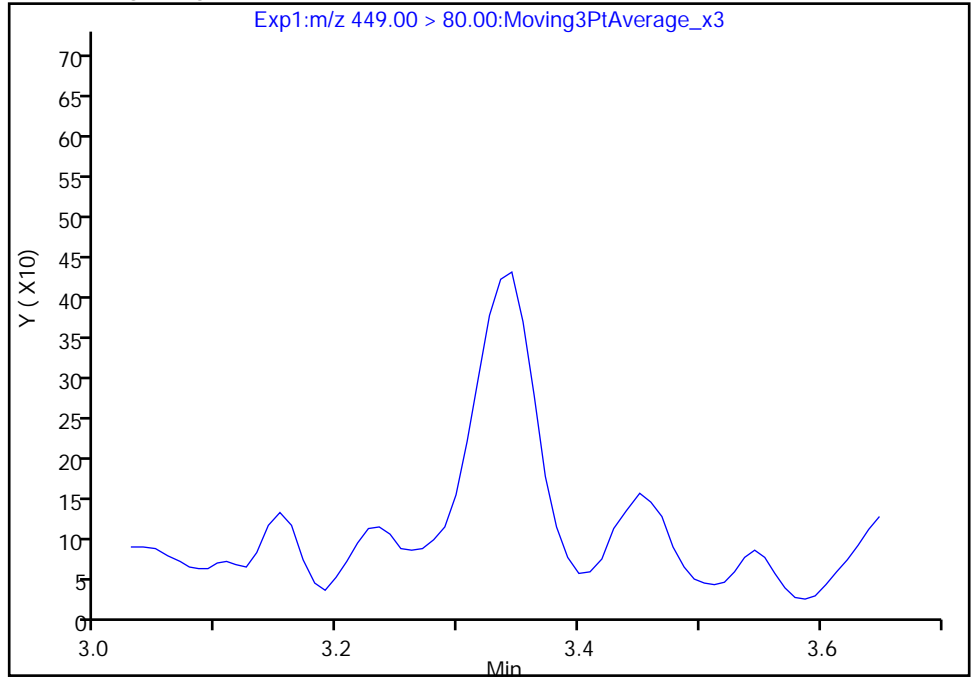
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

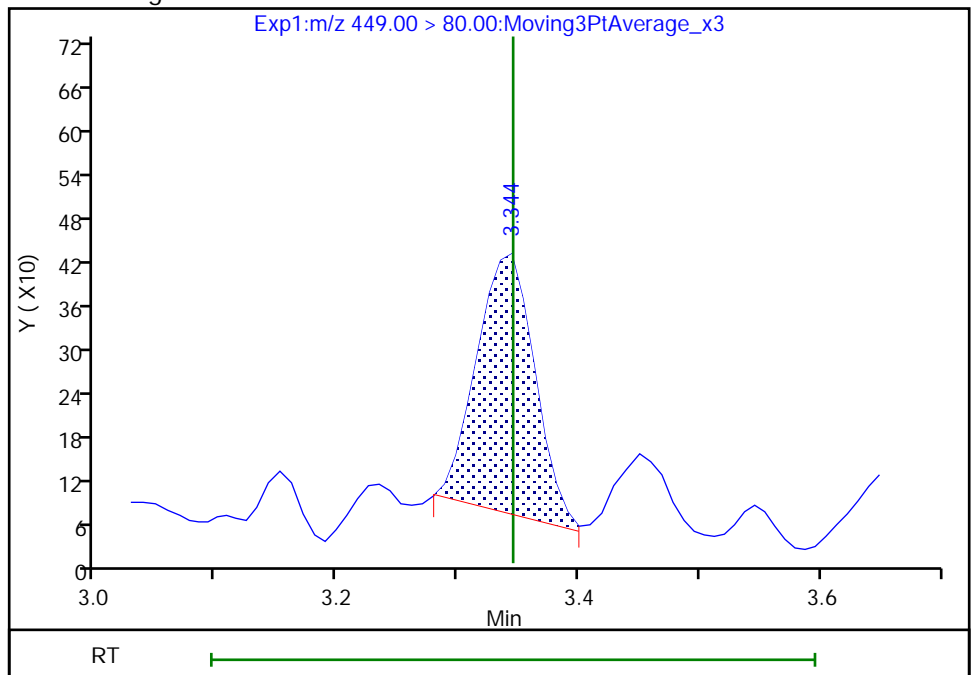
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.34
Area: 1190
Amount: 0.035841
Amount Units: ng/ml



Euofins TestAmerica, Burlington

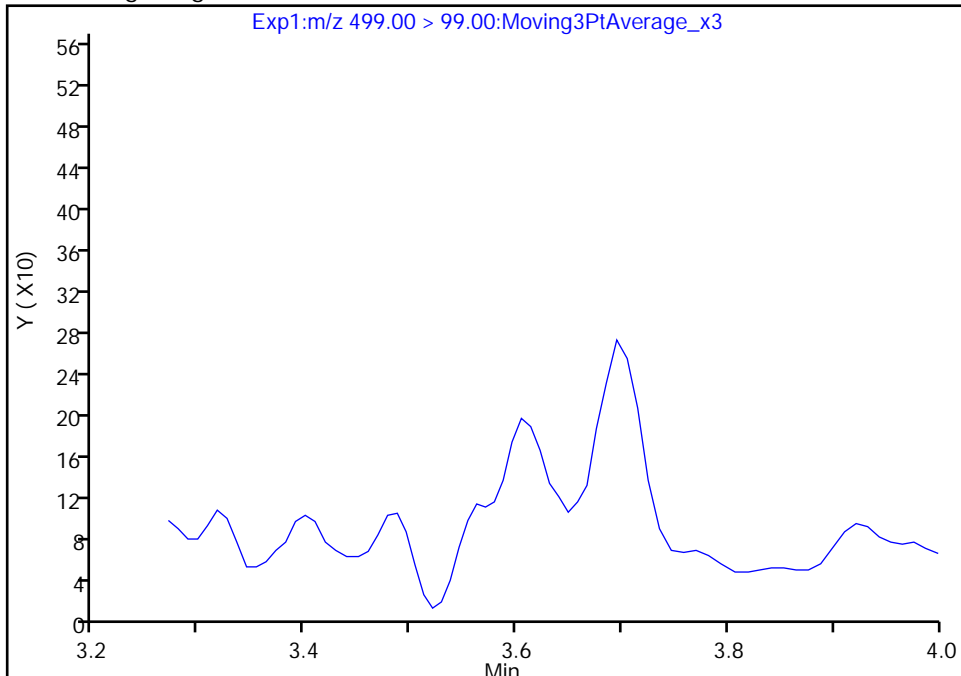
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

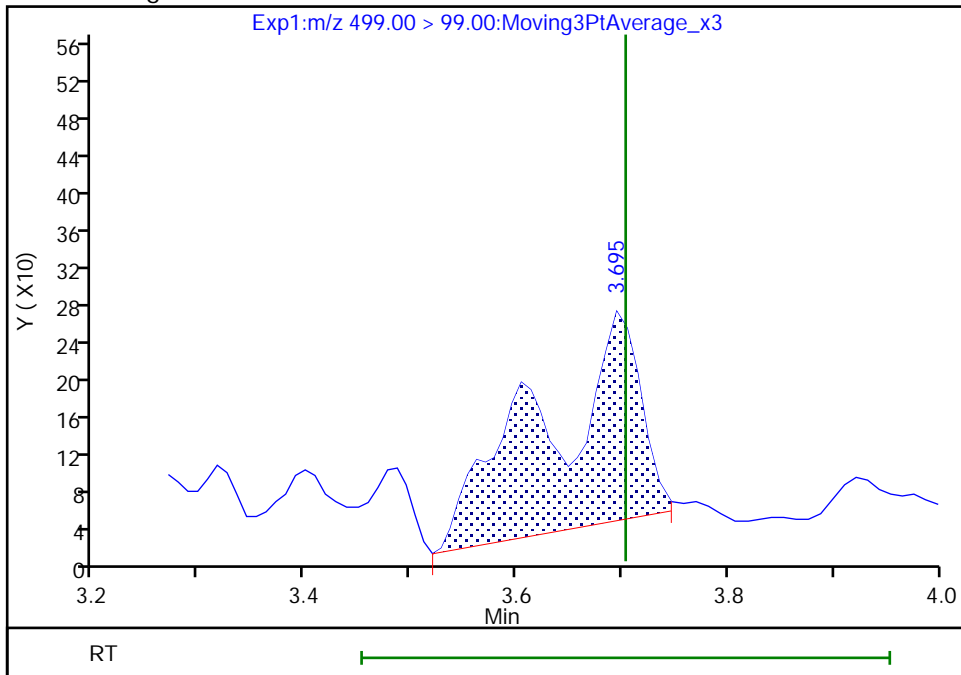
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.69
Area: 1417
Amount: 0.312041
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:33:31
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

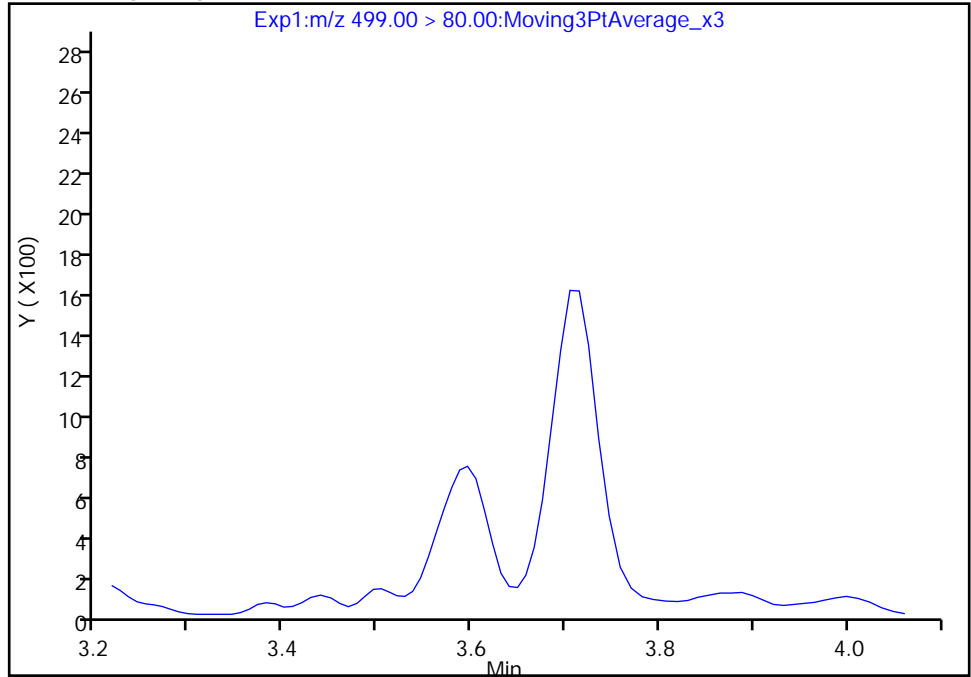
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

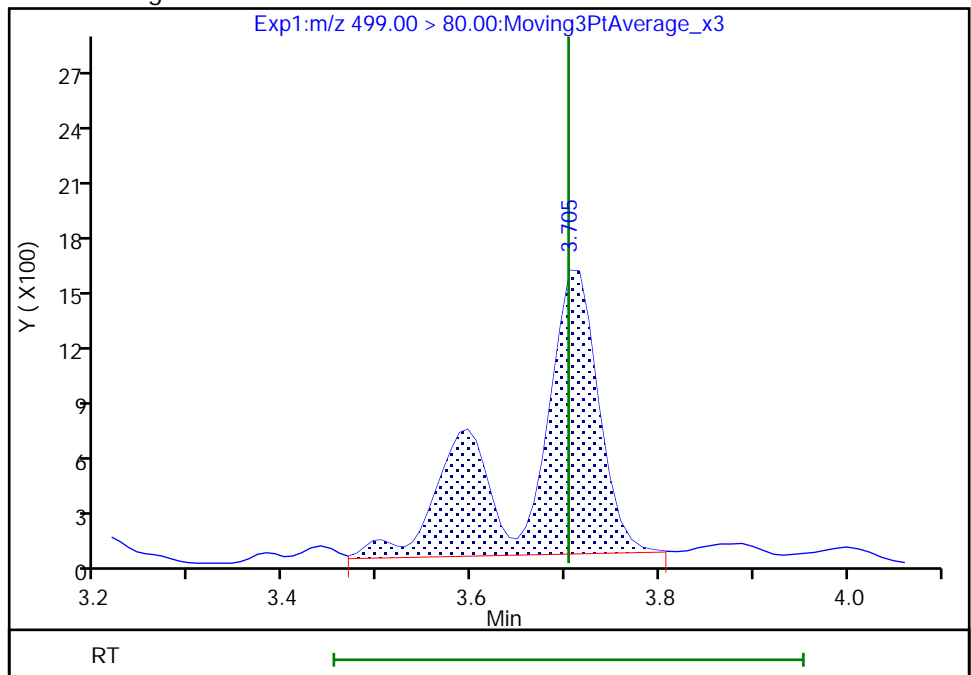
Not Detected
Expected RT: 3.70

Processing Integration Results



RT: 3.70
Area: 8141
Amount: 0.312041
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

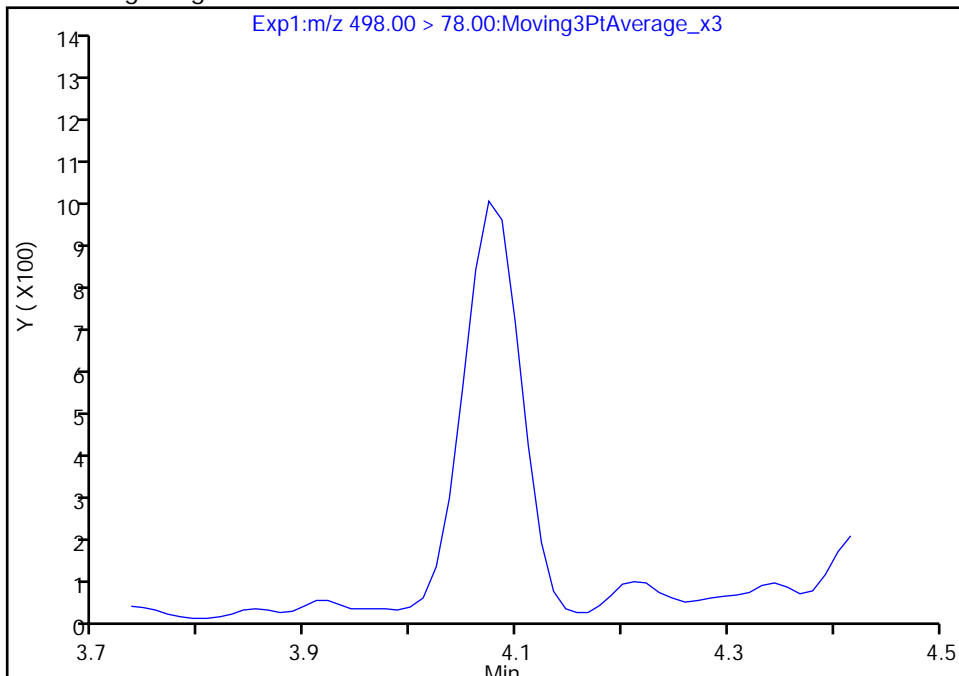
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

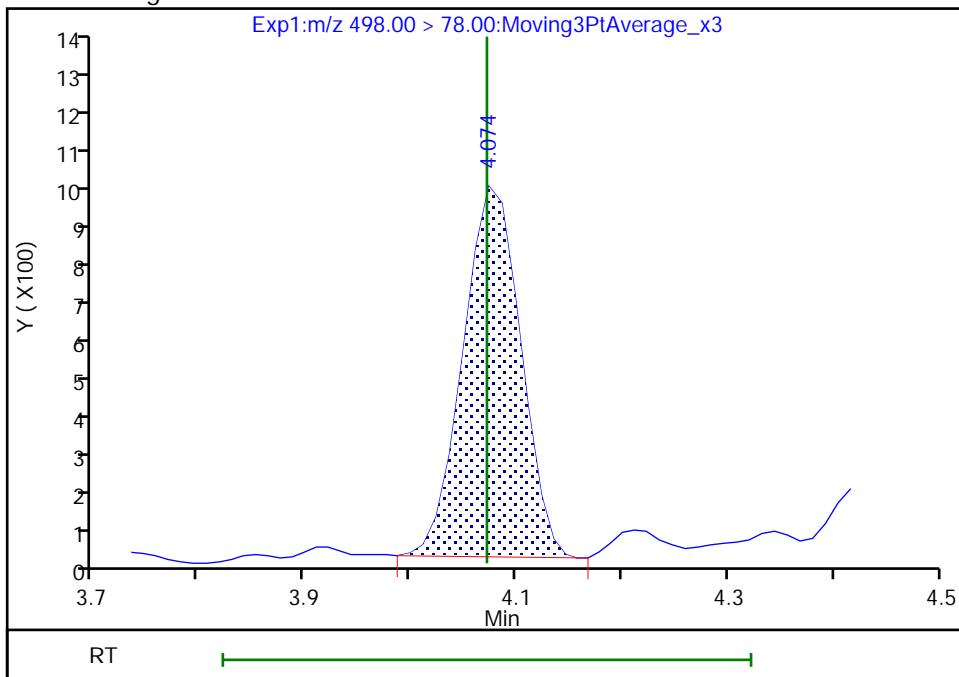
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.07
Area: 3729
Amount: 0.095302
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:34:25
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

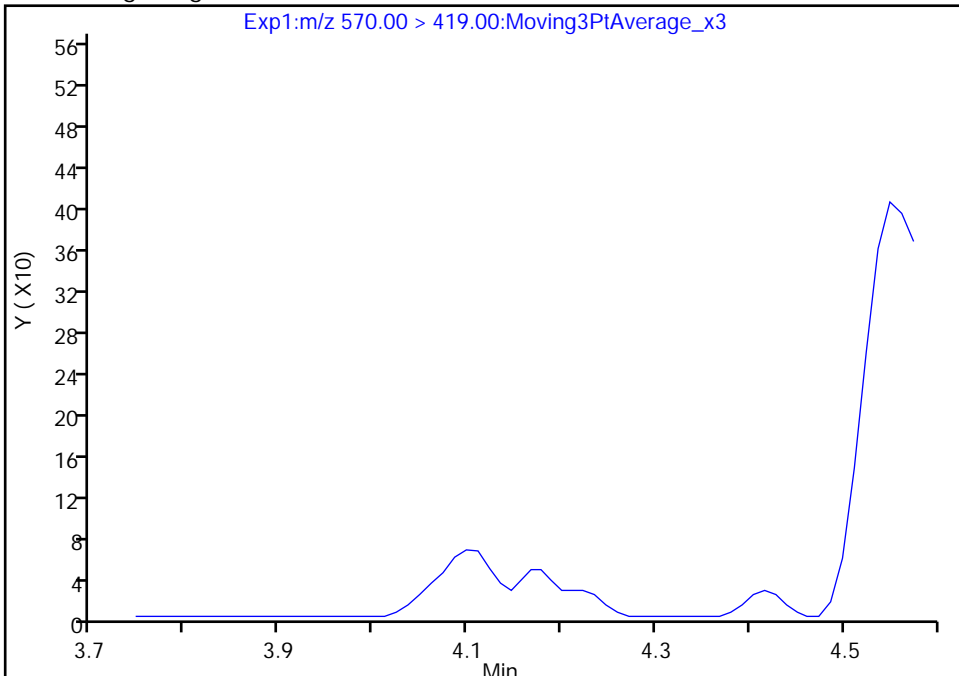
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

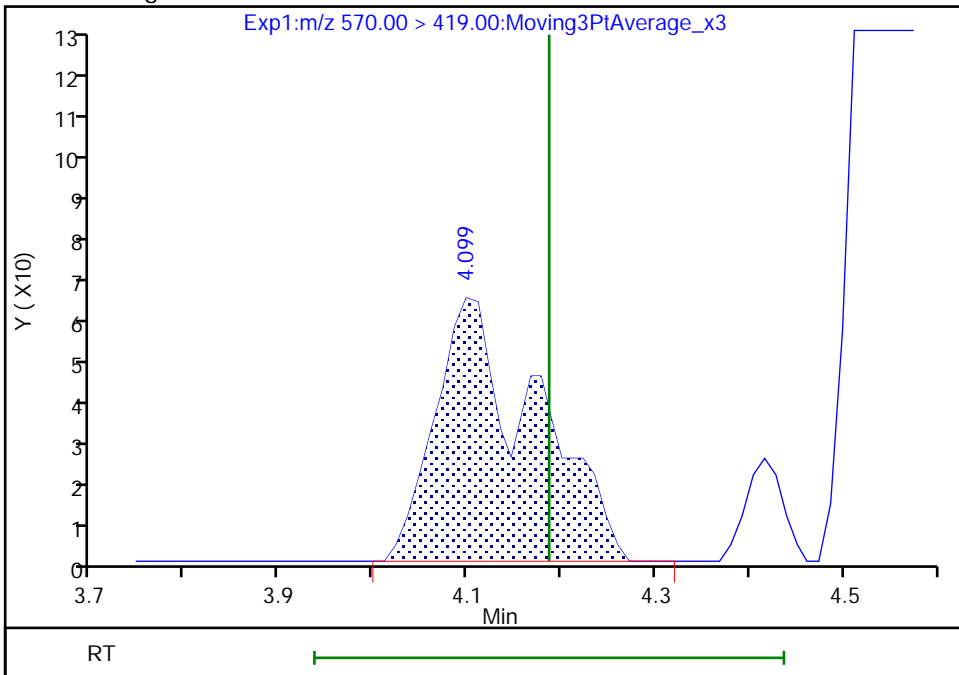
Not Detected
Expected RT: 4.19

Processing Integration Results



Manual Integration Results

RT: 4.10
Area: 471
Amount: 0.143108
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:34:32
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

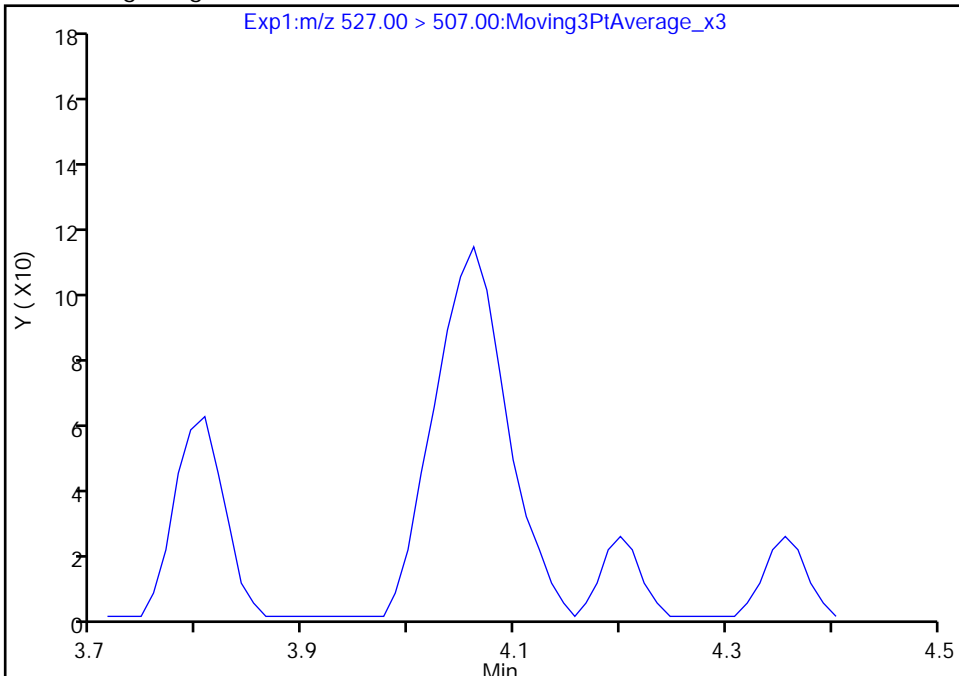
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E004.d
Injection Date: 02-Aug-2019 04:13:25 Instrument ID: LC812
Lims ID: 480-156213-F-1-A Lab Sample ID: 200-156213-1
Client ID: 356023-MW8B
Operator ID: lc812tech ALS Bottle#: 51 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

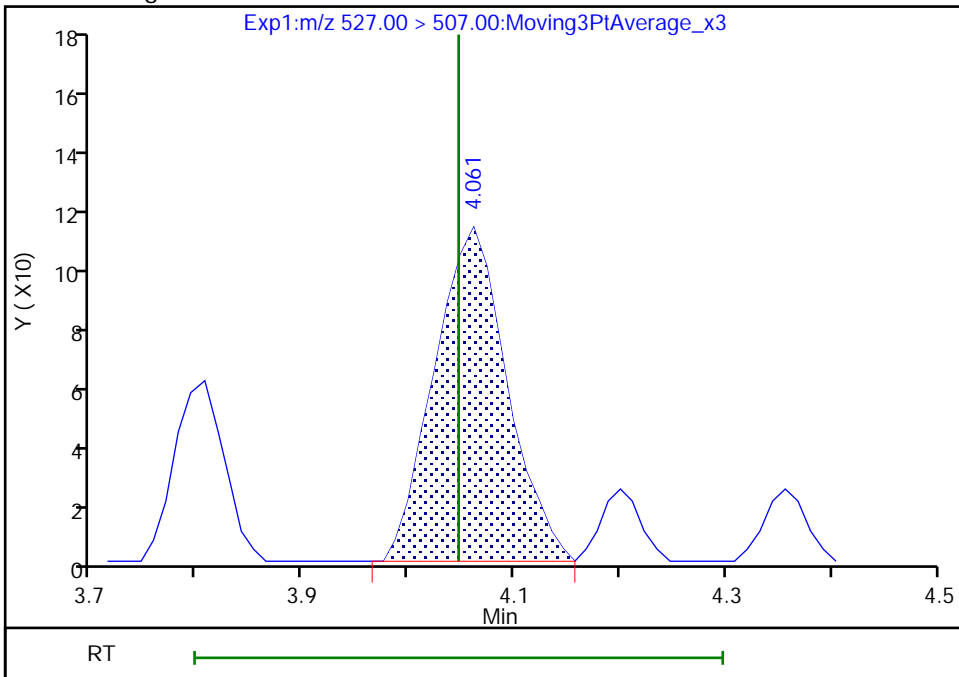
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.06
Area: 530
Amount: 0.052701
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:34:18
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8BD Lab Sample ID: 480-156213-2
 Matrix: Water Lab File ID: SC080119E005.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 13:20
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 290.8 (mL) Date Analyzed: 08/02/2019 04:21
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.7	0.86
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.7	0.54
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.7	0.65
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.78
335-67-1	Perfluorooctanoic acid (PFOA)	0.65	J	1.7	0.54
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.66
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.46
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.52
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.79
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.42
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.69
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.82
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.77
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.52
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.6	8.6
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.3
27619-97-2	6:2 FTS	ND		17	4.0
39108-34-4	8:2 FTS	ND		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW8BD Lab Sample ID: 480-156213-2
 Matrix: Water Lab File ID: SC080119E005.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 13:20
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 290.8 (mL) Date Analyzed: 08/02/2019 04:21
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	58		25-150
STL00992	13C4 PFBA	76		25-150
STL01893	13C5 PFPeA	80		25-150
STL00993	13C2 PFHxA	80		50-150
STL01892	13C4 PFHpA	83		50-150
STL00990	13C4 PFOA	79		50-150
STL00995	13C5 PFNA	83		50-150
STL00996	13C2 PFDA	79		50-150
STL00997	13C2 PFUnA	78		50-150
STL00998	13C2 PFDoA	78		50-150
STL02116	13C2 PFTeDA	66		50-150
STL02337	13C3 PFBS	93		50-150
STL00994	18O2 PFHxS	89		50-150
STL00991	13C4 PFOS	79		50-150
STL02118	d3-NMeFOSAA	63		50-150
STL02117	d5-NEtFOSAA	60		50-150
STL02279	M2-6:2 FTS	104		25-150
STL02280	M2-8:2 FTS	101		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
 Lims ID: 480-156213-F-2-A
 Client ID: 356023-MW8BD
 Sample Type: Client
 Inject. Date: 02-Aug-2019 04:21:26 ALS Bottle#: 52 Worklist Smp#: 5
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-2-A
 Misc. Info.: 200-0037095-005 Plate: 1 Rack: 4
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:38:10 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:40:02
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.507	2625362	38.0	76.1	10782	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.708	1.699	0.009	1.005	13346	0.2758		2.4		M
D 3 13C5 PFPeA	267.90 > 223.00	2.055	2.054	0.0	0.613	2582630	39.8	79.7	7535	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.067	2.067	0.0	1.006	6828	0.1366		0.4		M
D 47 13C3 PFBS	301.90 > 80.00	2.080	2.080	0.0	0.620	2749682	43.2	92.9	573769	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.080	2.093	-0.013	1.000	7035	0.1170	Target=1.90	11.1		M
298.90 > 99.00	2.080	2.093	-0.013	1.000	3928		1.79(0.95-2.85)	4.1		
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.733	2586303	40.2	80.3	6825	
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.873	1566555	42.0	88.8	6626	
D 9 13C4 PFHpA	367.00 > 322.00	2.928	2.928	0.0	0.873	2613381	41.4	82.9	6927	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	7444	0.1706	Target=3.37	7.3		M
399.00 > 99.00	2.928	2.928	0.0	1.000	2063		3.61(1.69-5.06)	2.0		M
D 12 M2-6:2 FTS	429.00 > 81.00	3.344	3.335	0.009	0.997	384834	49.6	104	631	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.335	3.336	-0.001	0.997	13515	0.9727		25.4		
D 14 13C4 PFOA	417.00 > 372.00	3.354	3.344	0.010	1.000	2632833	39.5	79.1	10873	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.354	3.355	-0.001	1.000	21671	0.3782	Target=2.84	2.3		M
413.00 > 169.00	3.354	3.355	-0.001	1.000	8623		2.51(1.42-4.25)	19.9		M
* 62 13C2 PFOA										
415.00 > 370.00	3.354	3.355	-0.001		3662065	50.0			8824	
D 18 13C4 PFOS										
503.00 > 80.00	3.705	3.695	0.010	1.105	1180300	38.0		79.5	3790	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.705	3.703	0.002	1.000	3889	0.1664	Target=4.33	5.2		M
499.00 > 99.00	3.695	3.703	-0.008	0.997	1543		2.52(2.16-6.49)	2.2		M
D 19 13C5 PFNA										
468.00 > 423.00	3.725	3.715	0.010	1.111	2529367	41.6		83.3	18791	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.725	3.723	0.002	1.000	5351	0.1168	Target=8.15	1.5		M
463.00 > 169.00	3.725	3.723	0.002	1.000	662		8.08(4.08-12.23)	9.9		M
D 23 13C2 PFDA										
515.00 > 470.00	4.036	4.036	0.0	1.204	1921509	39.5		79.1	7808	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.049	4.036	0.013	1.207	348186	48.6		101	667	
25 1H,1H,2H,2H-perfluorodecanesulfoni										M
527.00 > 507.00	4.049	4.047	0.002	1.000	399	0.0411		4.9		M
D 21 13C8 FOSA										
506.00 > 78.00	4.074	4.061	0.013	1.215	1610335	28.9		57.7	4502	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.086	4.072	0.014	1.003	1681	0.0572		9.6		M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.178	4.178	0.0	1.246	194436	31.3		62.6	2303	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.200	4.187	0.013	1.005	332	0.1128		1.2		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.308	4.296	0.012	1.285	1734088	39.2		78.3	8660	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.308	0.012	1.288	206218	29.8		59.6	943	
D 36 13C2 PFDoA										
615.00 > 570.00	4.550	4.537	0.013	1.357	1847623	38.8		77.5	7153	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.965	4.965	0.0	1.481	2162299	33.0		65.9	7789	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.972	4.972	0.0	1.001	522	0.0907	Target=1.02	5.9		M
713.00 > 219.00	4.972	4.972	0.0	1.001	529		0.99(0.51-1.54)	10.6		M

QC Flag Legend

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d

Injection Date: 02-Aug-2019 04:21:26

Instrument ID: LC812

Lims ID: 480-156213-F-2-A

Lab Sample ID: 200-156213-2

Client ID: 356023-MW8BD

Operator ID: lc812tech

ALS Bottle#: 52

Worklist Smp#: 5

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

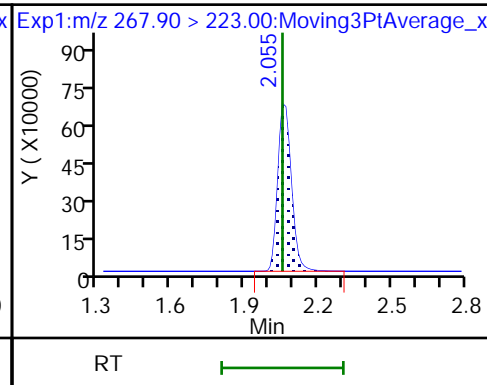
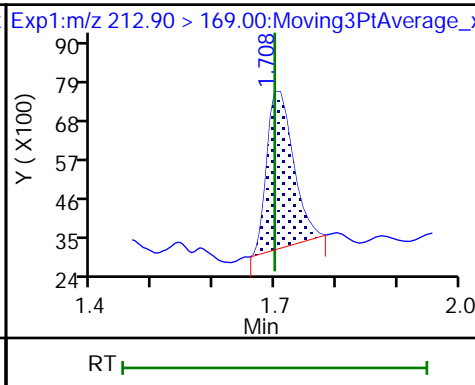
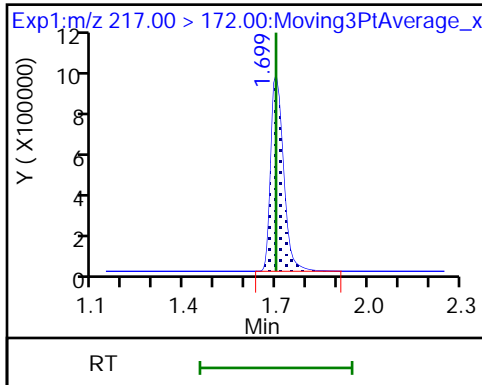
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

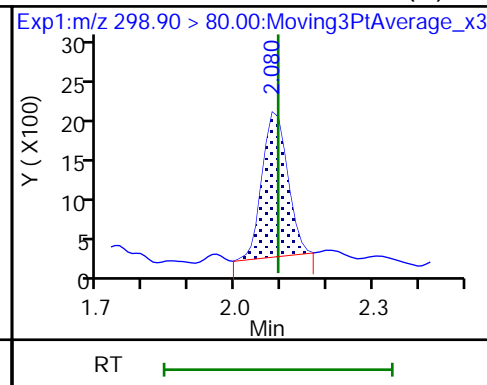
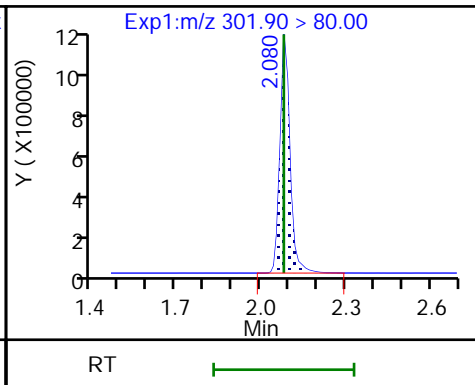
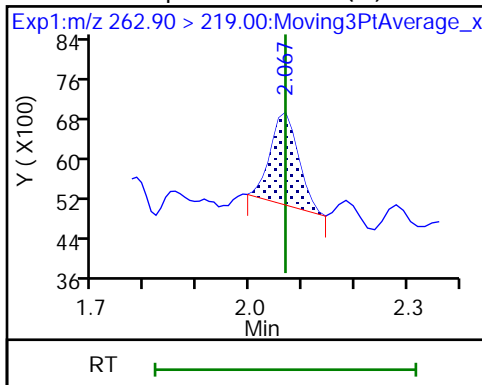
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

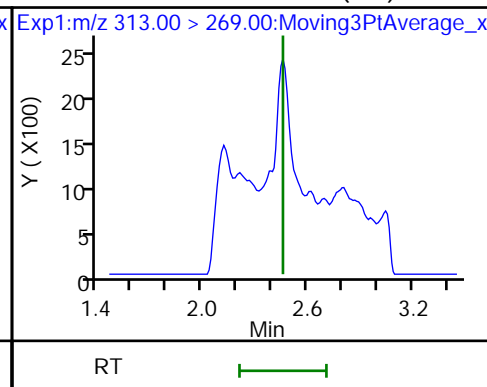
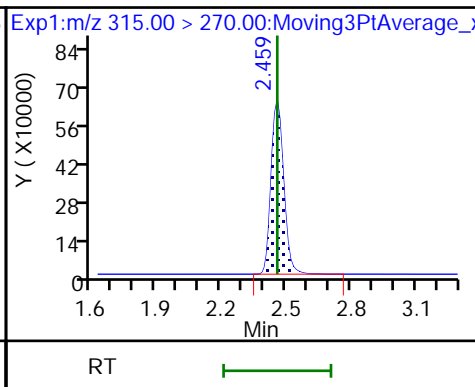
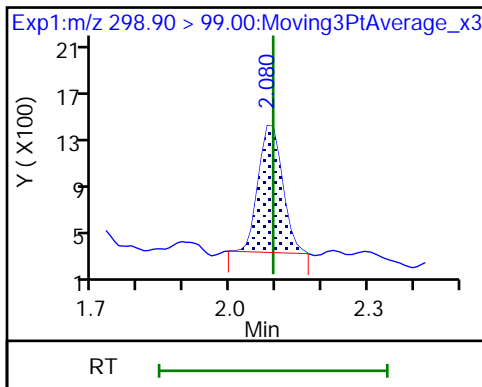
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

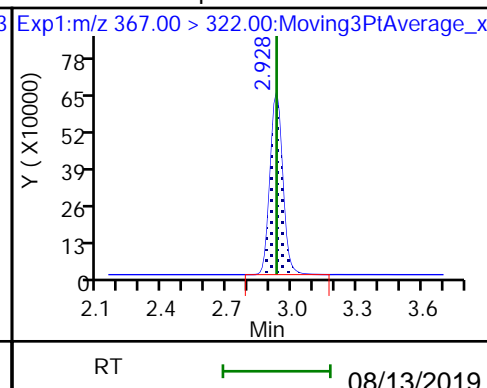
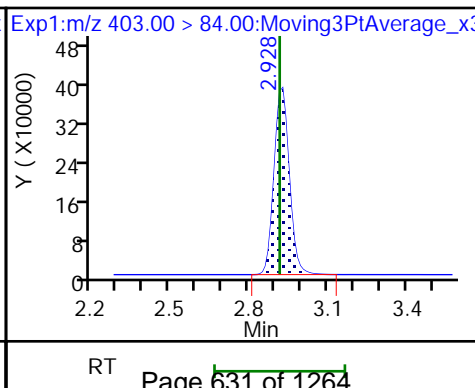
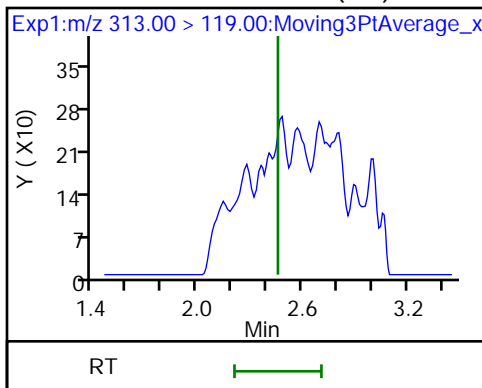
6 Perfluorohexanoic acid (ND)



6 Perfluorohexanoic acid (ND)

D 11 18O2 PFHxS

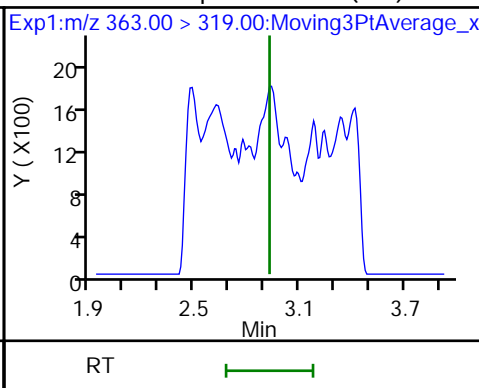
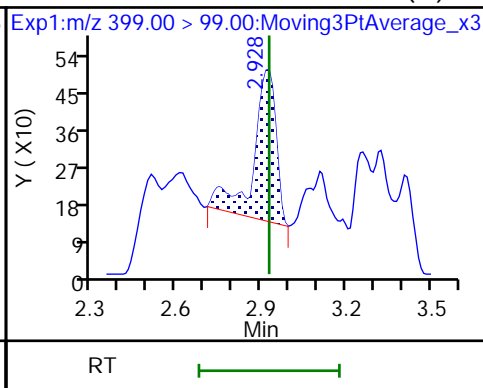
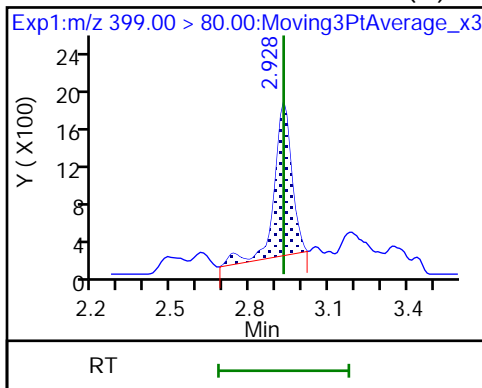
D 9 13C4 PFHpA



8 Perfluorohexanesulfonic acid (M)

8 Perfluorohexanesulfonic acid (M)

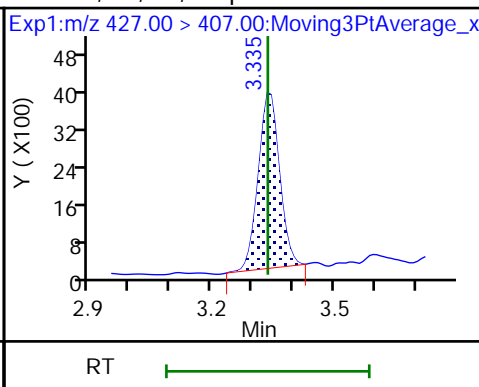
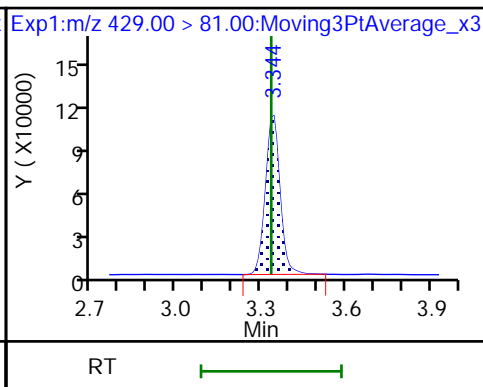
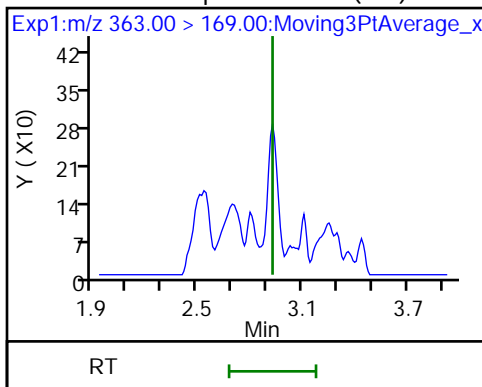
10 Perfluoroheptanoic acid (ND)



10 Perfluoroheptanoic acid (ND)

D 12 M2-6:2 FTS

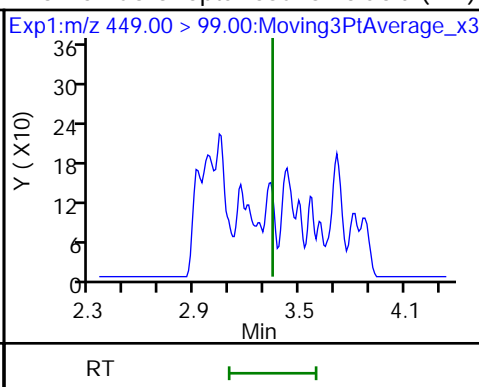
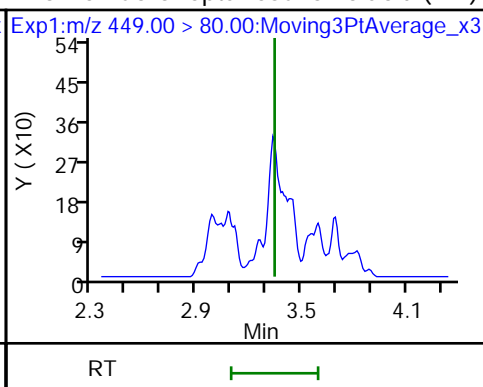
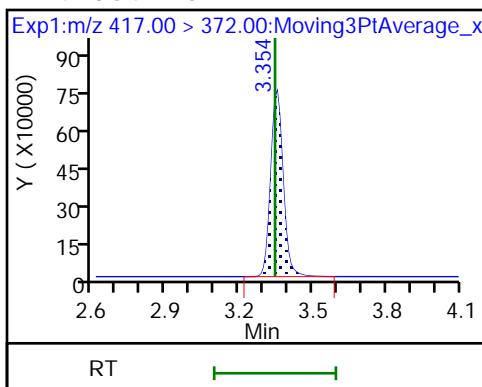
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid (ND)

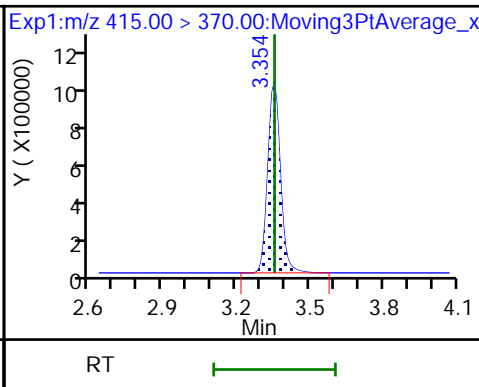
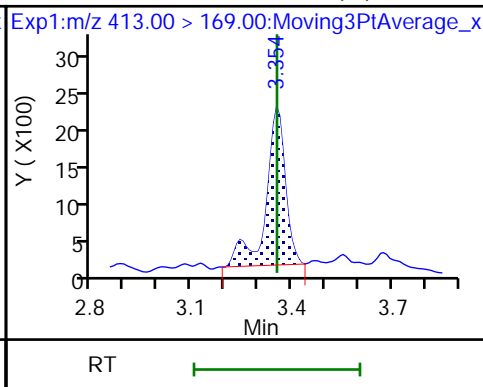
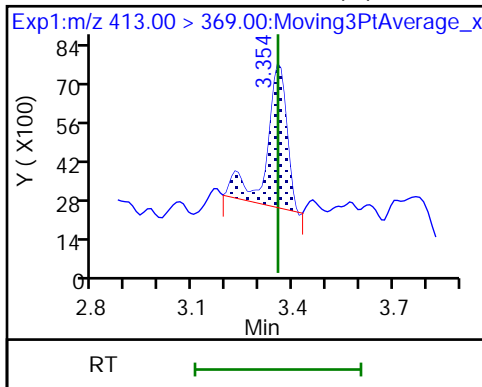
16 Perfluoroheptanesulfonic acid (ND)



15 Perfluorooctanoic acid (M)

15 Perfluorooctanoic acid (M)

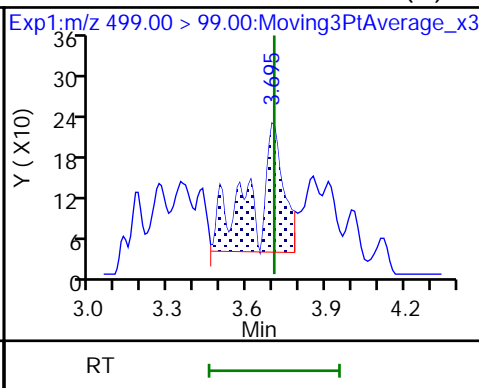
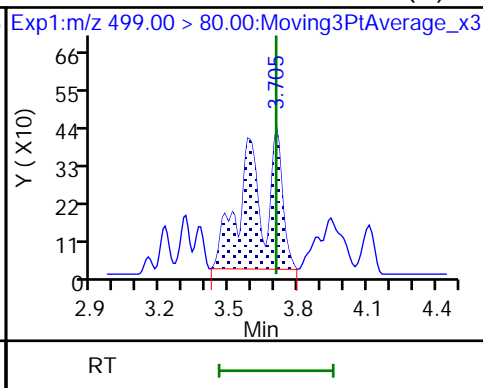
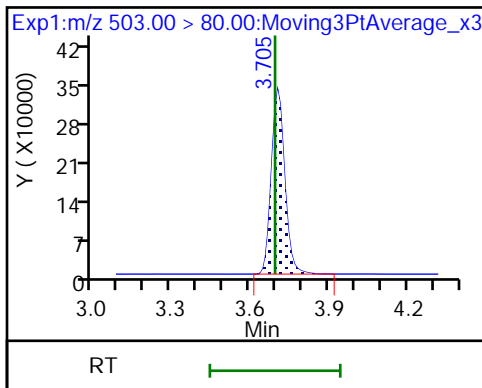
* 62 13C2 PFOA



D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

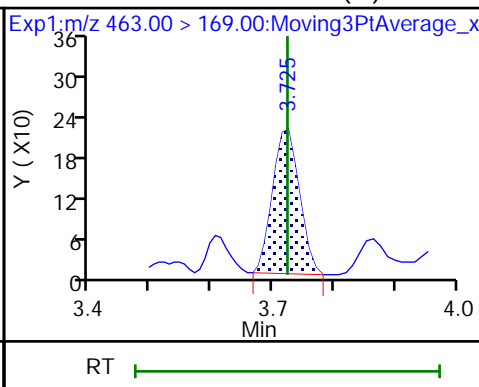
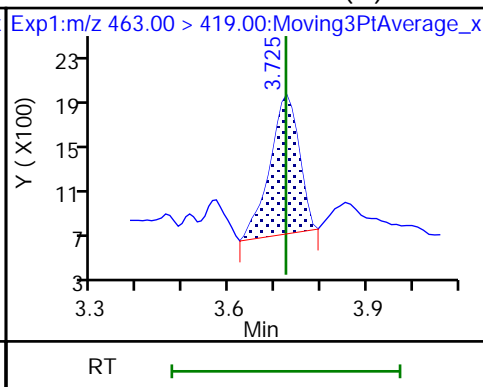
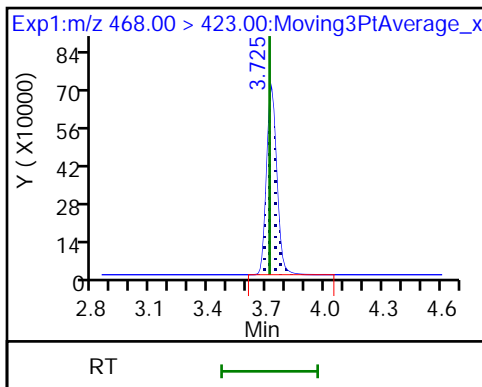
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (M)

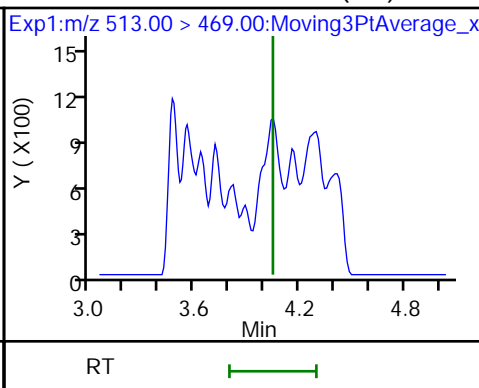
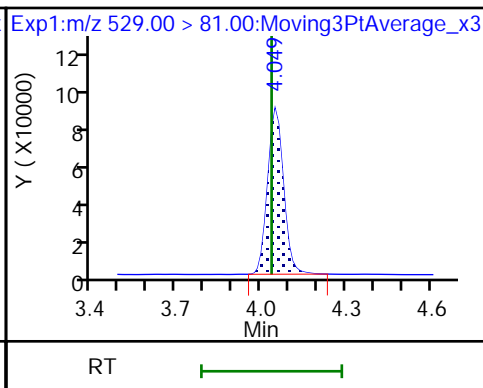
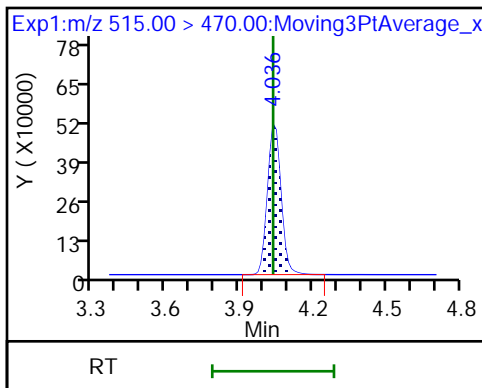
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

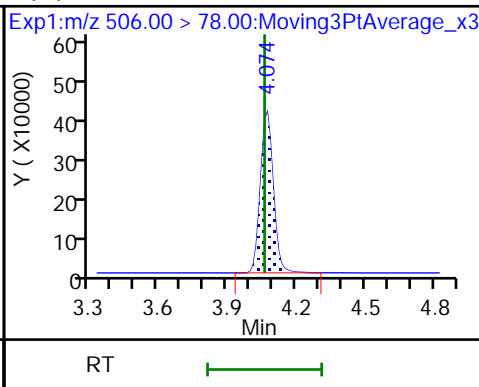
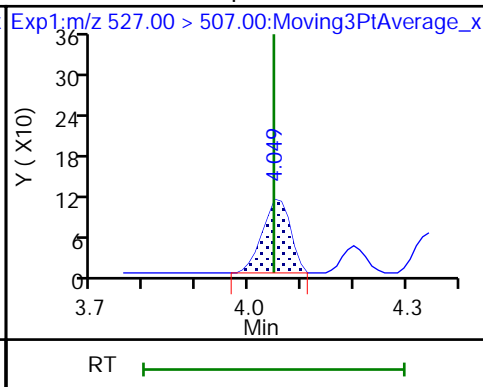
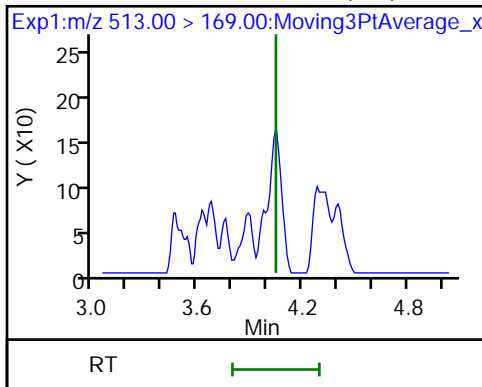
24 Perfluorodecanoic acid (ND)



24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

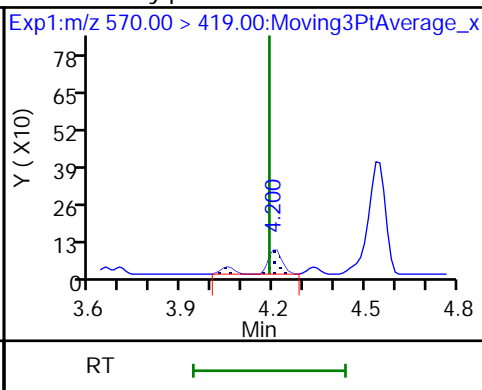
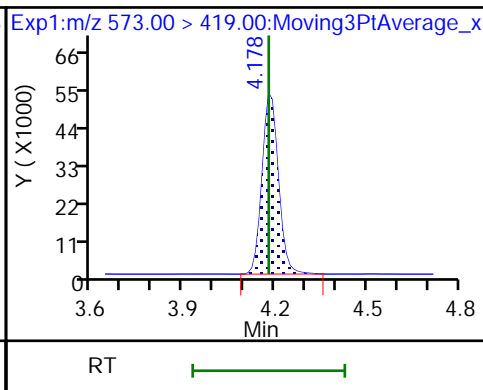
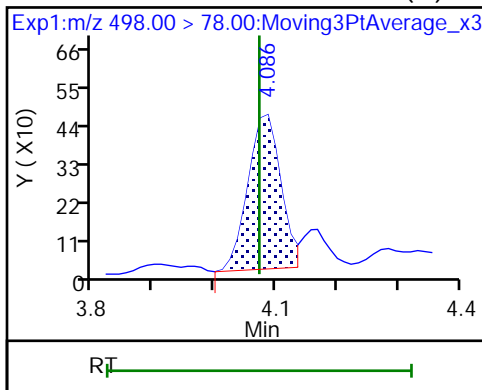
D 27 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

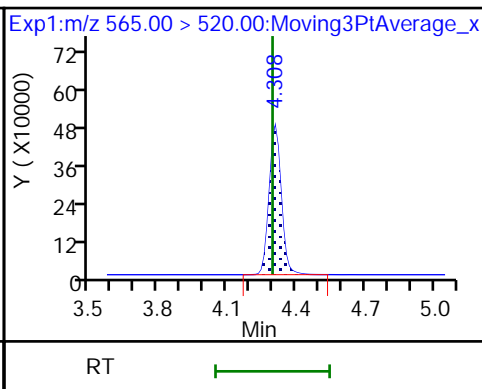
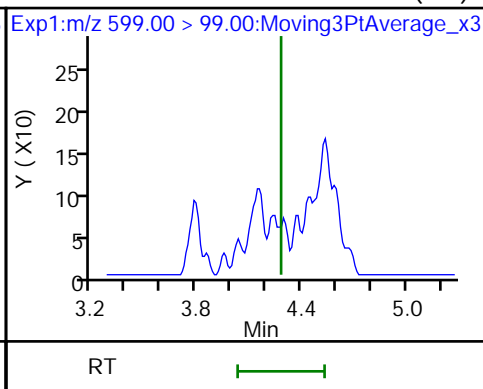
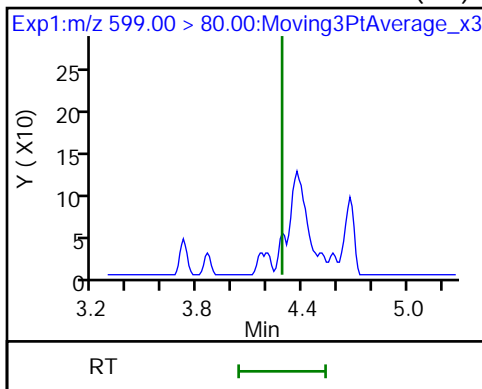
28 N-methylperfluorooctanesulfonamido (M)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

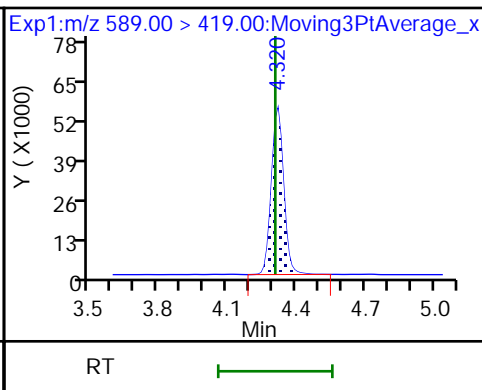
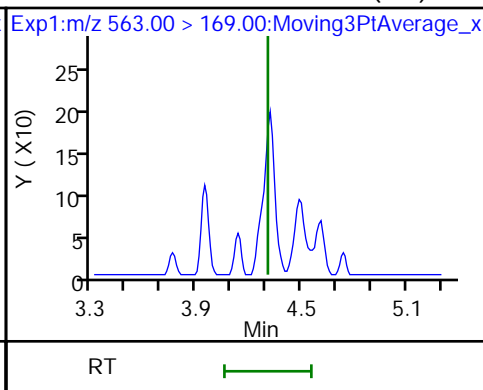
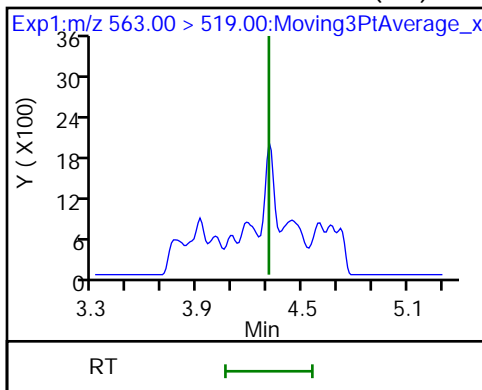
D 30 13C2 PFUnA



31 Perfluoroundecanoic acid (ND)

31 Perfluoroundecanoic acid (ND)

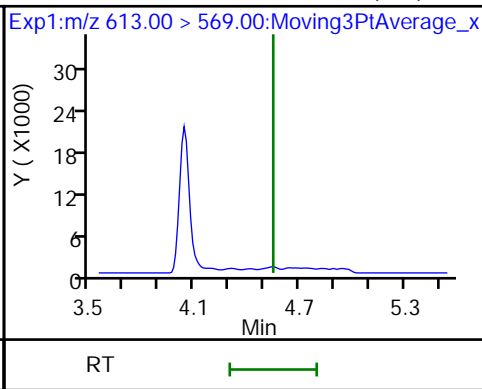
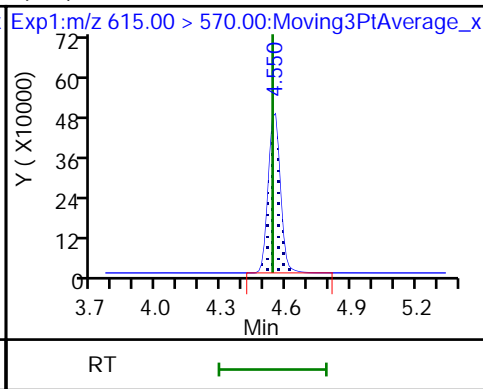
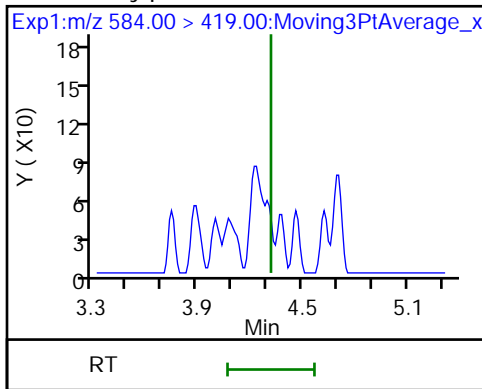
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (ND)

D 33 13C2 PFDoA

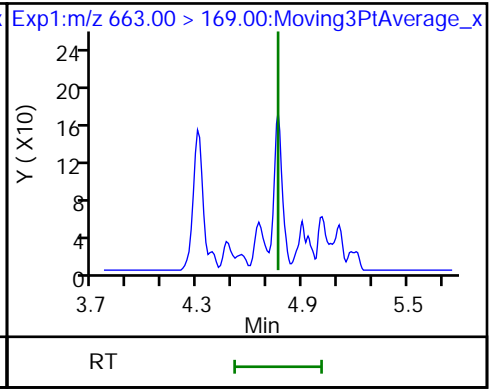
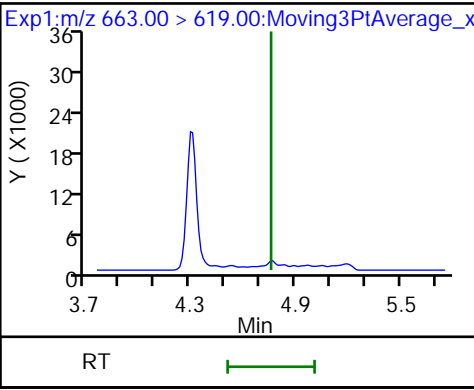
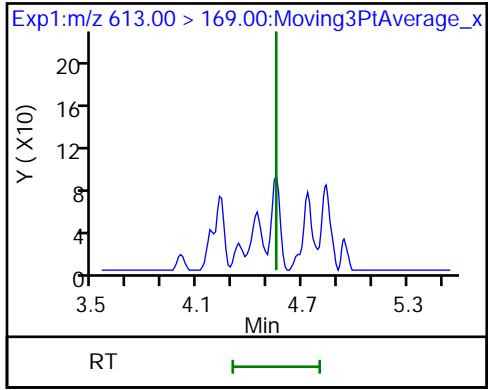
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

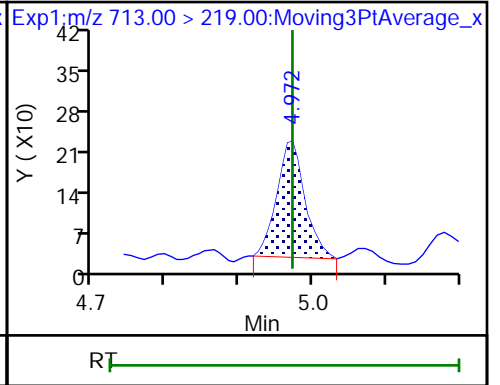
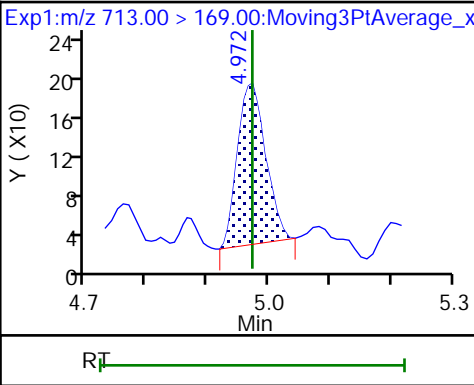
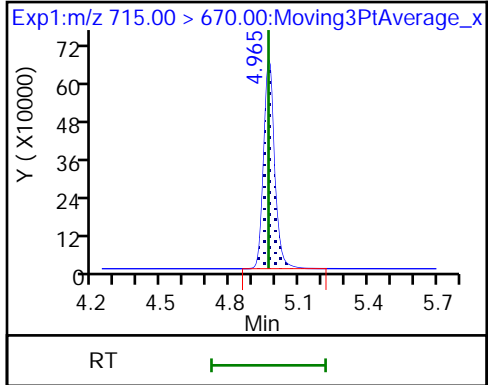
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (M)

42 Perfluorotetradecanoic acid (M)



Euofins TestAmerica, Burlington

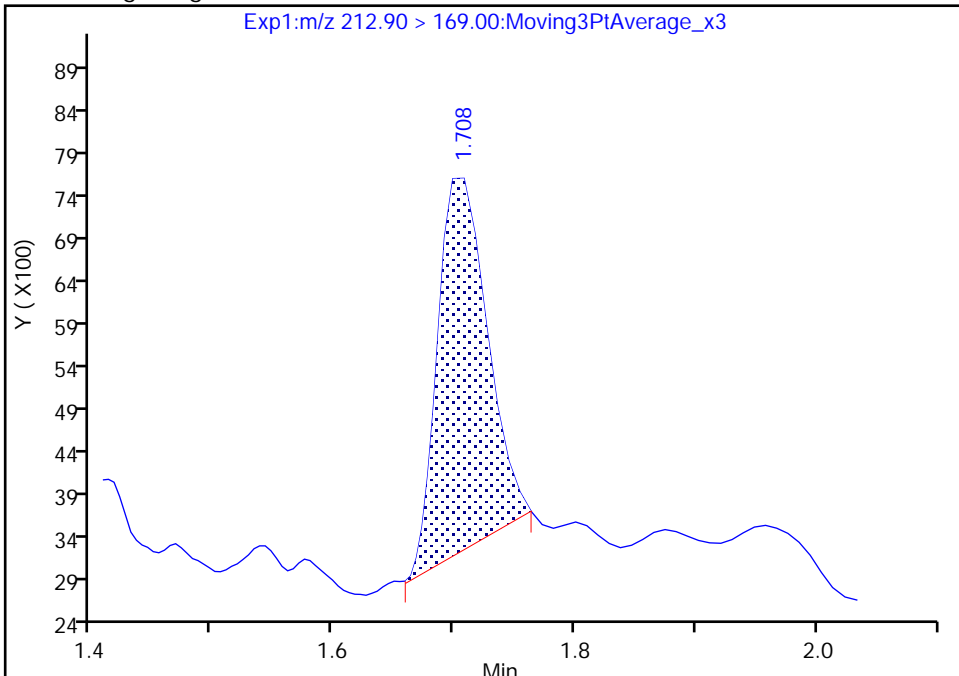
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

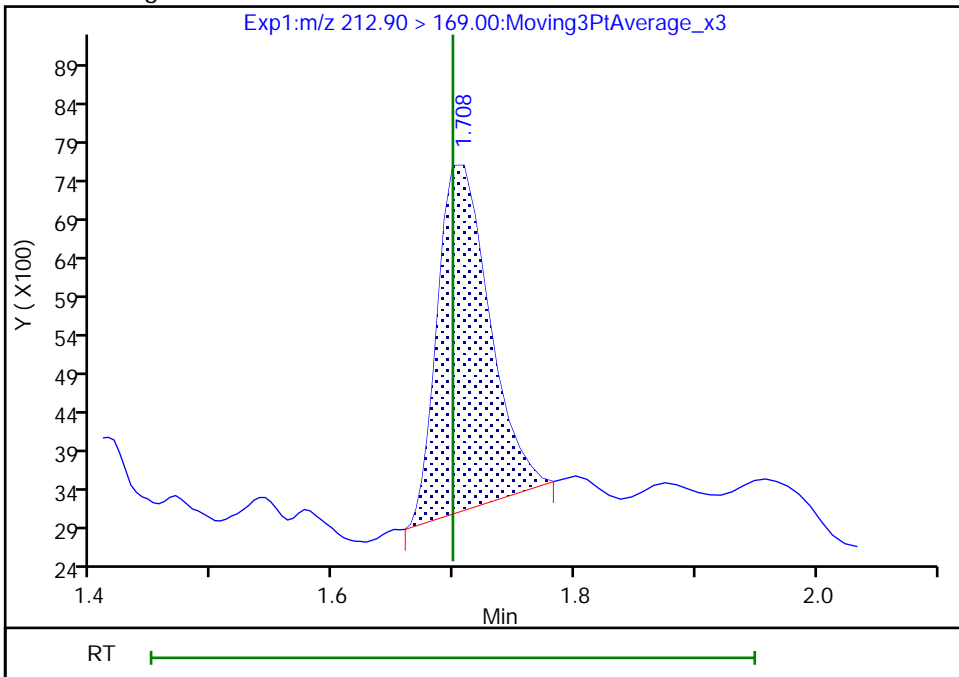
RT: 1.71
Area: 12396
Amount: 0.256151
Amount Units: ng/ml

Processing Integration Results



RT: 1.71
Area: 13346
Amount: 0.275781
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:36:28
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

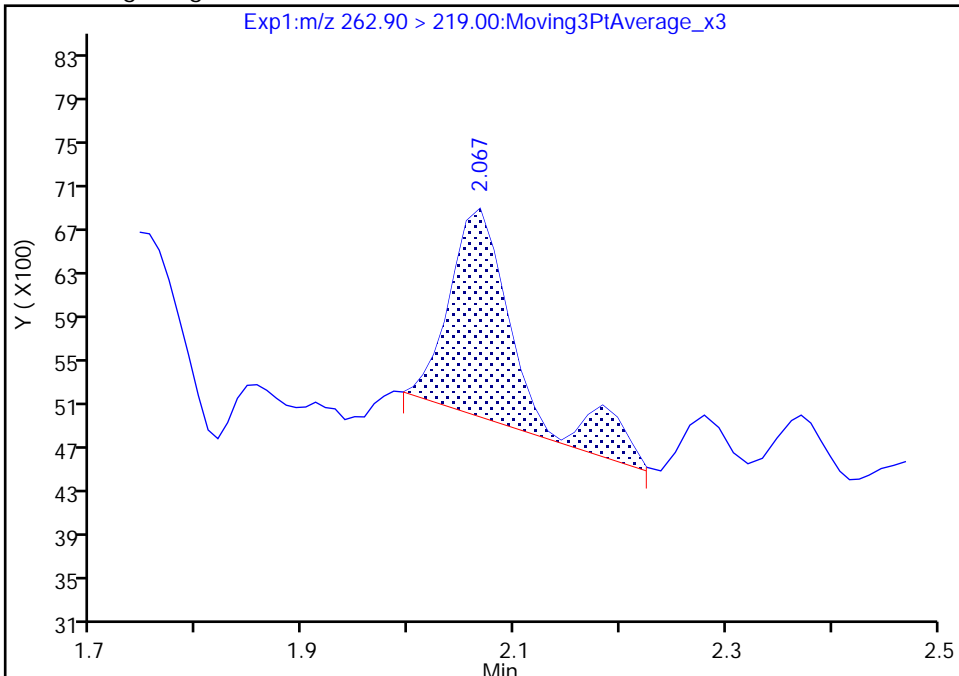
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

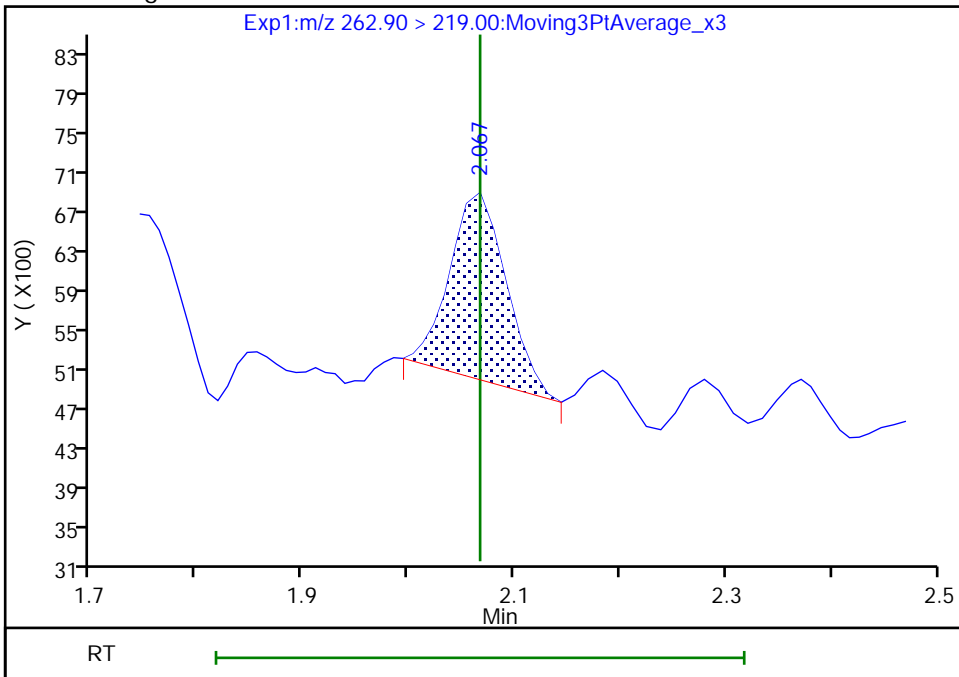
RT: 2.07
Area: 8207
Amount: 0.164198
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 6828
Amount: 0.136608
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:36:34
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

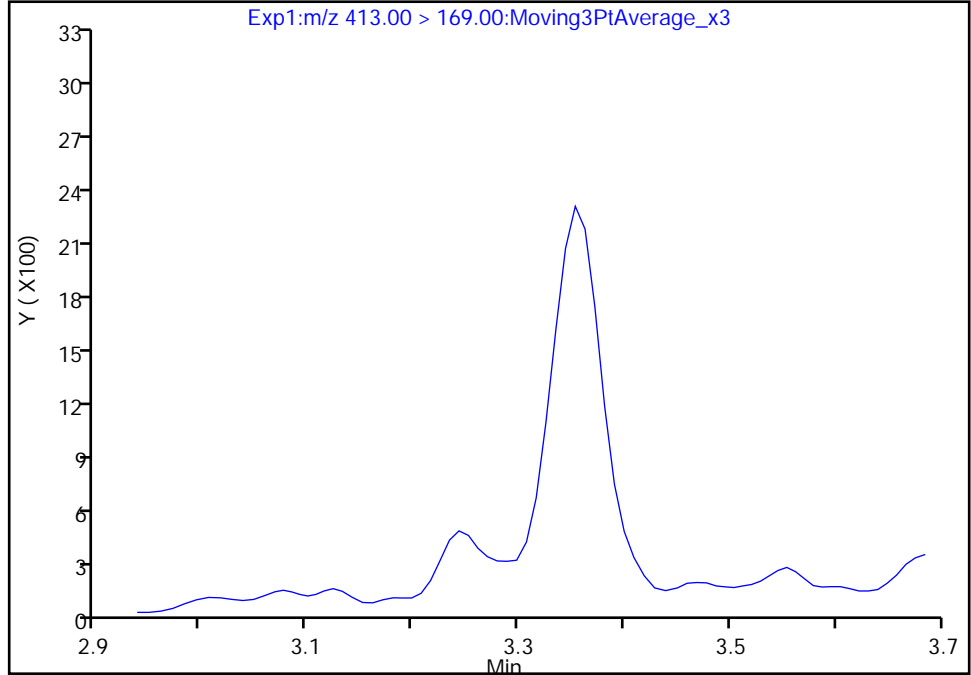
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

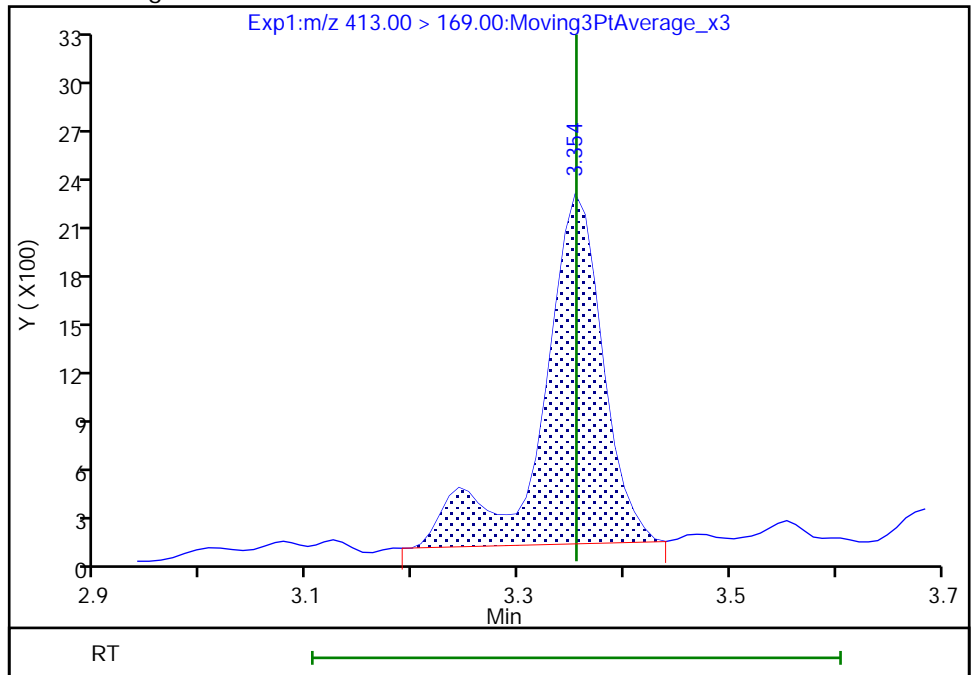
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.35
Area: 8623
Amount: 0.378221
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:37:21
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

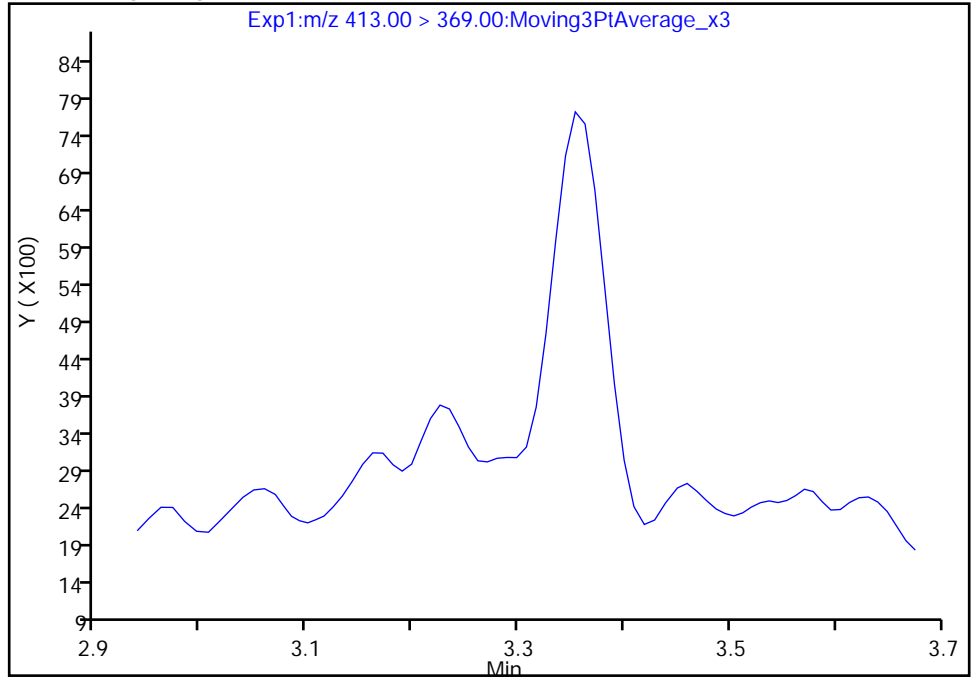
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

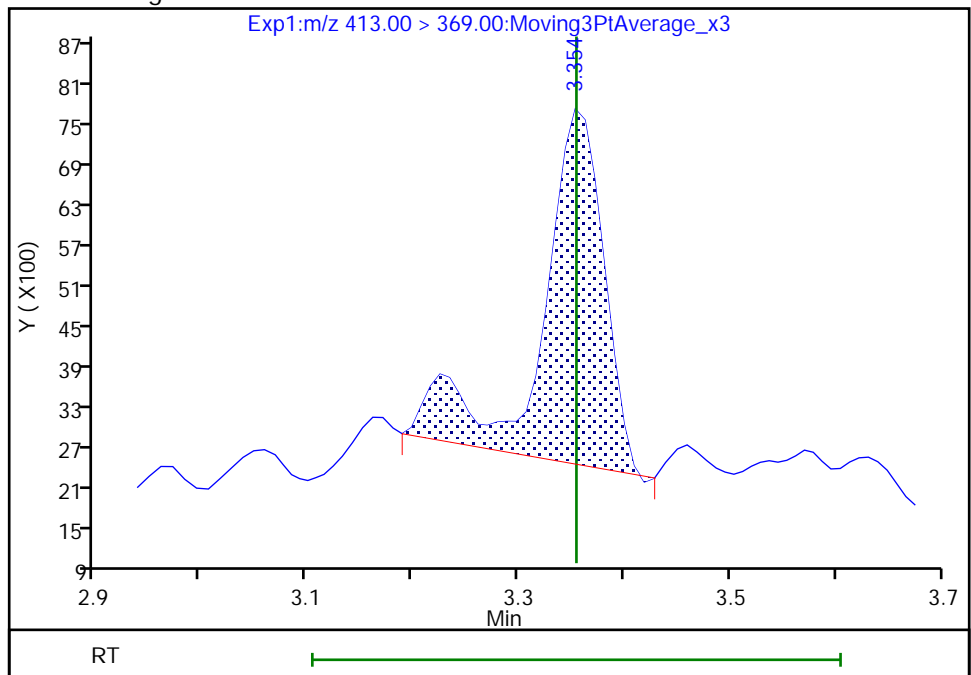
Not Detected
Expected RT: 3.35

Processing Integration Results



RT: 3.35
Area: 21671
Amount: 0.378221
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

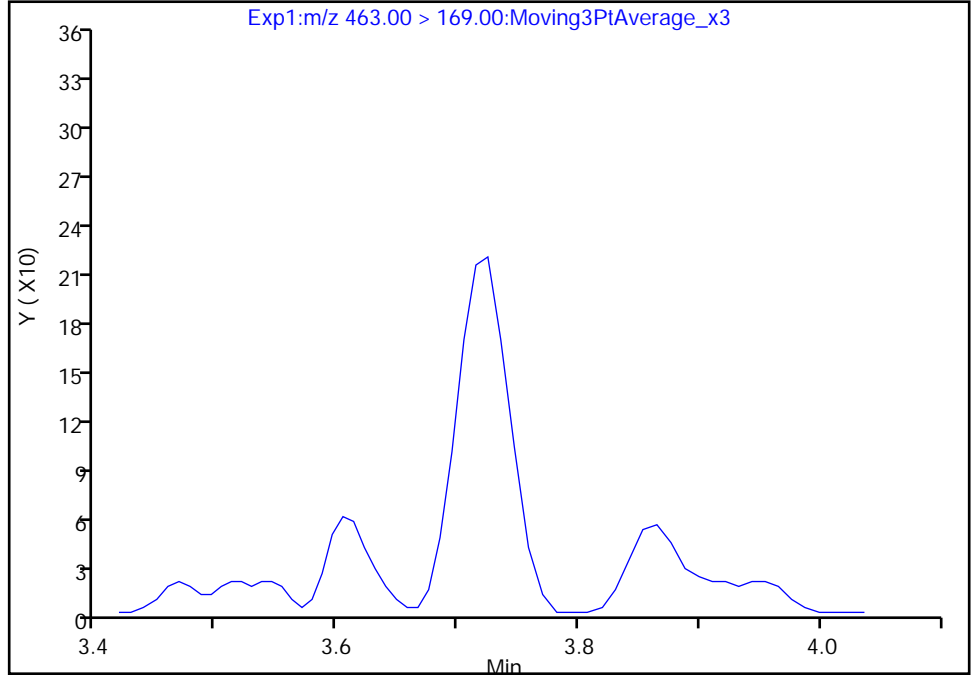
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

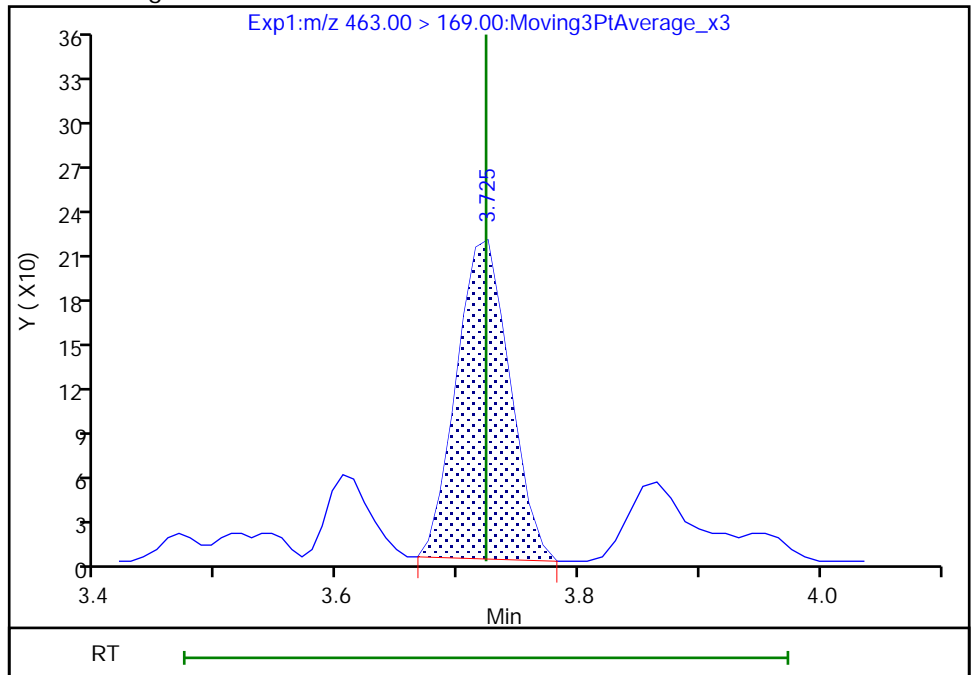
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.72
Area: 662
Amount: 0.116765
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:37:45
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

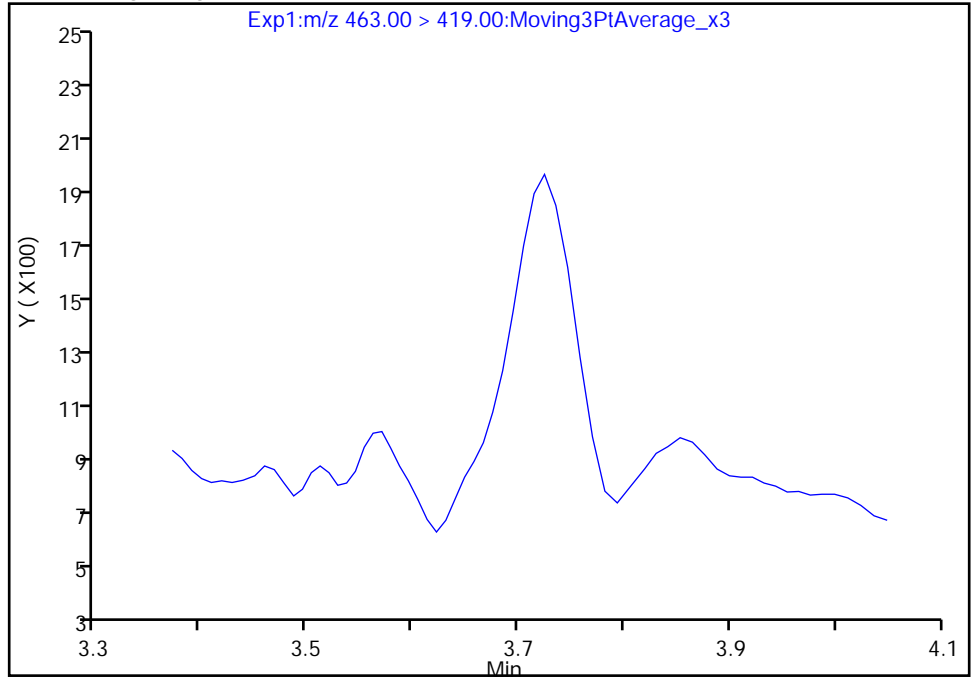
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

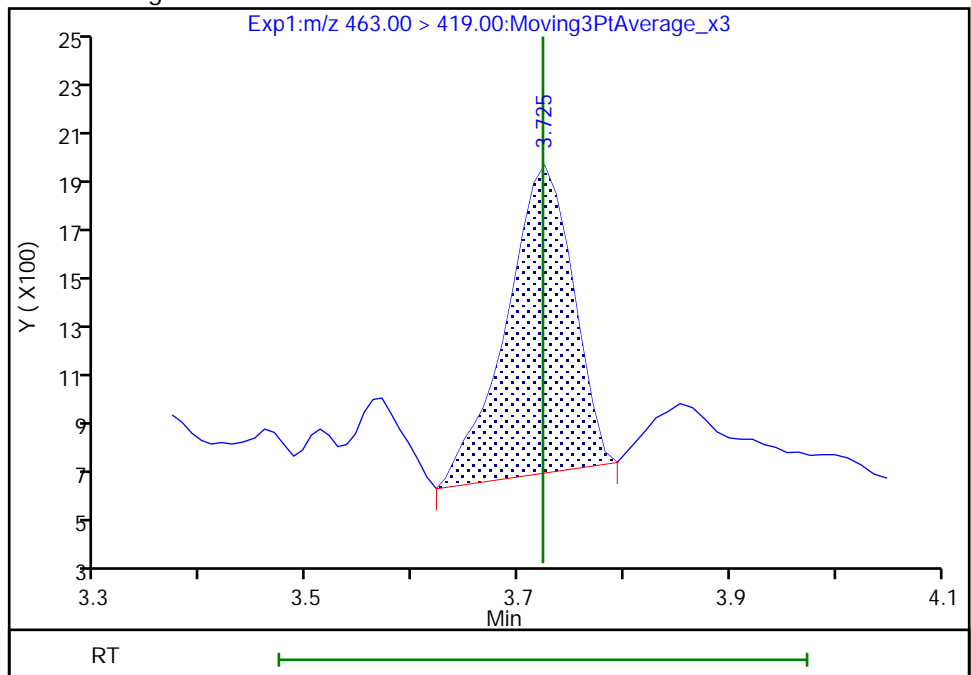
Not Detected
Expected RT: 3.72

Processing Integration Results



RT: 3.72
Area: 5351
Amount: 0.116765
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

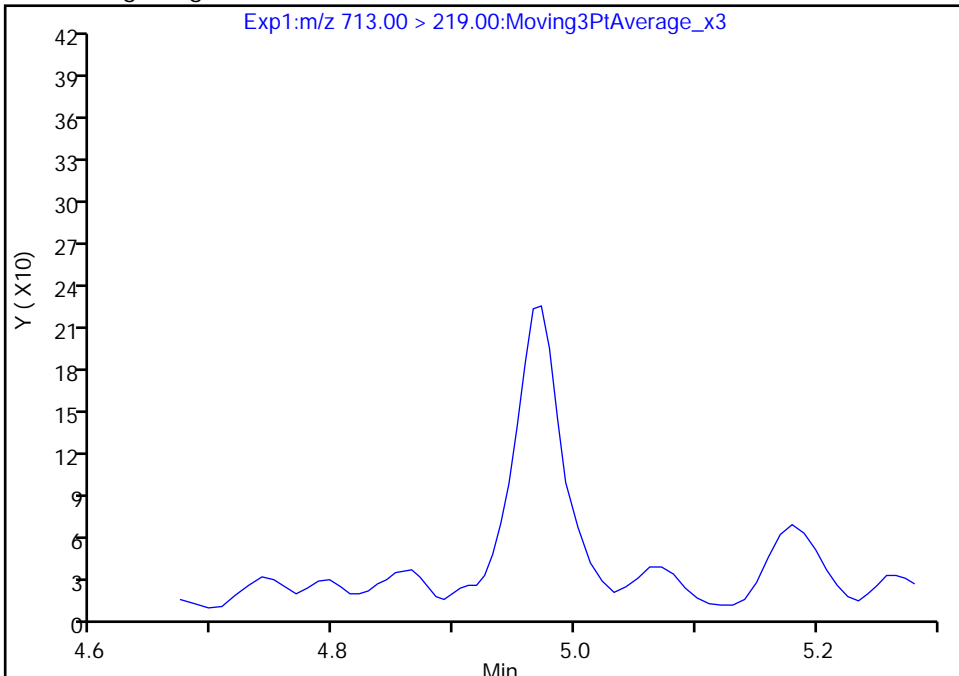
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

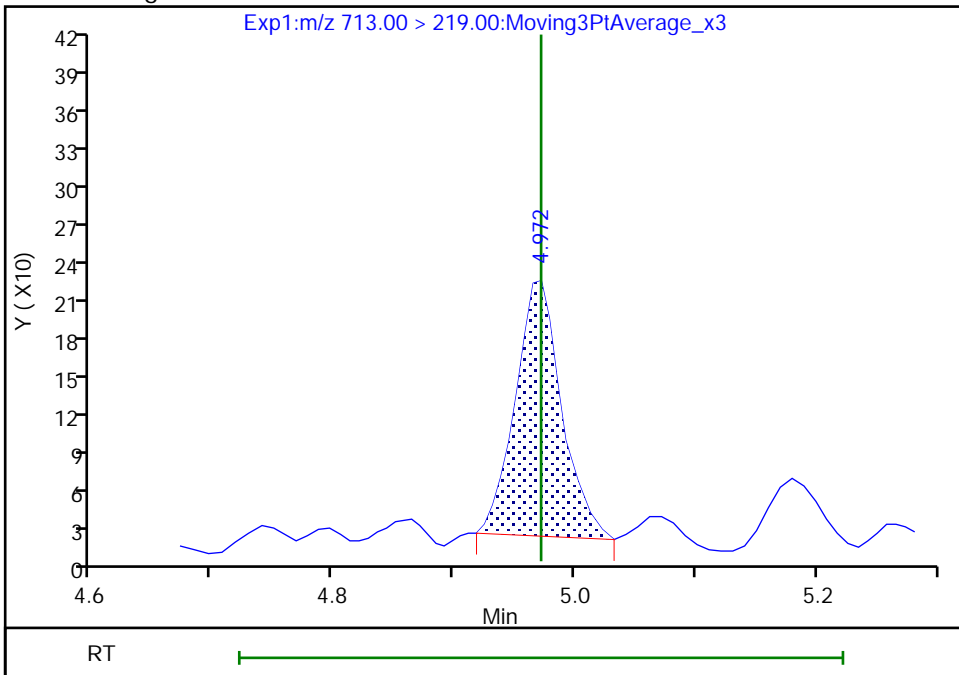
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 529
Amount: 0.090672
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:39:45
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

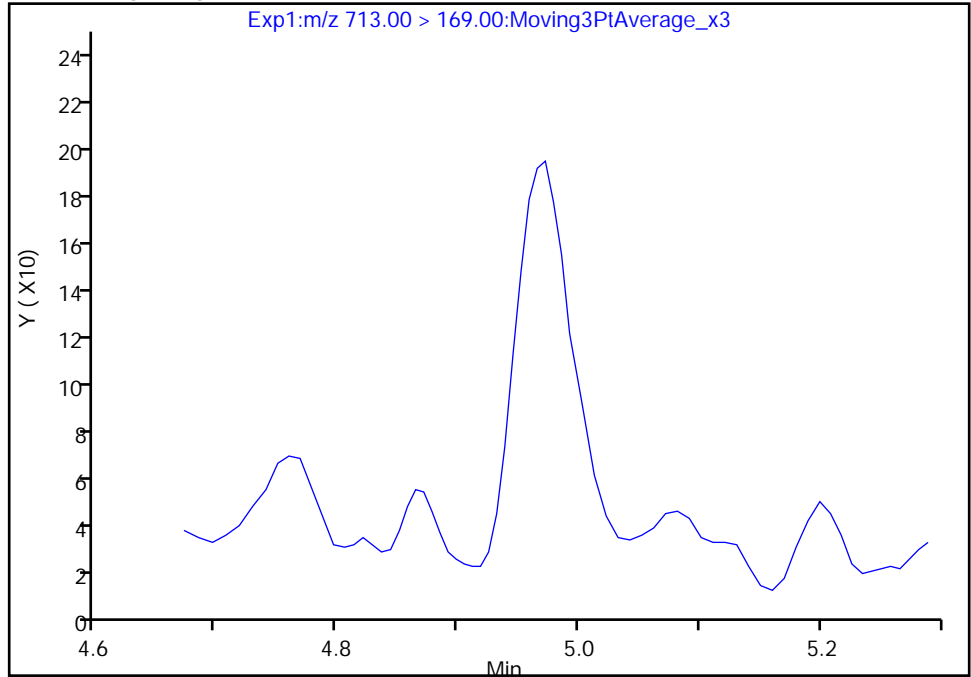
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

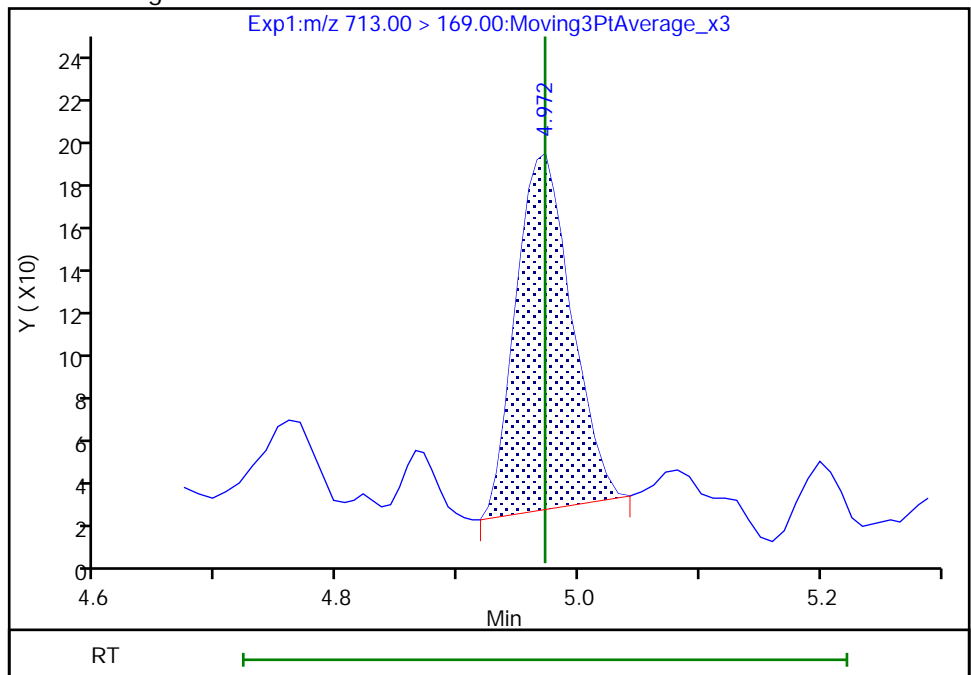
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 522
Amount: 0.090672
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:39:45

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

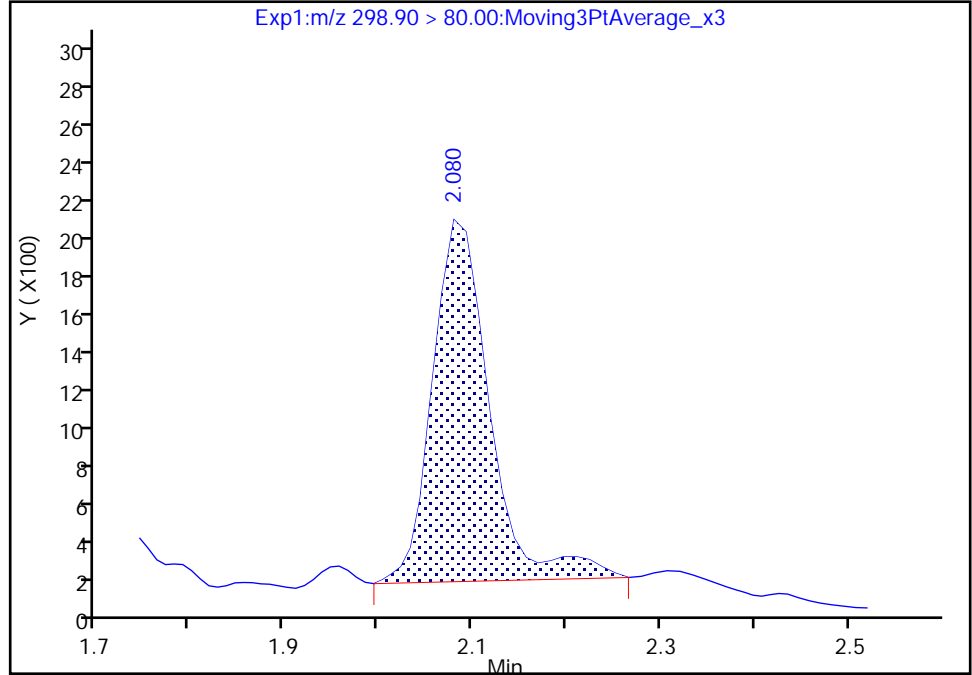
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

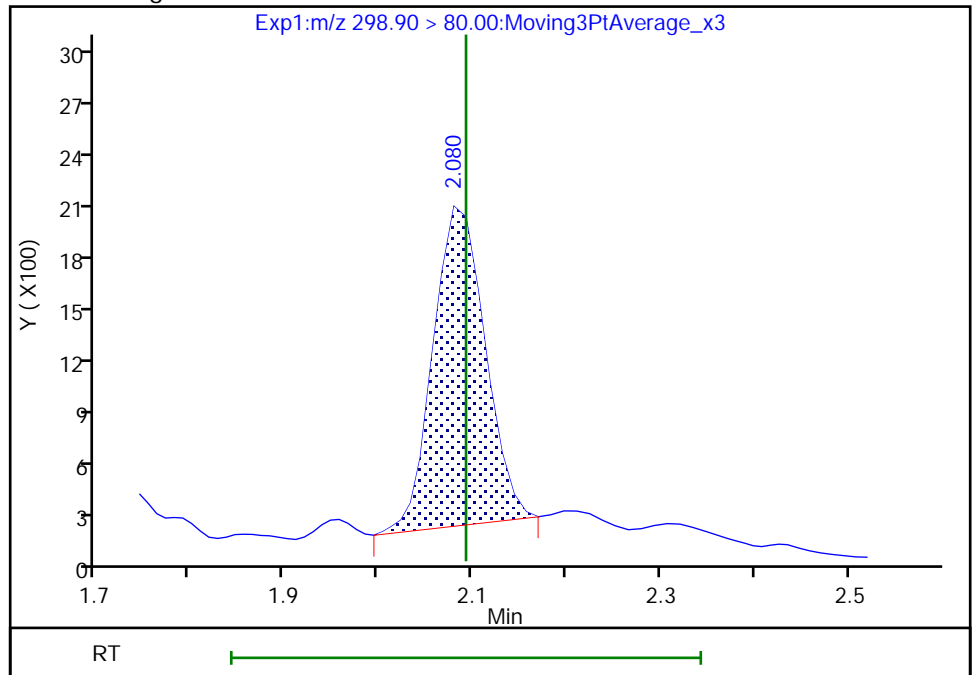
RT: 2.08
Area: 7932
Amount: 0.131951
Amount Units: ng/ml

Processing Integration Results



RT: 2.08
Area: 7035
Amount: 0.117029
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:36:41
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins TestAmerica, Burlington

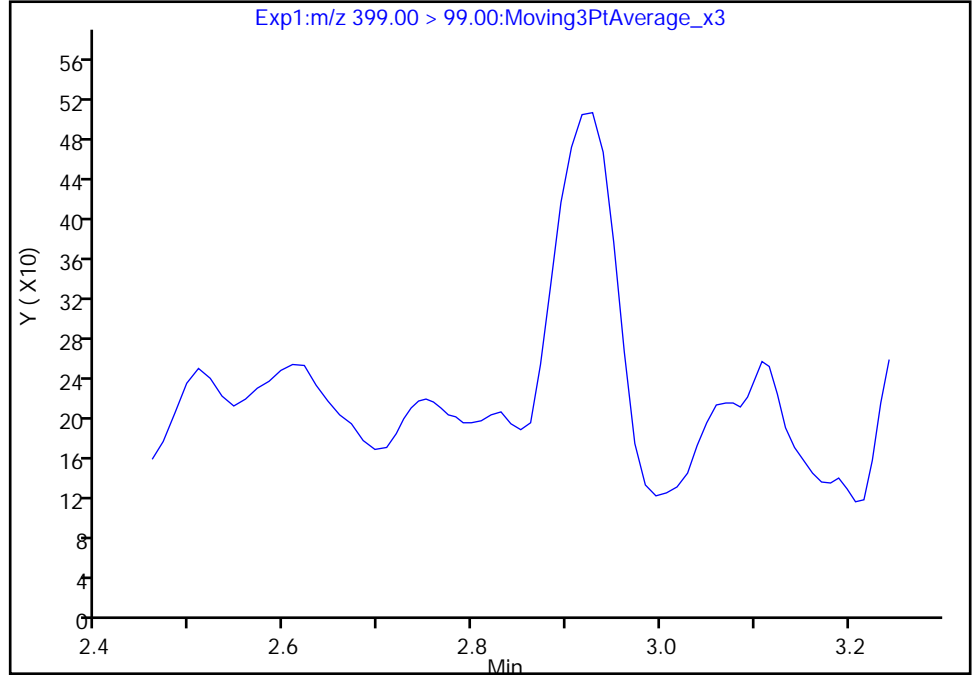
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

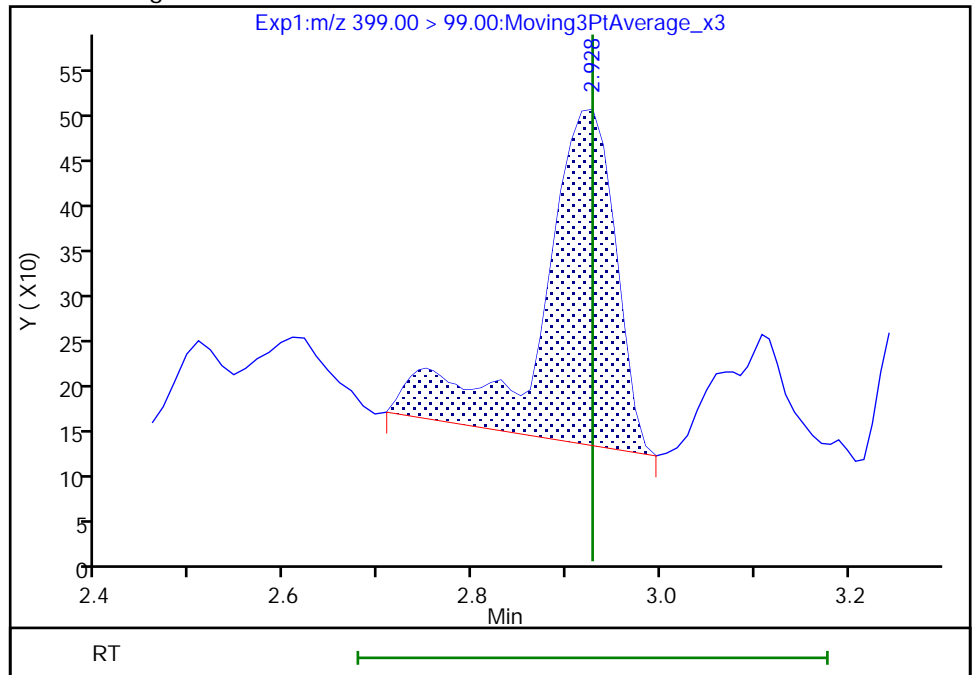
Not Detected
Expected RT: 2.93

Processing Integration Results



RT: 2.93
Area: 2063
Amount: 0.170559
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:37:06
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

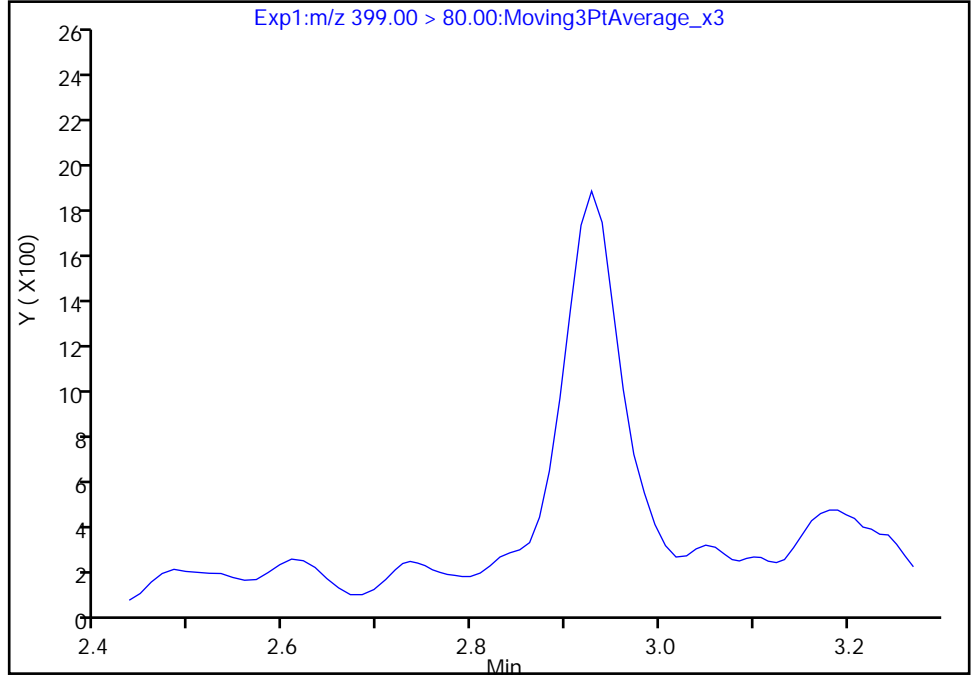
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

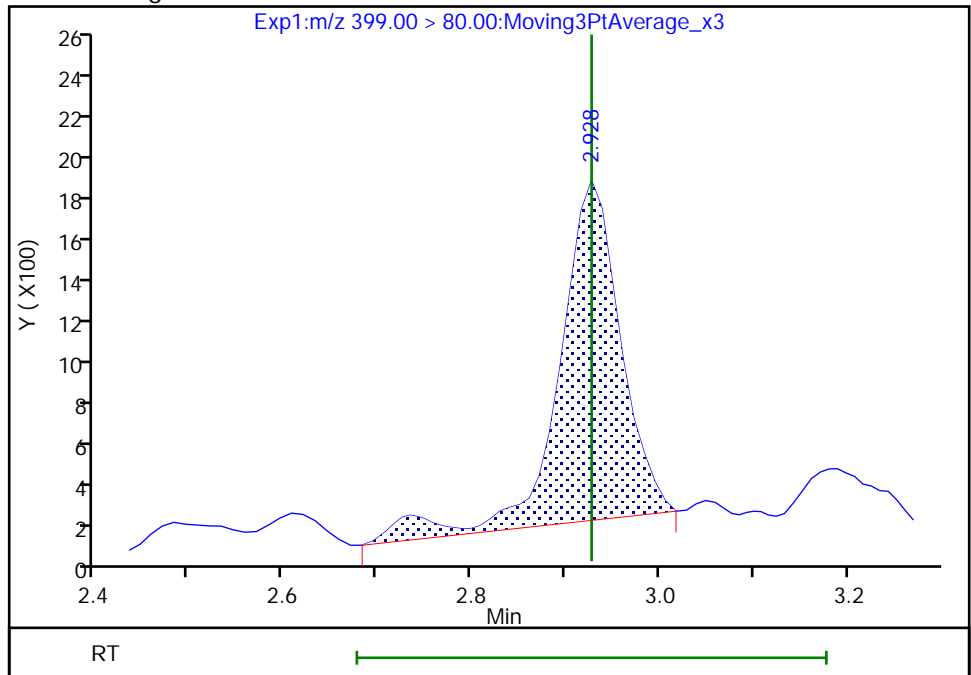
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 7444
Amount: 0.170559
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

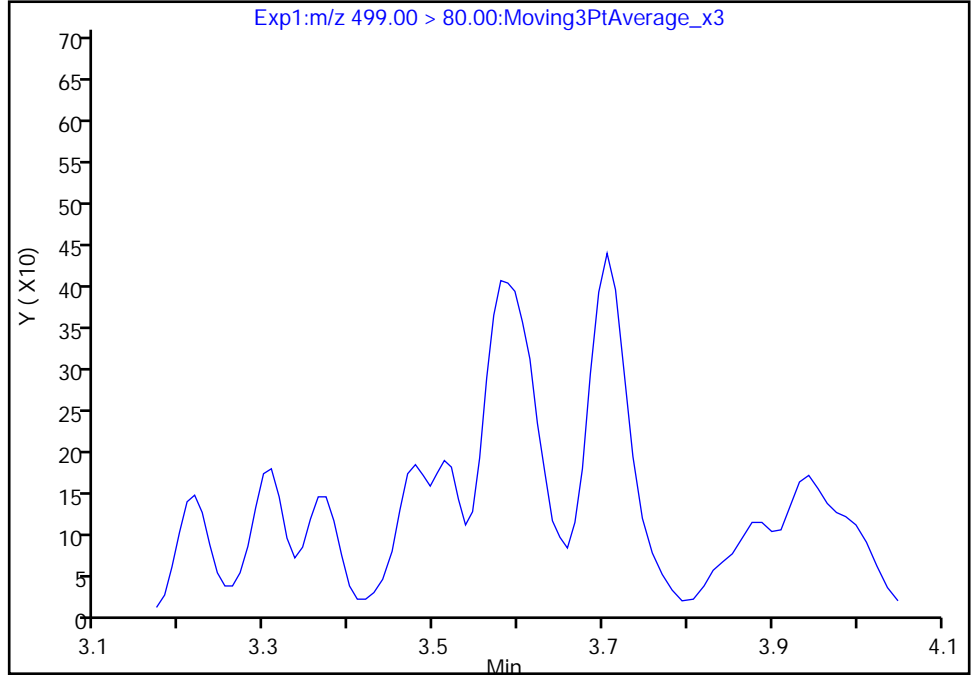
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

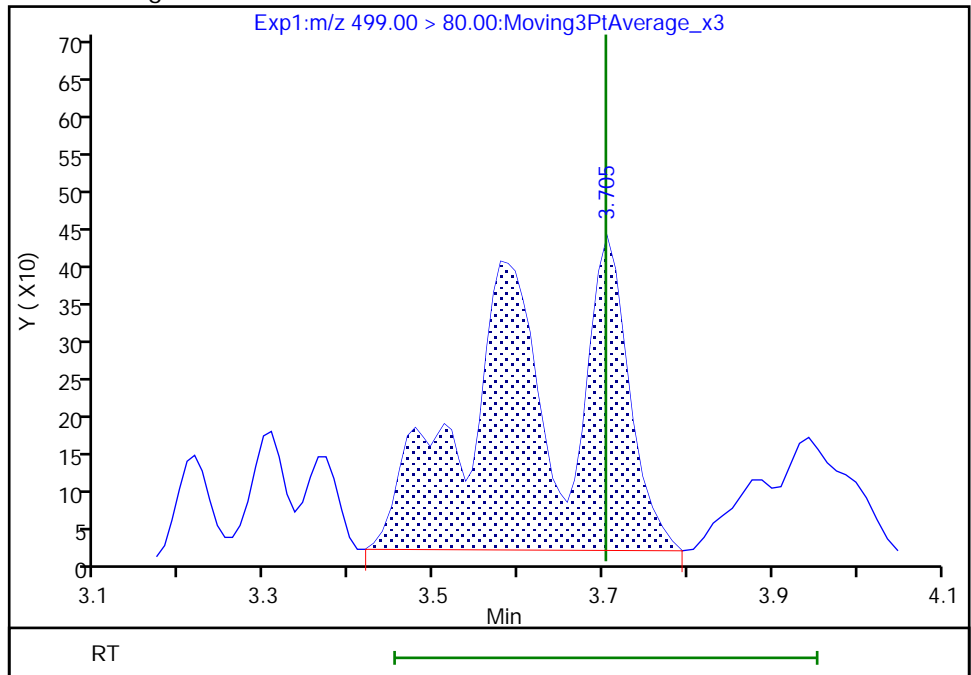
Not Detected
Expected RT: 3.70

Processing Integration Results



RT: 3.70
Area: 3889
Amount: 0.166397
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:37:56
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

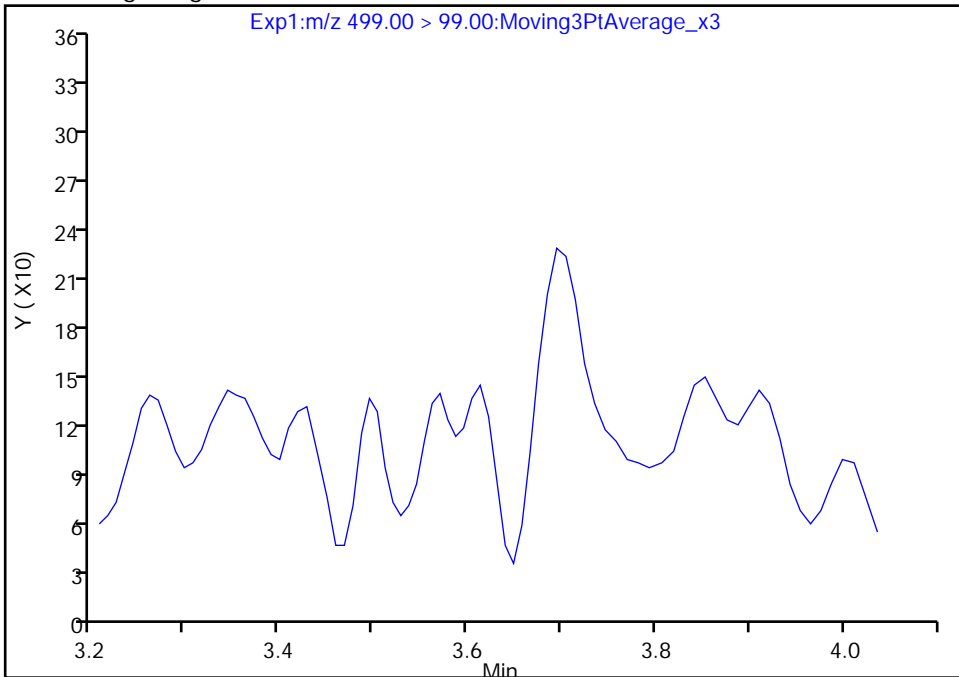
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

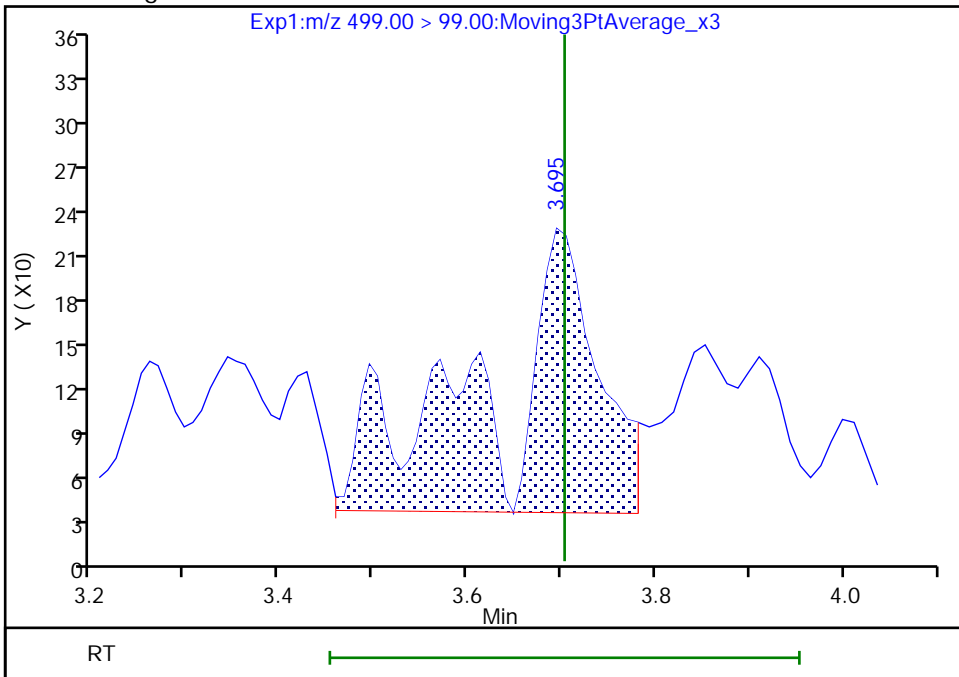
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.69
Area: 1543
Amount: 0.166397
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

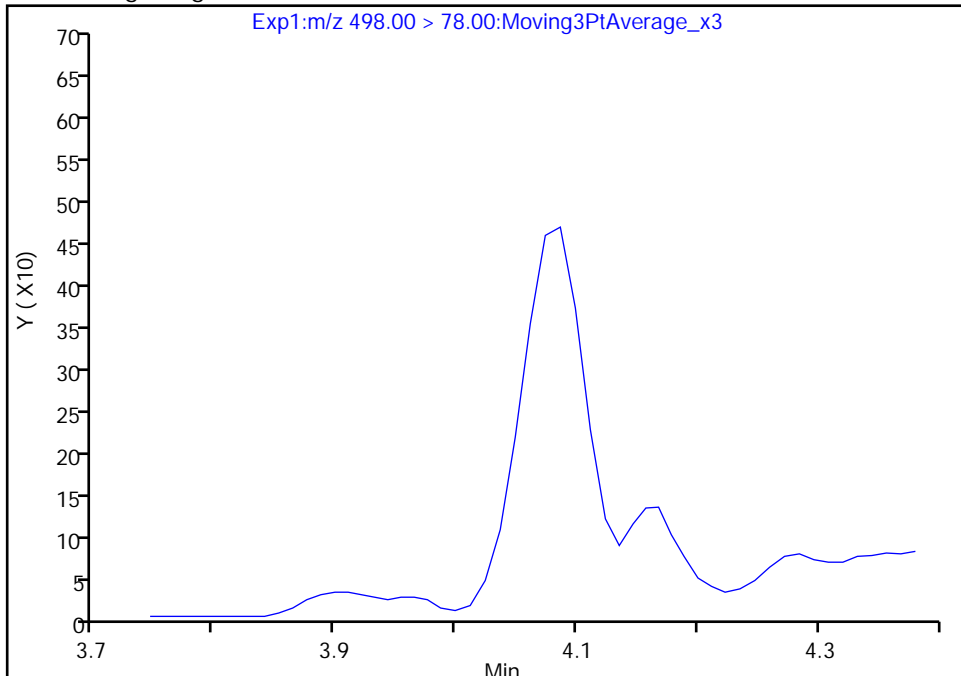
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

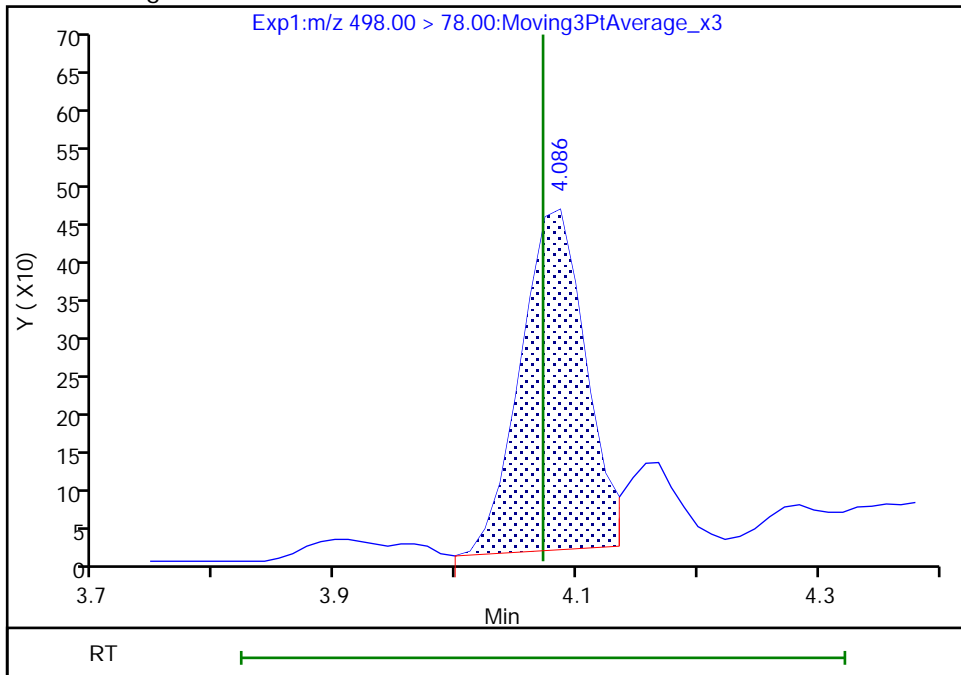
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.09
Area: 1681
Amount: 0.057172
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:39:09
Audit Action: Manually Integrated

Audit Reason: Split Peak

Eurofins TestAmerica, Burlington

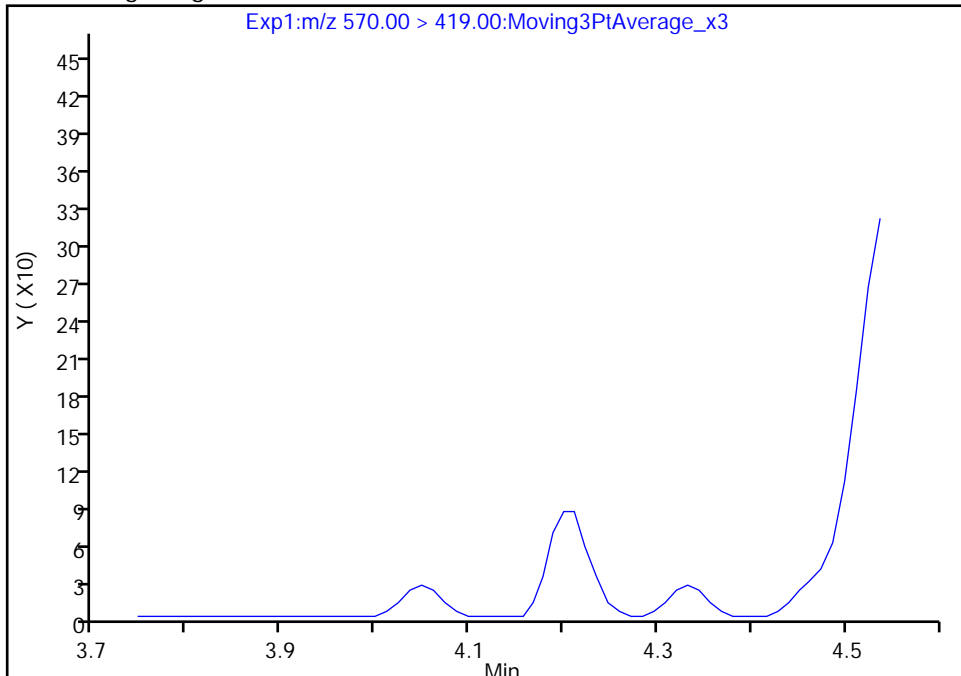
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

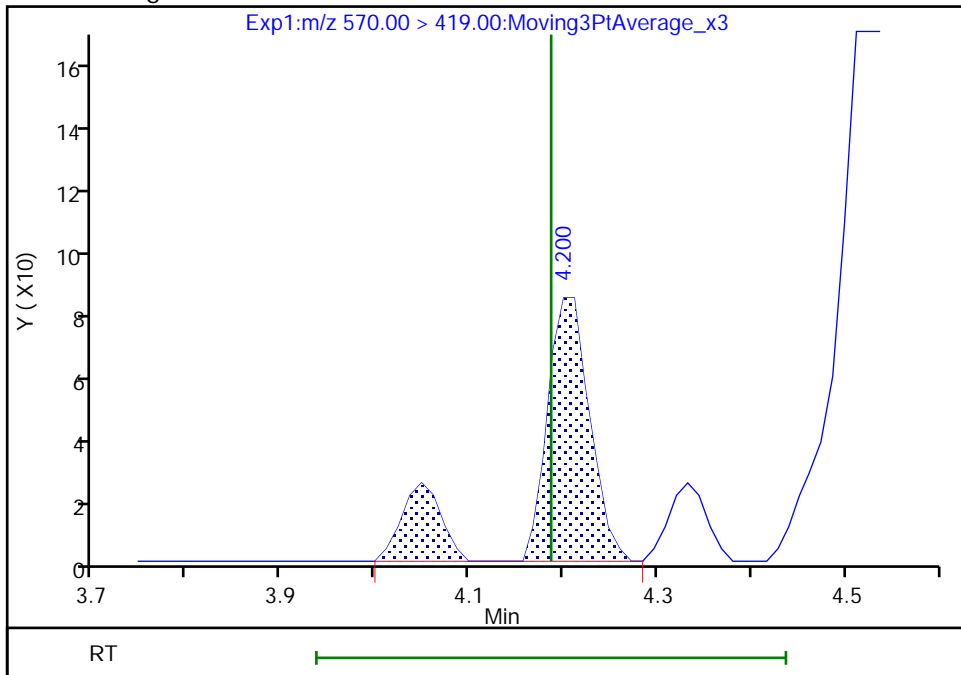
Not Detected
Expected RT: 4.19

Processing Integration Results



RT: 4.20
Area: 332
Amount: 0.112827
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:39:24
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

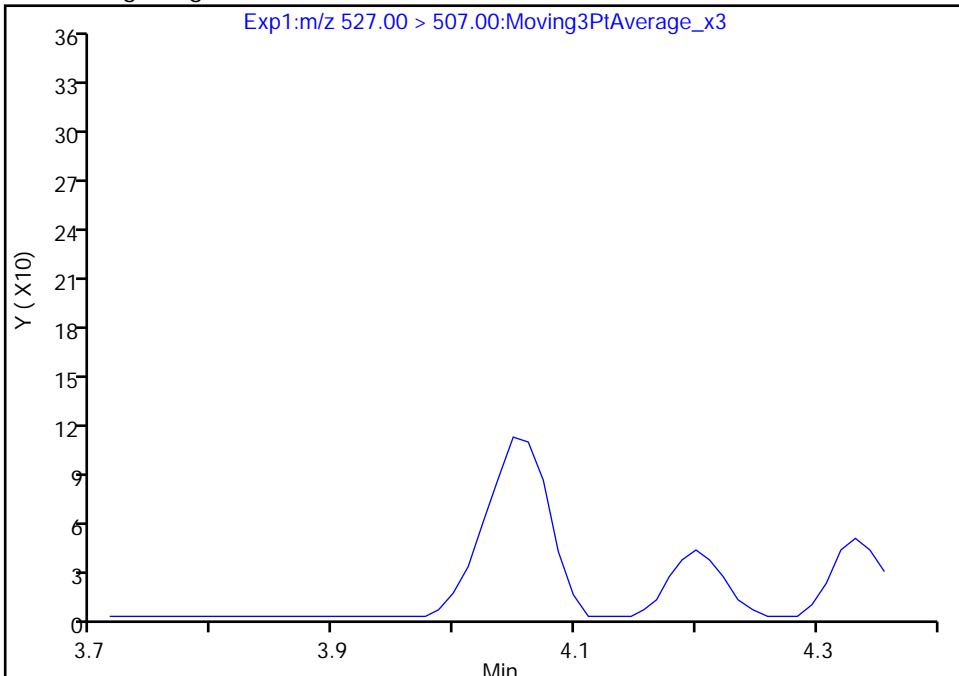
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E005.d
Injection Date: 02-Aug-2019 04:21:26 Instrument ID: LC812
Lims ID: 480-156213-F-2-A Lab Sample ID: 200-156213-2
Client ID: 356023-MW8BD
Operator ID: lc812tech ALS Bottle#: 52 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

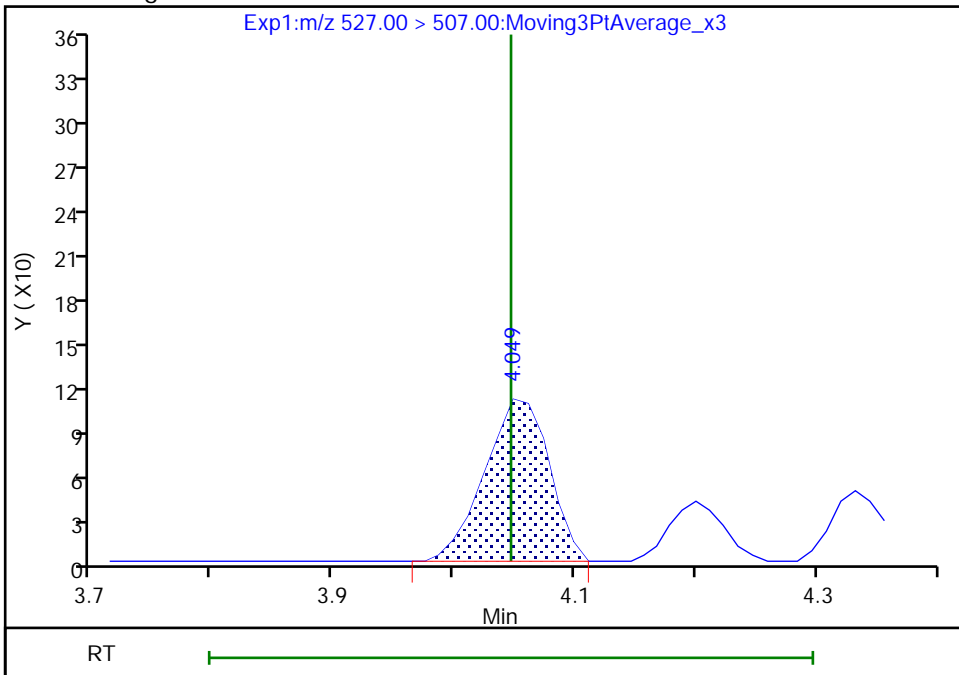
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 399
Amount: 0.041062
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:38:28
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW16 Lab Sample ID: 480-156213-3
 Matrix: Water Lab File ID: SC080119E006.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 17:10
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 314.5 (mL) Date Analyzed: 08/02/2019 04:29
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.6	0.79
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.6	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.6	0.60
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.72
335-67-1	Perfluorooctanoic acid (PFOA)	0.52	J	1.6	0.50
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.21
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.61
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.42
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.73
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.39
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.64
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.48
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		7.9	7.9
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.7
39108-34-4	8:2 FTS	ND		16	2.3

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW16 Lab Sample ID: 480-156213-3
 Matrix: Water Lab File ID: SC080119E006.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 17:10
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 314.5 (mL) Date Analyzed: 08/02/2019 04:29
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	78		25-150
STL00992	13C4 PFBA	94		25-150
STL01893	13C5 PFPeA	90		25-150
STL00993	13C2 PFHxA	90		50-150
STL01892	13C4 PFHpA	95		50-150
STL00990	13C4 PFOA	82		50-150
STL00995	13C5 PFNA	88		50-150
STL00996	13C2 PFDA	85		50-150
STL00997	13C2 PFUnA	88		50-150
STL00998	13C2 PFDoA	85		50-150
STL02116	13C2 PFTeDA	66		50-150
STL02337	13C3 PFBS	90		50-150
STL00994	18O2 PFHxS	88		50-150
STL00991	13C4 PFOS	88		50-150
STL02118	d3-NMeFOSAA	67		50-150
STL02117	d5-NEtFOSAA	72		50-150
STL02279	M2-6:2 FTS	95		25-150
STL02280	M2-8:2 FTS	102		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
 Lims ID: 480-156213-F-3-A
 Client ID: 356023-MW16
 Sample Type: Client
 Inject. Date: 02-Aug-2019 04:29:27 ALS Bottle#: 53 Worklist Smp#: 6
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-3-A
 Misc. Info.: 200-0037095-006 Plate: 1 Rack: 4
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:45:58
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.506	3978083	47.1	94.2	12541	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.699	1.699	0.0	1.000	11347	0.1547		2.1		M
D 3 13C5 PFPeA	267.90 > 223.00	2.054	2.054	0.0	0.612	3567554	45.0	89.9	6739	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.054	2.067	-0.013	1.000	10695	0.1549		0.4		M
D 47 13C3 PFBS	301.90 > 80.00	2.080	2.080	0.0	0.620	3263429	41.9	90.1	693562	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.080	2.093	-0.013	1.000	9586	0.1344	Target=1.90	13.6		
298.90 > 99.00	2.080	2.093	-0.013	1.000	4725		2.03(0.95-2.85)	4.6		
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.733	3534863	44.9	89.7	7522	
D 11 18O2 PFHxS	403.00 > 84.00	2.916	2.916	0.0	0.869	1905287	41.8	88.3	8154	
D 9 13C4 PFHpA	367.00 > 322.00	2.928	2.928	0.0	0.873	3678833	47.7	95.3	7464	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.004	10440	0.1967	Target=3.37	13.3		M
399.00 > 99.00	2.916	2.928	-0.012	1.000	3078		3.39(1.69-5.06)	4.3		M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.928	2.928	0.0	1.000	2720	0.0395	Target=3.76	1.1		M
363.00 > 169.00	2.928	2.928	0.0	1.000	1146		2.37(1.88-5.65)	5.0		M
D 12 M2-6:2 FTS	429.00 > 81.00	3.336	3.335	0.001	0.994	429559	45.2	95.2	853	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfoni	427.00 > 407.00	3.336	3.336	0.0	1.000	14207	0.9160		28.9	
D 14 13C4 PFOA	417.00 > 372.00	3.355	3.344	0.011	1.000	3328959	40.8	81.7	10802	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.345	3.355	-0.010	0.997	23622	0.3261	Target=2.84	2.3		M
413.00 > 169.00	3.355	3.355	0.0	1.000	7173		3.29(1.42-4.25)	27.6		M
* 62 13C2 PFOA										
415.00 > 370.00	3.355	3.355	0.0		4481285	50.0			10045	
D 18 13C4 PFOS										
503.00 > 80.00	3.703	3.695	0.008	1.104	1599936	42.1		88.0	9356	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.703	3.703	0.0	1.000	7154	0.2258	Target=4.33	18.8		M
499.00 > 99.00	3.703	3.703	0.0	1.000	1897		3.77(2.16-6.49)	6.3		M
D 19 13C5 PFNA										
468.00 > 423.00	3.723	3.715	0.008	1.110	3257733	43.8		87.6	19876	
D 23 13C2 PFDA										
515.00 > 470.00	4.034	4.036	-0.002	1.203	2513859	42.3		84.5	11915	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.047	4.036	0.011	1.206	428539	48.9		102	1368	
D 21 13C8 FOSA										
506.00 > 78.00	4.072	4.061	0.011	1.214	2675320	39.2		78.3	7267	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.072	4.072	0.0	1.000	3207	0.0657		34.8		M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.178	0.009	1.248	255477	33.6		67.3	2599	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.198	4.187	0.011	1.003	128	0.0331		0.3		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.307	4.296	0.011	1.284	2393280	44.2		88.3	13091	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.307	4.307	0.0	1.000	6556	0.1596	Target=7.95	3.3		RM
563.00 > 169.00	4.307	4.307	0.0	1.000	329		19.93(3.98-11.93)	4.2		M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.308	0.011	1.287	305068	36.0		72.1	1229	
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.537	0.012	1.356	2485431	42.6		85.2	8991	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.965	4.965	0.0	1.480	2638854	32.9		65.7	7247	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.965	4.972	-0.007	1.000	665	0.0947	Target=1.02	7.9		M
713.00 > 219.00	4.965	4.972	-0.007	1.000	865		0.77(0.51-1.54)	12.1		M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d

Injection Date: 02-Aug-2019 04:29:27

Instrument ID: LC812

Lims ID: 480-156213-F-3-A

Lab Sample ID: 200-156213-3

Client ID: 356023-MW16

Operator ID: lc812tech

ALS Bottle#: 53

Worklist Smp#: 6

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

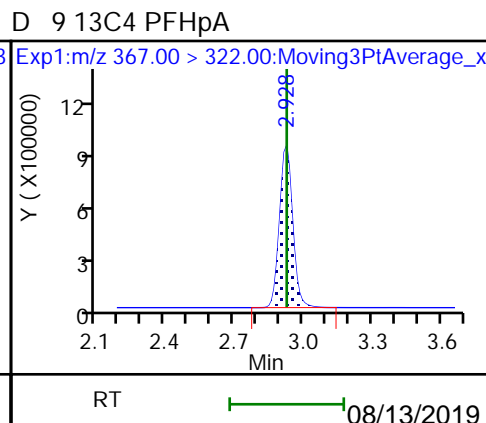
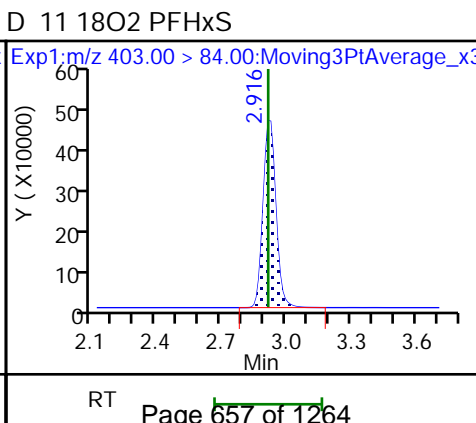
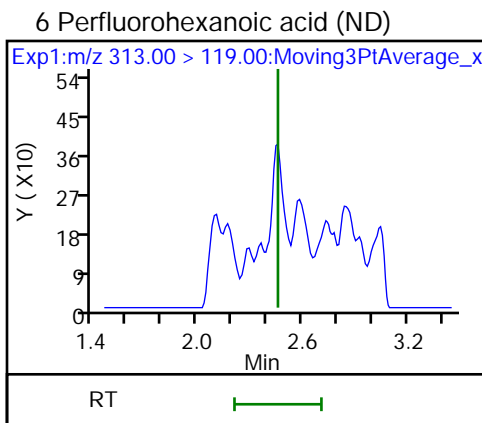
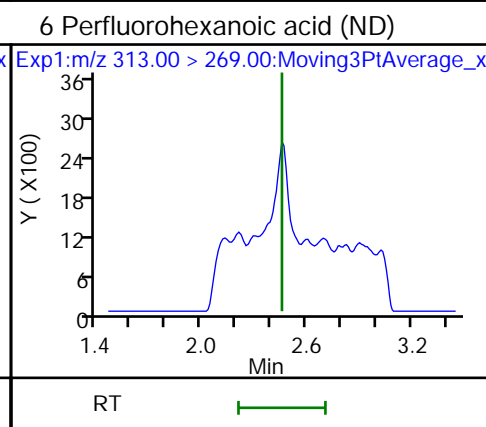
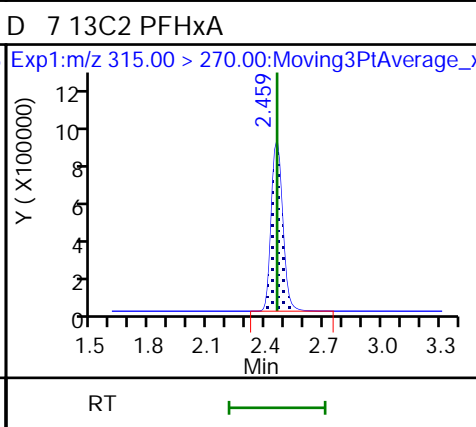
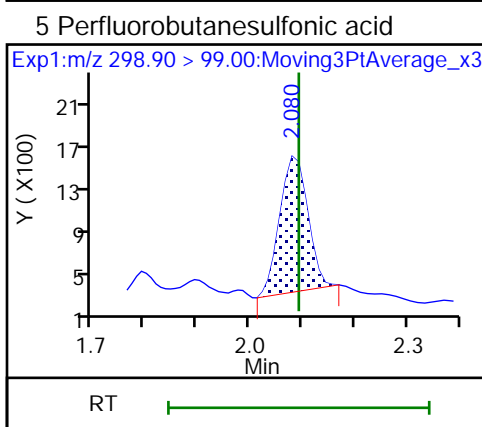
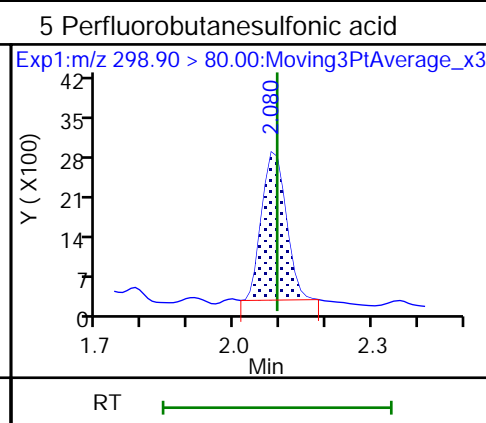
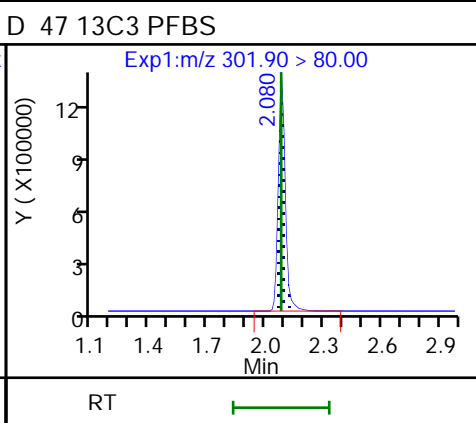
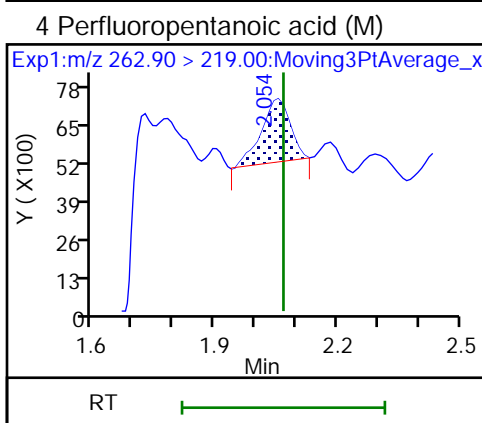
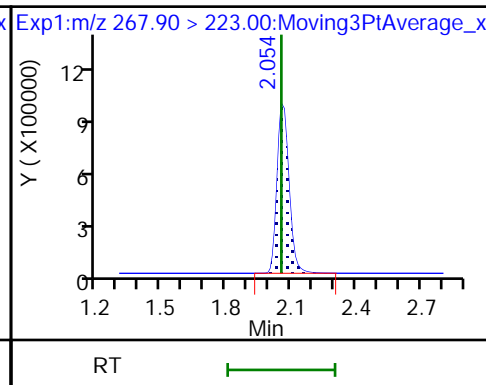
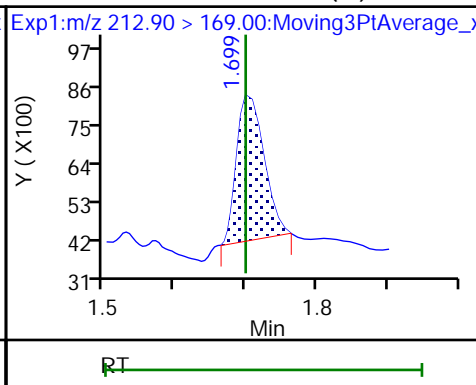
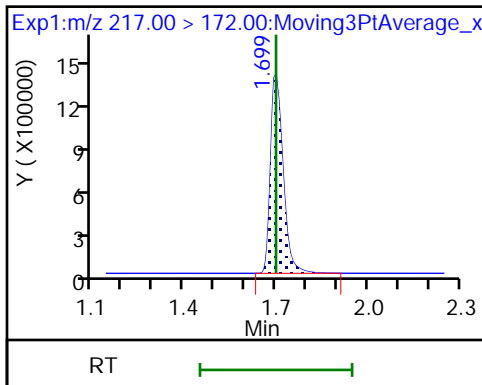
Method: PFC_LC812

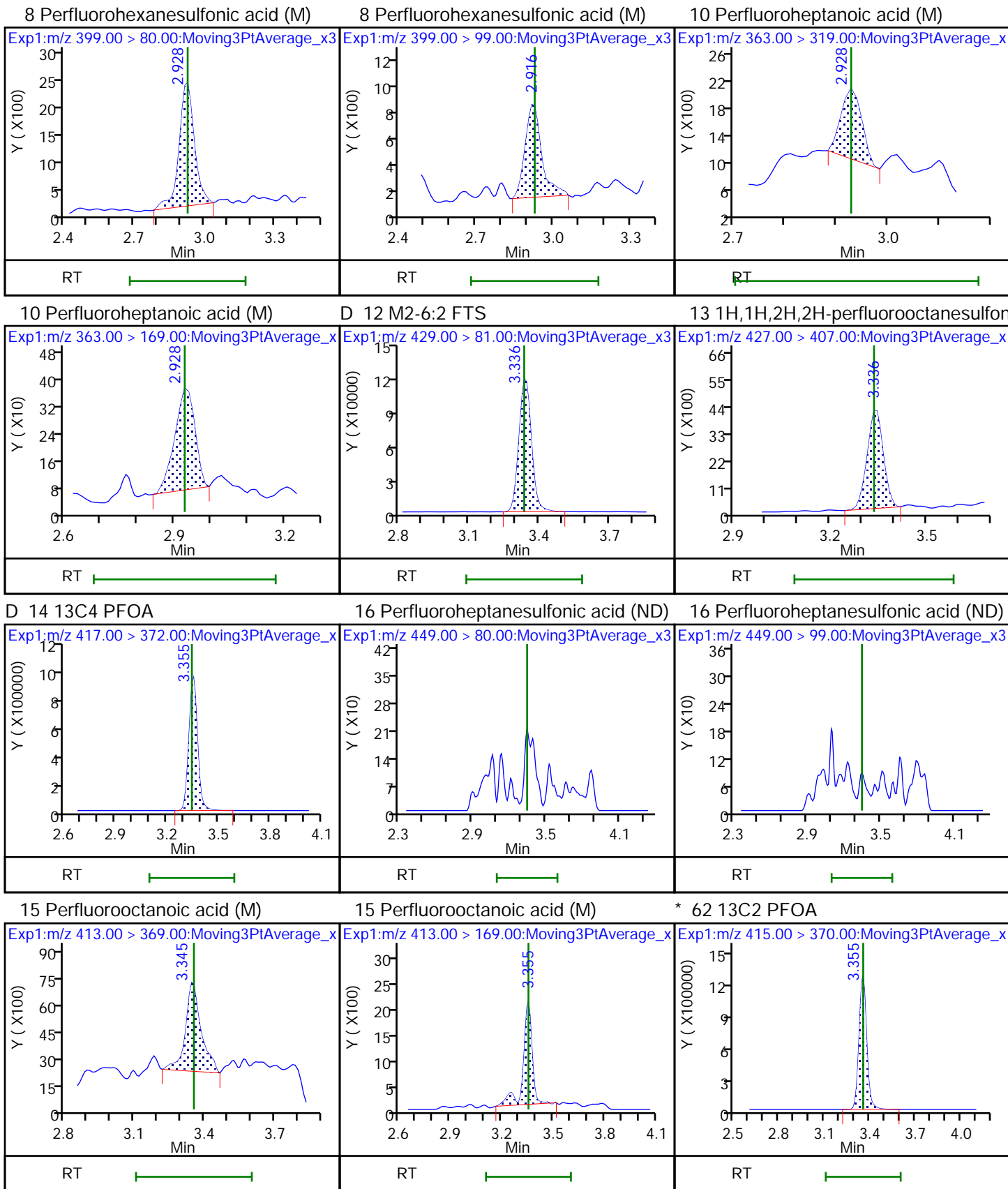
Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

D 3 13C5 PFPeA

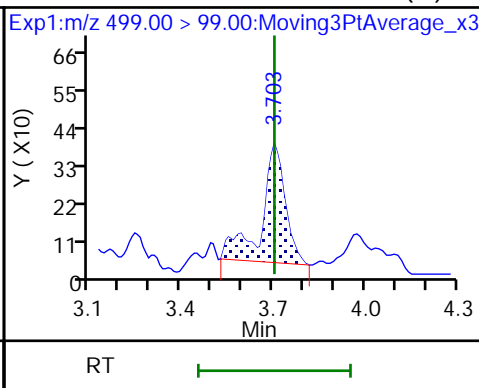
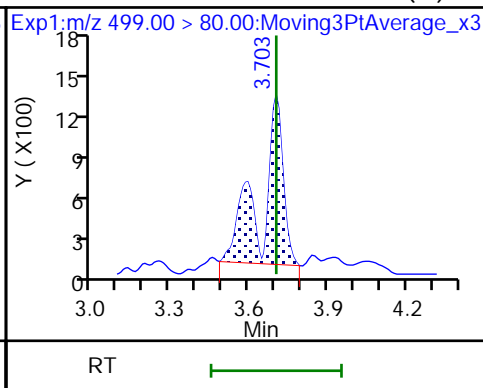
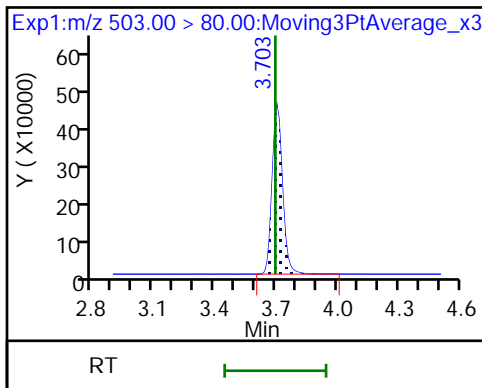




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

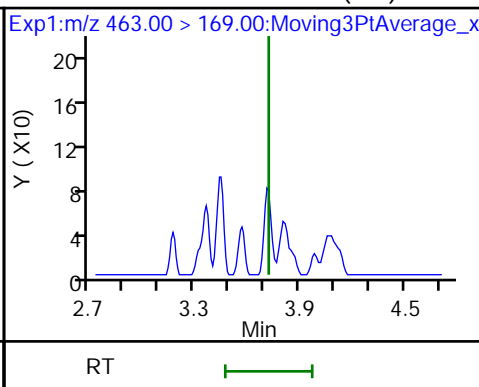
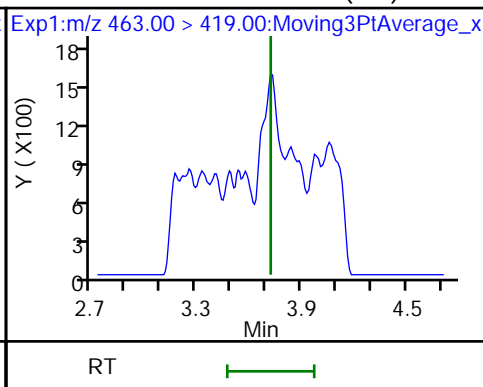
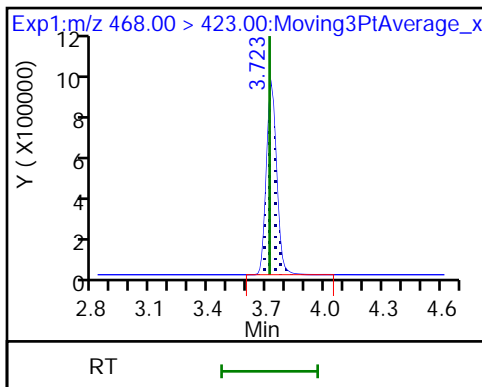
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (ND)

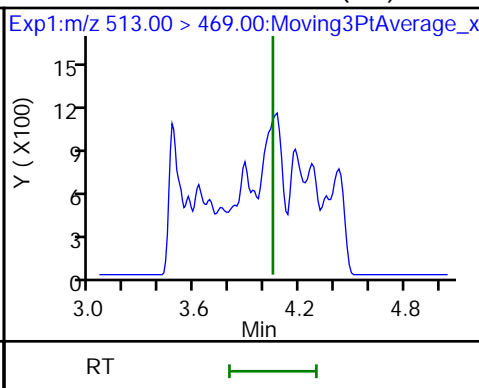
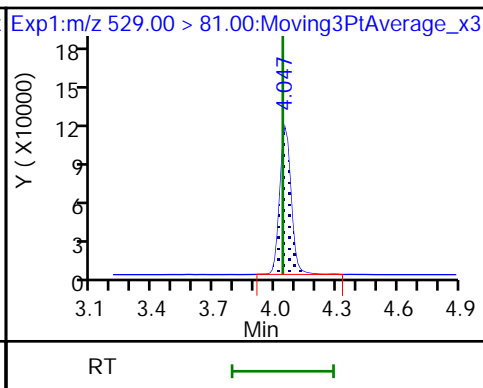
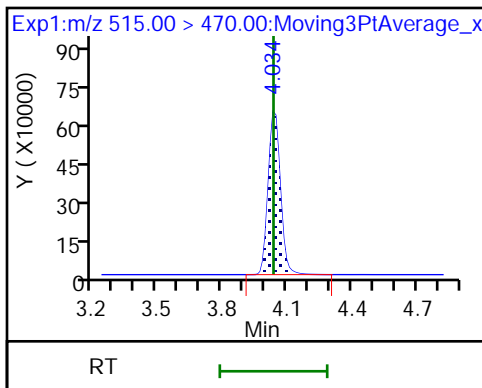
20 Perfluorononanoic acid (ND)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

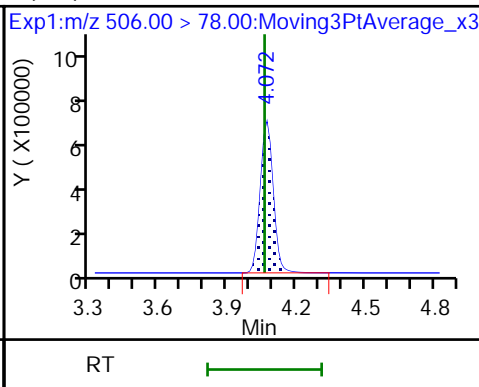
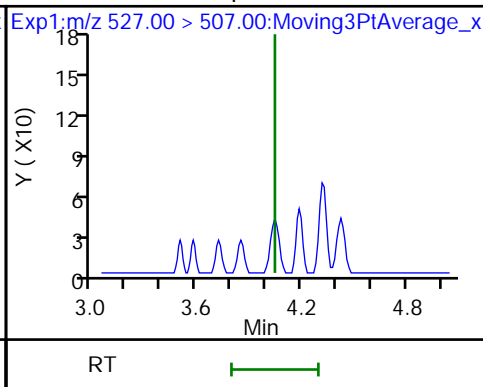
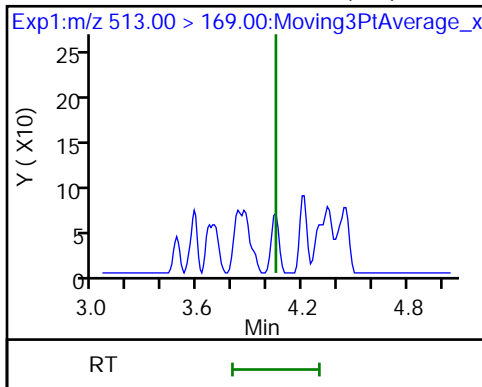
24 Perfluorodecanoic acid (ND)



24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonate (ND)

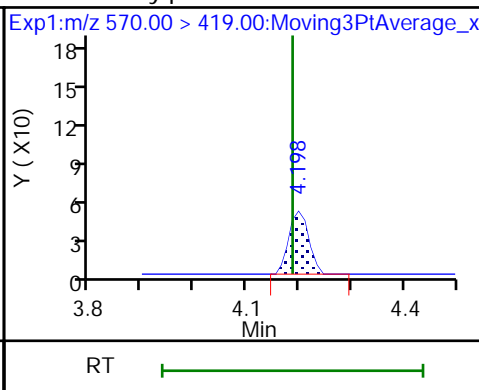
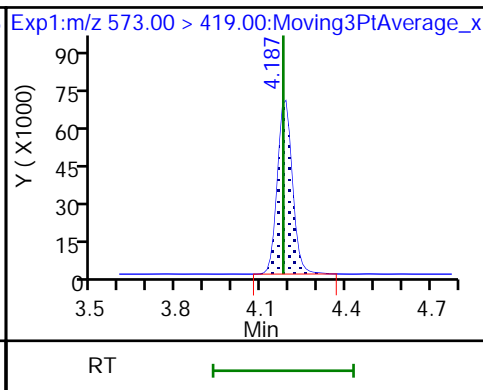
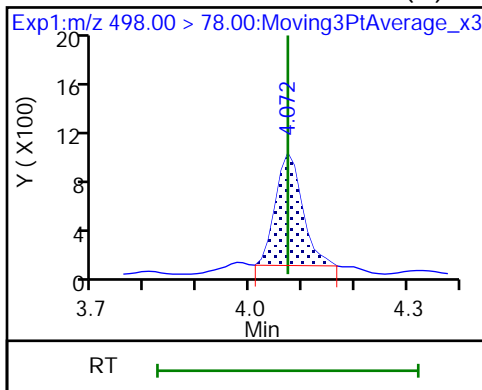
(ND) 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

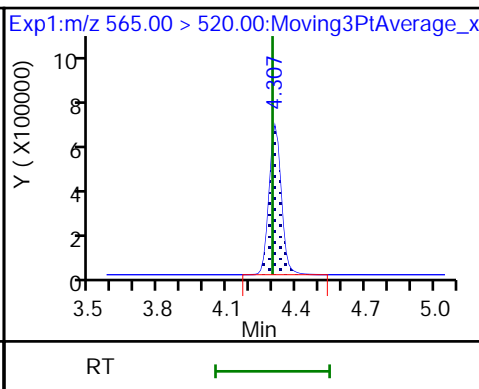
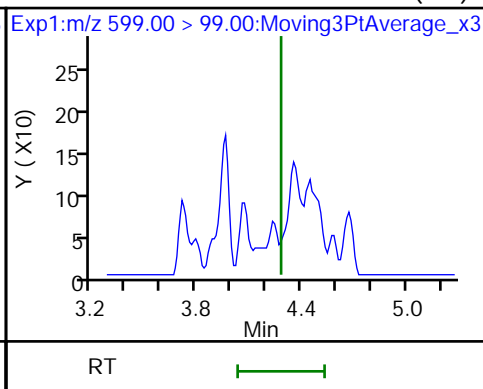
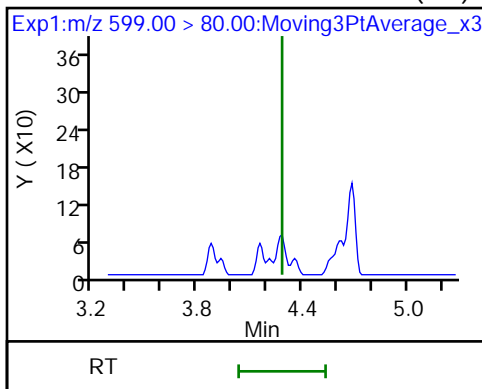
28 N-methylperfluorooctanesulfonamido (M)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

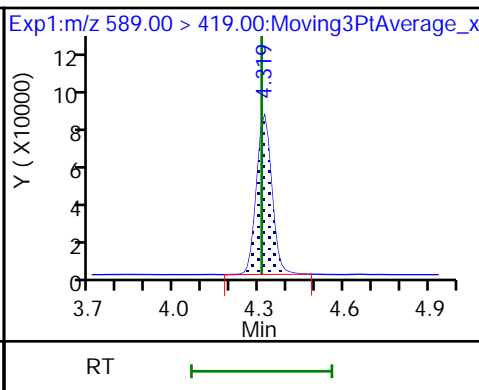
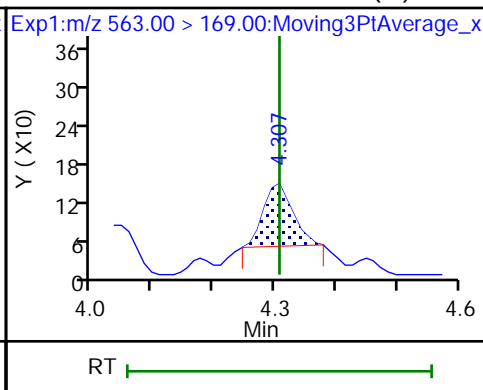
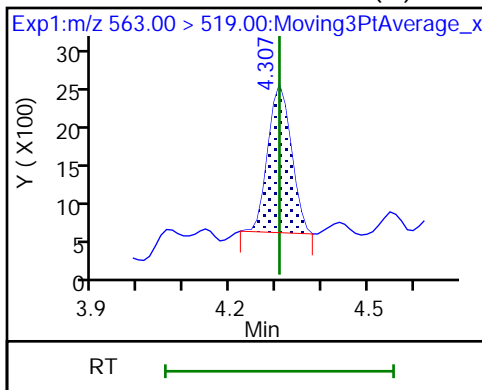
D 30 13C2 PFUoA



31 Perfluoroundecanoic acid (M)

31 Perfluoroundecanoic acid (M)

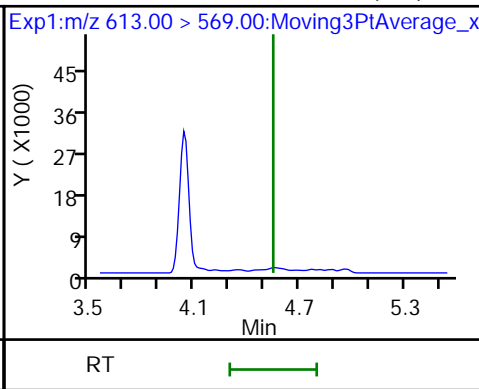
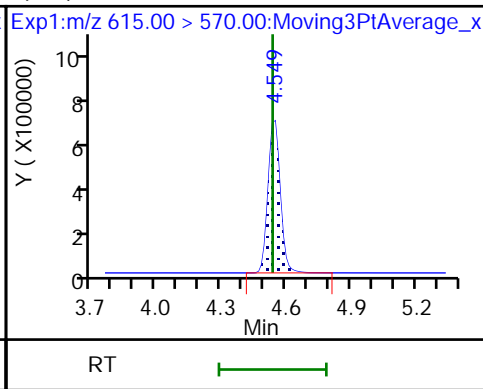
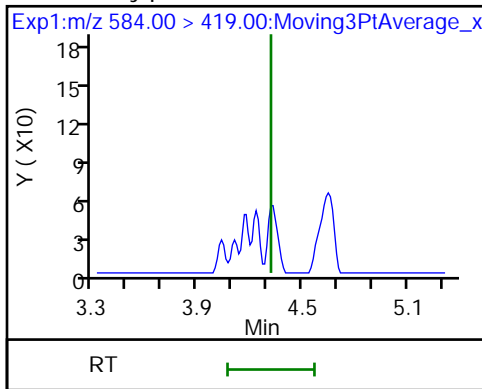
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 33 13C2 PFDoA

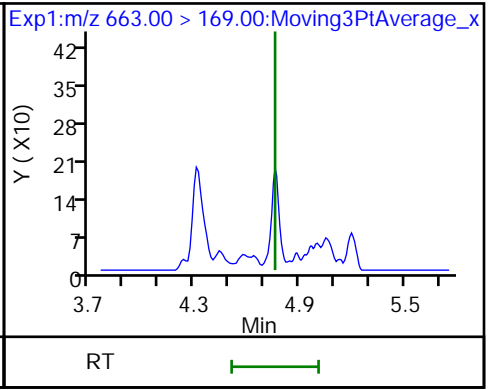
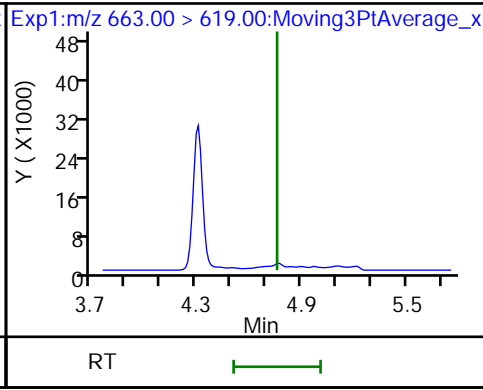
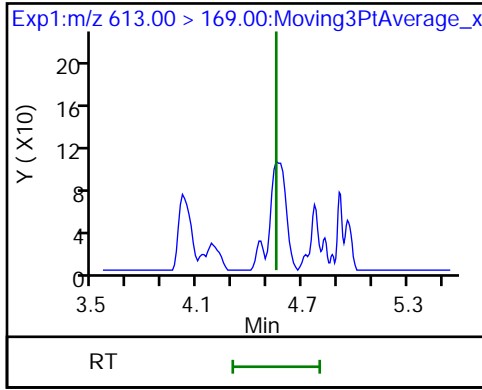
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

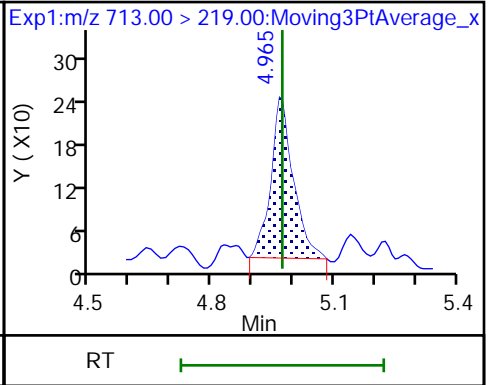
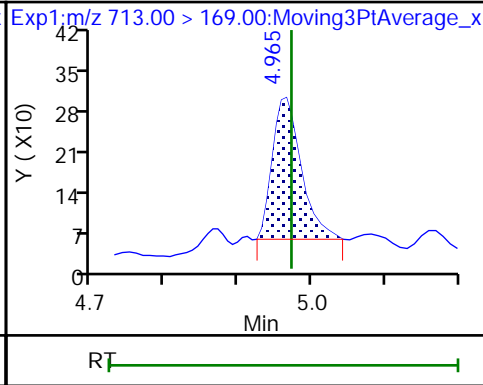
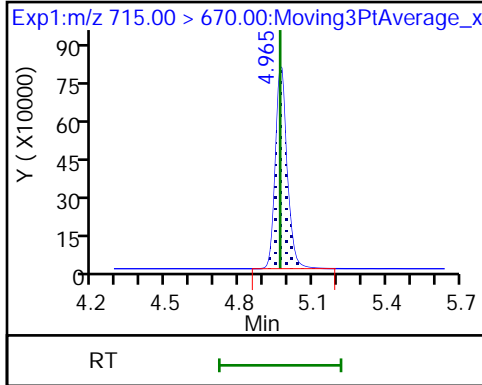
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (M)

42 Perfluorotetradecanoic acid (M)



Euofins TestAmerica, Burlington

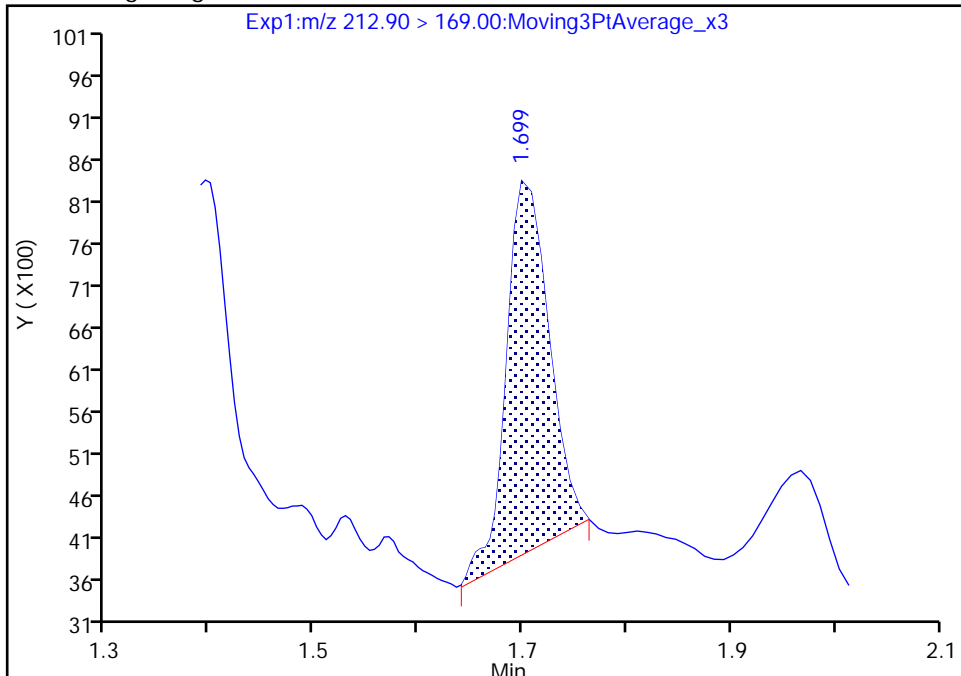
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

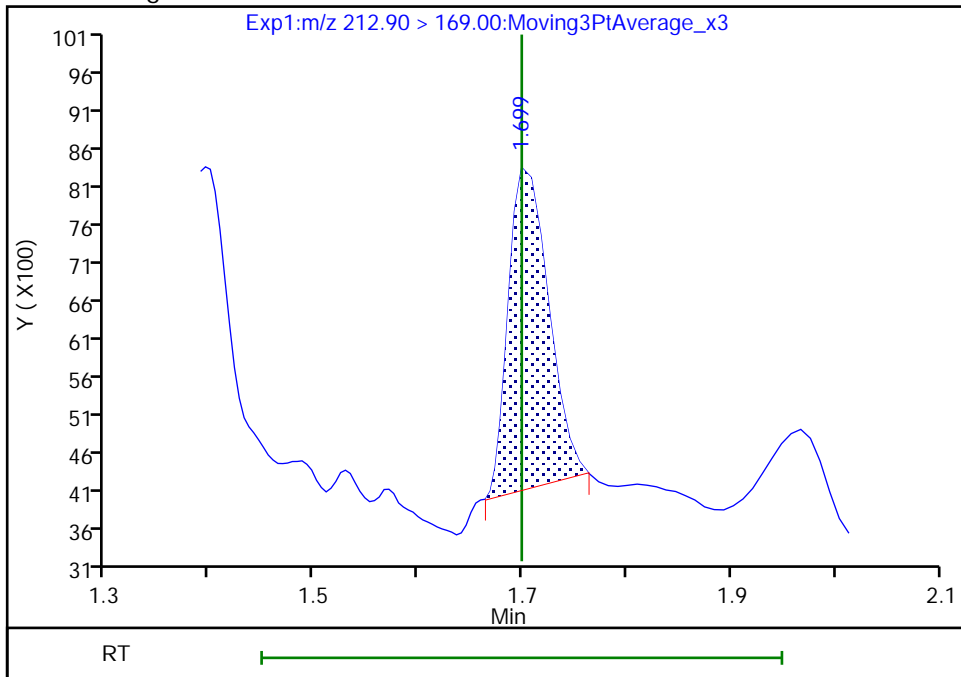
RT: 1.70
Area: 12611
Amount: 0.171980
Amount Units: ng/ml

Processing Integration Results



RT: 1.70
Area: 11347
Amount: 0.154743
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:40:39
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

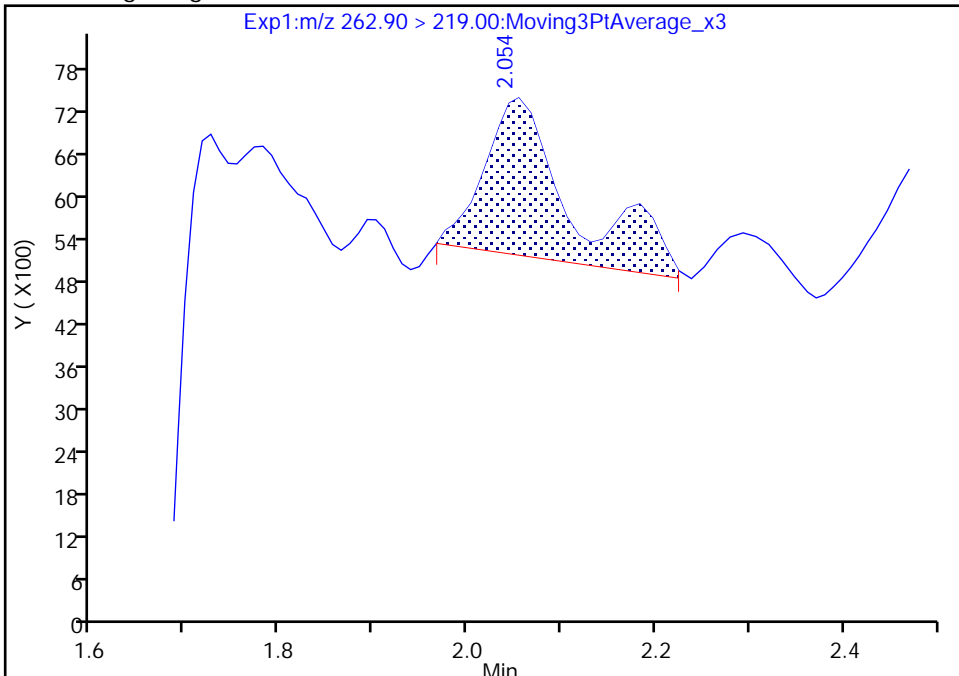
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

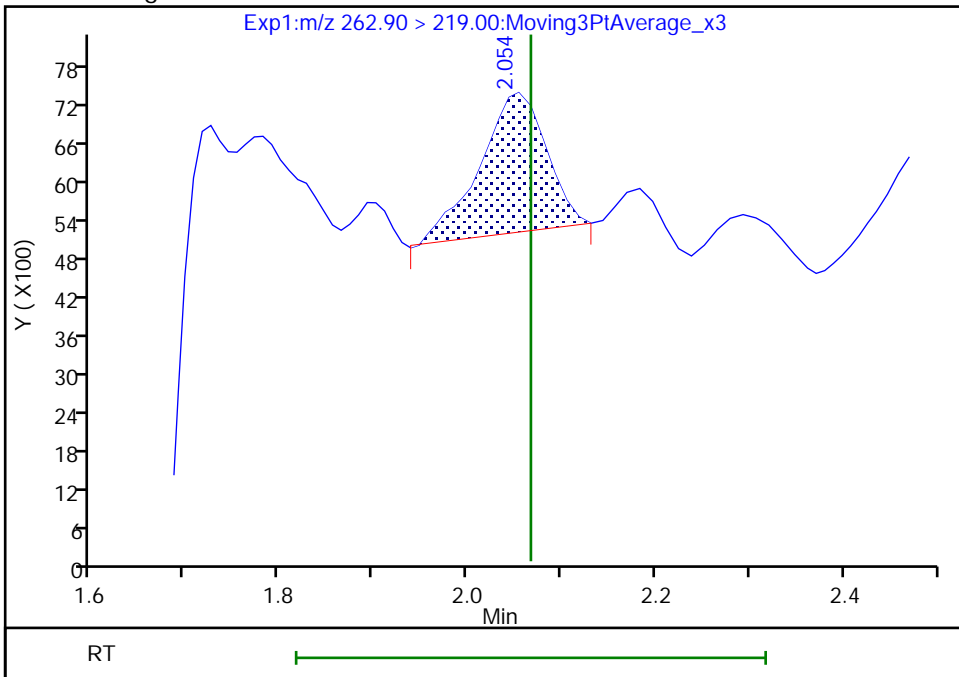
RT: 2.05
Area: 14244
Amount: 0.206303
Amount Units: ng/ml

Processing Integration Results



RT: 2.05
Area: 10695
Amount: 0.154901
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:40:47
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

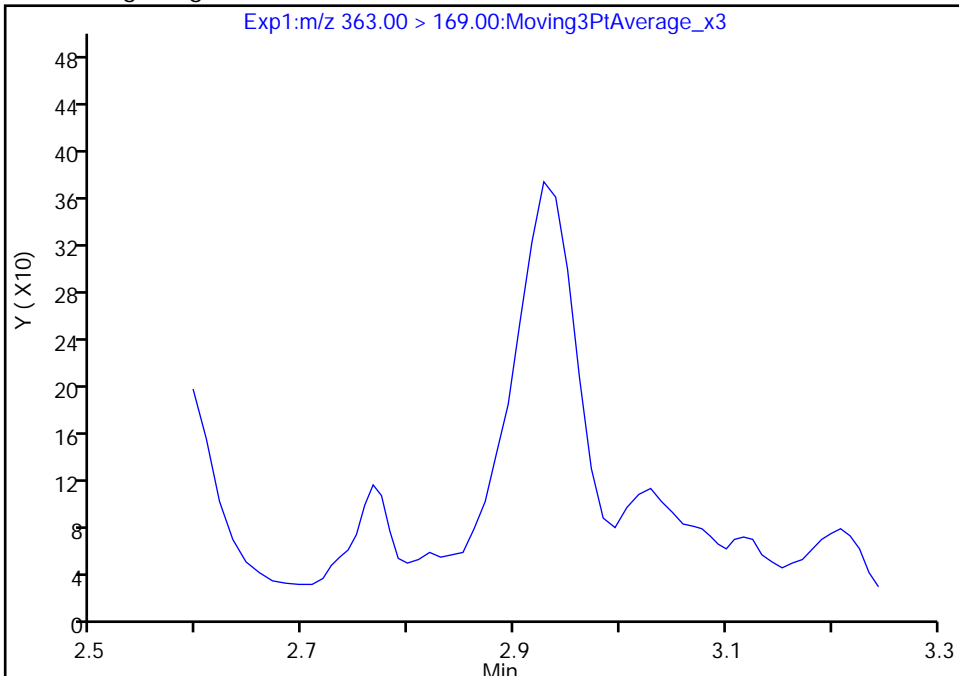
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

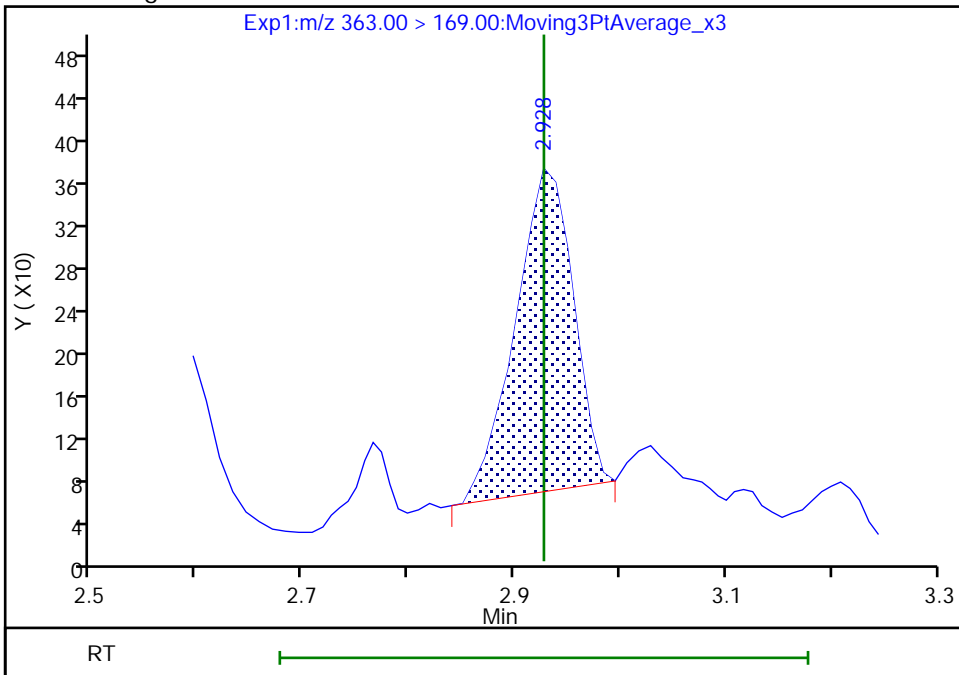
Not Detected
Expected RT: 2.93

Processing Integration Results



RT: 2.93
Area: 1146
Amount: 0.039469
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:42:25
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

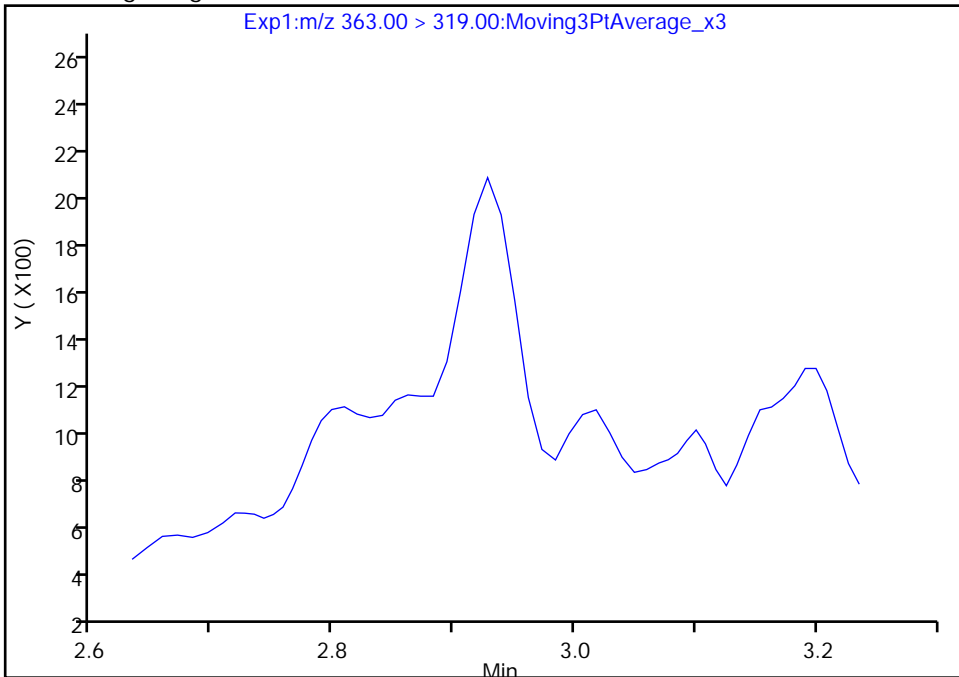
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

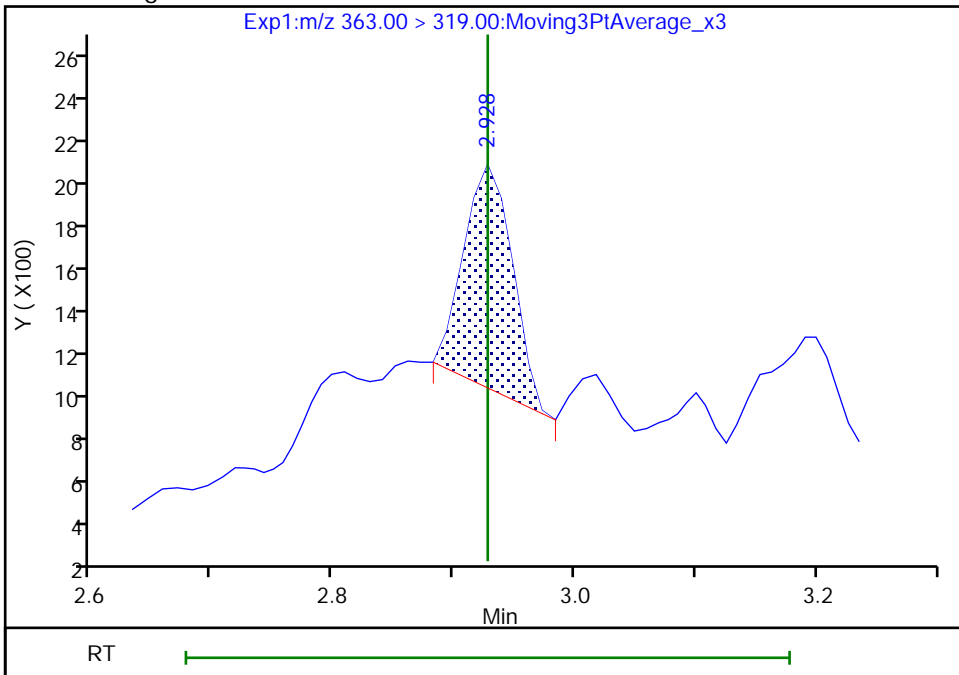
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 2720
Amount: 0.039469
Amount Units: ng/ml



Euofins TestAmerica, Burlington

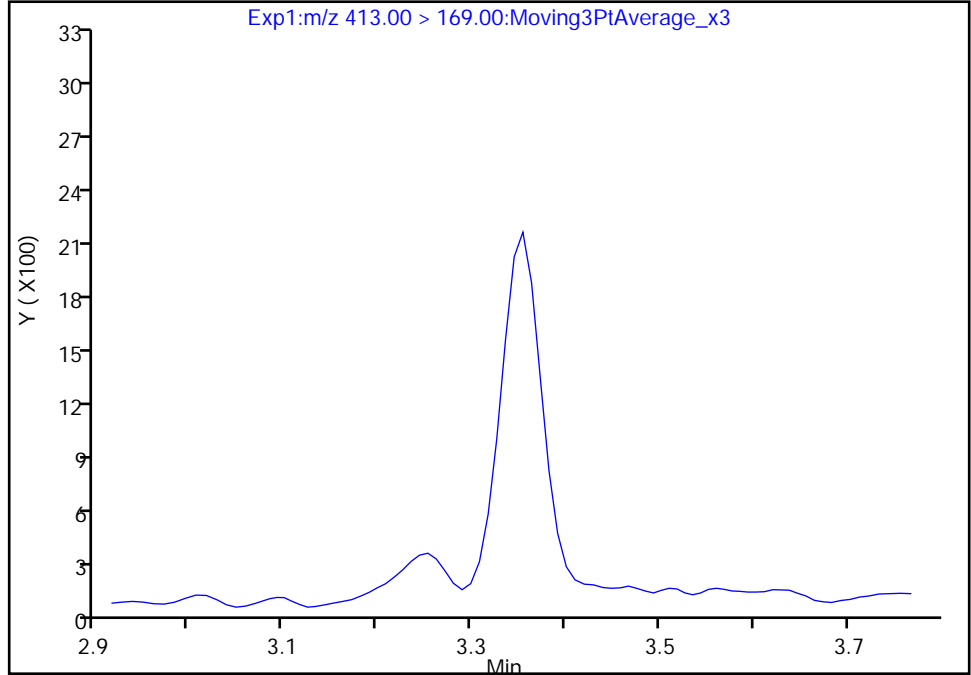
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

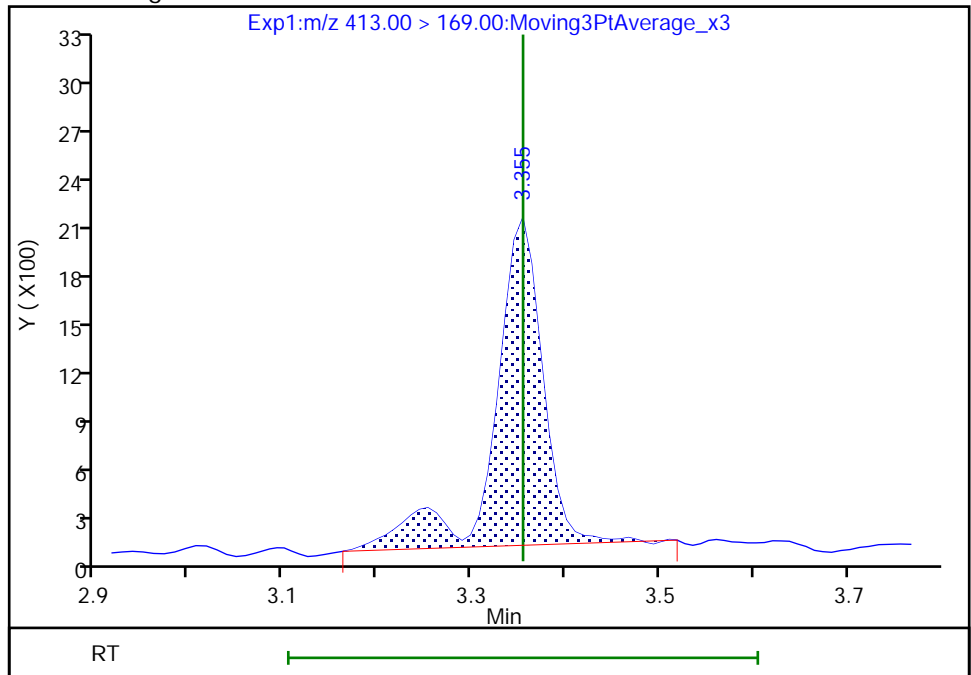
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.35
Area: 7173
Amount: 0.326061
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:42:55
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

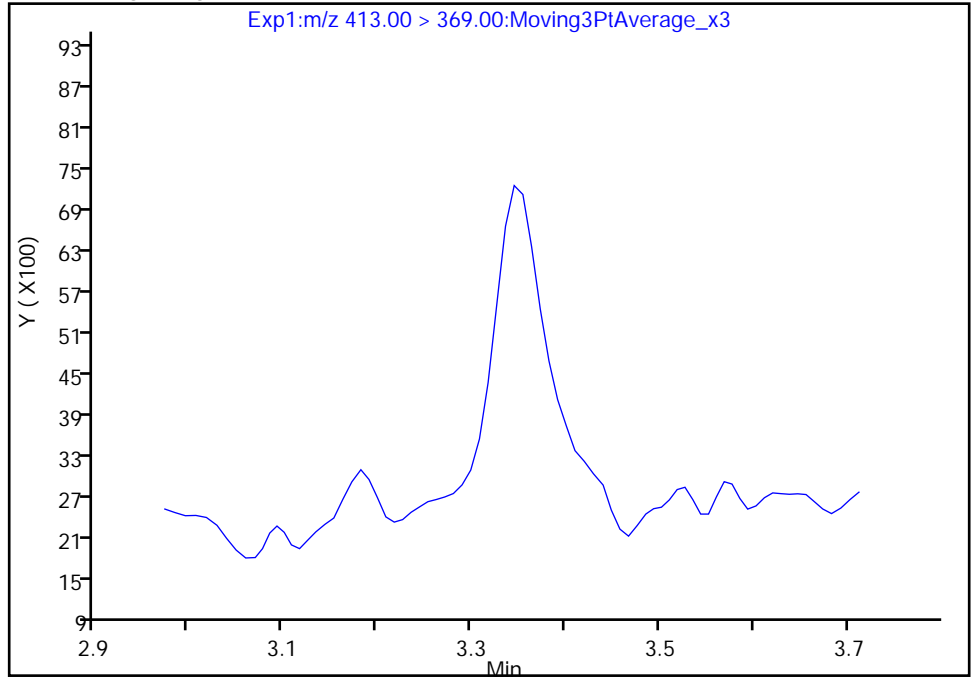
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

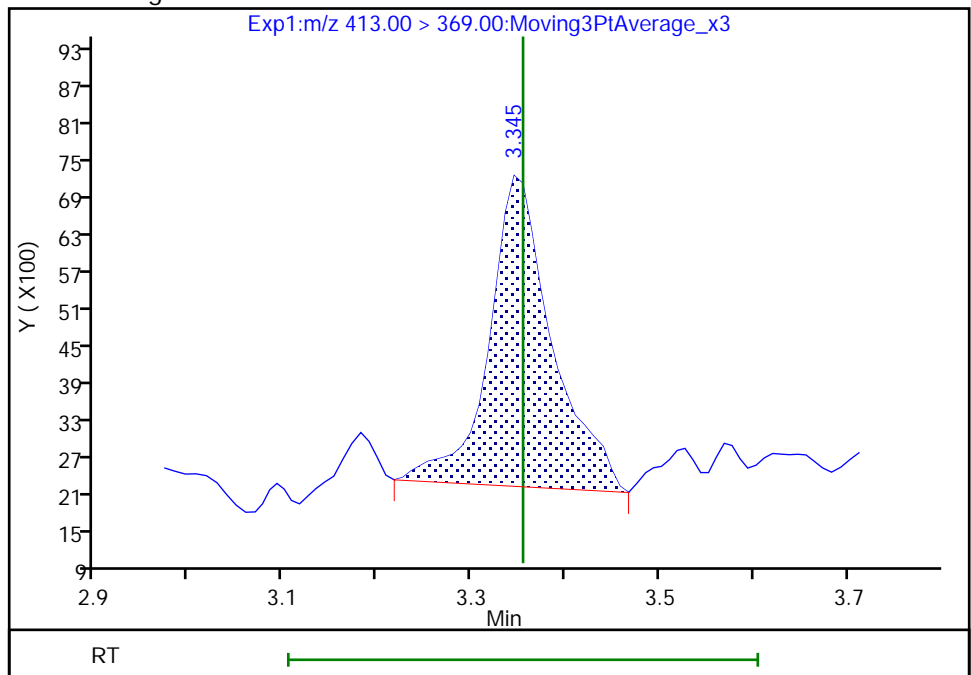
Not Detected
Expected RT: 3.35

Processing Integration Results



RT: 3.35
Area: 23622
Amount: 0.326061
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

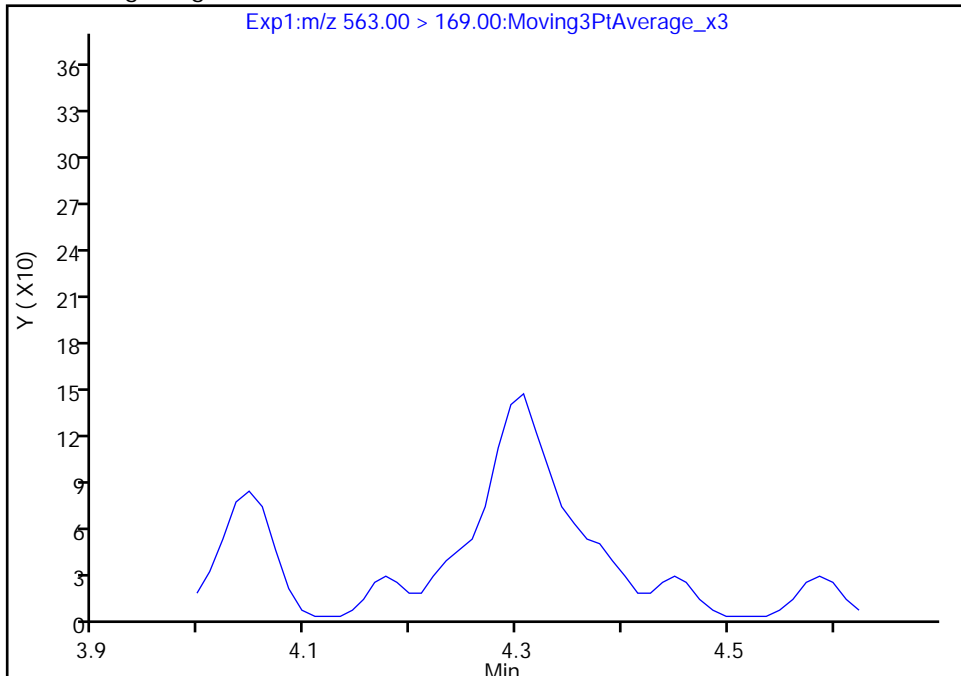
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

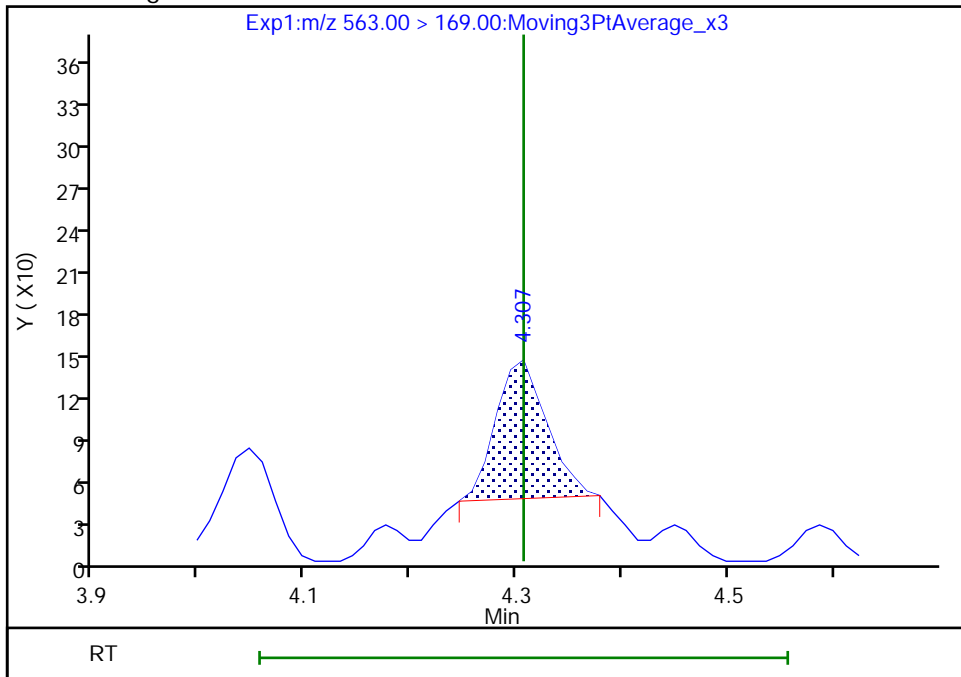
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 329
Amount: 0.159625
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:44:54
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

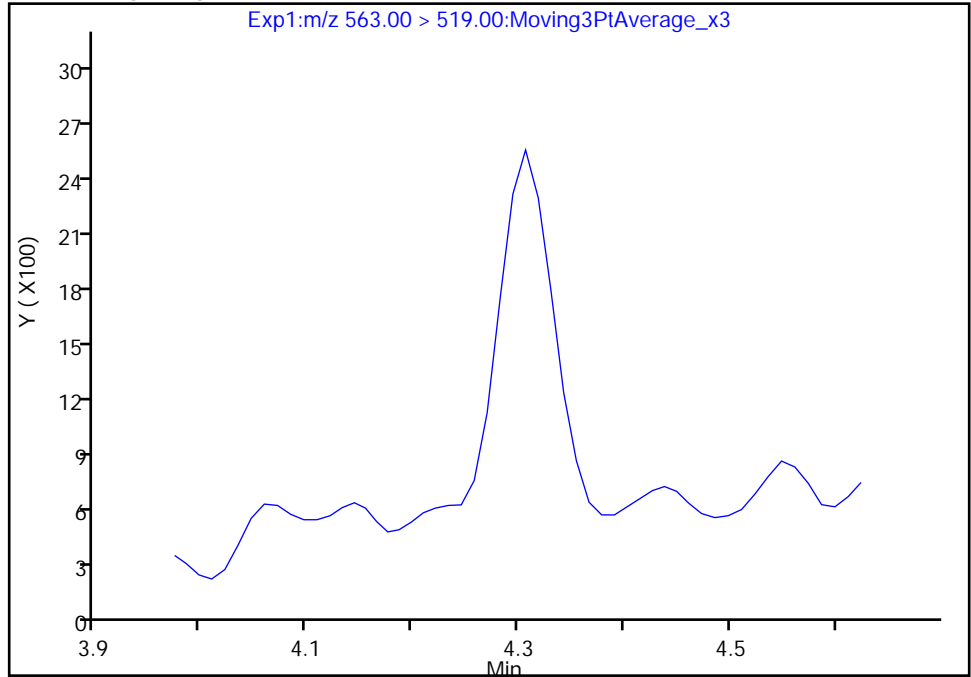
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

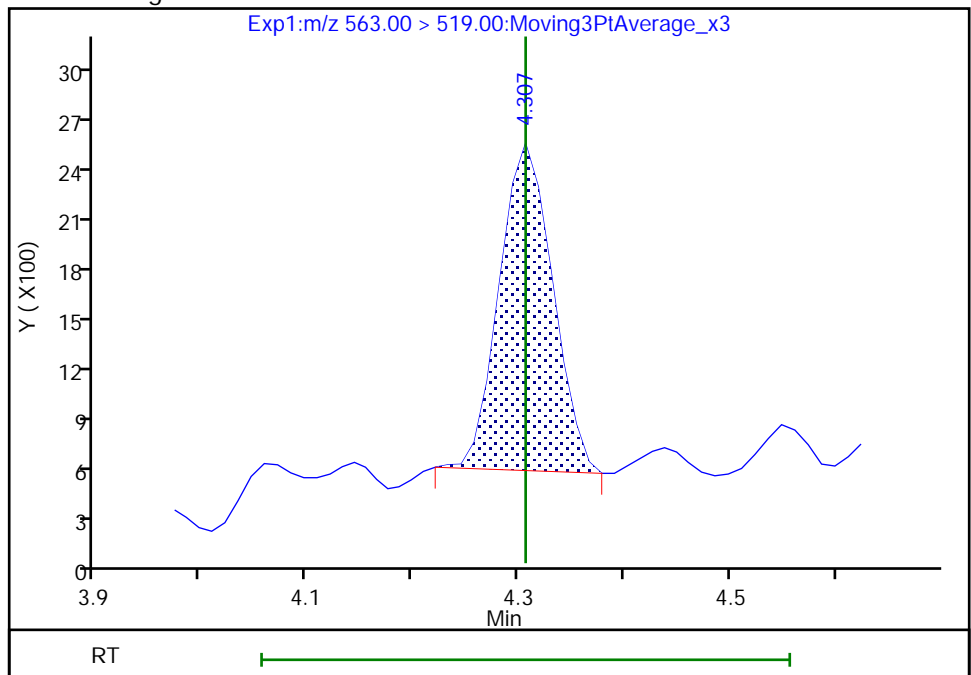
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 6556
Amount: 0.159625
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:44:54

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

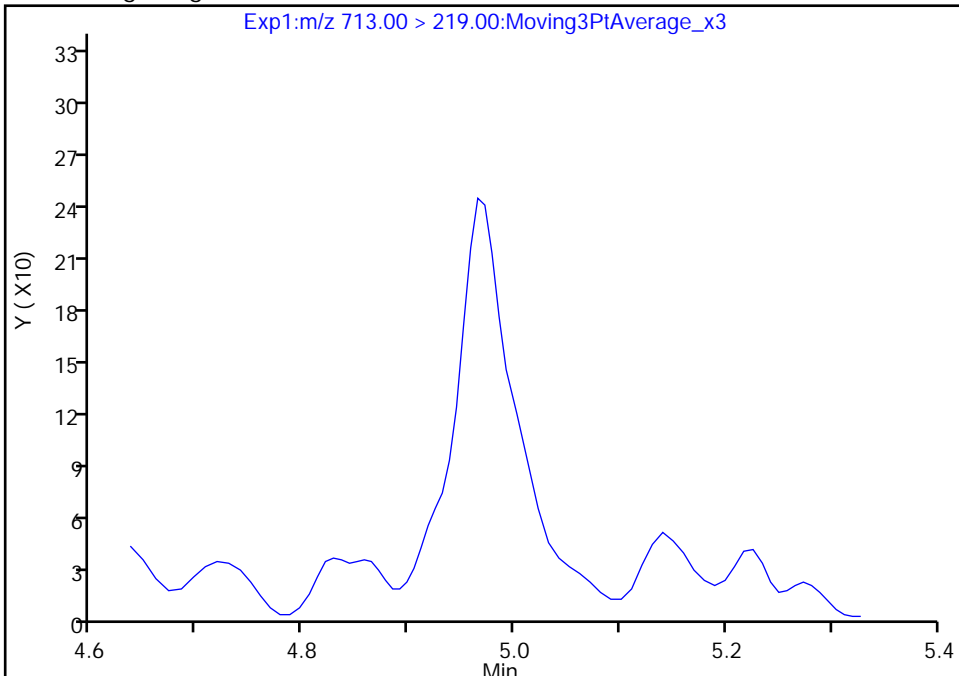
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

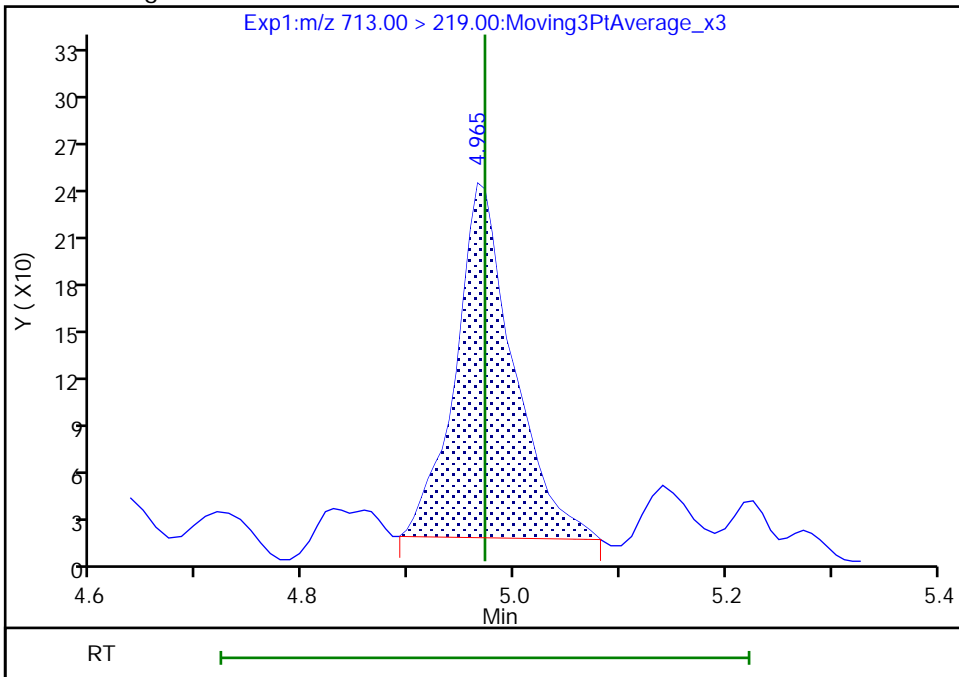
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 865
Amount: 0.094651
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:45:42
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

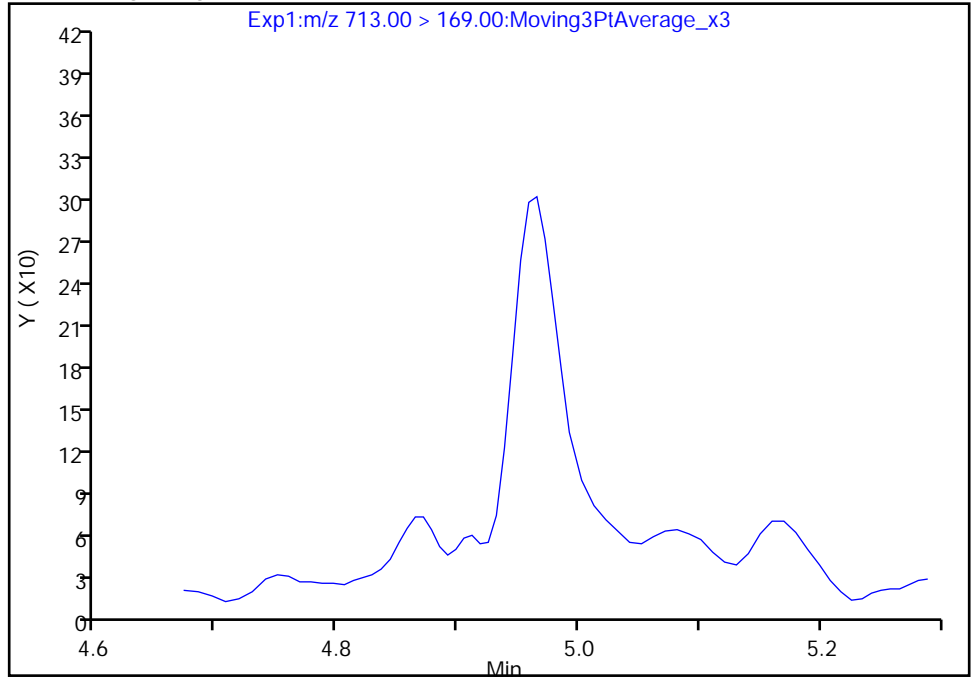
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

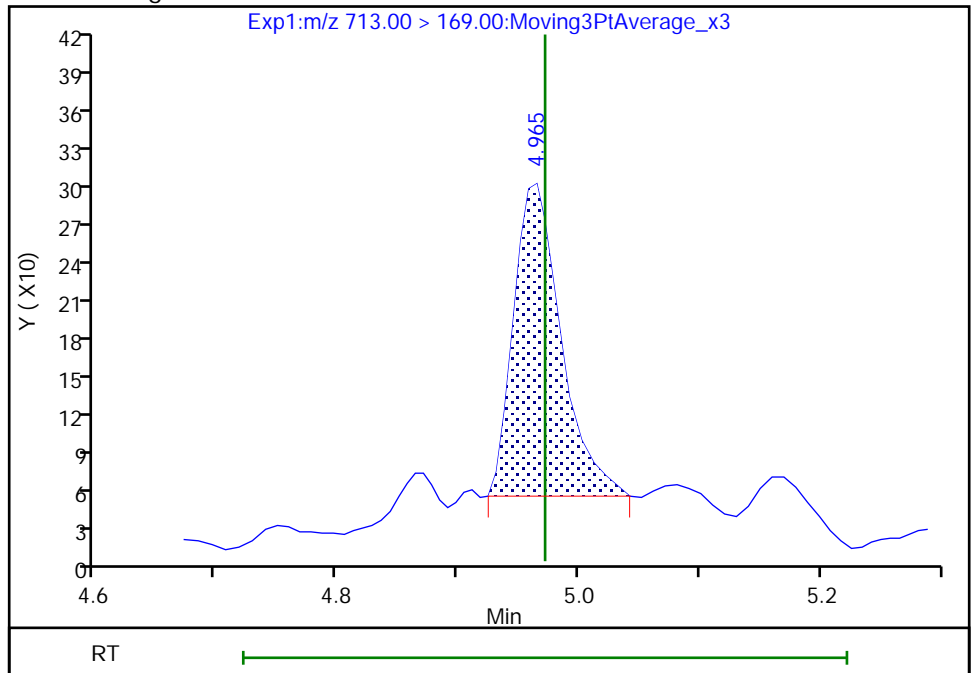
Not Detected
Expected RT: 4.97

Processing Integration Results



RT: 4.97
Area: 665
Amount: 0.094651
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:45:42

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

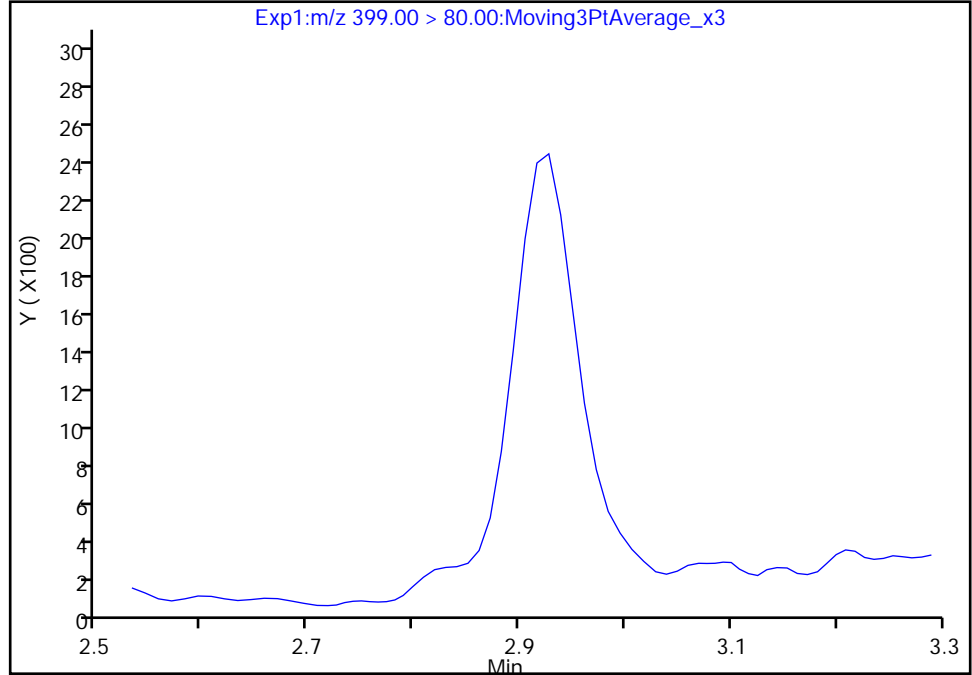
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

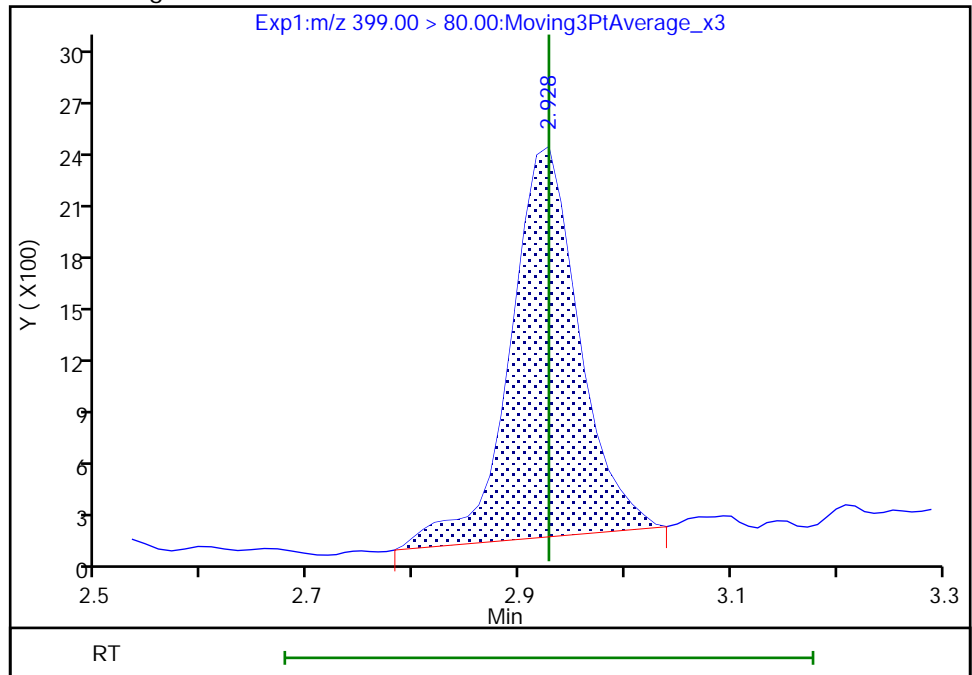
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 10440
Amount: 0.196677
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:42:05
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

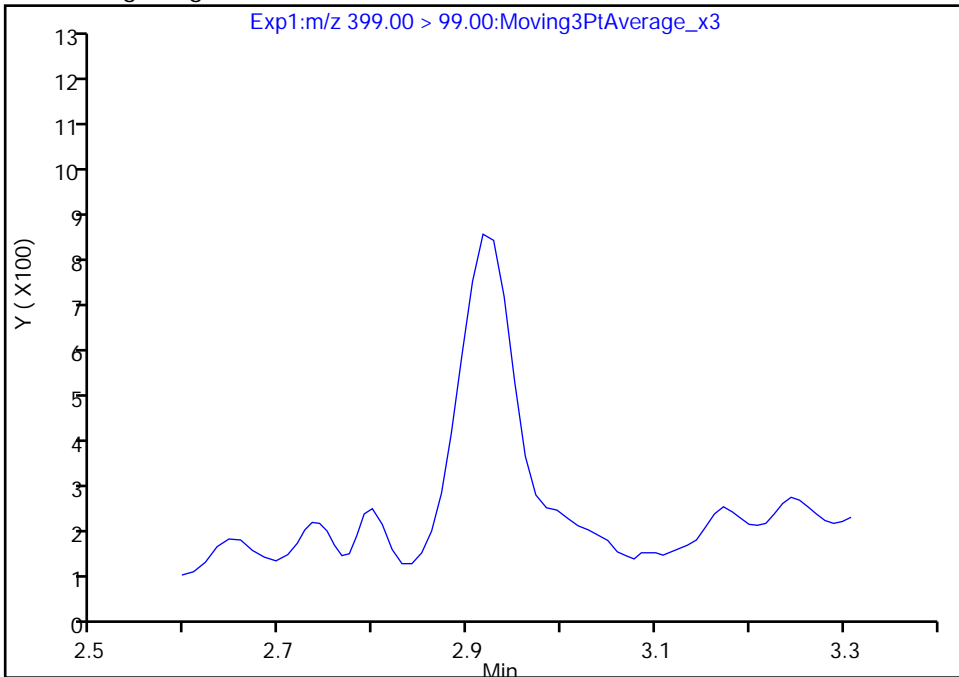
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

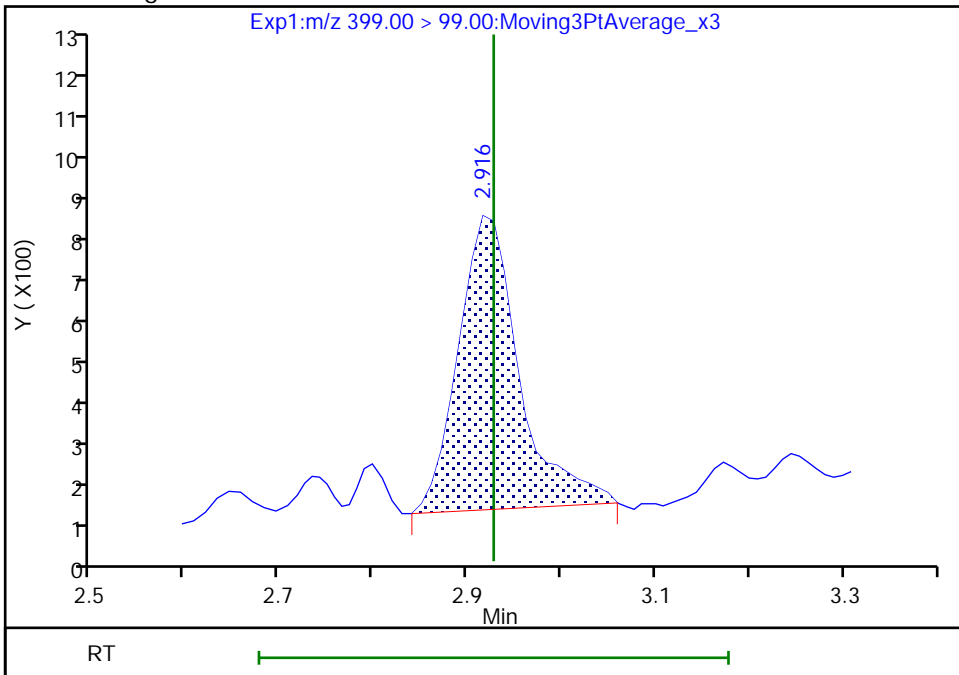
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.92
Area: 3078
Amount: 0.196677
Amount Units: ng/ml



Reviewer: murrayjw, 12-Aug-2019 09:01:01

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

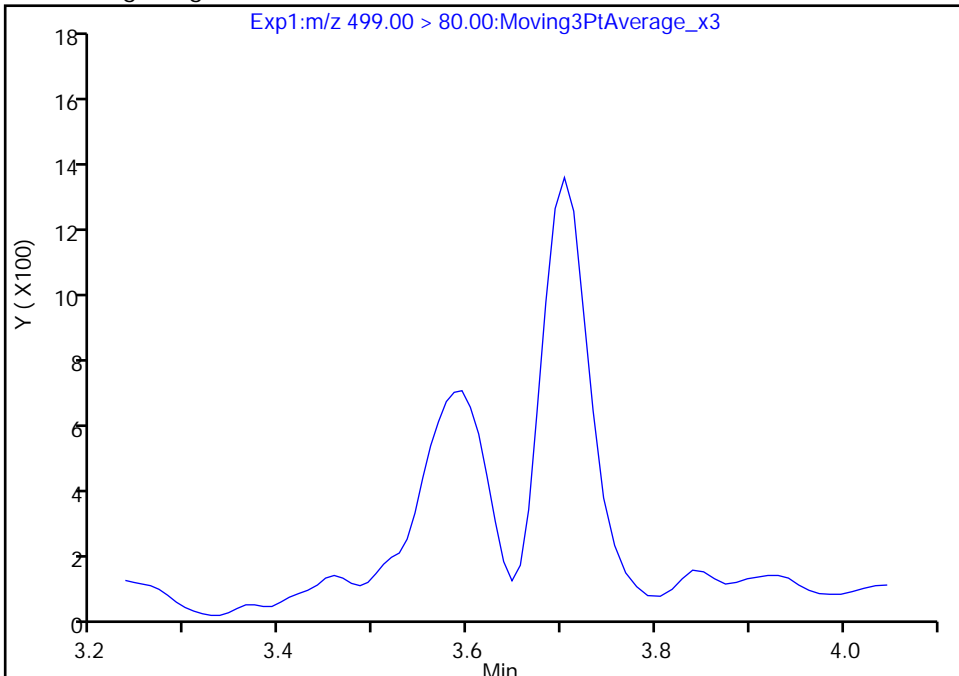
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

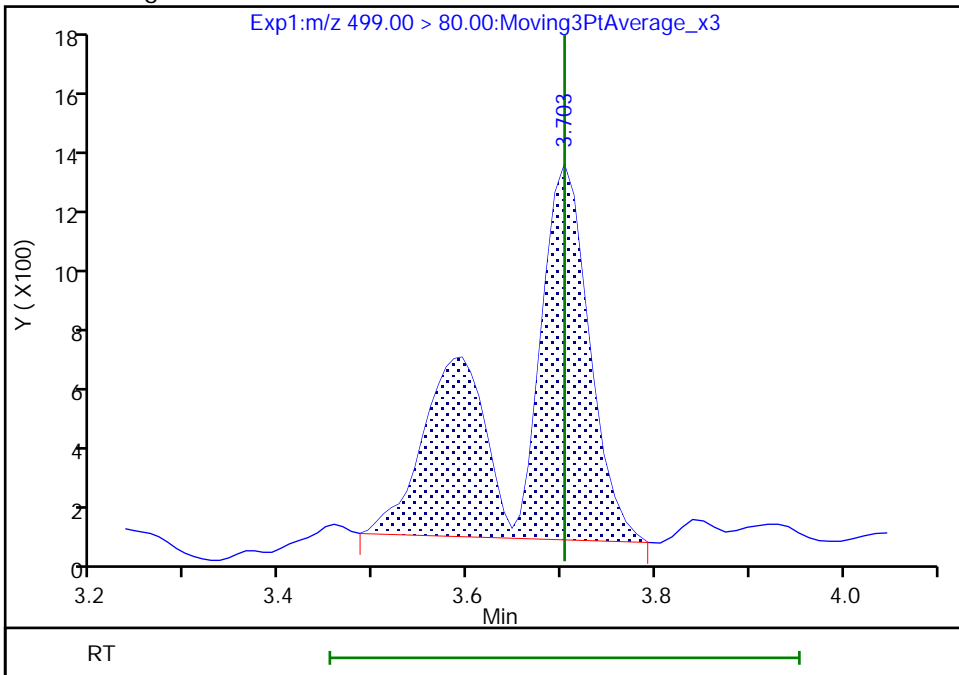
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.70
Area: 7154
Amount: 0.225812
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:44:13
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

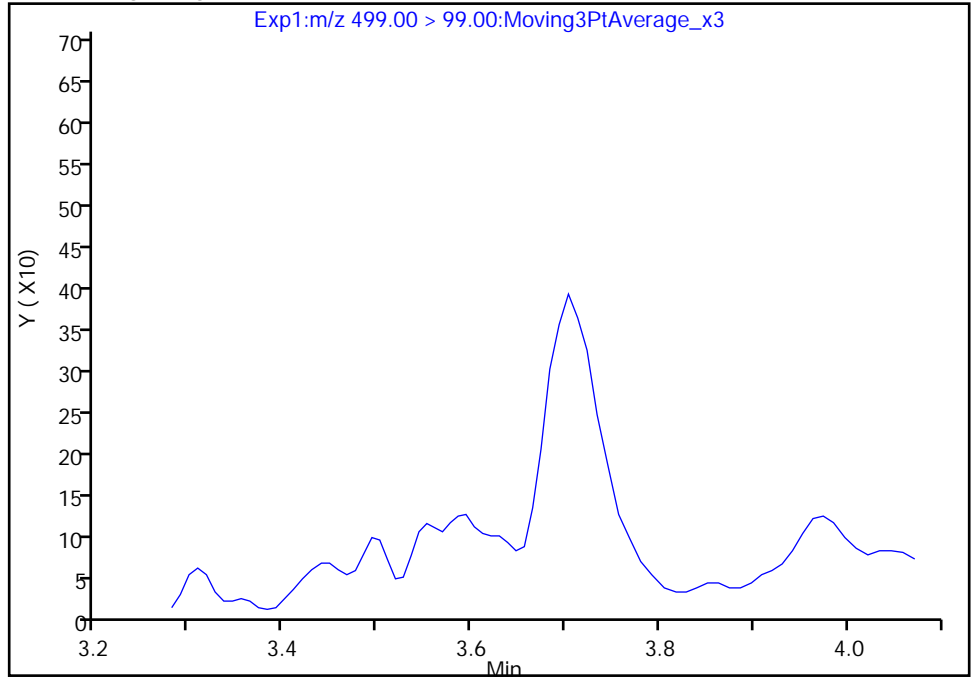
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

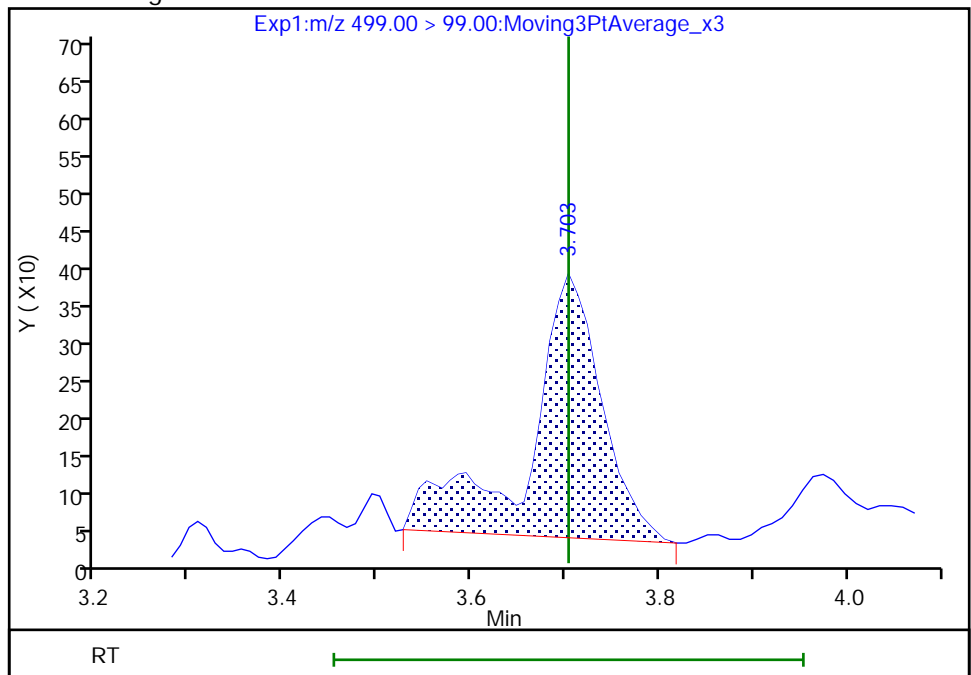
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.70
Area: 1897
Amount: 0.225812
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

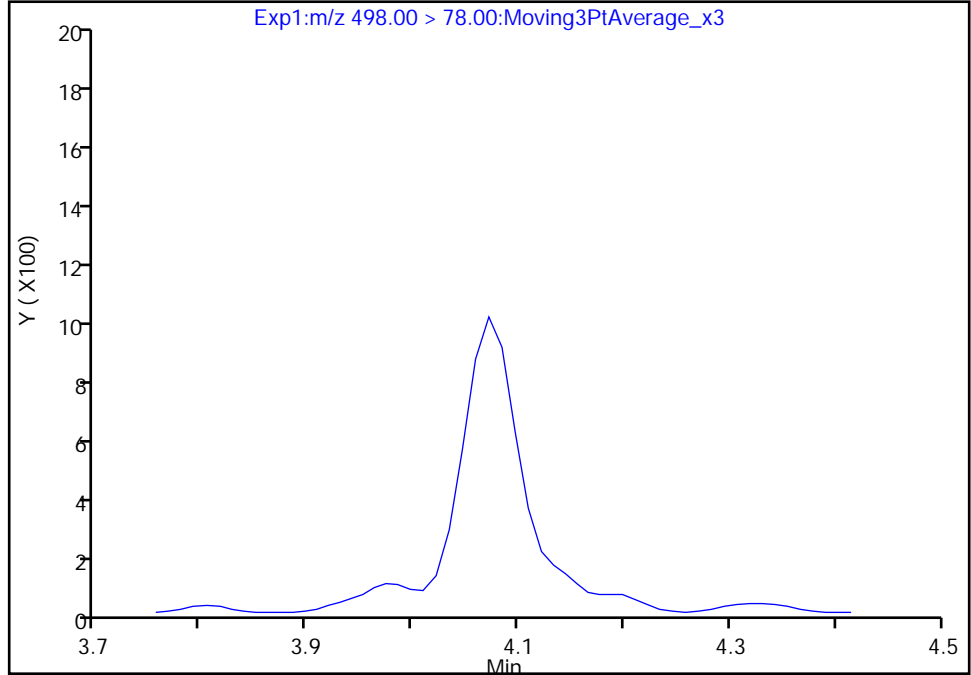
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

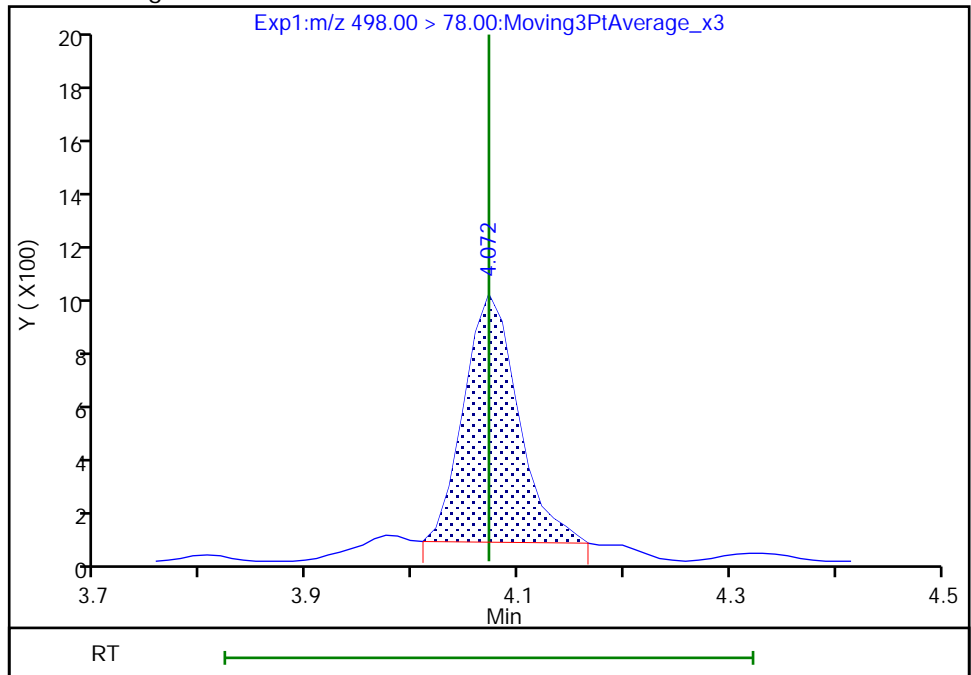
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.07
Area: 3207
Amount: 0.065653
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:44:32
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

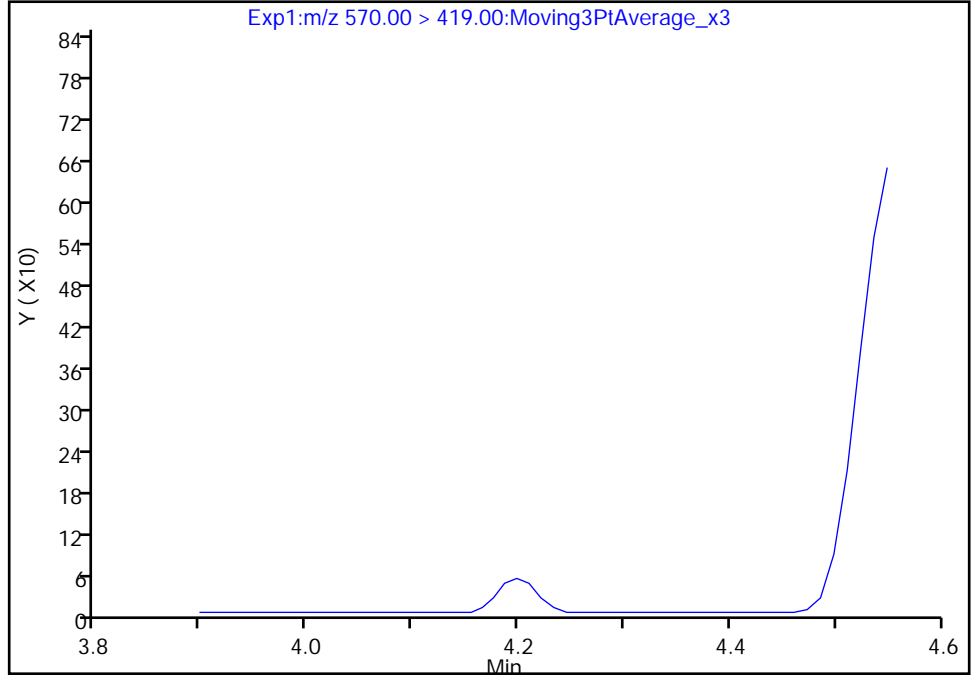
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E006.d
Injection Date: 02-Aug-2019 04:29:27 Instrument ID: LC812
Lims ID: 480-156213-F-3-A Lab Sample ID: 200-156213-3
Client ID: 356023-MW16
Operator ID: lc812tech ALS Bottle#: 53 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

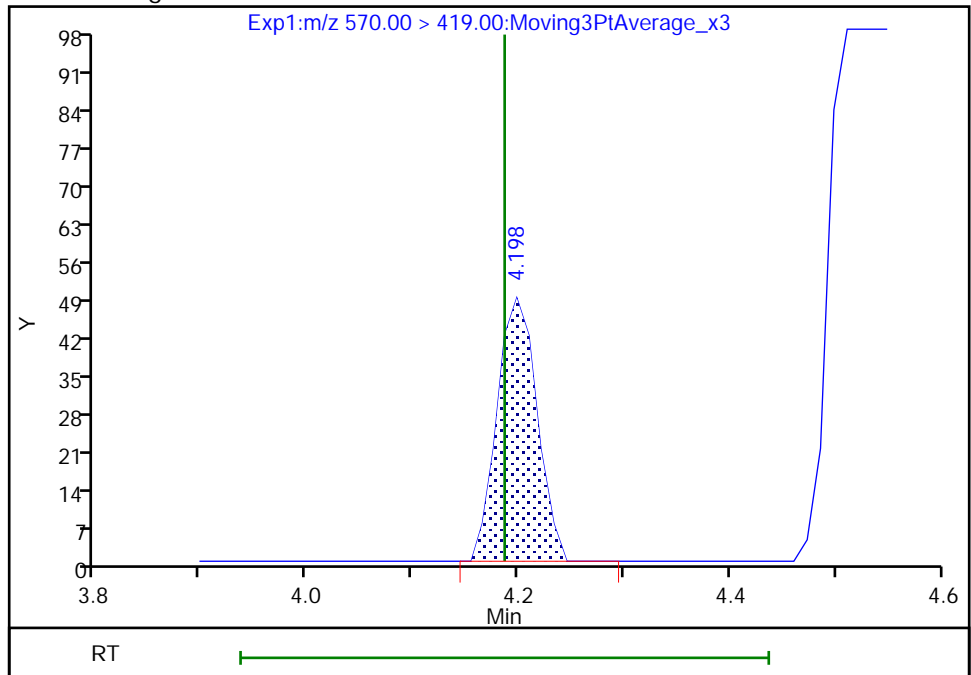
Not Detected
Expected RT: 4.19

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 128
Amount: 0.033106
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:44:38
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW14B 150 Lab Sample ID: 480-156213-4
 Matrix: Water Lab File ID: SC080119E007.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 11:50
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 310.3(mL) Date Analyzed: 08/02/2019 04:37
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.0		1.6	0.81
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.9		1.6	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	3.1		1.6	0.61
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.1	J	1.6	0.73
335-67-1	Perfluorooctanoic acid (PFOA)	4.4		1.6	0.51
375-95-1	Perfluorononanoic acid (PFNA)	0.92	J	1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.62
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.74
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2.8		1.6	0.39
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.6	0.64
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.77
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.5		1.6	0.49
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.1	8.1
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.7
39108-34-4	8:2 FTS	ND		16	2.3

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW14B 150 Lab Sample ID: 480-156213-4
 Matrix: Water Lab File ID: SC080119E007.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 11:50
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 310.3 (mL) Date Analyzed: 08/02/2019 04:37
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	75		25-150
STL00992	13C4 PFBA	78		25-150
STL01893	13C5 PFPeA	86		25-150
STL00993	13C2 PFHxA	91		50-150
STL01892	13C4 PFHpA	91		50-150
STL00990	13C4 PFOA	83		50-150
STL00995	13C5 PFNA	83		50-150
STL00996	13C2 PFDA	84		50-150
STL00997	13C2 PFUnA	84		50-150
STL00998	13C2 PFDoA	77		50-150
STL02116	13C2 PFTeDA	68		50-150
STL02337	13C3 PFBS	88		50-150
STL00994	18O2 PFHxS	92		50-150
STL00991	13C4 PFOS	83		50-150
STL02118	d3-NMeFOSAA	63		50-150
STL02117	d5-NEtFOSAA	64		50-150
STL02279	M2-6:2 FTS	101		25-150
STL02280	M2-8:2 FTS	104		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
 Lims ID: 480-156213-F-4-A
 Client ID: 356023-MW14B 150
 Sample Type: Client
 Inject. Date: 02-Aug-2019 04:37:28 ALS Bottle#: 54 Worklist Smp#: 7
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-4-A
 Misc. Info.: 200-0037095-007 Plate: 1 Rack: 4
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:49:42
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.508	3043835	38.9	77.8	9892	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.000	104074	1.85		15.4	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	3163392	43.0	86.1	6551	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	112081	1.83		4.8	M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	2958348	41.0	88.1	391495	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	112881	1.75	Target=1.90	56.7	
	298.90 > 99.00	2.093	2.093	0.0	1.000	55878		2.02(0.95-2.85)	43.1	
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.731	3319567	45.5	90.9	6602	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.005	130305	1.91	Target=13.23	23.8	
	313.00 > 119.00	2.459	2.459	0.0	1.000	11197		11.64(6.61-19.84)	15.5	
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.870	1830809	43.3	91.5	4963	
D 9 13C4 PFHpA	367.00 > 322.00	2.928	2.928	0.0	0.870	3256722	45.5	91.1	5640	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.939	2.928	0.011	1.004	43681	0.8564	Target=3.37	32.6	M
	399.00 > 99.00	2.928	2.928	0.0	1.000	11192		3.90(1.69-5.06)	12.4	M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.004	42522	0.6970	Target=3.76	9.4	
	363.00 > 169.00	2.939	2.928	0.011	1.004	11658		3.65(1.88-5.65)	39.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.345	3.335	0.010	0.995	421924	47.9		101	749	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.345	3.336	0.009	1.000	13579	0.8914			32.0	
D 14 13C4 PFOA										
417.00 > 372.00	3.364	3.344	0.020	1.000	3133092	41.5		83.0	8950	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.364	3.355	0.009	1.000	186198	2.73	Target=2.84		18.8	M
413.00 > 169.00	3.364	3.355	0.009	1.000	79018		2.36(1.42-4.25)		189	M
* 62 13C2 PFOA										
415.00 > 370.00	3.364	3.355	0.009		4152473	50.0			14776	
D 18 13C4 PFOS										
503.00 > 80.00	3.713	3.695	0.018	1.104	1401567	39.8		83.2	4363	
17 Perfluorooctanesulfonic acid										RM
499.00 > 80.00	3.594	3.703	-0.109	0.968	43607	1.57	Target=4.33		100	RM
499.00 > 99.00	3.713	3.703	0.010	1.000	6446		6.76(2.16-6.49)		8.9	M
D 19 13C5 PFNA										
468.00 > 423.00	3.734	3.715	0.019	1.110	2846236	41.3		82.6	15394	
20 Perfluorononanoic acid										
463.00 > 419.00	3.734	3.723	0.011	1.000	29495	0.5720	Target=8.15		9.9	
463.00 > 169.00	3.734	3.723	0.011	1.000	4408		6.69(4.08-12.23)		22.9	
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.036	0.011	1.203	2311995	41.9		83.9	7955	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.036	0.023	1.207	402662	49.6		104	943	
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.047	4.047	0.0	0.997	68	0.006051			1.3	M
D 21 13C8 FOSA										
506.00 > 78.00	4.072	4.061	0.011	1.210	2379391	37.6		75.2	7286	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.084	4.072	0.012	1.003	3516	0.0809			22.4	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.178	0.009	1.245	222390	31.6		63.2	2224	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.284	2105136	41.9		83.9	9670	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.319	4.307	0.012	1.000	3445	0.0954	Target=7.95		1.7	R
563.00 > 169.00	4.307	4.307	0.0	0.997	1285		2.68(3.98-11.93)		16.5	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.308	0.011	1.284	249867	31.8		63.7	1030	
D 36 13C2 PFDaA										
615.00 > 570.00	4.549	4.537	0.012	1.352	2075145	38.4		76.8	7858	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.478	2542871	34.2		68.3	9718	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d

Injection Date: 02-Aug-2019 04:37:28

Instrument ID: LC812

Lims ID: 480-156213-F-4-A

Lab Sample ID: 200-156213-4

Client ID: 356023-MW14B 150

Operator ID: lc812tech

ALS Bottle#: 54

Worklist Smp#: 7

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

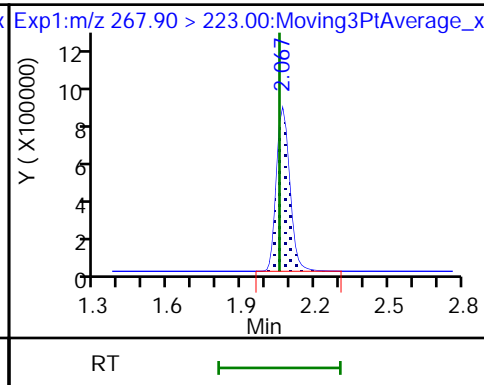
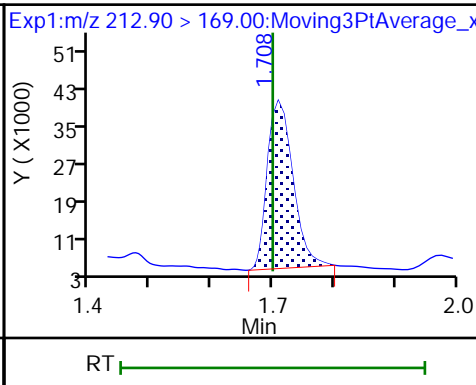
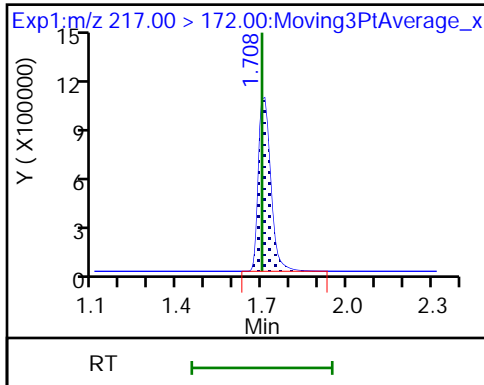
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

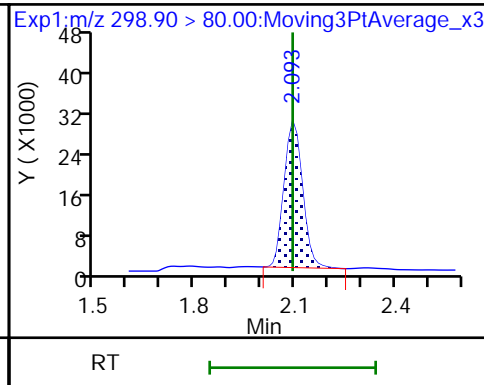
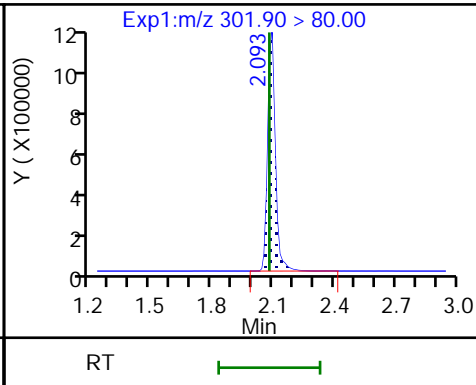
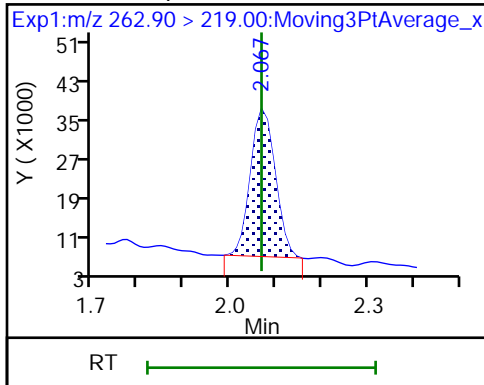
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

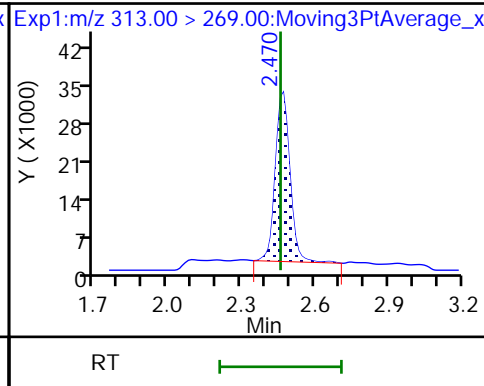
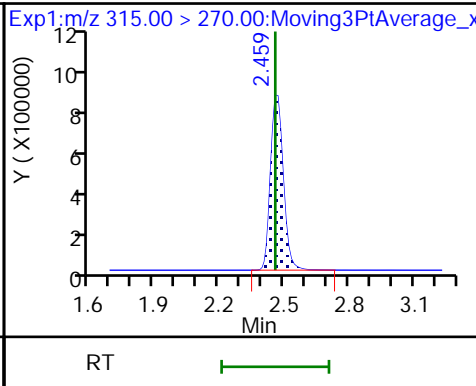
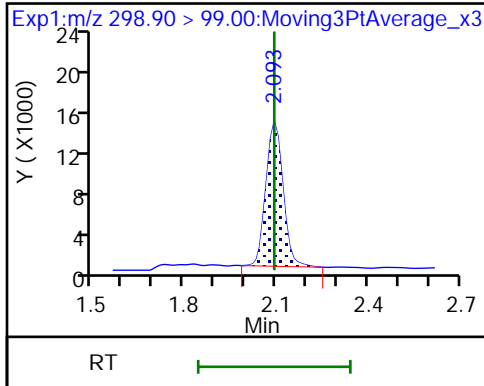
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

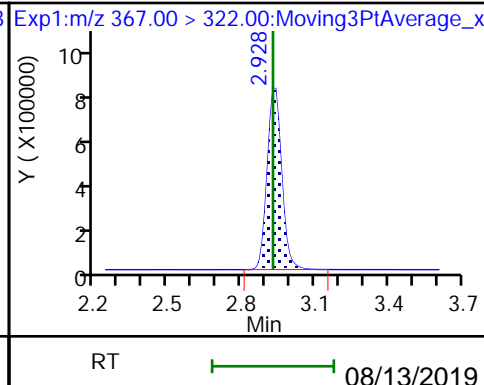
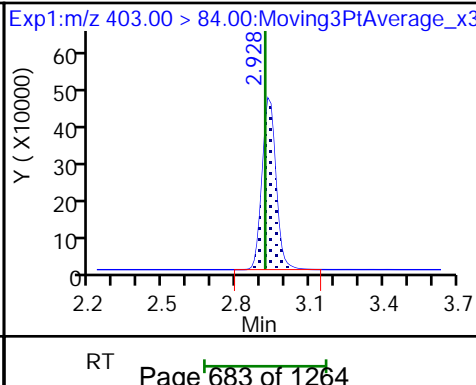
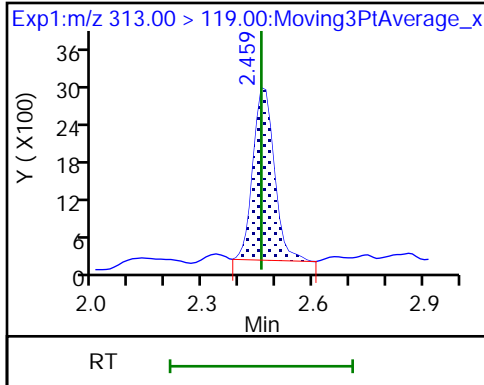
6 Perfluorohexanoic acid

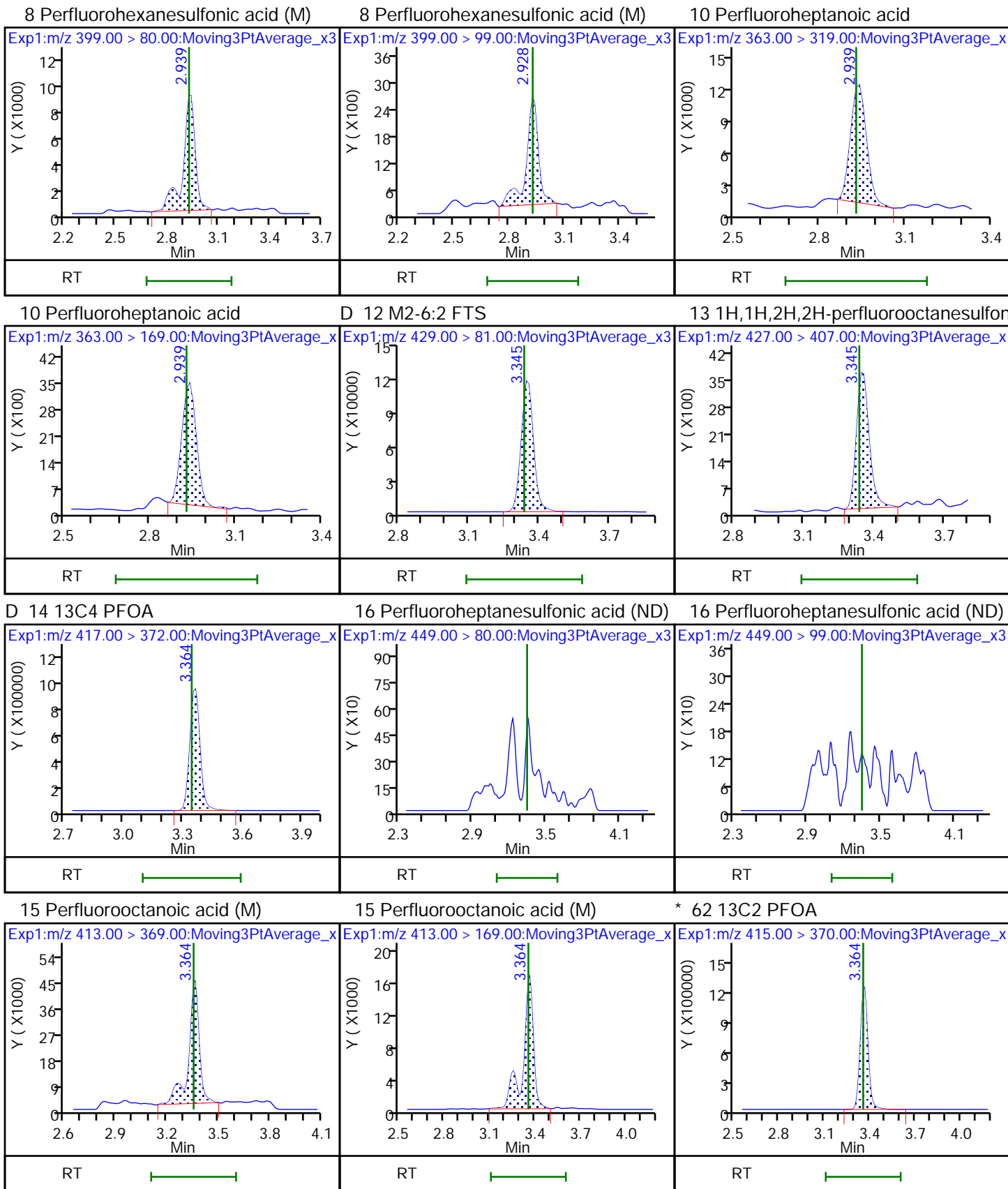


6 Perfluorohexanoic acid

D 11 18O2 PFHxS

D 9 13C4 PFHpA

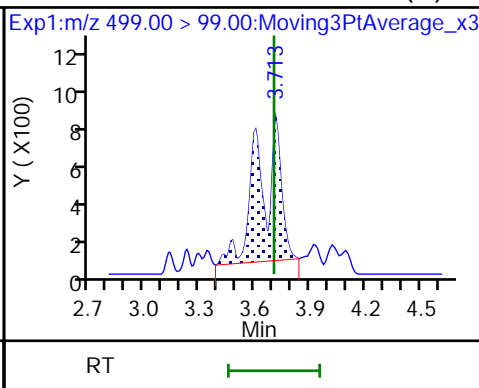
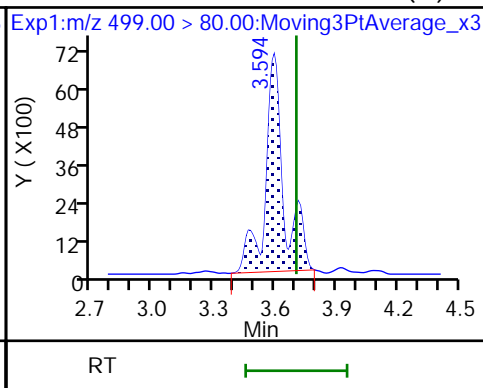
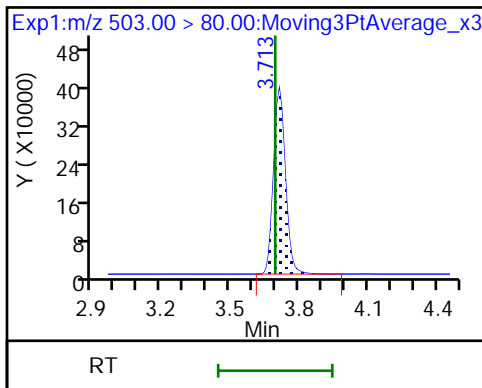




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

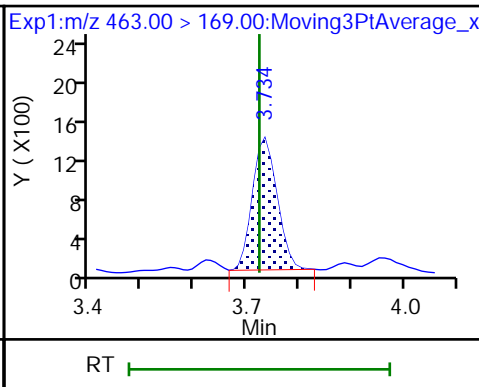
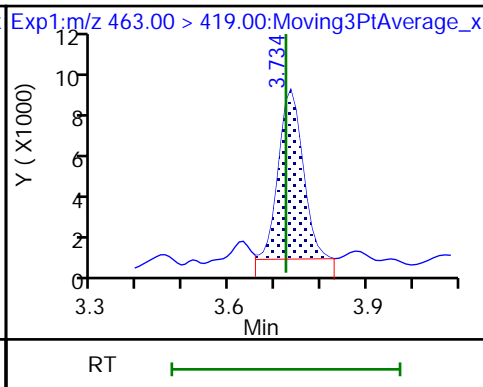
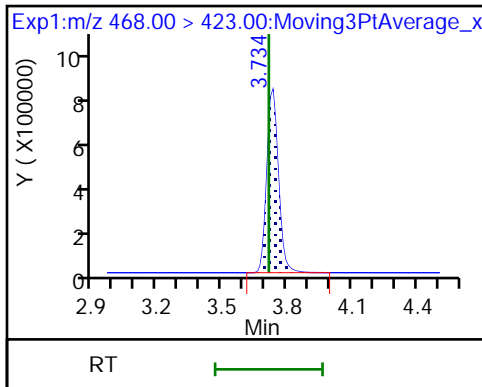
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid

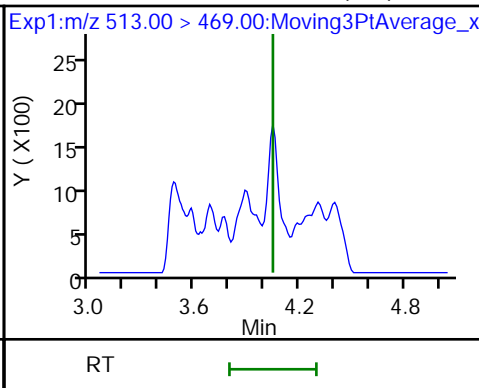
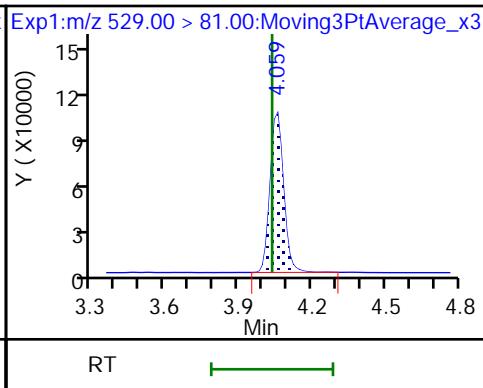
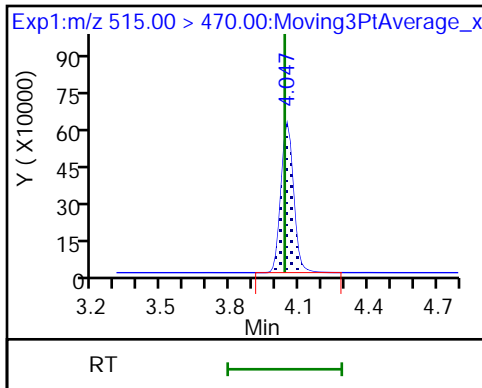
20 Perfluorononanoic acid



D 23 13C2 PFDA

D 26 M2-8:2 FTS

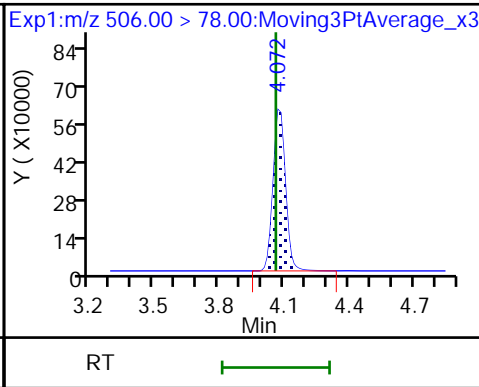
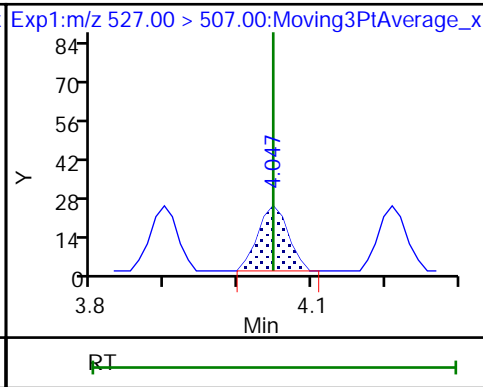
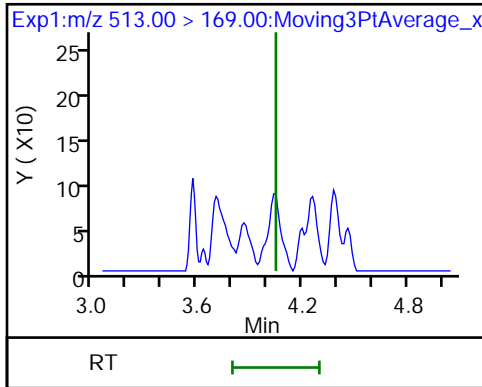
24 Perfluorodecanoic acid (ND)



24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

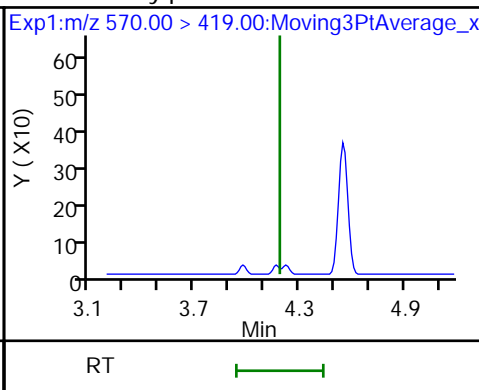
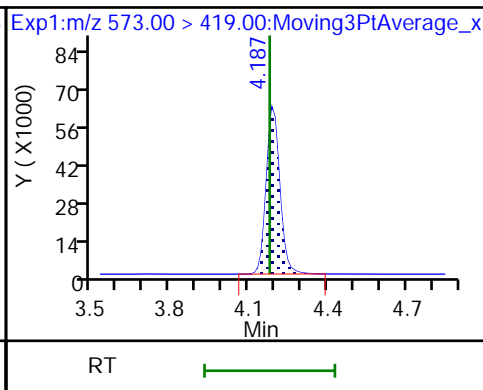
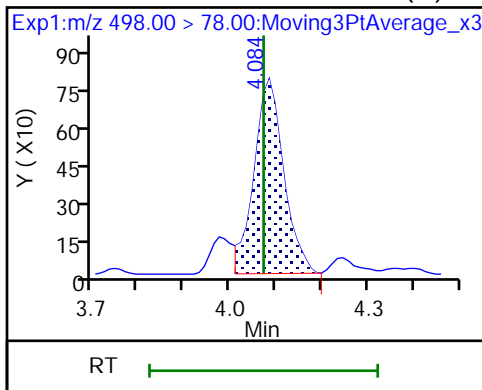
D 27 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

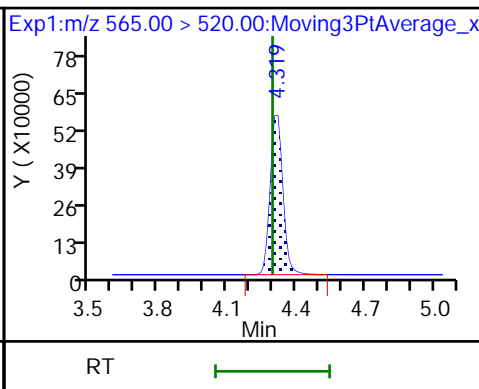
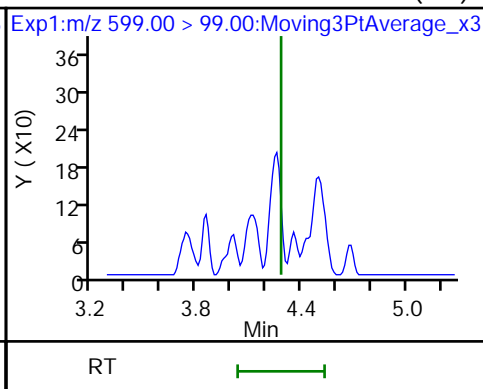
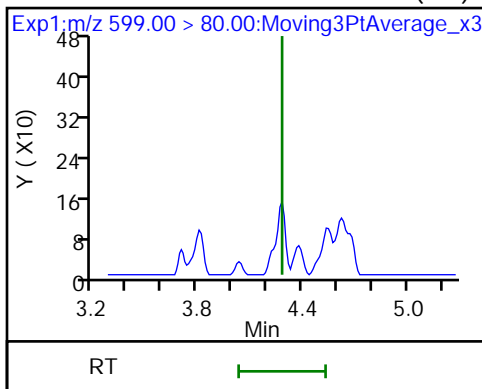
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

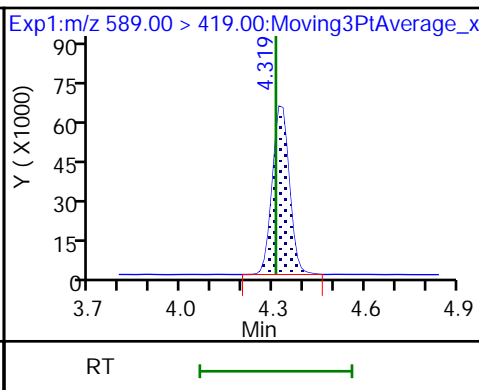
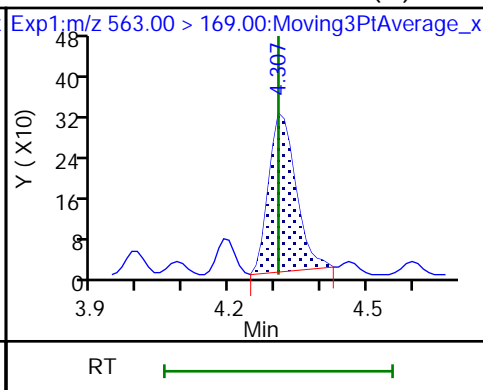
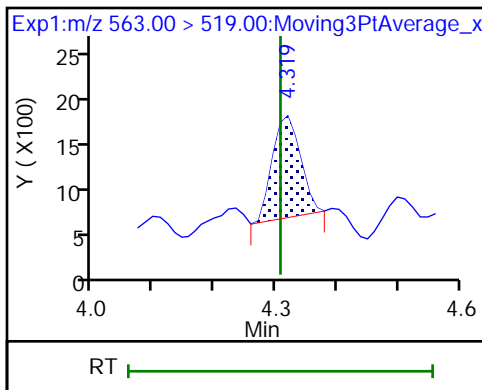
D 30 13C2 PFUa



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid (M)

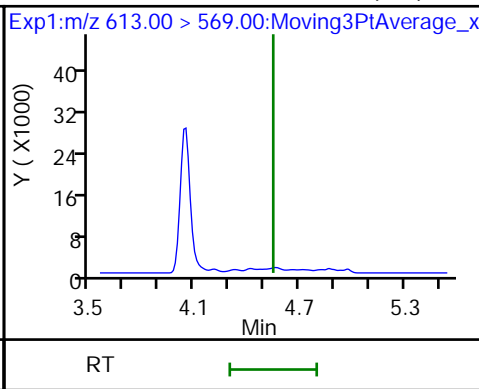
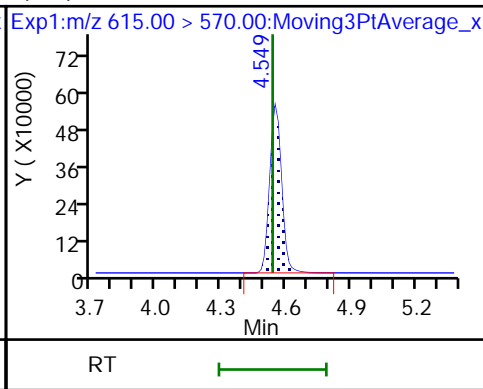
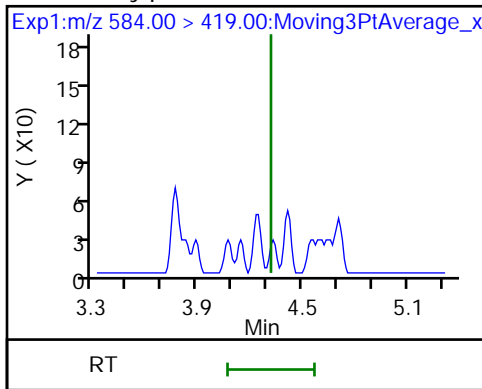
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (ND)

D 36 13C2 PFDoA

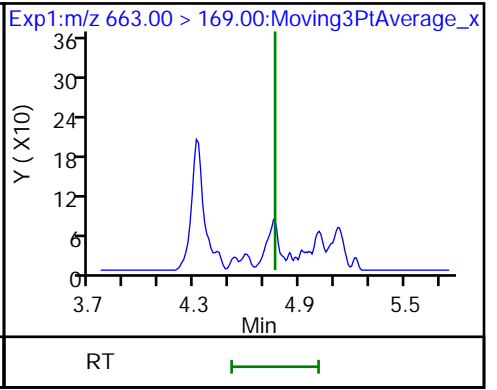
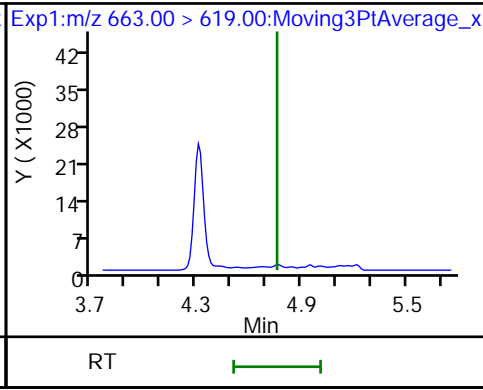
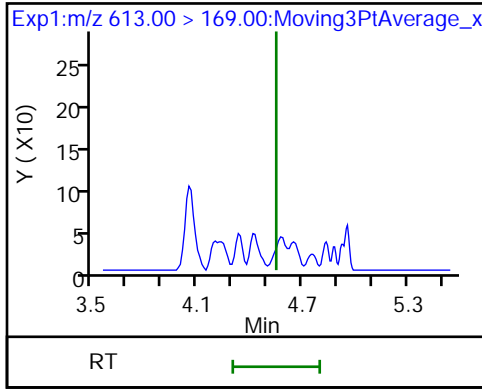
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

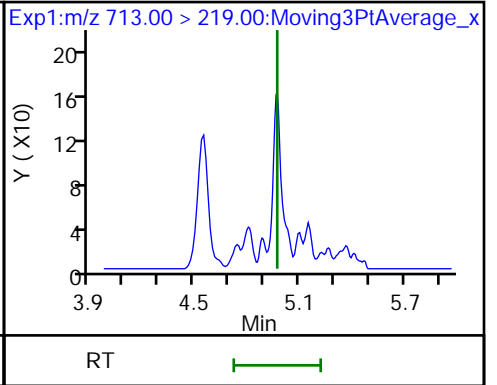
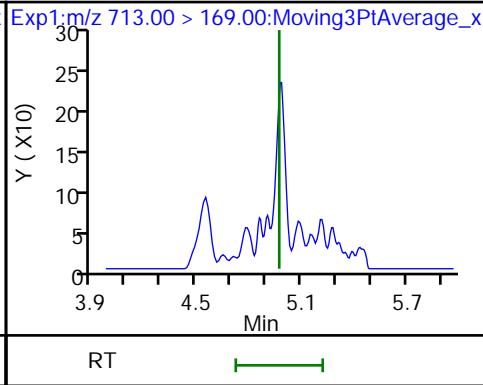
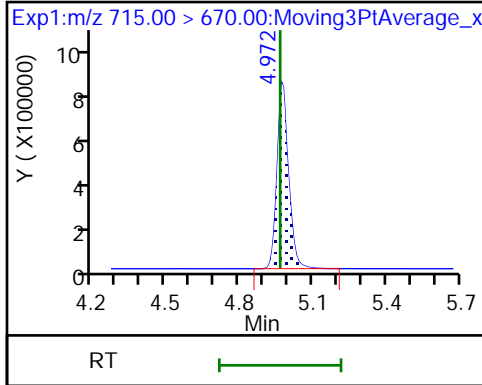
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (ND)

42 Perfluorotetradecanoic acid (ND)



Eurofins TestAmerica, Burlington

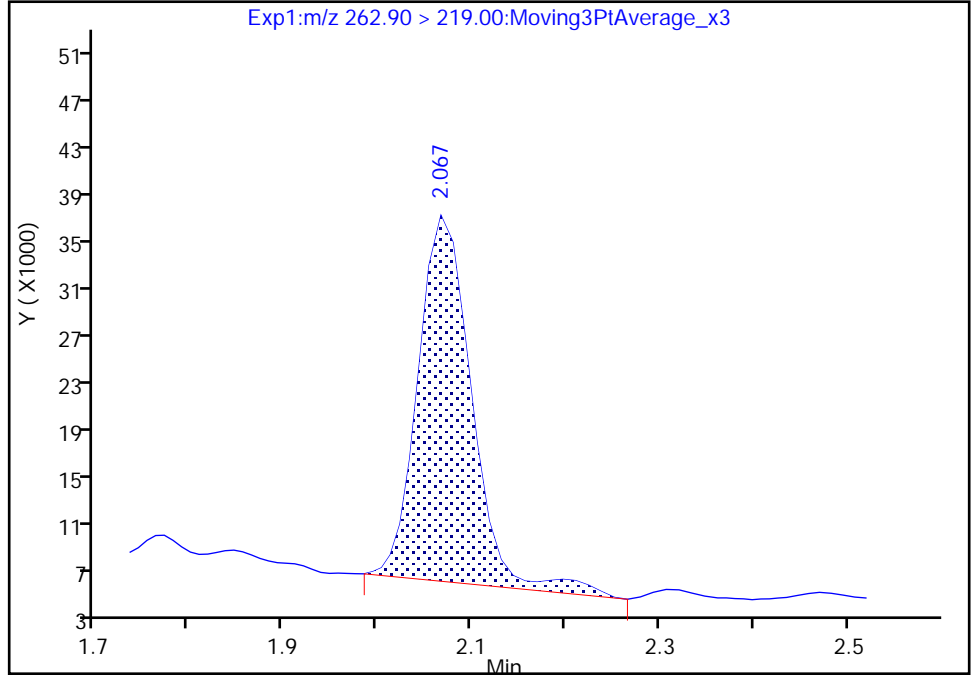
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

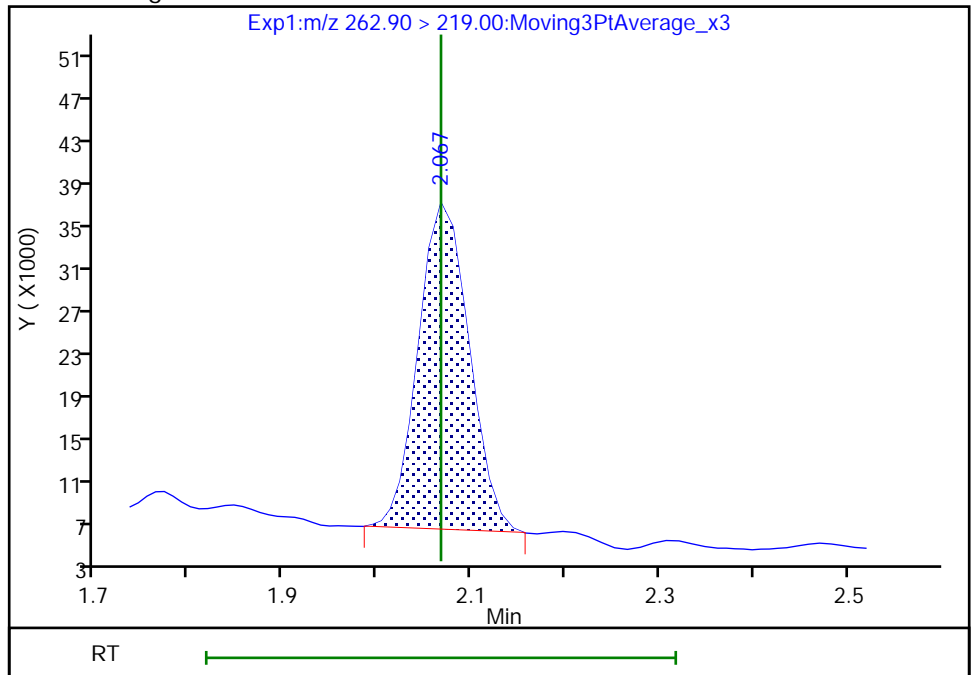
RT: 2.07
Area: 120568
Amount: 1.969355
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 112081
Amount: 1.830728
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:46:43
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

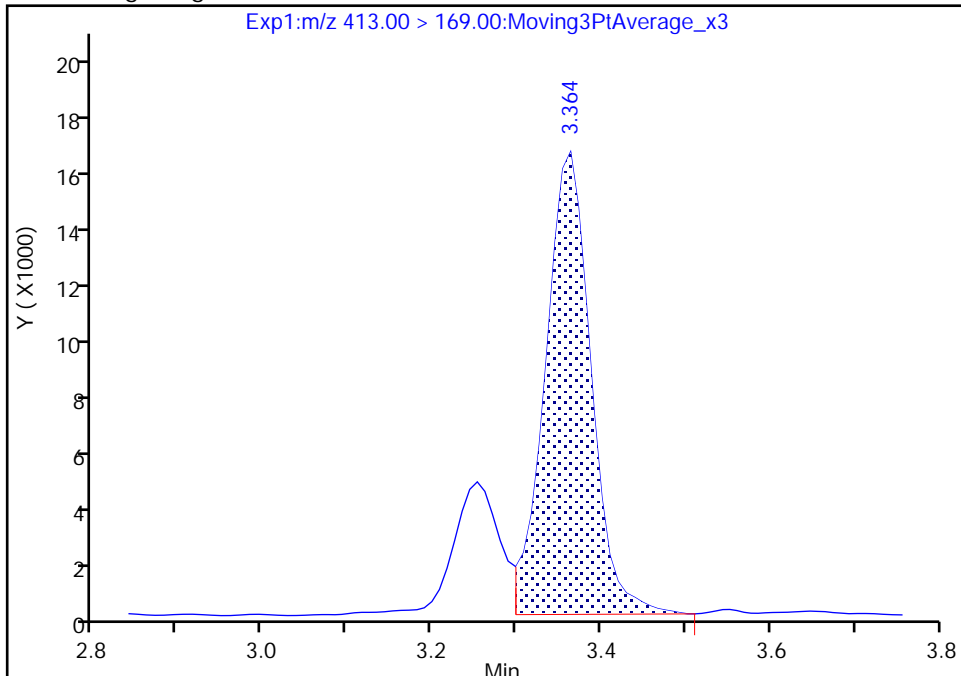
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

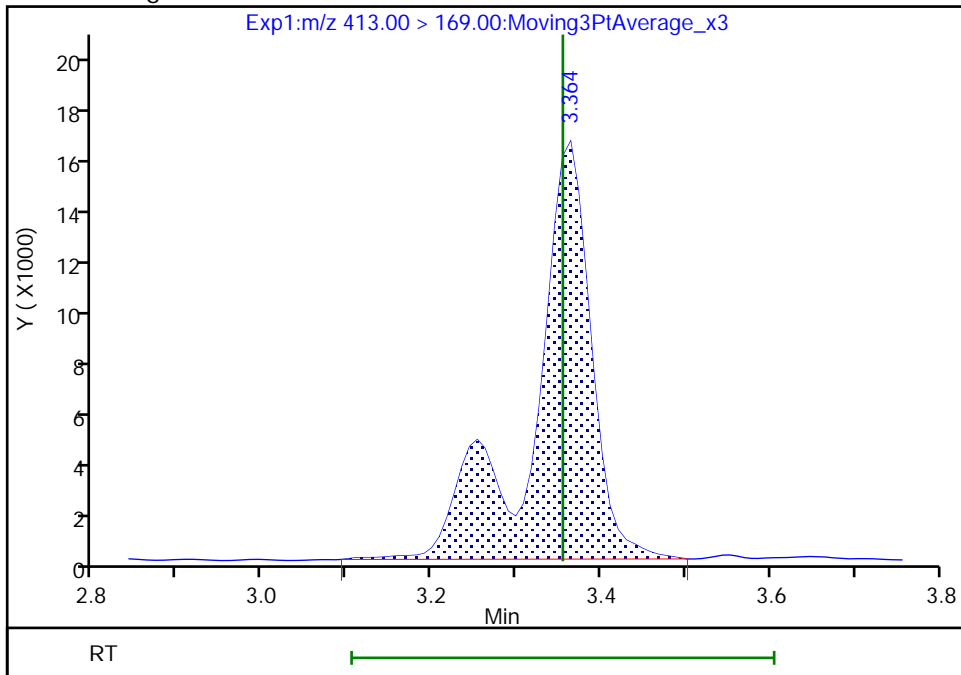
RT: 3.36
Area: 61373
Amount: 2.781047
Amount Units: ng/ml

Processing Integration Results



RT: 3.36
Area: 79018
Amount: 2.730815
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:47:24
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

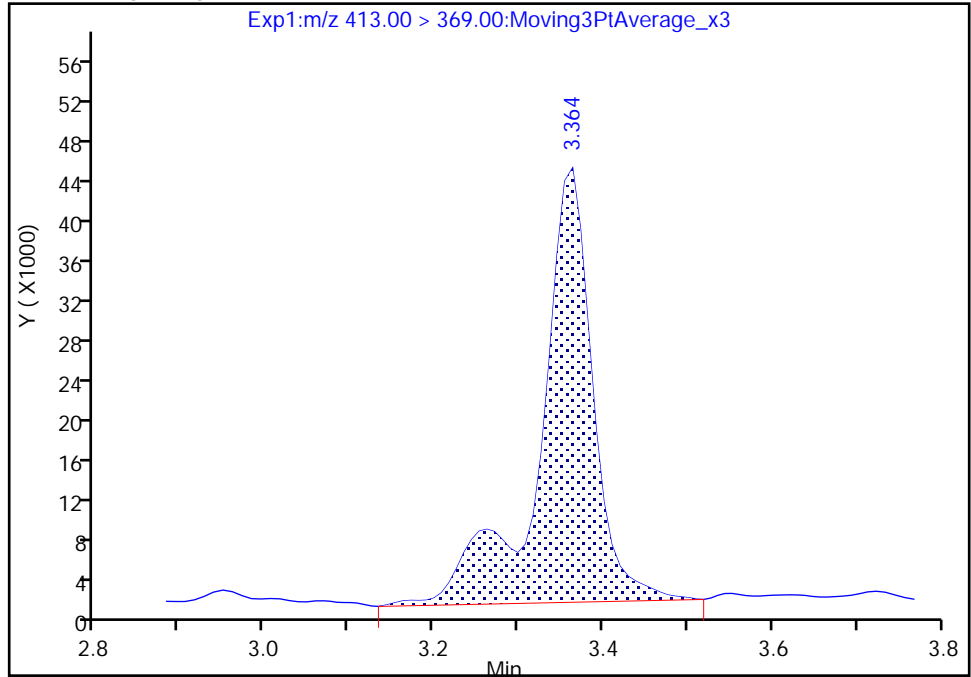
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

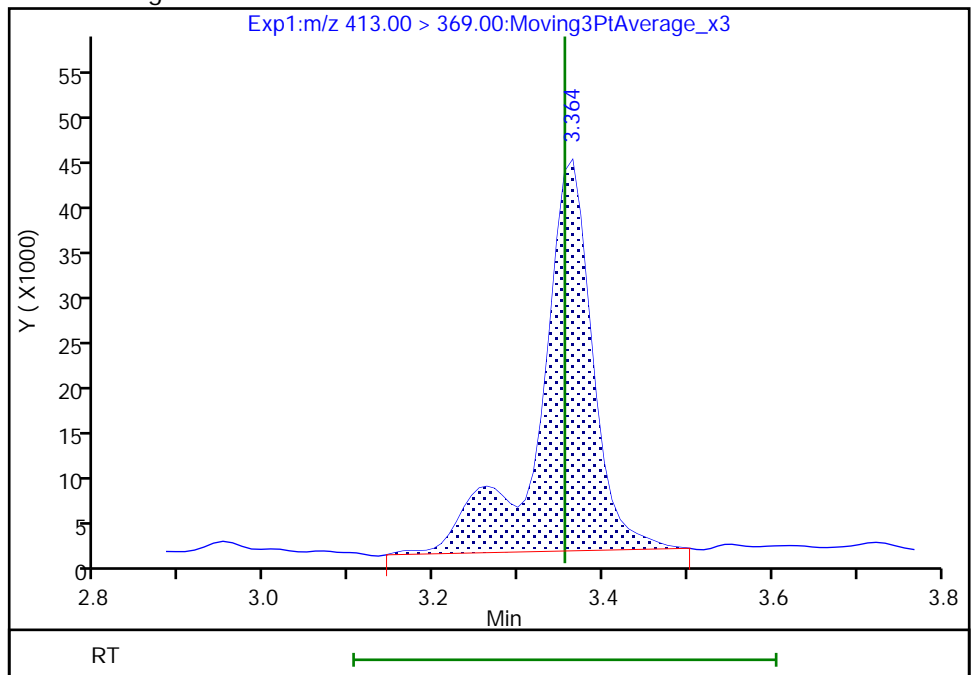
RT: 3.36
Area: 189623
Amount: 2.781047
Amount Units: ng/ml

Processing Integration Results



RT: 3.36
Area: 186198
Amount: 2.730815
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:47:30

Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

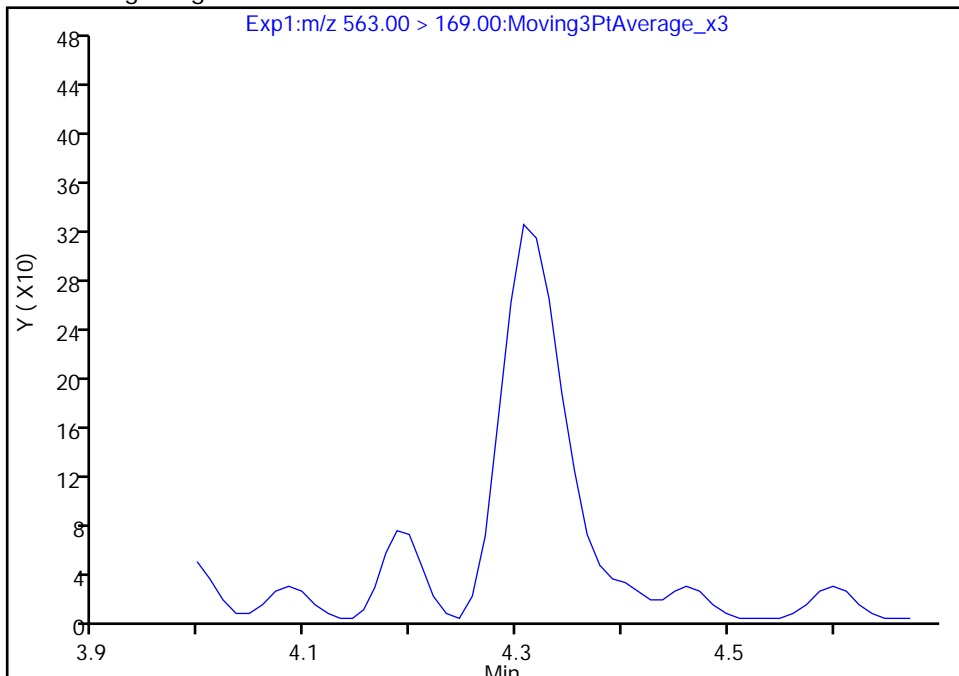
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

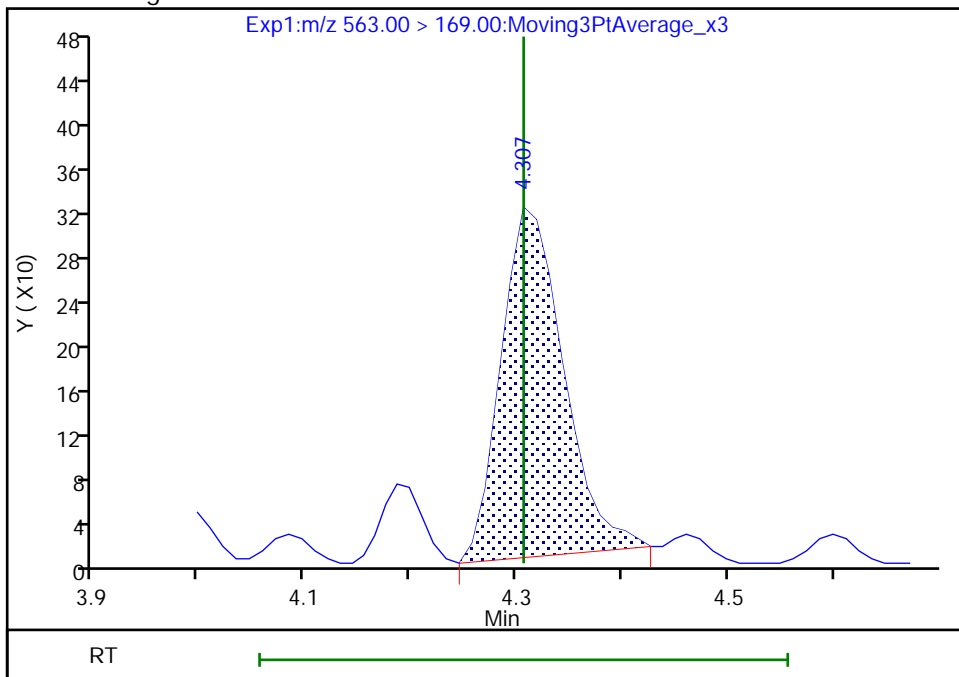
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 1285
Amount: 0.095360
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:49:10
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

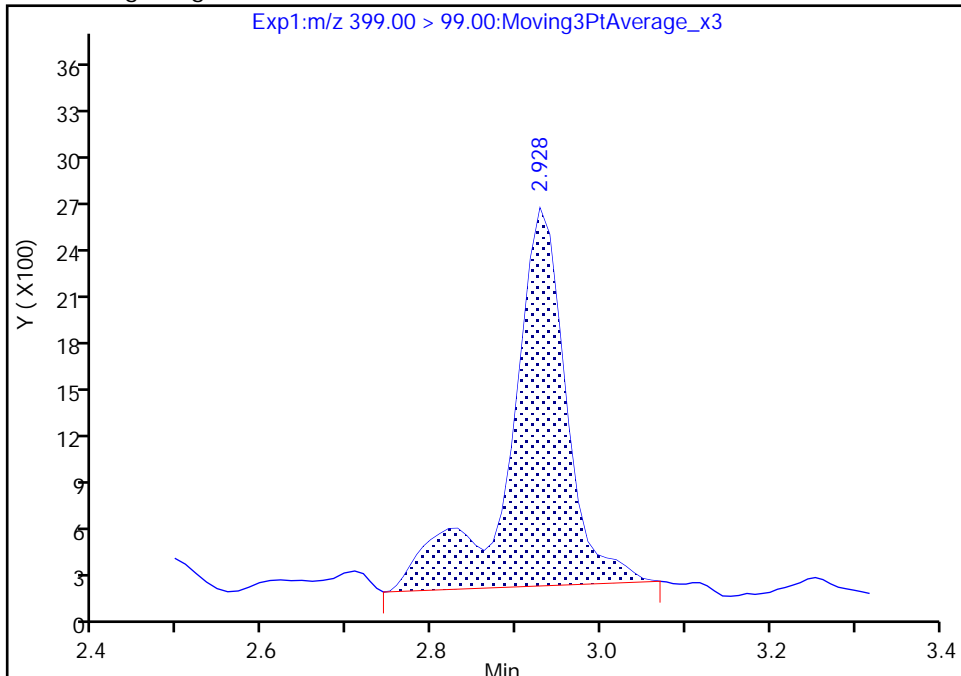
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

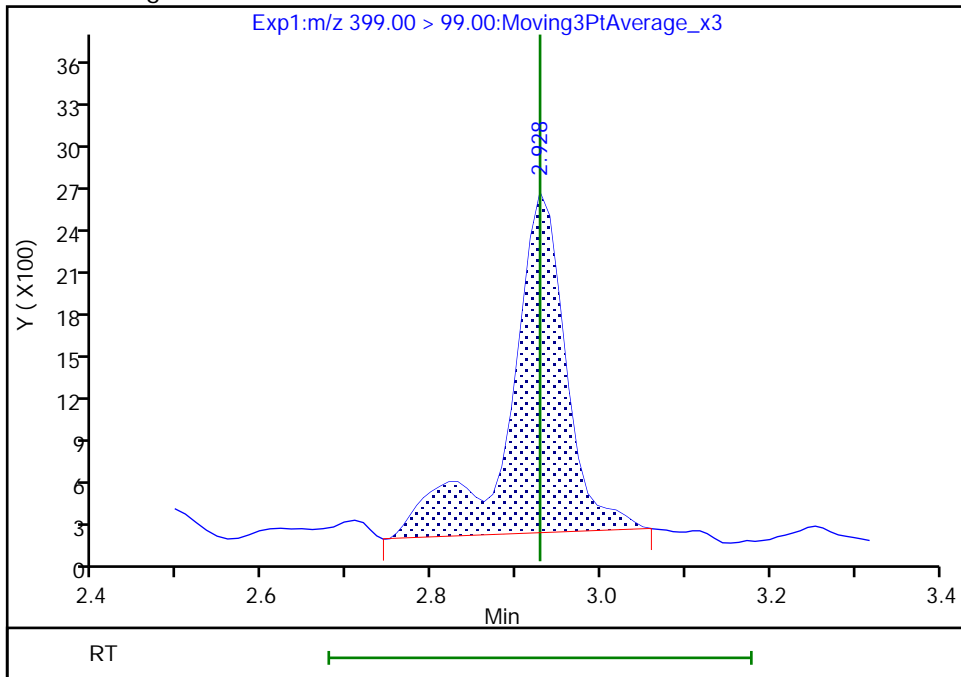
RT: 2.93
Area: 11330
Amount: 0.876000
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 11192
Amount: 0.856375
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:46:59
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

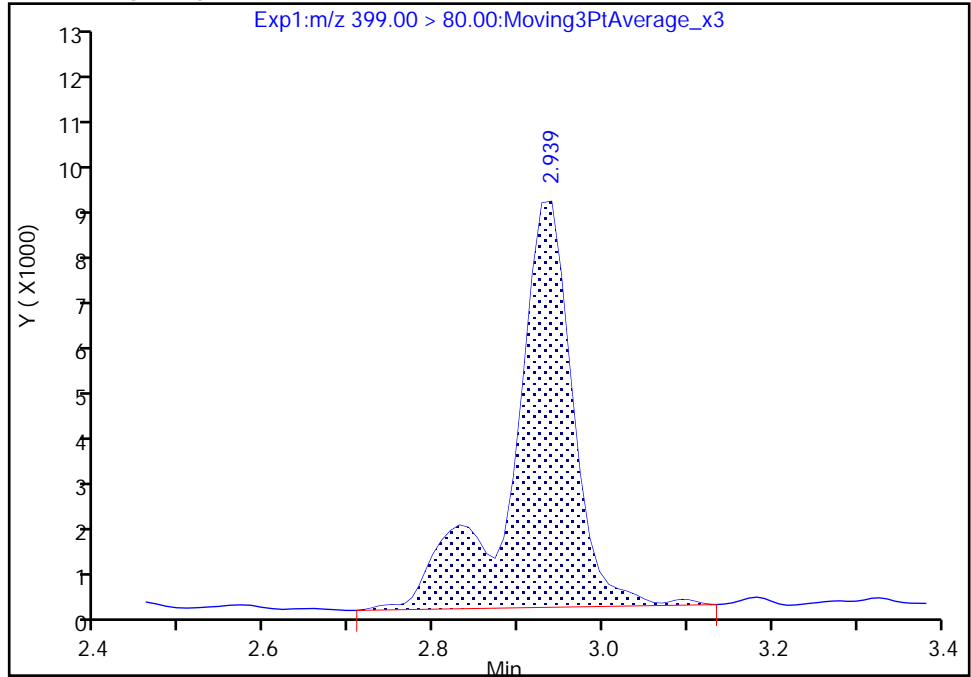
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

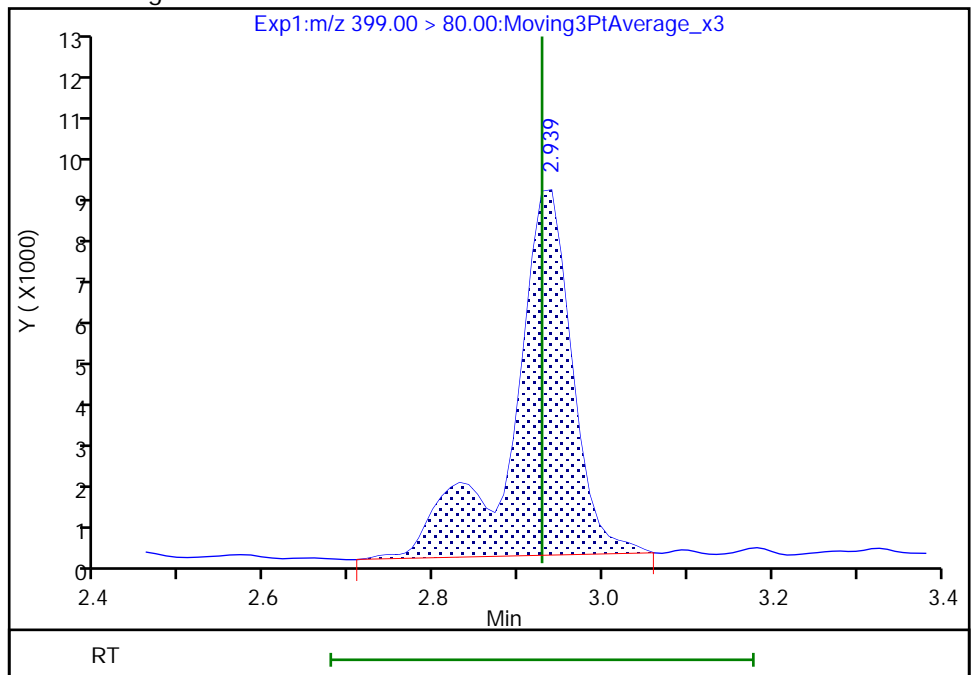
RT: 2.94
Area: 44682
Amount: 0.876000
Amount Units: ng/ml

Processing Integration Results



RT: 2.94
Area: 43681
Amount: 0.856375
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:47:03

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

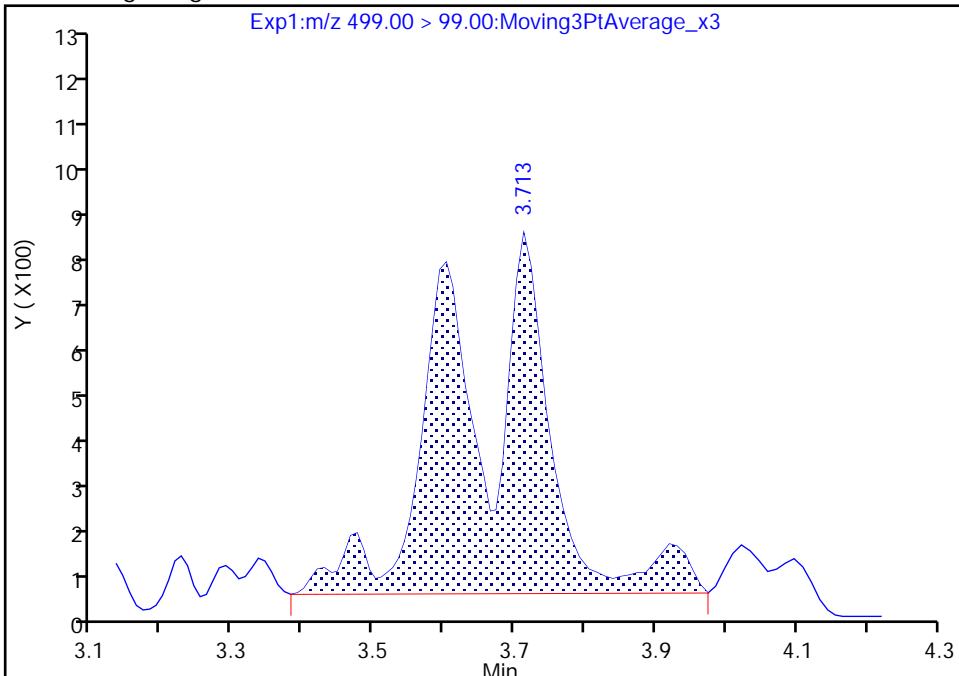
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

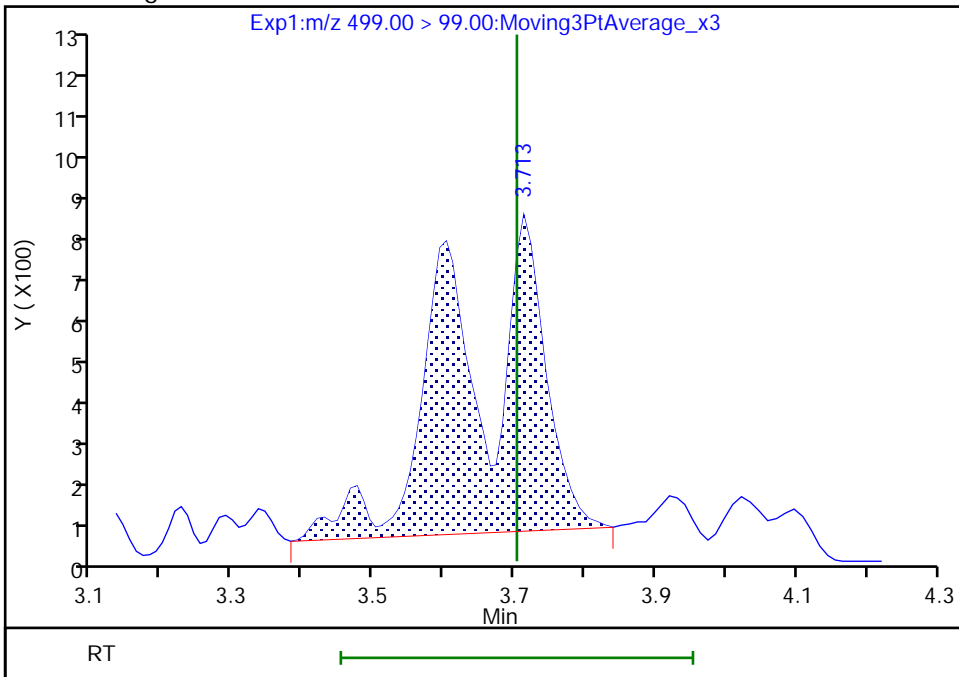
RT: 3.71
Area: 7347
Amount: 1.656562
Amount Units: ng/ml

Processing Integration Results



RT: 3.71
Area: 6446
Amount: 1.571239
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:47:39
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

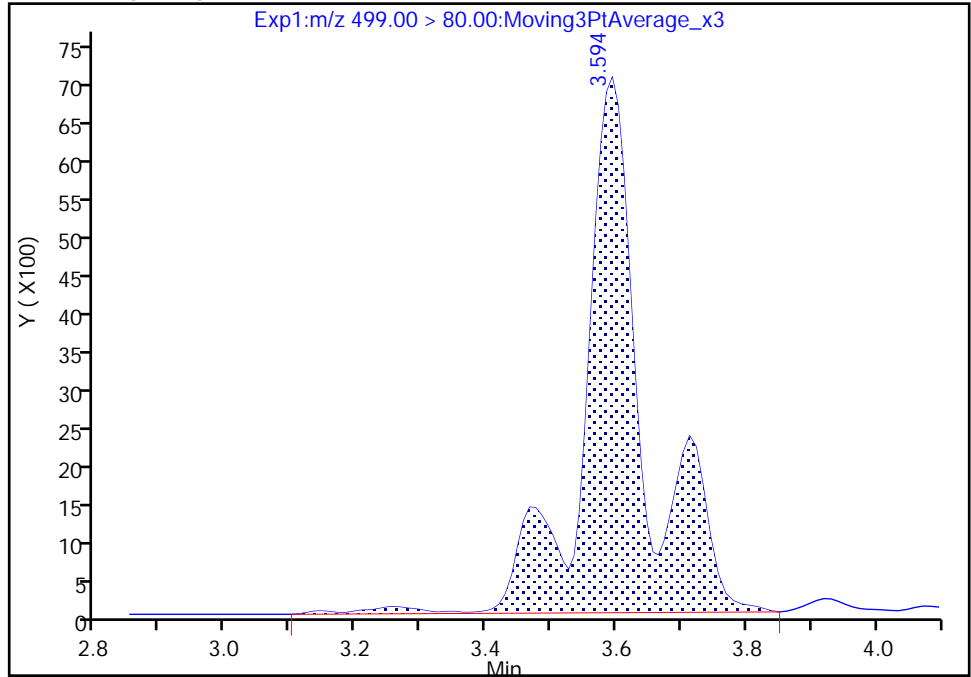
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

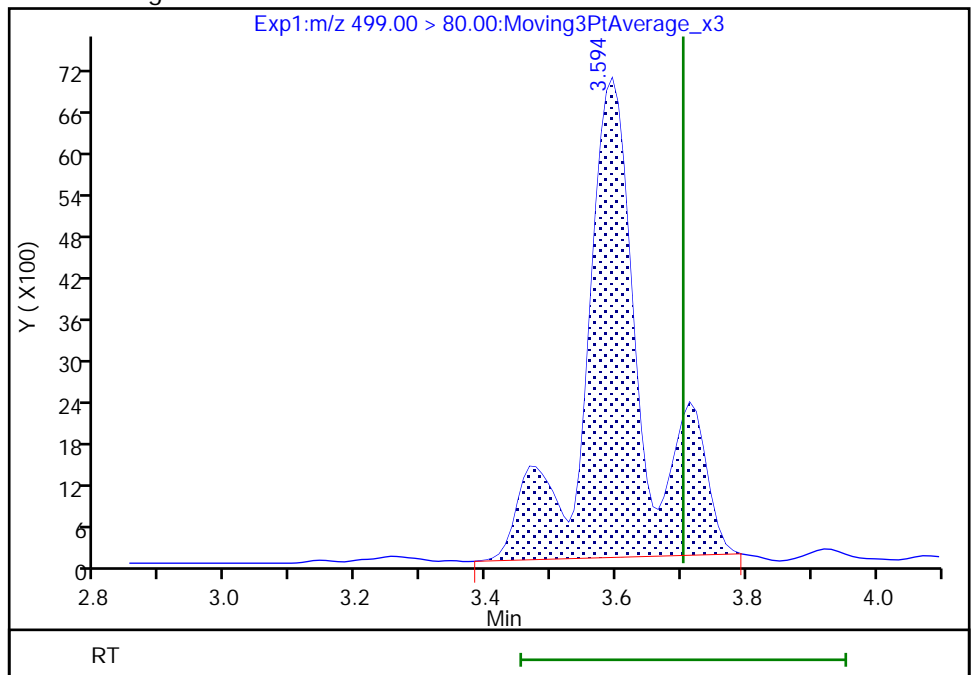
RT: 3.59
Area: 45975
Amount: 1.656562
Amount Units: ng/ml

Processing Integration Results



RT: 3.59
Area: 43607
Amount: 1.571239
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:47:44

Audit Action: Manually Integrated

Audit Reason: Isomers

Euofins TestAmerica, Burlington

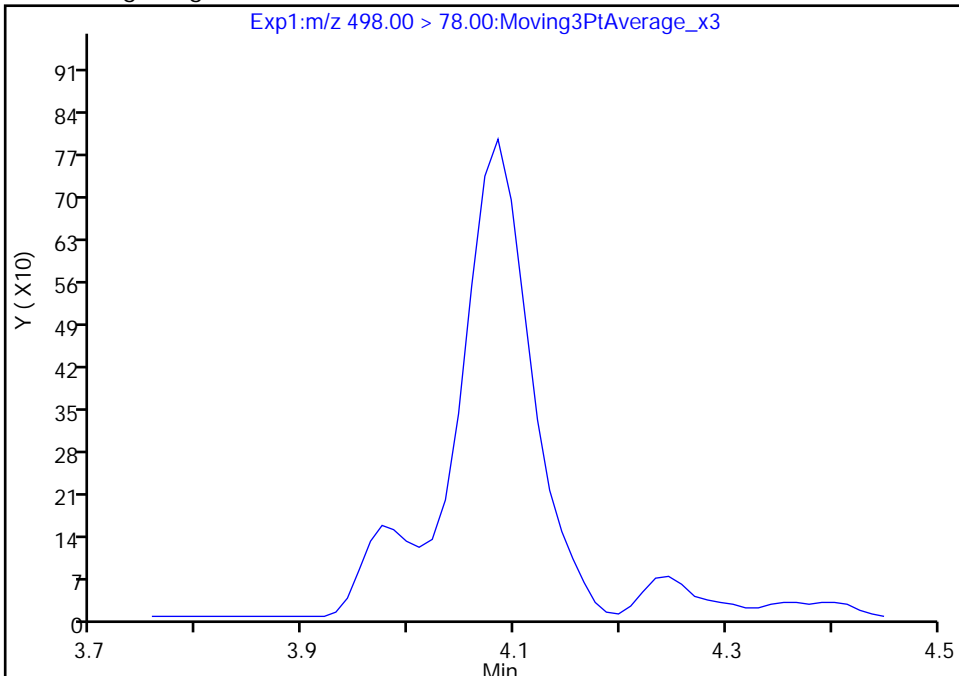
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

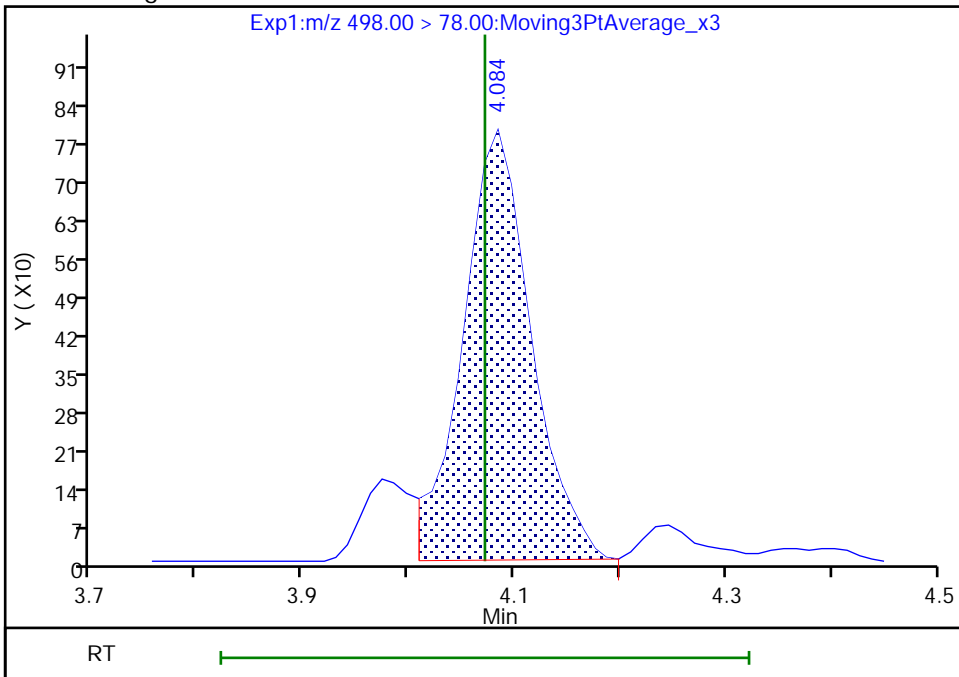
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.08
Area: 3516
Amount: 0.080931
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:48:19
Audit Action: Manually Integrated

Audit Reason: Split Peak

Eurofins TestAmerica, Burlington

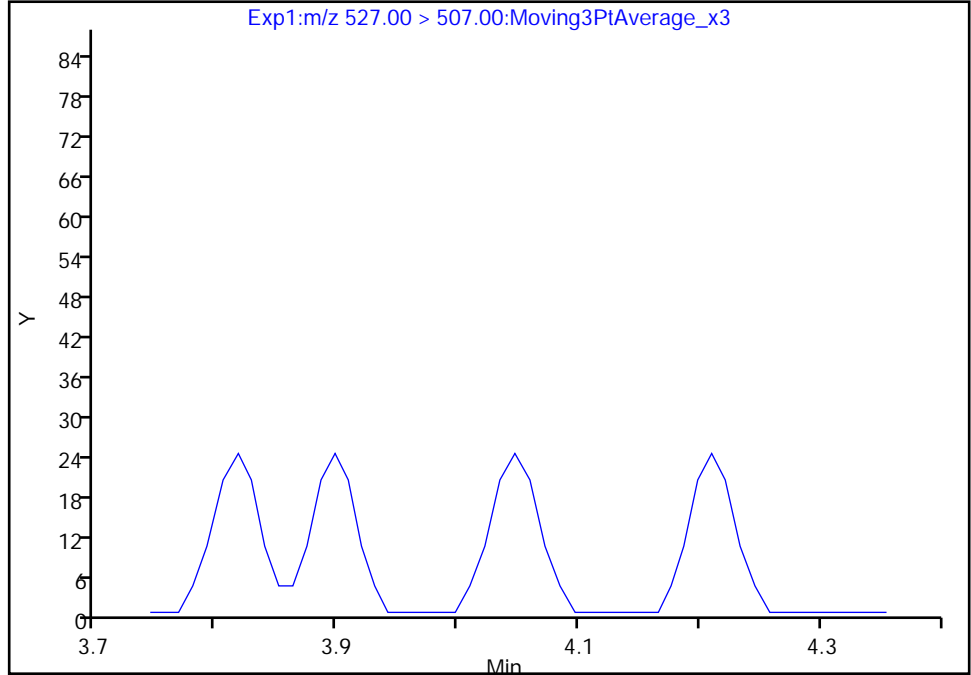
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E007.d
Injection Date: 02-Aug-2019 04:37:28 Instrument ID: LC812
Lims ID: 480-156213-F-4-A Lab Sample ID: 200-156213-4
Client ID: 356023-MW14B 150
Operator ID: lc812tech ALS Bottle#: 54 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

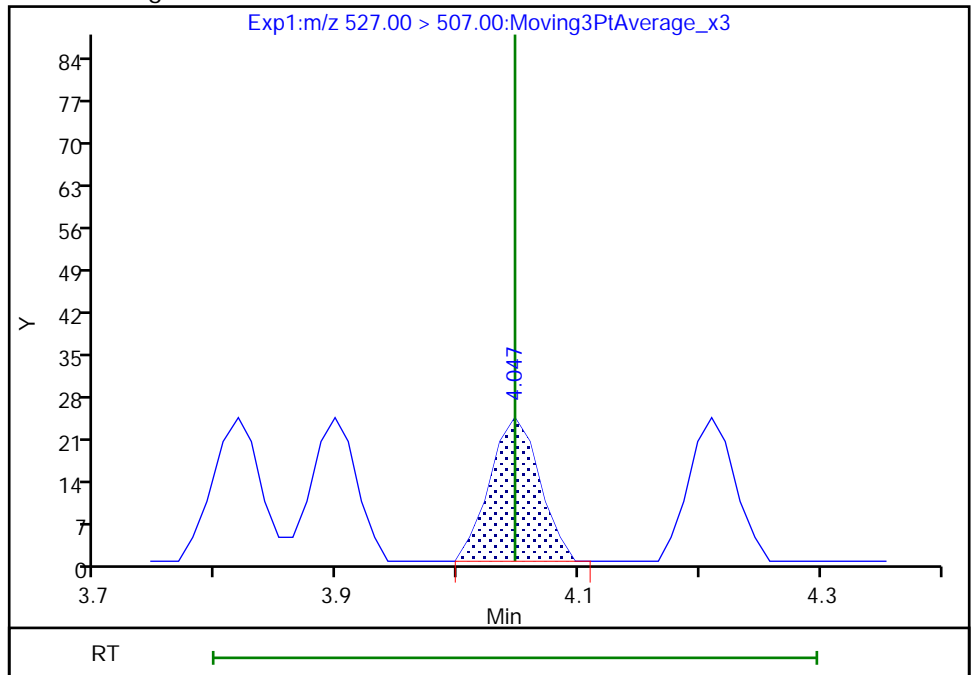
Not Detected
Expected RT: 4.05

Processing Integration Results



RT: 4.05
Area: 68
Amount: 0.006051
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:48:02
Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW12B 190 Lab Sample ID: 480-156213-5
 Matrix: Water Lab File ID: SC080119E008.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 17:27
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 300.2 (mL) Date Analyzed: 08/02/2019 04:45
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.7		1.7	0.83
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.7		1.7	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	1.7		1.7	0.63
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.84	J	1.7	0.76
335-67-1	Perfluorooctanoic acid (PFOA)	3.1		1.7	0.52
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.64
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.44
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.77
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.2	J	1.7	0.41
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.67	J	1.7	0.67
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.79
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.8		1.7	0.51
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.3	8.3
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.2
27619-97-2	6:2 FTS	ND		17	3.8
39108-34-4	8:2 FTS	ND		17	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW12B 190 Lab Sample ID: 480-156213-5
 Matrix: Water Lab File ID: SC080119E008.d
 Analysis Method: 537 (modified) Date Collected: 07/09/2019 17:27
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 300.2 (mL) Date Analyzed: 08/02/2019 04:45
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	73		25-150
STL00992	13C4 PFBA	75		25-150
STL01893	13C5 PFPeA	82		25-150
STL00993	13C2 PFHxA	91		50-150
STL01892	13C4 PFHpA	91		50-150
STL00990	13C4 PFOA	81		50-150
STL00995	13C5 PFNA	78		50-150
STL00996	13C2 PFDA	80		50-150
STL00997	13C2 PFUnA	75		50-150
STL00998	13C2 PFDoA	66		50-150
STL02116	13C2 PFTeDA	60		50-150
STL02337	13C3 PFBS	86		50-150
STL00994	18O2 PFHxS	88		50-150
STL00991	13C4 PFOS	74		50-150
STL02118	d3-NMeFOSAA	62		50-150
STL02117	d5-NEtFOSAA	57		50-150
STL02279	M2-6:2 FTS	98		25-150
STL02280	M2-8:2 FTS	93		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
 Lims ID: 480-156213-F-5-A
 Client ID: 356023-MW12B 190
 Sample Type: Client
 Inject. Date: 02-Aug-2019 04:45:30 ALS Bottle#: 1 Worklist Smp#: 8
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-5-A
 Misc. Info.: 200-0037095-008 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:54:26
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.507	2810601	37.4	74.7	10430	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.708	1.699	0.009	1.005	53174	1.03		9.4		M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.616	2913003	41.2	82.5	6841	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	58014	1.03		3.1	
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.624	2775114	40.0	86.0	363021	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.093	2.093	0.0	1.000	42185	0.6953	Target=1.90	27.3		
298.90 > 99.00	2.093	2.093	0.0	1.000	22511		1.87(0.95-2.85)	17.3		M
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.733	3195816	45.5	91.1	6894	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.005	66409	1.01	Target=13.23	15.8	
313.00 > 119.00	2.459	2.459	0.0	1.000	5503		12.07(6.61-19.84)	7.3		
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.873	1683824	41.4	87.6	4560	
D 9 13C4 PFHpA	367.00 > 322.00	2.928	2.928	0.0	0.873	3115599	45.3	90.6	8362	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	18934	0.4036	Target=3.37	14.3		M
399.00 > 99.00	2.928	2.928	0.0	1.000	3938		4.81(1.69-5.06)	4.4		M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.004	29531	0.5060	Target=3.76	6.3	
363.00 > 169.00	2.939	2.928	0.011	1.004	9117		3.24(1.88-5.65)	33.8		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.344	3.335	0.009	0.997	393857	46.6		98.0	648	
13 1H,1H,2H,2H-perfluorooctanesulfo										
427.00 > 407.00	3.354	3.336	0.018	1.003	11855	0.8336			30.5	
D 14 13C4 PFOA										
417.00 > 372.00	3.363	3.344	0.019	1.003	2935454	40.4		80.9	9975	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.363	3.355	0.008	1.000	117203	1.83	Target=2.84		12.0	M
413.00 > 169.00	3.363	3.355	0.008	1.000	46557		2.52(1.42-4.25)		156	M
* 62 13C2 PFOA										
415.00 > 370.00	3.354	3.355	-0.001		3991536	50.0			9625	
D 18 13C4 PFOS										
503.00 > 80.00	3.715	3.695	0.020	1.108	1197615	35.4		74.0	4086	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.587	3.703	-0.116	0.966	40434	1.71	Target=4.33		69.9	RM
499.00 > 99.00	3.705	3.703	0.002	0.997	5761		7.02(2.16-6.49)		8.6	M
D 19 13C5 PFNA										
468.00 > 423.00	3.725	3.715	0.010	1.111	2577590	38.9		77.8	12717	
20 Perfluorononanoic acid										
463.00 > 419.00	3.725	3.723	0.002	1.000	5872	0.1257	Target=8.15		2.1	M
463.00 > 169.00	3.725	3.723	0.002	1.000	1167		5.03(4.08-12.23)		13.3	M
D 23 13C2 PFDA										
515.00 > 470.00	4.049	4.036	0.013	1.207	2111087	39.8		79.7	8093	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.061	4.036	0.025	1.211	345966	44.3		92.5	947	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.049	4.047	0.002	1.000	2970	0.0727	Target=9.58		0.9	M
513.00 > 169.00	4.049	4.047	0.002	1.000	436		6.81(4.79-14.37)		2.7	M
D 21 13C8 FOSA										
506.00 > 78.00	4.074	4.061	0.013	1.215	2206582	36.3		72.6	6893	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.074	4.072	0.002	1.000	1717	0.0426			14.9	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.189	4.178	0.011	1.249	208572	30.8		61.6	1947	
D 30 13C2 PFUnA										
565.00 > 520.00	4.308	4.296	0.012	1.285	1803151	37.4		74.7	12248	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.320	4.307	0.013	1.003	3802	0.1229	Target=7.95		1.8	M
563.00 > 169.00	4.296	4.307	-0.011	0.997	582		6.53(3.98-11.93)		7.8	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.308	0.012	1.288	214203	28.4		56.8	819	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.320	4.319	0.001	1.000	539	0.1966			4.6	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.550	4.537	0.013	1.357	1711704	33.0		65.9	9153	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.483	2146141	30.0		60.0	7059	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
42 Perfluorotetradecanoic acid										RM
713.00 > 169.00	4.986	4.972	0.014	1.003	470	0.0823	Target=1.02		5.0	RM
713.00 > 219.00	4.986	4.972	0.014	1.003	295		1.59(0.51-1.54)		6.1	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d

Injection Date: 02-Aug-2019 04:45:30

Instrument ID: LC812

Lims ID: 480-156213-F-5-A

Lab Sample ID: 200-156213-5

Client ID: 356023-MW12B 190

Operator ID: lc812tech

ALS Bottle#: 1

Worklist Smp#: 8

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

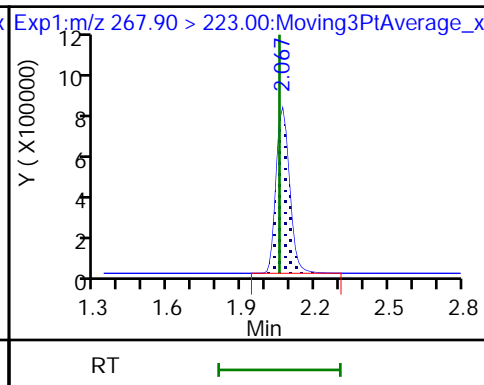
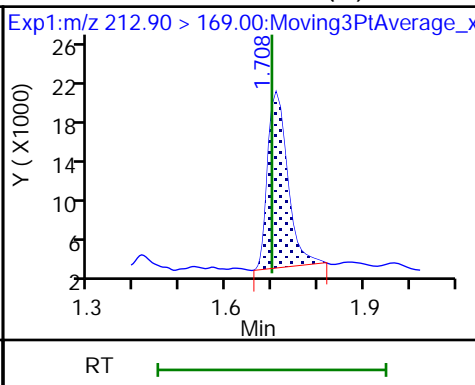
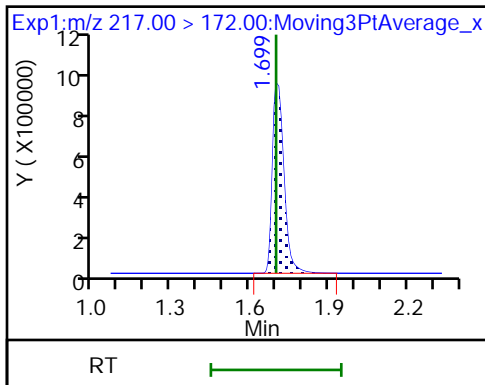
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

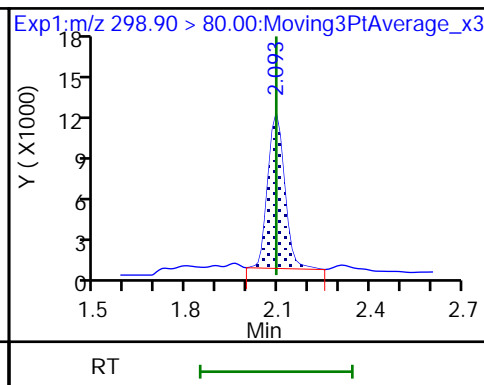
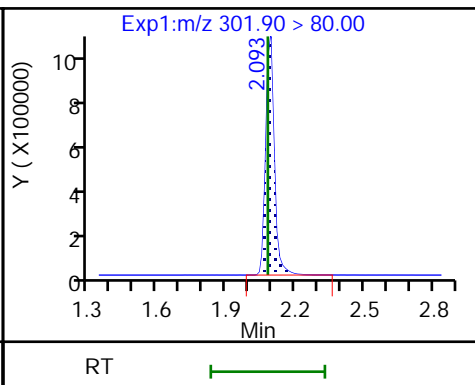
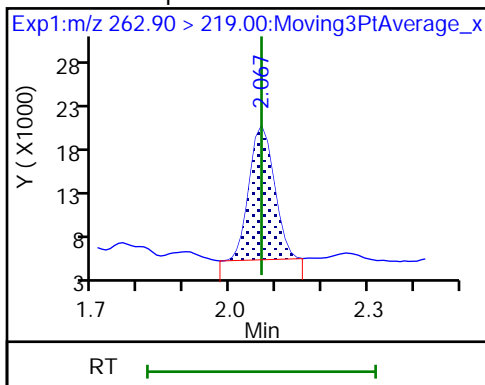
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

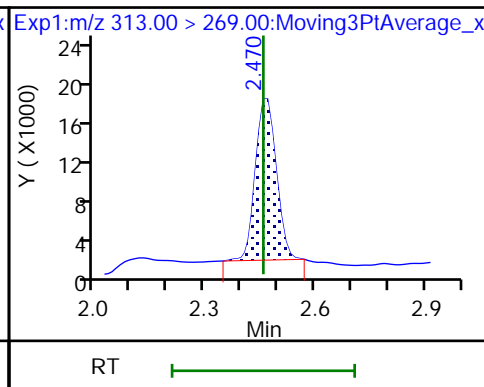
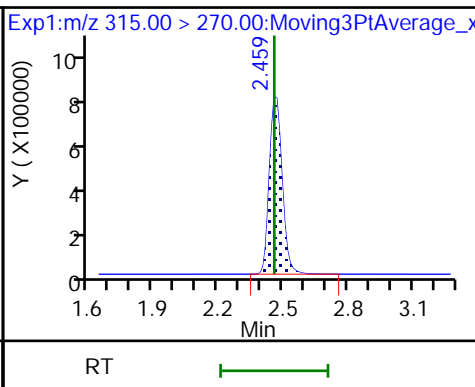
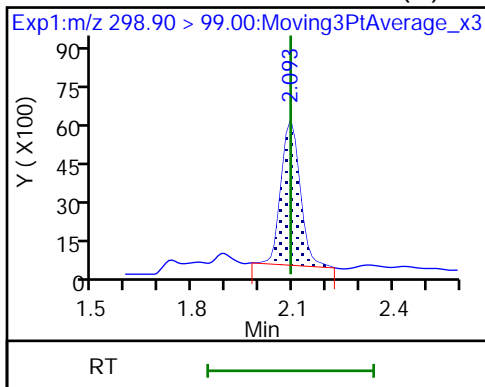
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid (M)

D 7 13C2 PFHxA

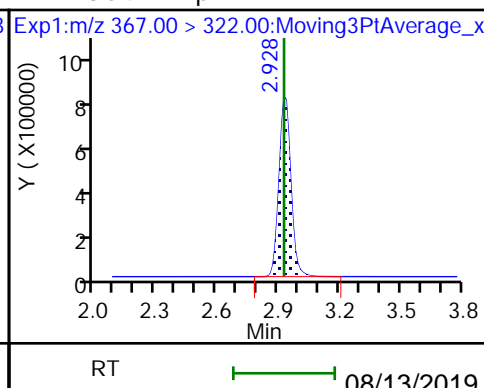
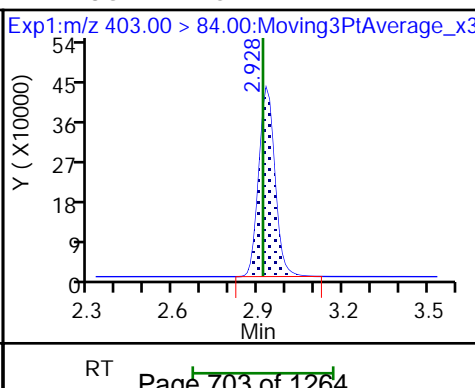
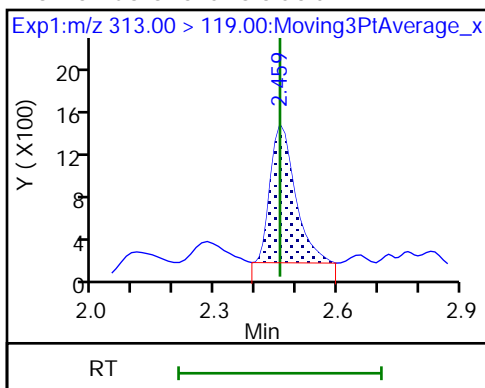
6 Perfluorohexanoic acid

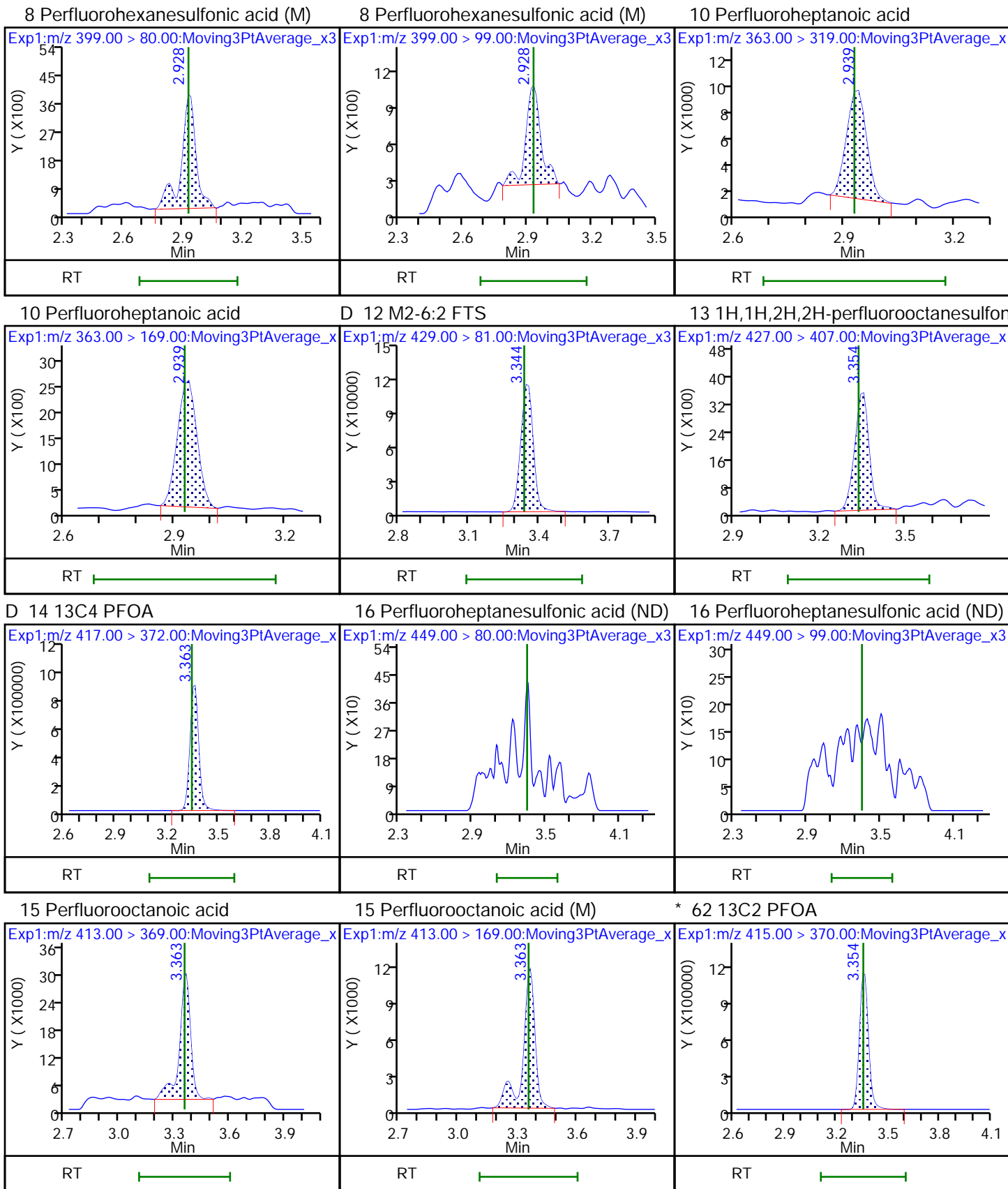


6 Perfluorohexanoic acid

D 11 18O2 PFHxS

D 9 13C4 PFHpA

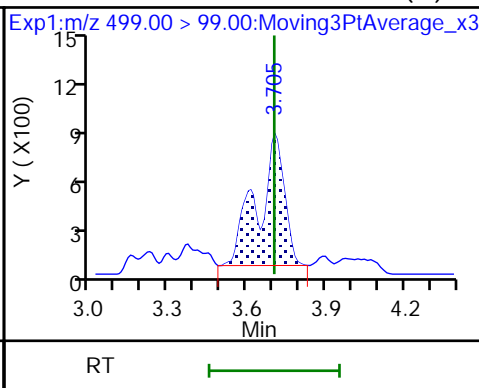
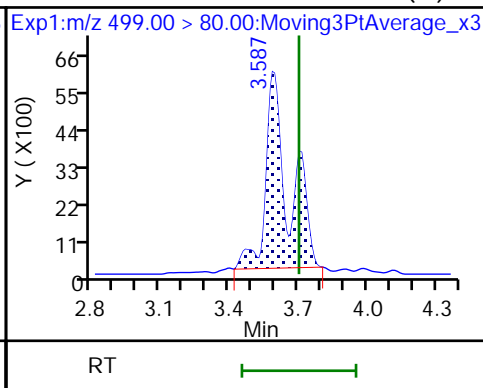
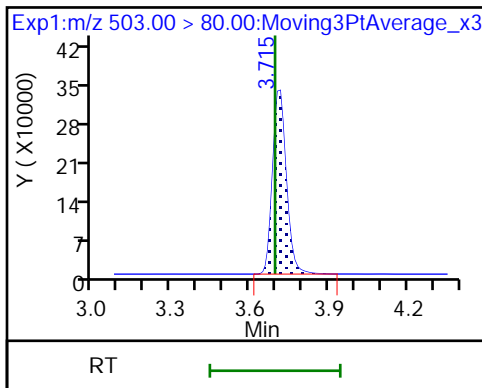




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

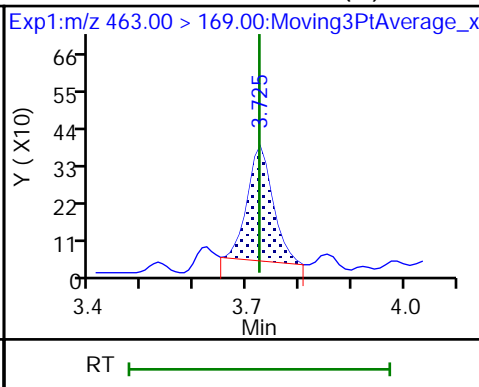
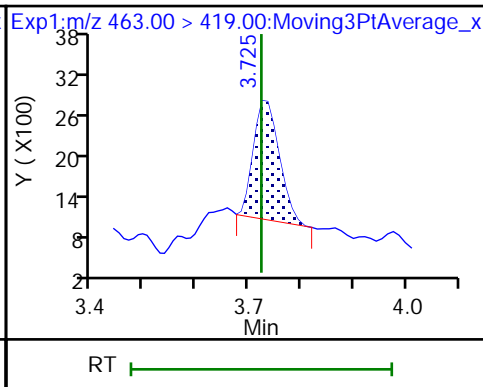
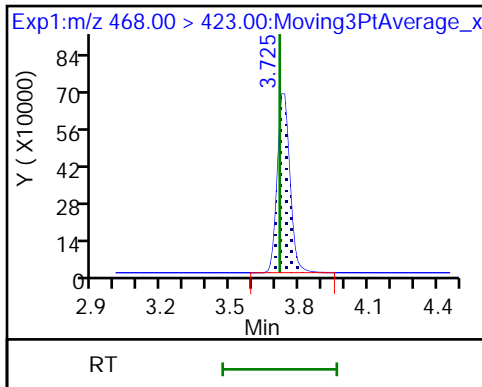
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid

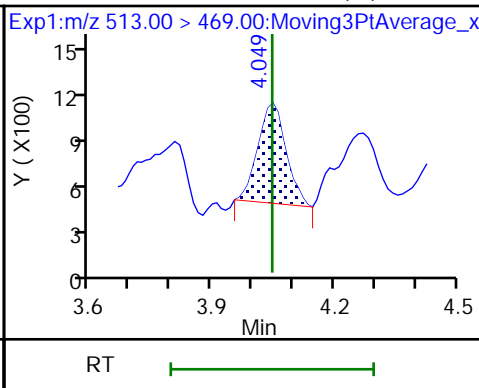
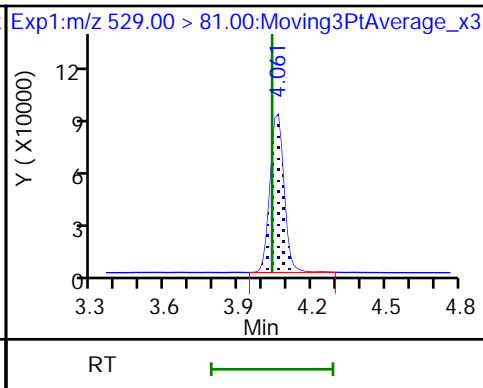
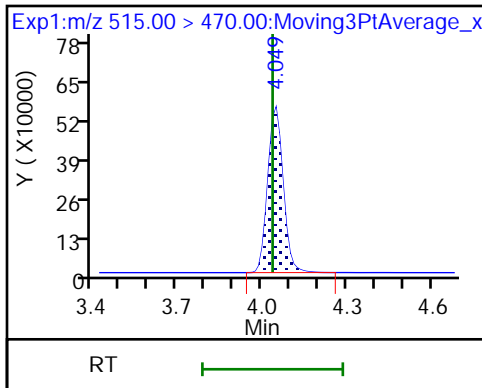
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

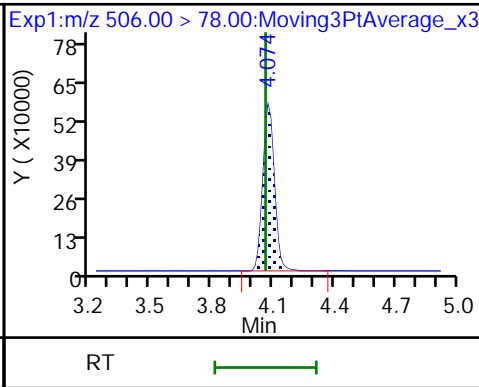
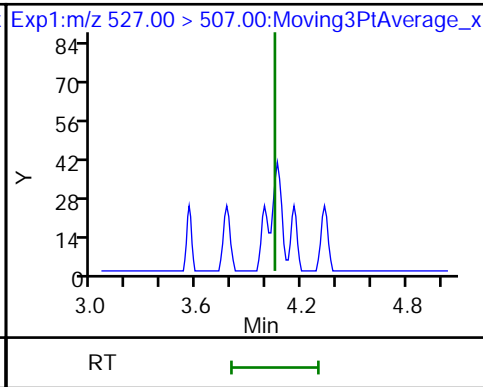
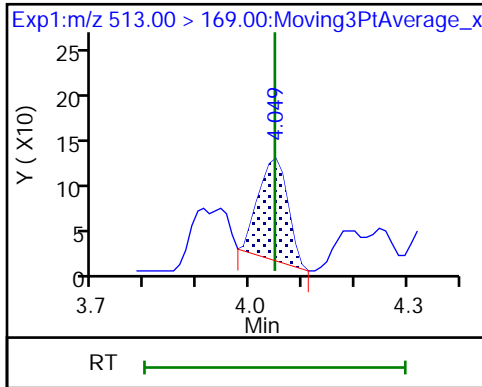
24 Perfluorodecanoic acid (M)



24 Perfluorodecanoic acid (M)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

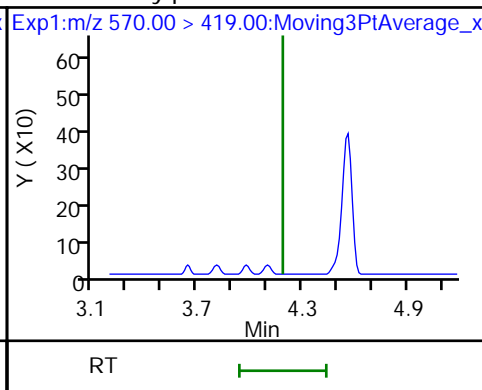
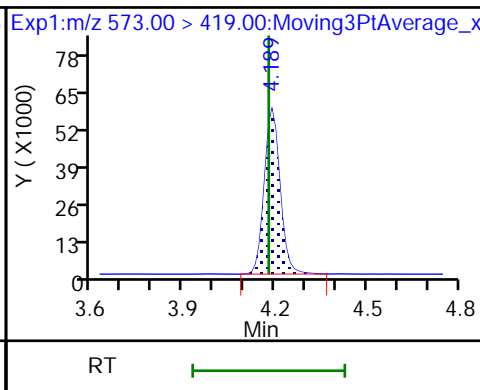
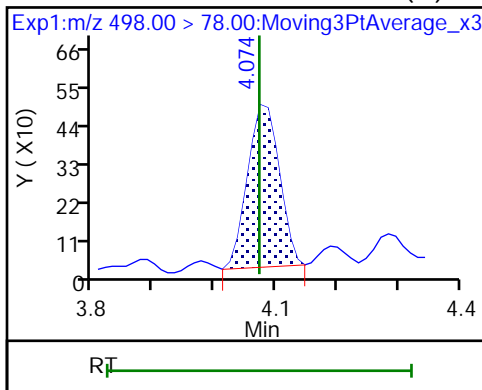
(M) 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

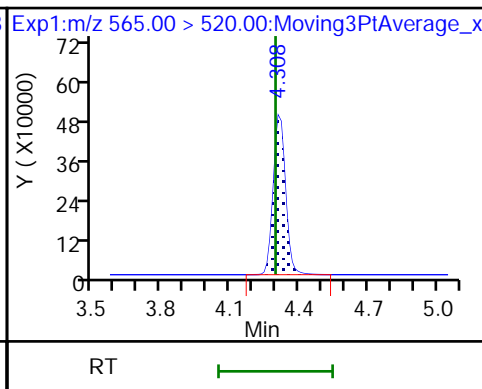
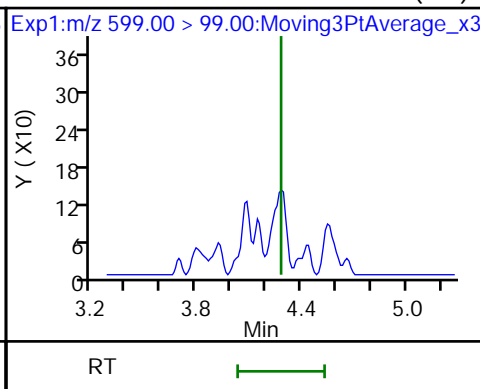
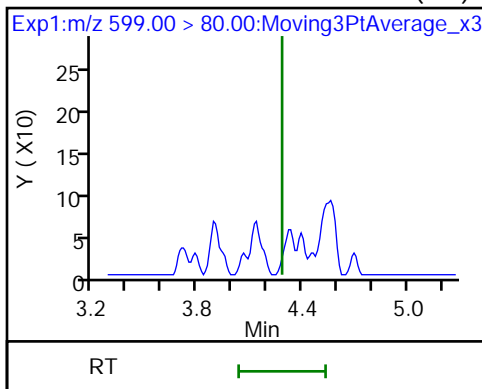
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

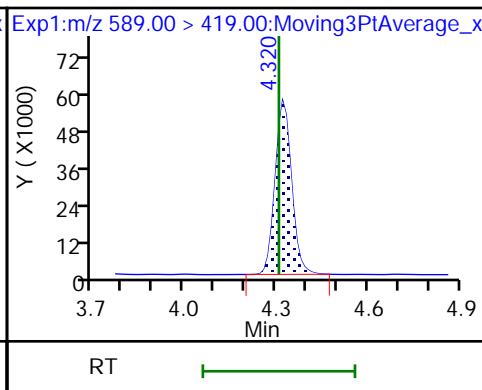
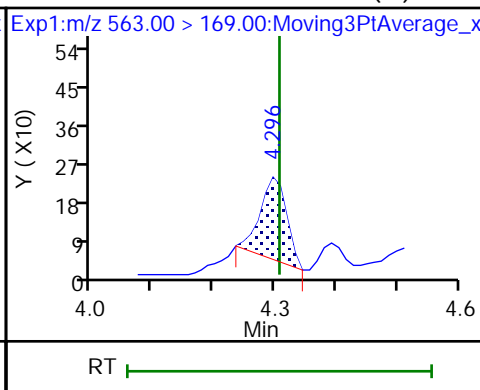
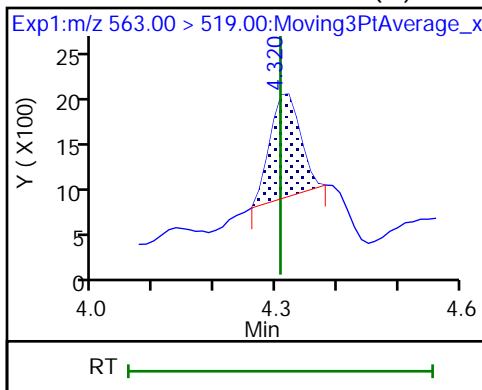
D 30 13C2 PFUnA



31 Perfluoroundecanoic acid (M)

31 Perfluoroundecanoic acid (M)

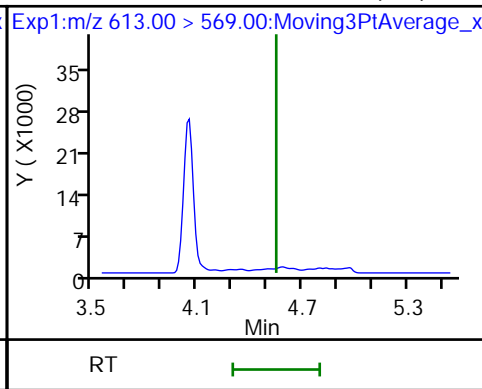
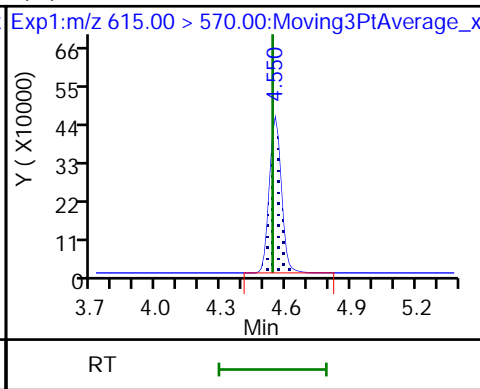
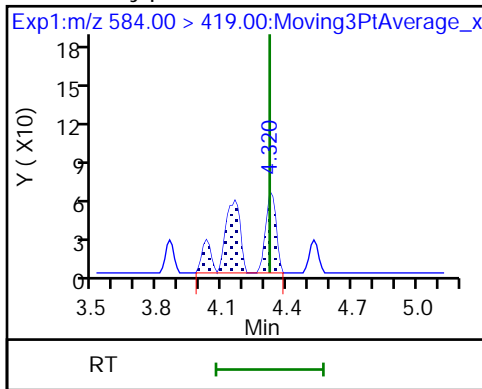
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 36 13C2 PFDoA

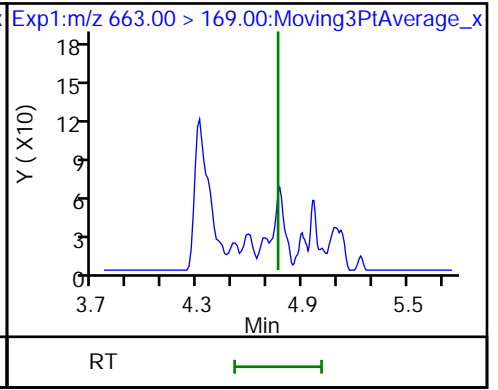
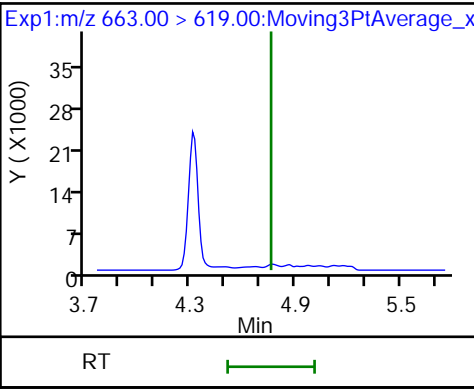
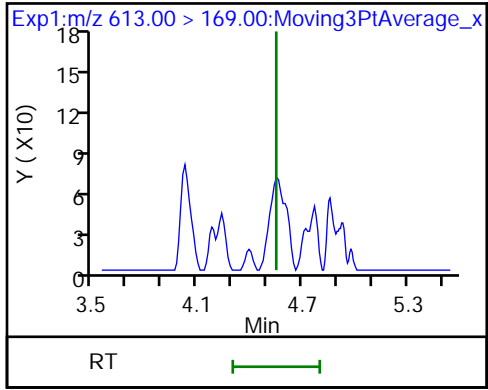
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

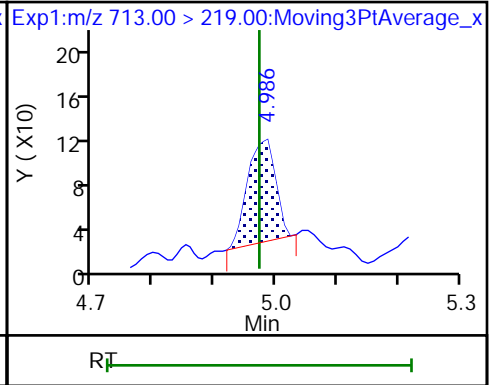
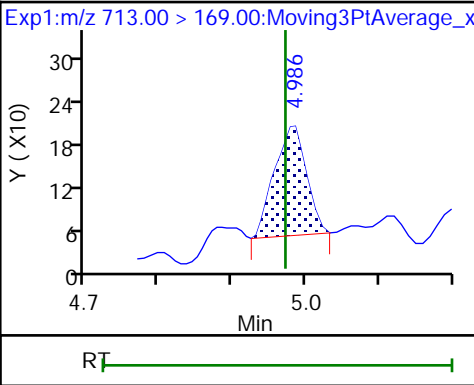
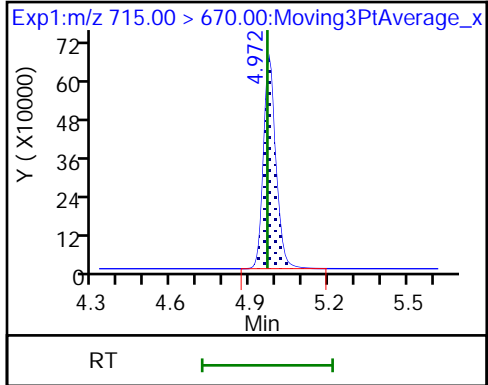
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (M)

42 Perfluorotetradecanoic acid (M)



Eurofins TestAmerica, Burlington

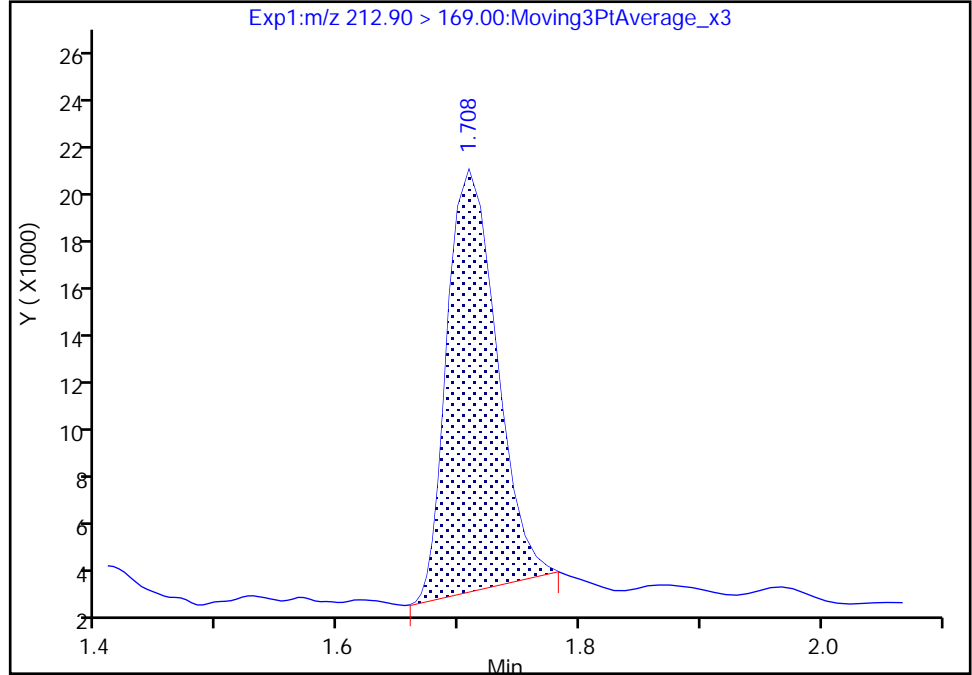
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

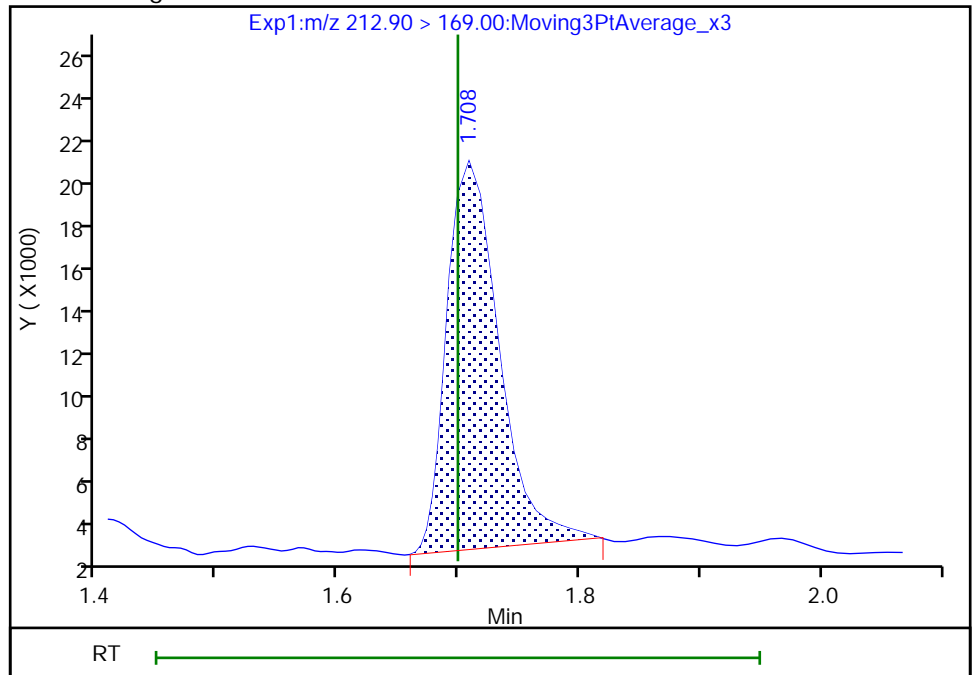
RT: 1.71
Area: 49548
Amount: 0.956379
Amount Units: ng/ml

Processing Integration Results



RT: 1.71
Area: 53174
Amount: 1.026368
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:50:09
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

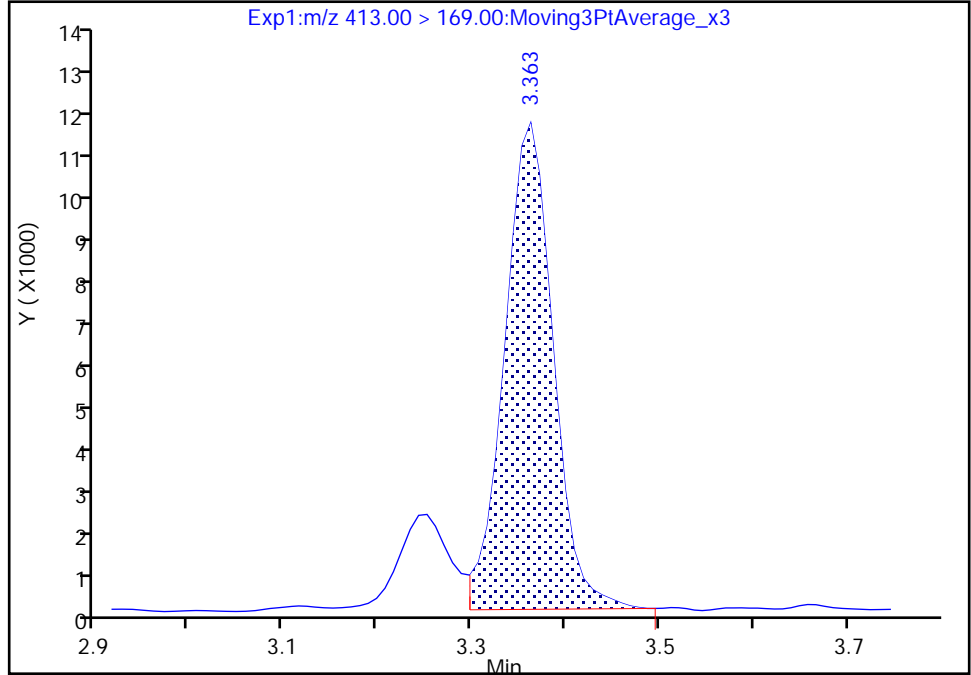
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

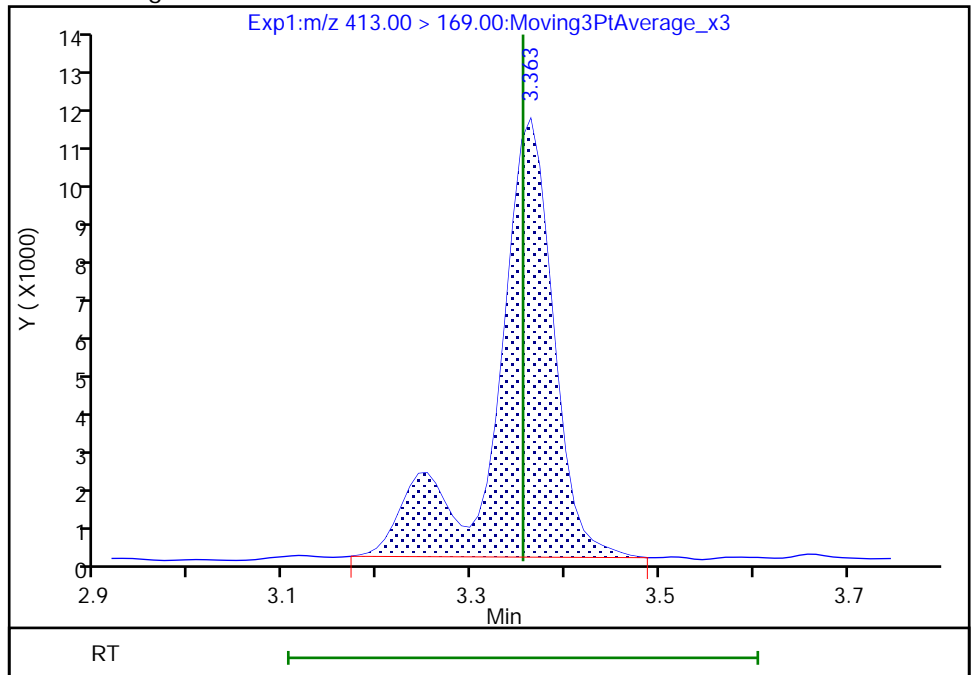
RT: 3.36
Area: 39225
Amount: 1.834653
Amount Units: ng/ml

Processing Integration Results



RT: 3.36
Area: 46557
Amount: 1.834653
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:52:09
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

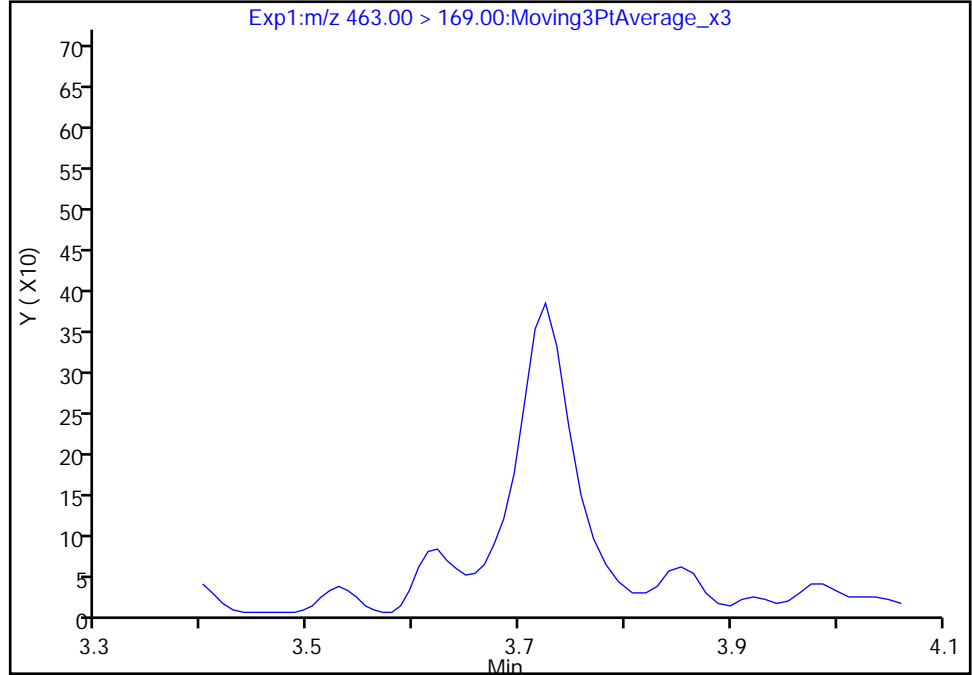
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

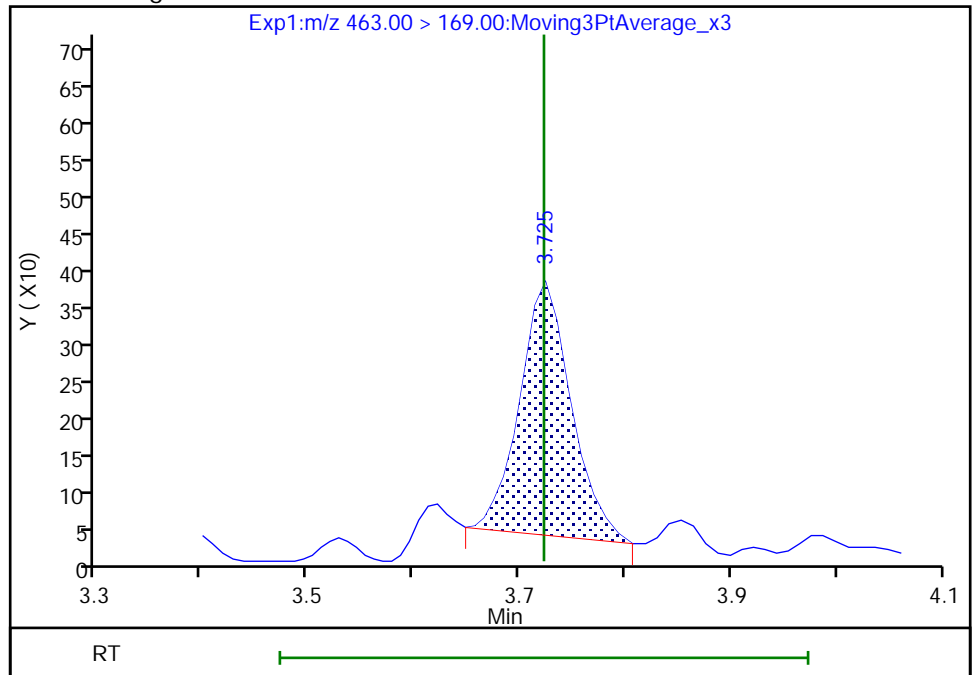
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.72
Area: 1167
Amount: 0.125737
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:52:54
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

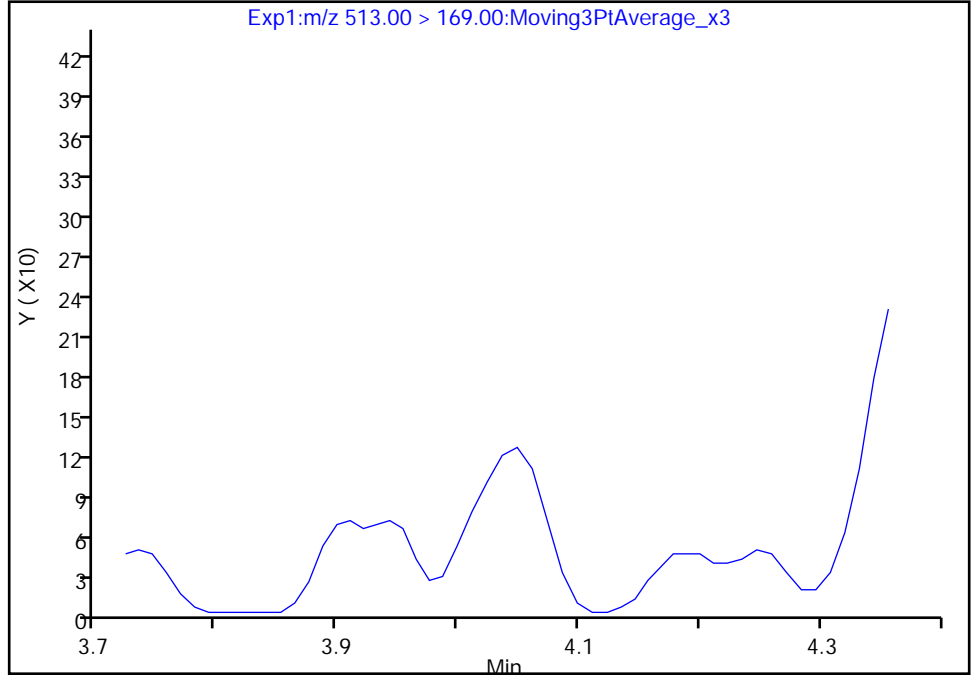
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

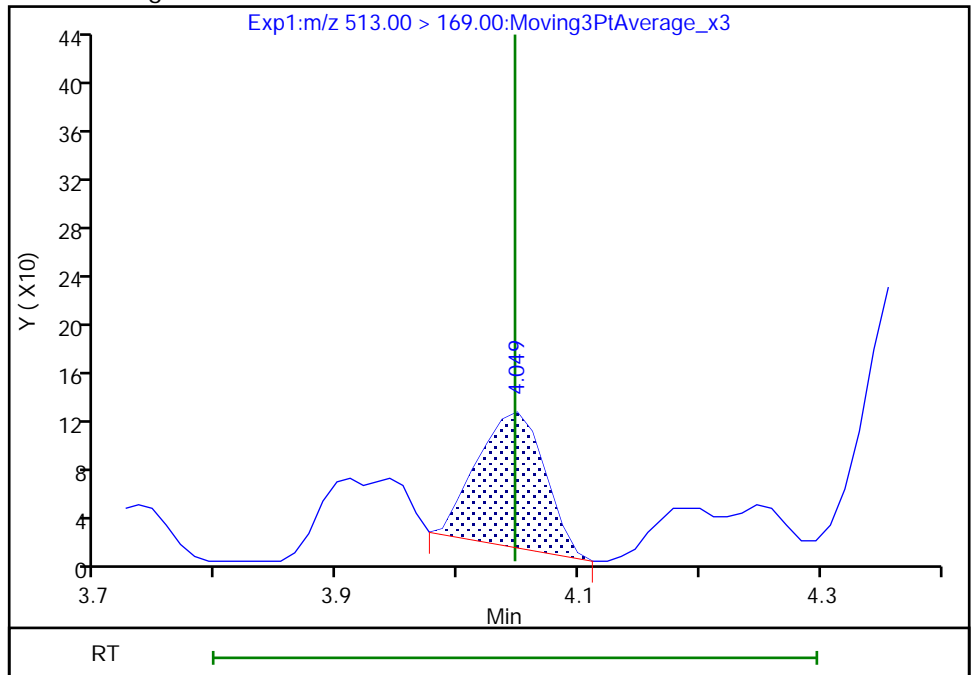
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 436
Amount: 0.072654
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:53:01
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

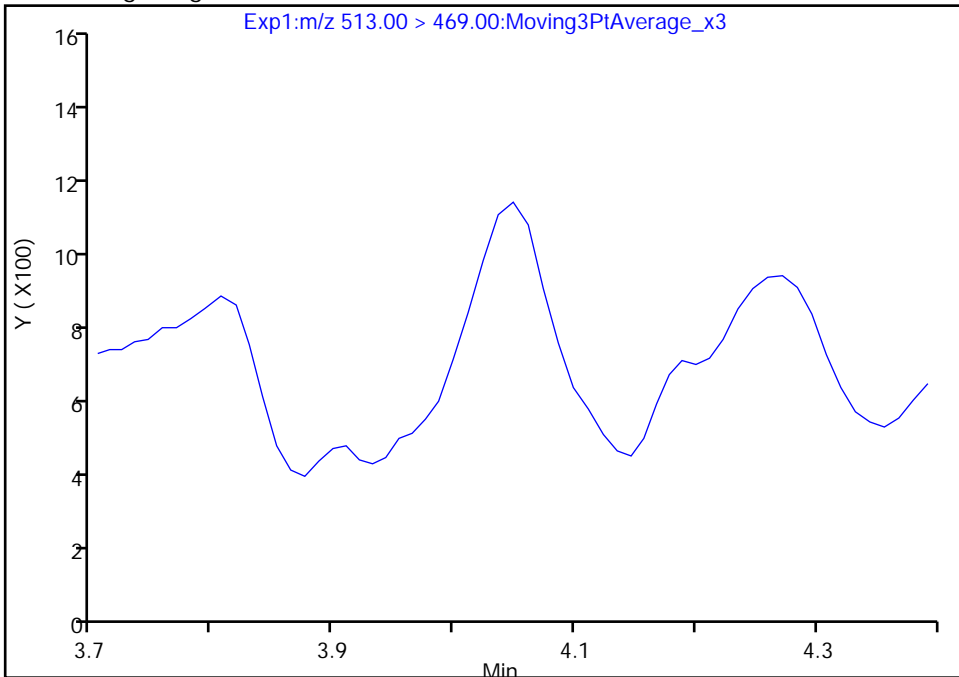
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

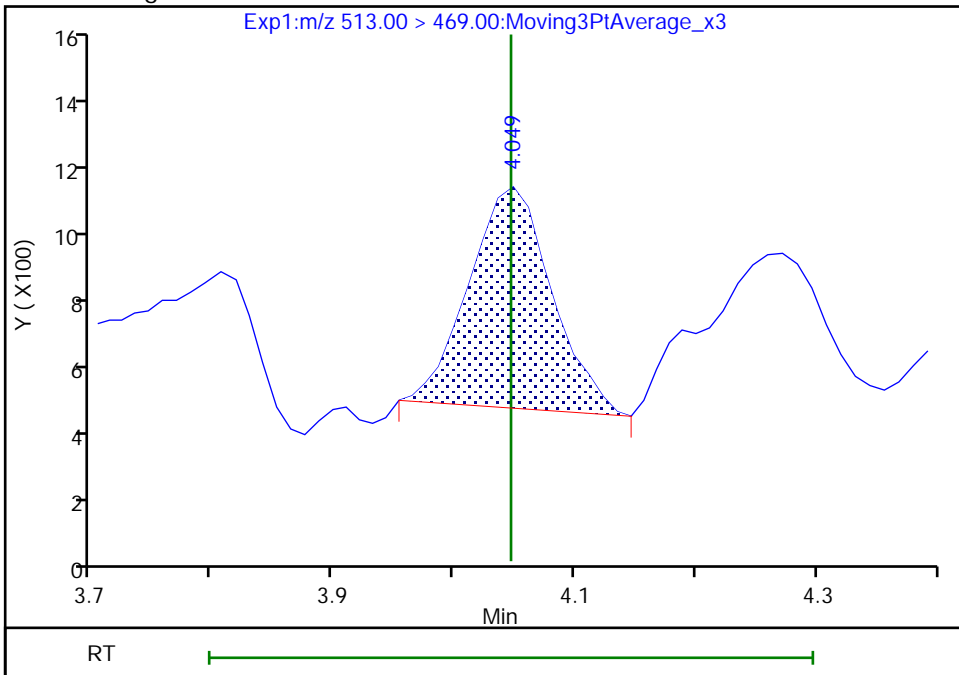
Not Detected
Expected RT: 4.05

Processing Integration Results



RT: 4.05
Area: 2970
Amount: 0.072654
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

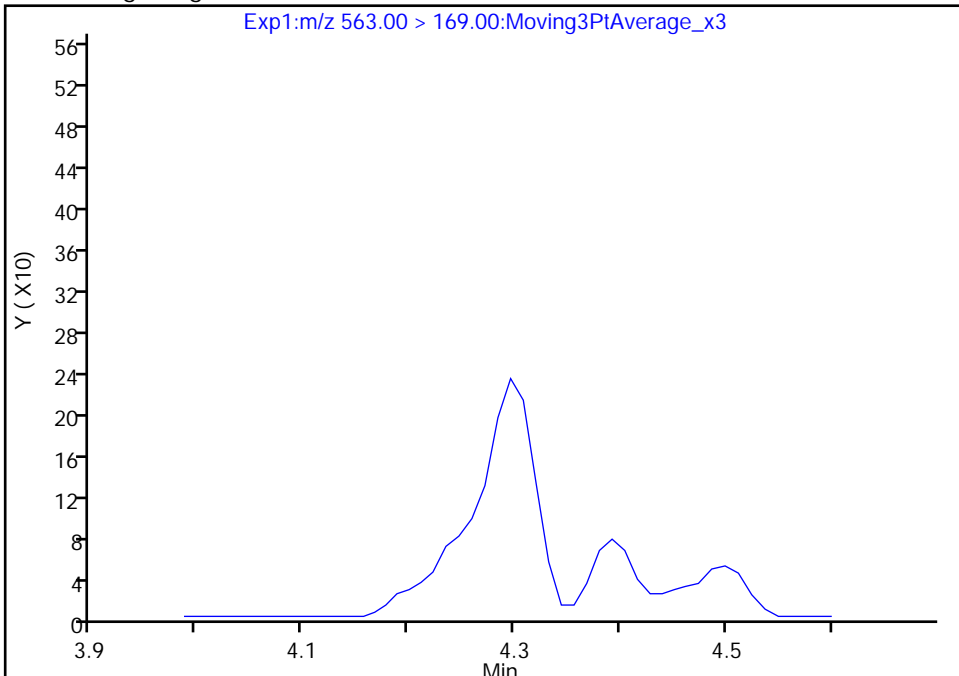
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

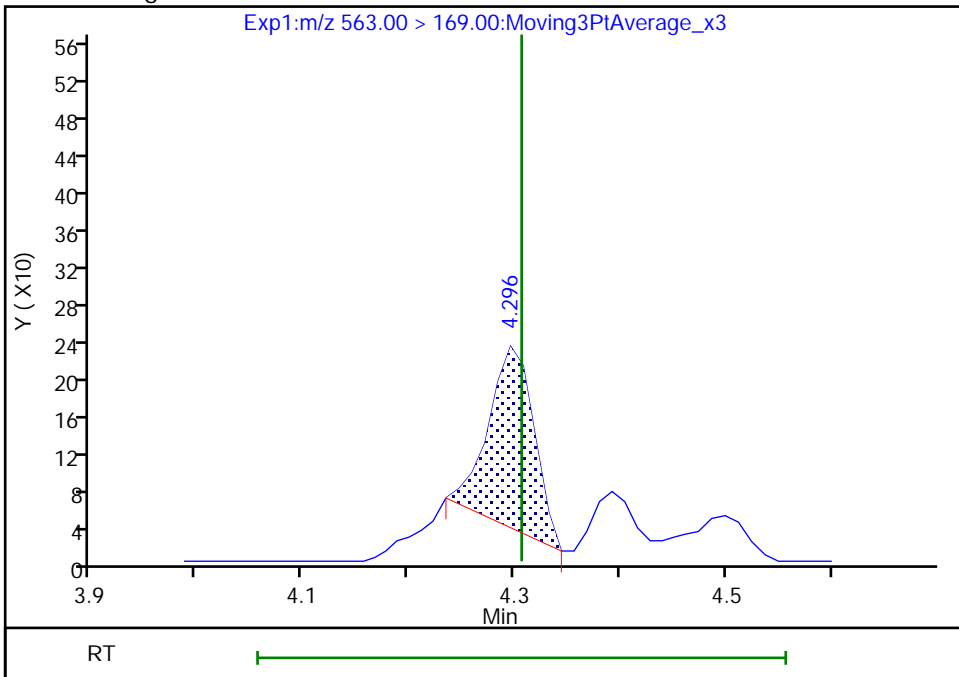
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.30
Area: 582
Amount: 0.122867
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:53:34
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

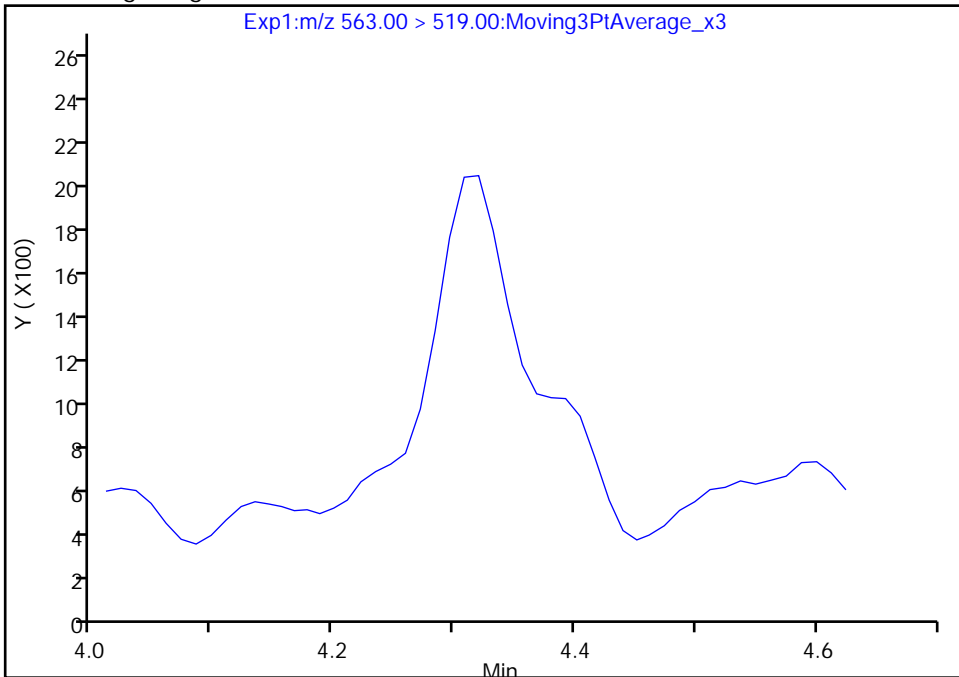
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

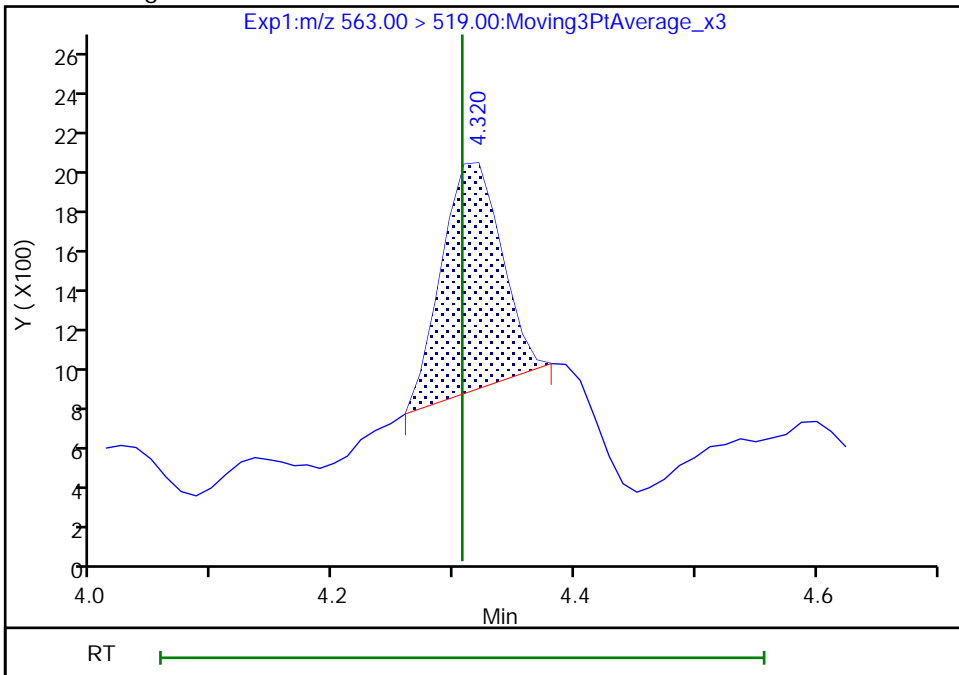
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 3802
Amount: 0.122867
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

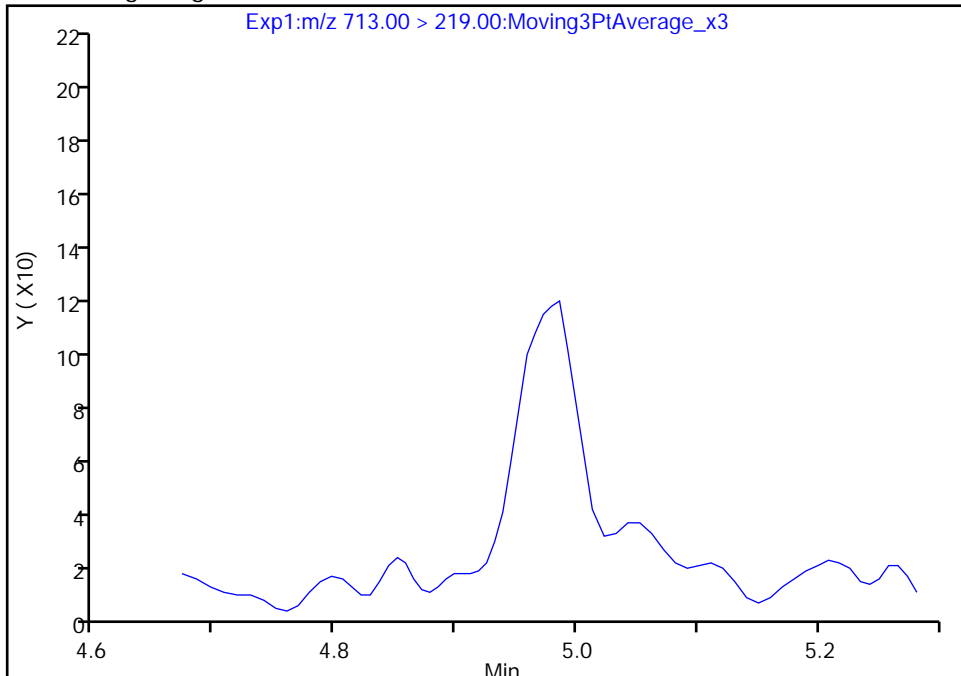
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

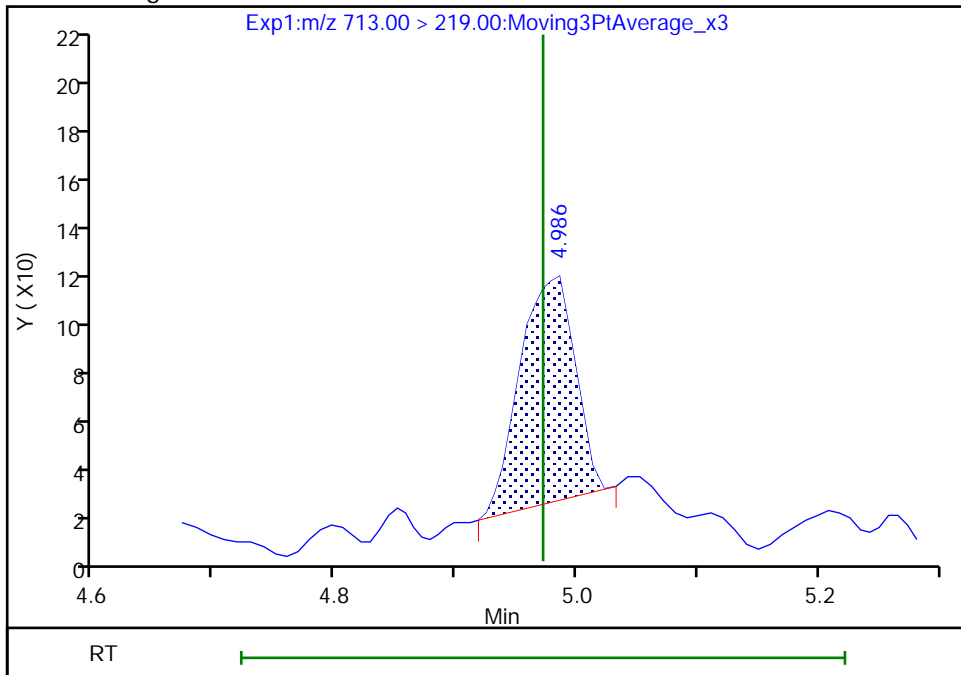
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 295
Amount: 0.082254
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:54:06
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

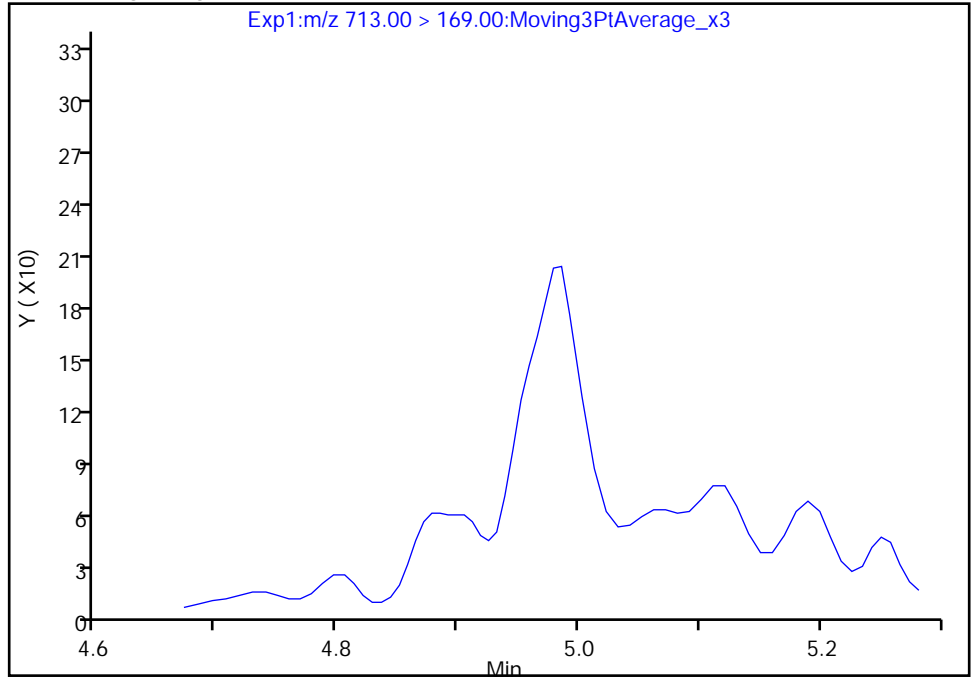
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

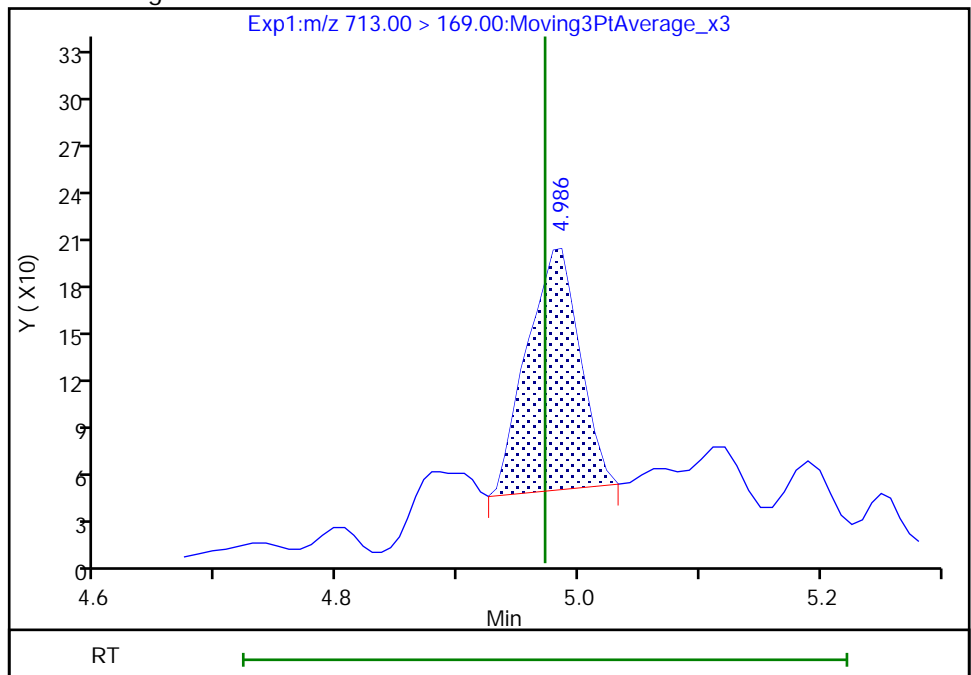
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.99
Area: 470
Amount: 0.082254
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

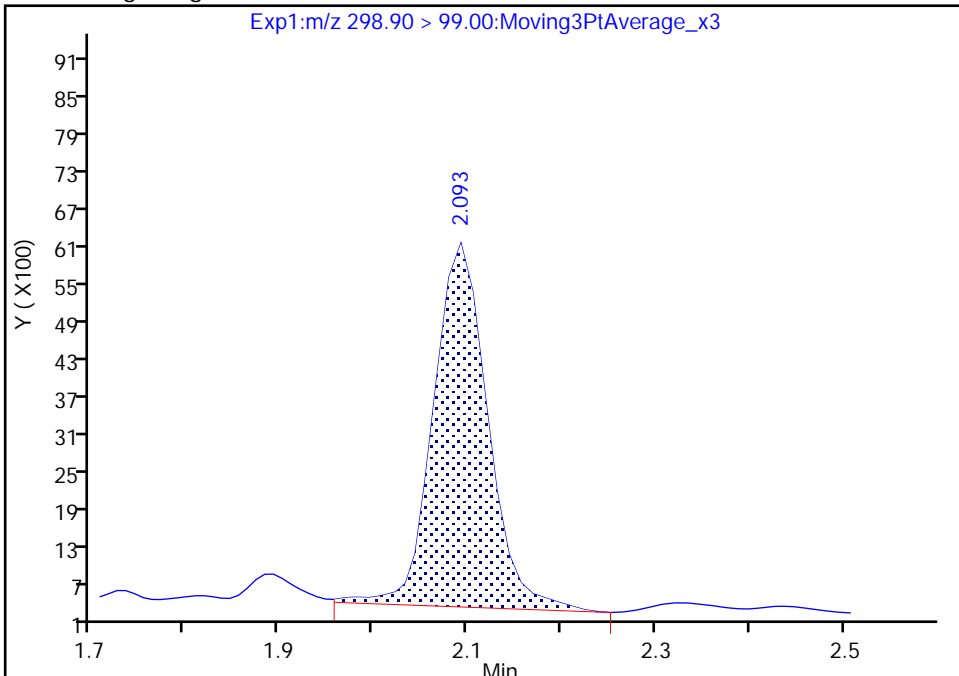
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

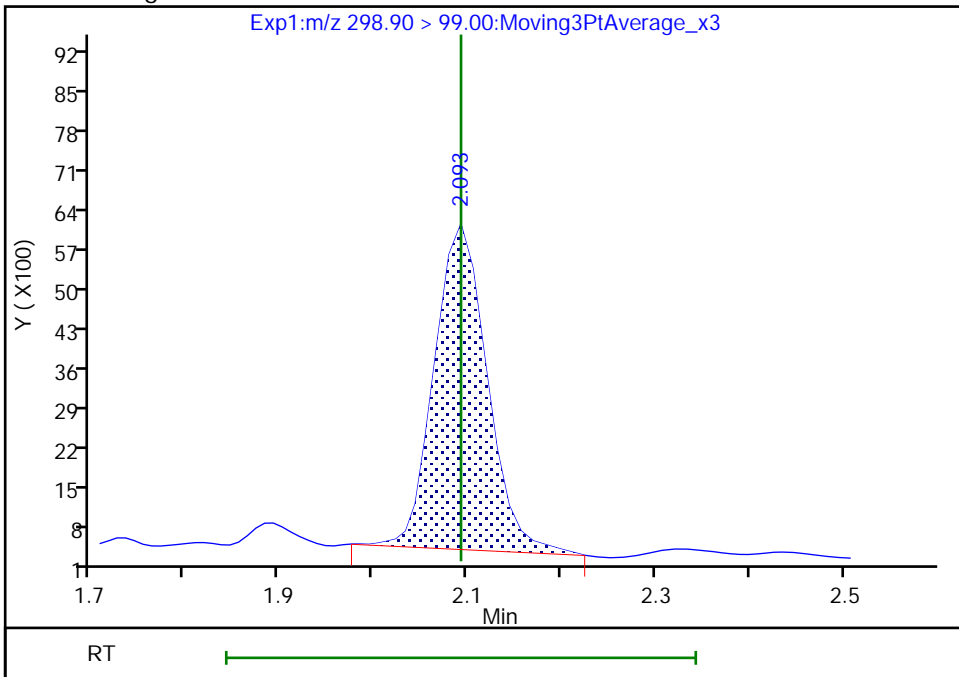
RT: 2.09
Area: 23426
Amount: 0.695327
Amount Units: ng/ml

Processing Integration Results



RT: 2.09
Area: 22511
Amount: 0.695327
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:50:25
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

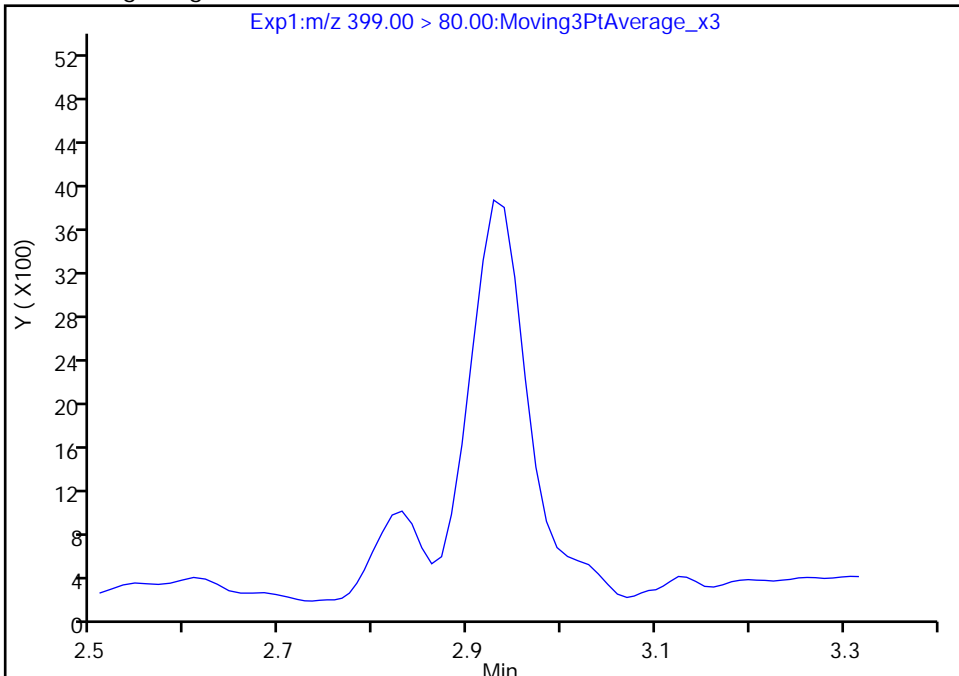
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

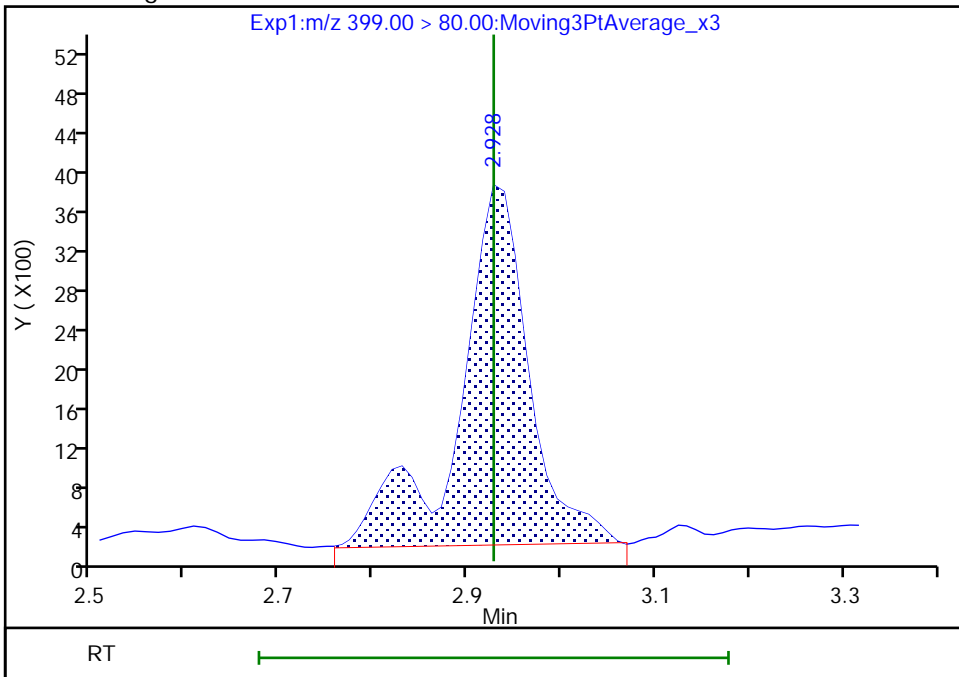
Not Detected
Expected RT: 2.93

Processing Integration Results



RT: 2.93
Area: 18934
Amount: 0.403608
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:51:35
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

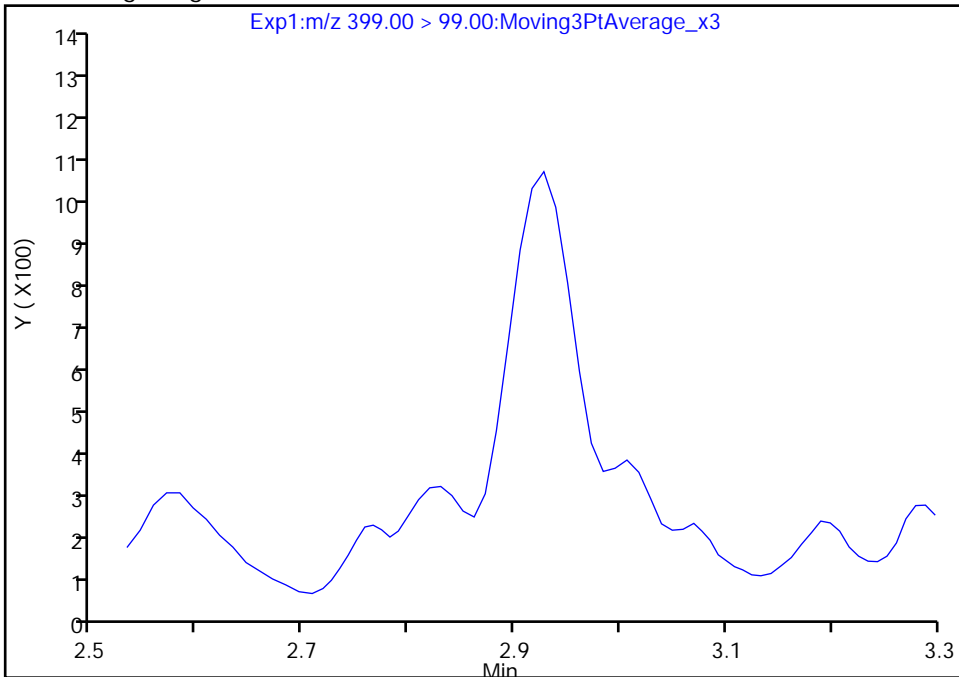
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

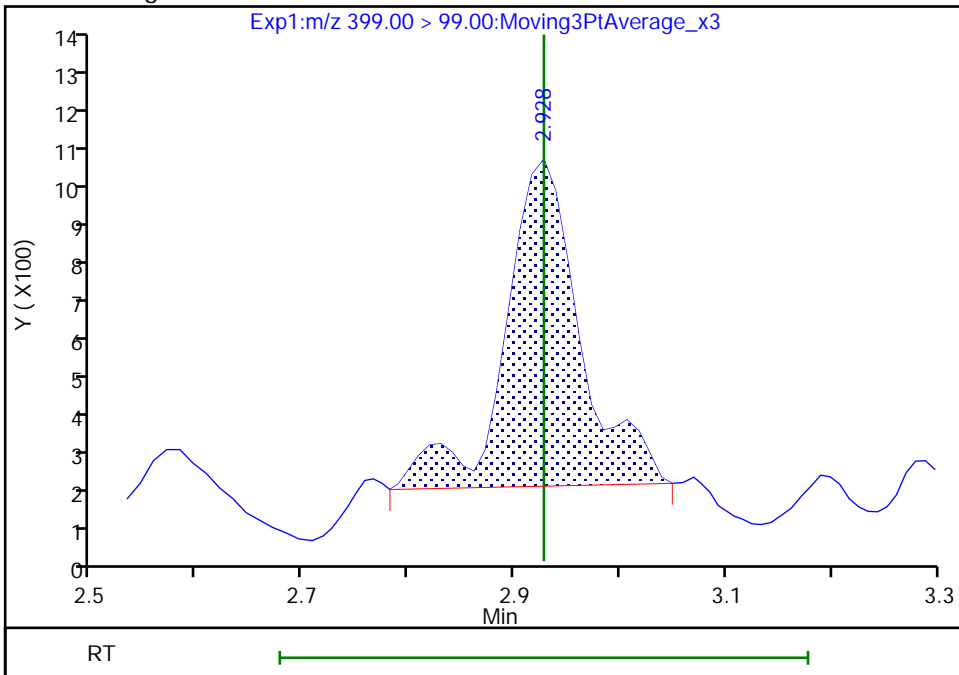
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 3938
Amount: 0.403608
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

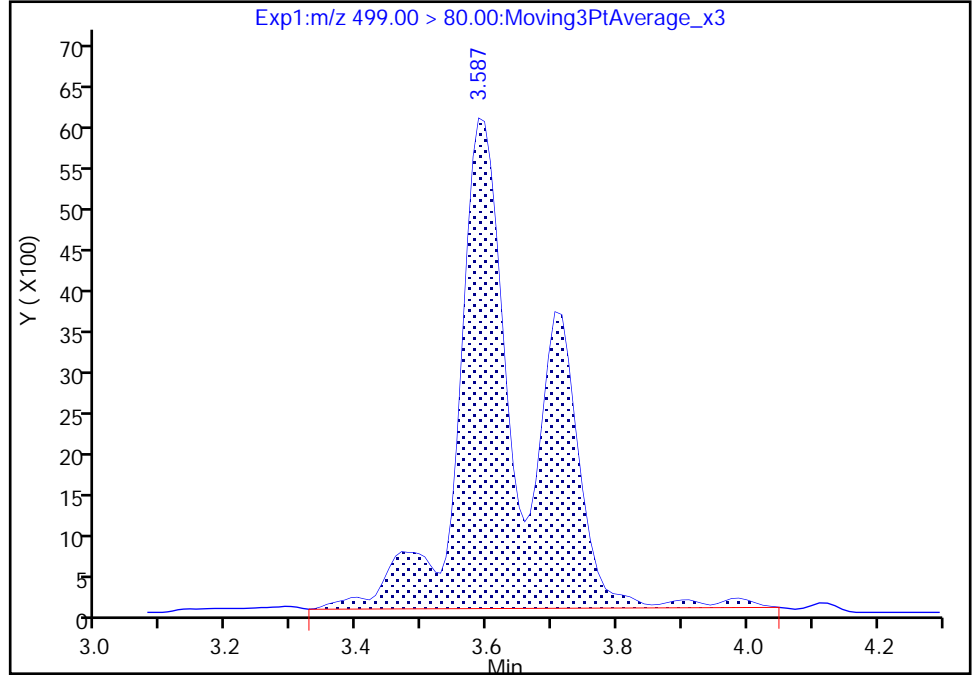
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

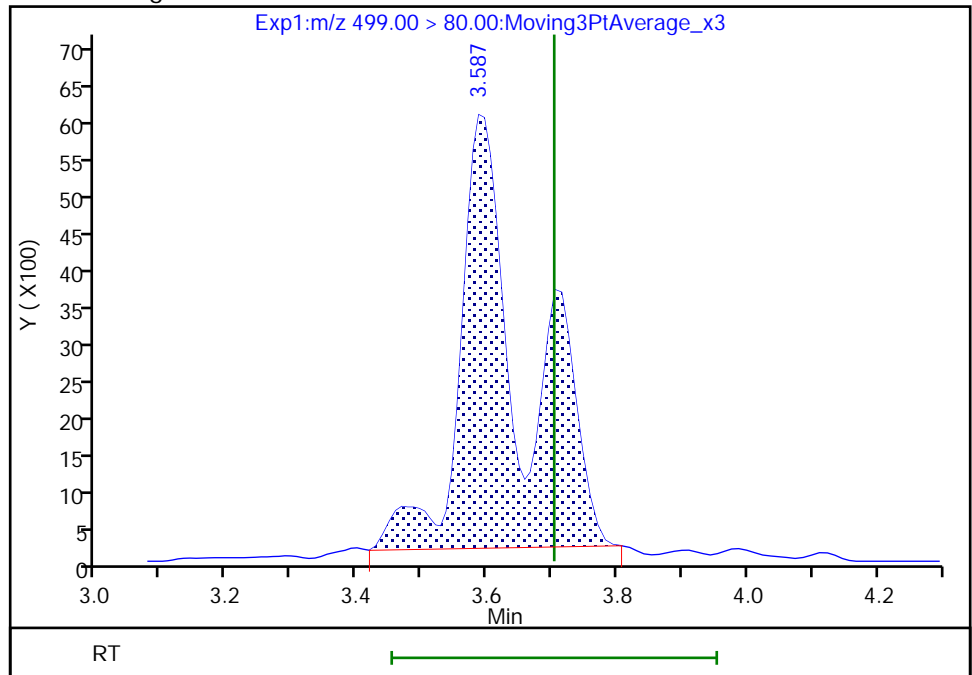
RT: 3.59
Area: 44925
Amount: 1.894395
Amount Units: ng/ml

Processing Integration Results



RT: 3.59
Area: 40434
Amount: 1.705019
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

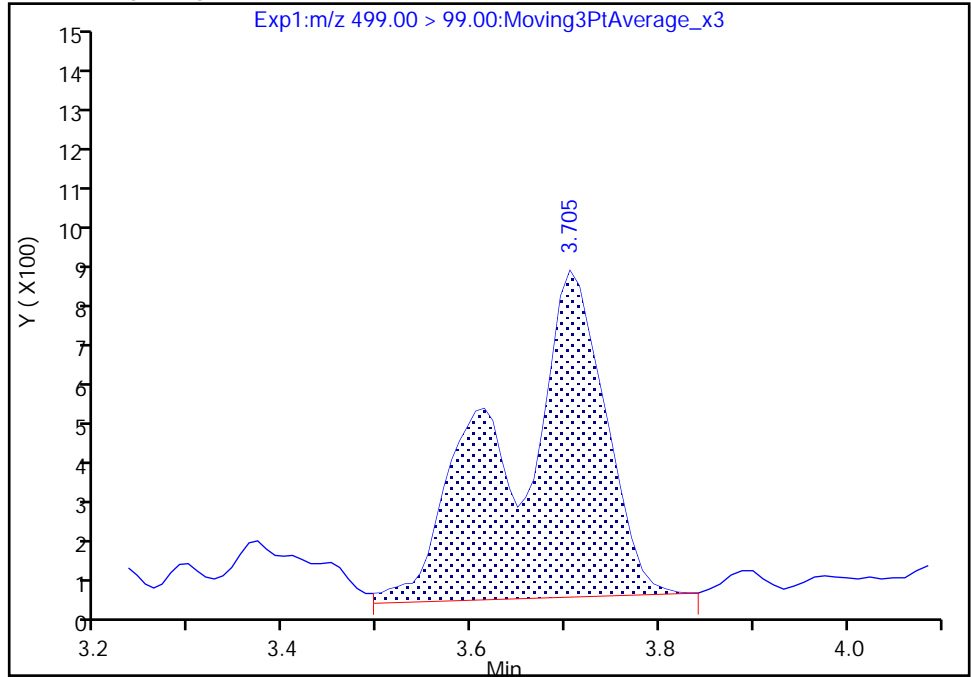
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

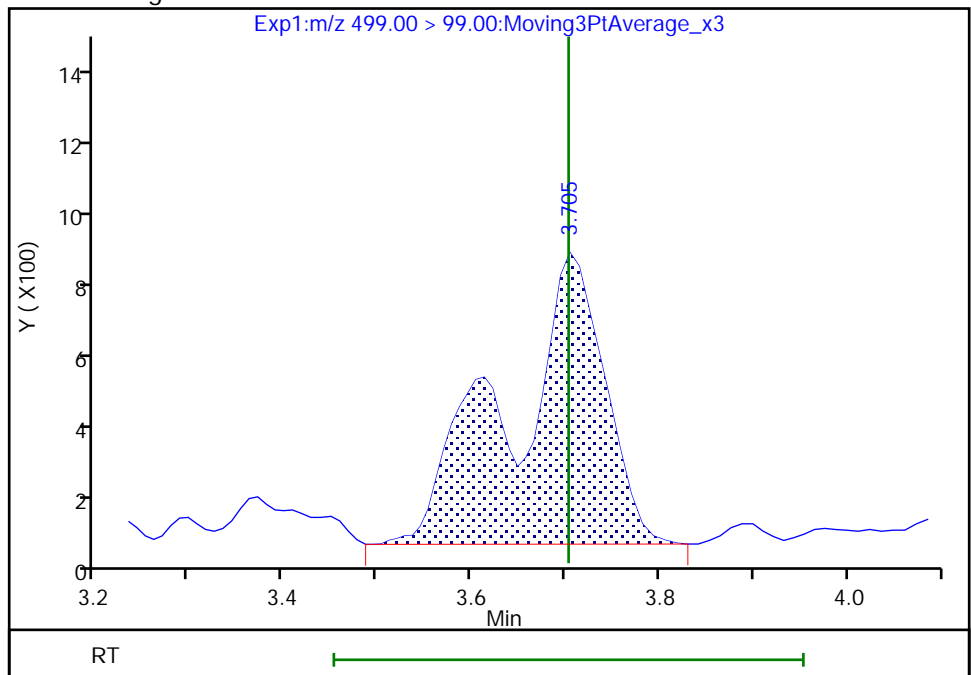
RT: 3.70
Area: 6021
Amount: 1.894395
Amount Units: ng/ml

Processing Integration Results



RT: 3.70
Area: 5761
Amount: 1.705019
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:52:39

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

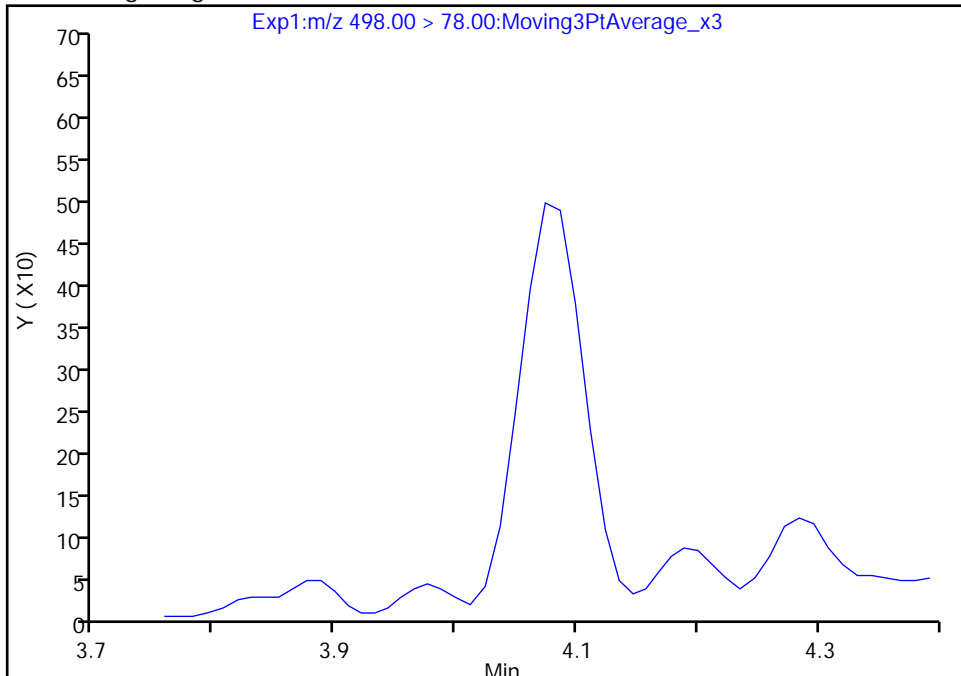
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

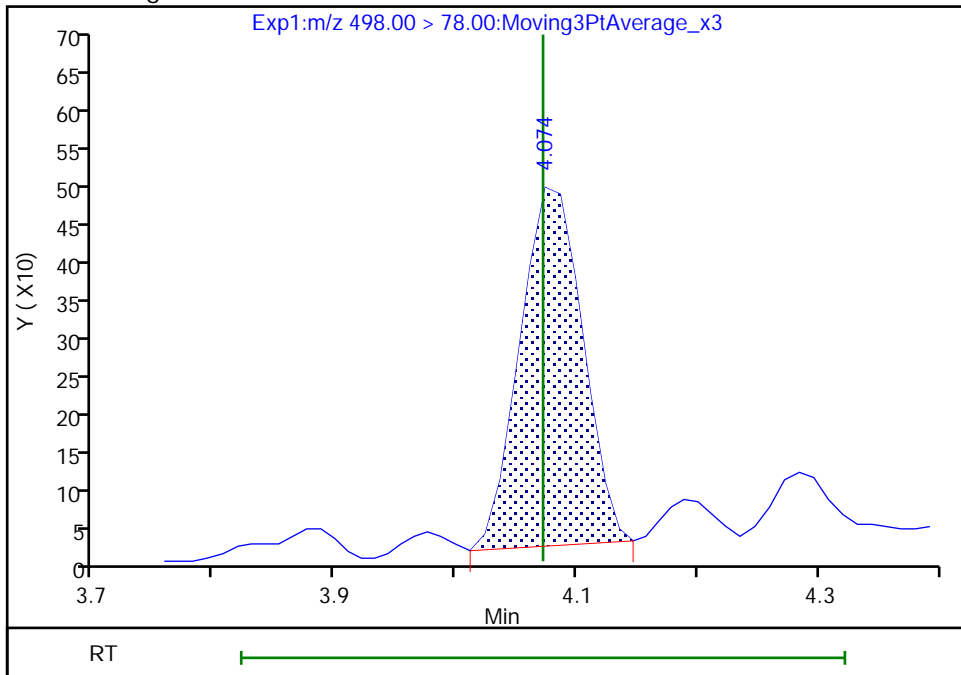
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.07
Area: 1717
Amount: 0.042617
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:53:18
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

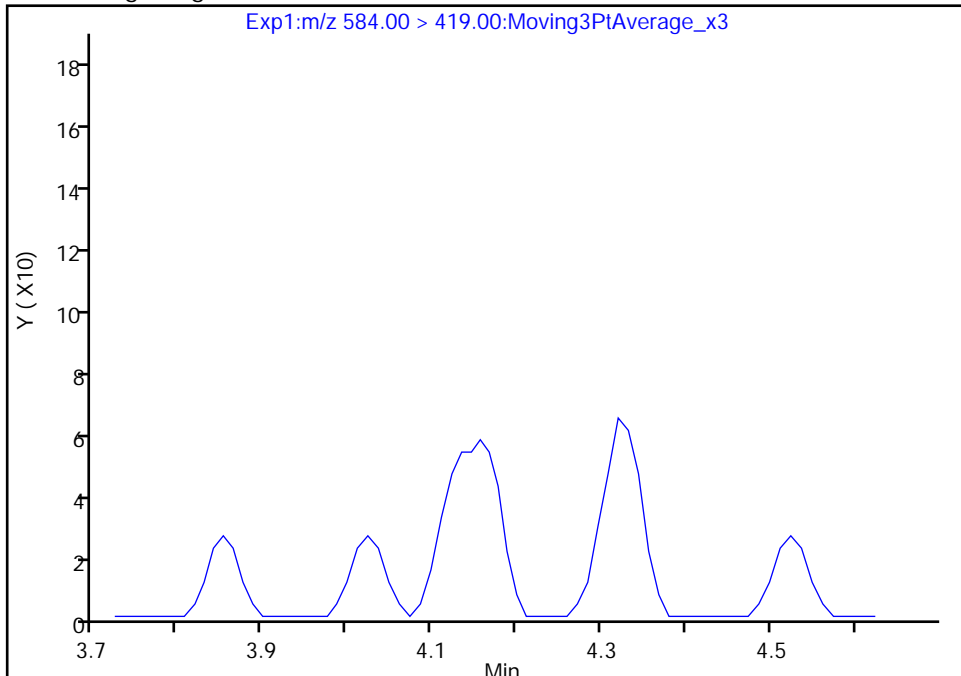
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E008.d
Injection Date: 02-Aug-2019 04:45:30 Instrument ID: LC812
Lims ID: 480-156213-F-5-A Lab Sample ID: 200-156213-5
Client ID: 356023-MW12B 190
Operator ID: lc812tech ALS Bottle#: 1 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

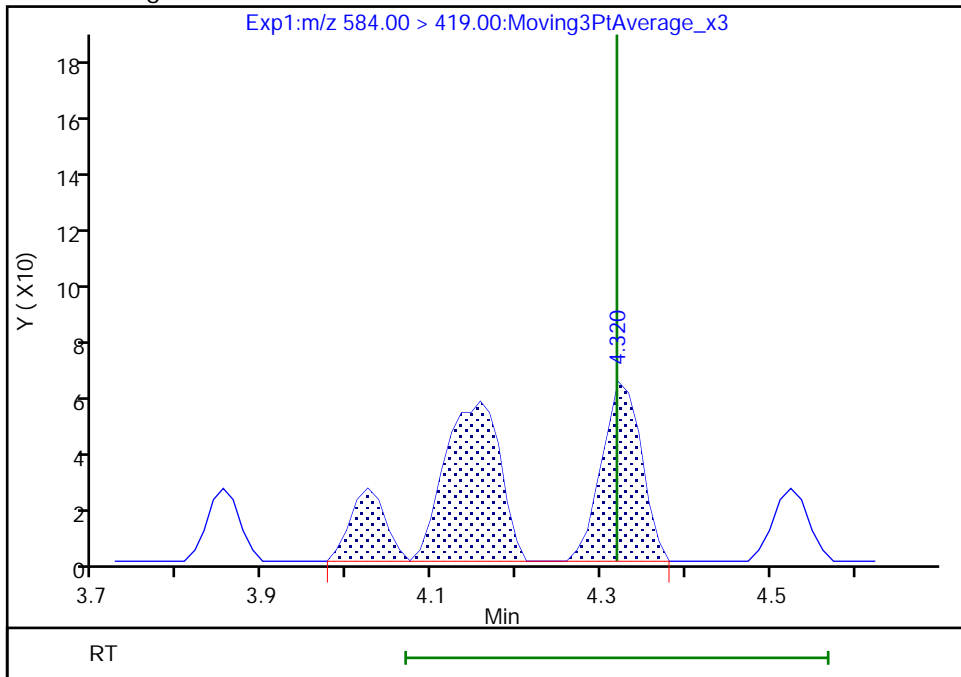
Signal: 1

Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results



RT: 4.32
Area: 539
Amount: 0.196597
Amount Units: ng/ml

Reviewer: manopan, 06-Aug-2019 16:53:50
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11B Lab Sample ID: 480-156213-6
 Matrix: Water Lab File ID: SC080119E009.d
 Analysis Method: 537 (modified) Date Collected: 07/10/2019 11:37
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 305.3 (mL) Date Analyzed: 08/02/2019 04:53
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.6	0.82
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.6	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.6	0.62
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.75
335-67-1	Perfluorooctanoic acid (PFOA)	0.53	J	1.6	0.52
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.63
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.66
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.78
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.74
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.50
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.2	8.2
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.8
39108-34-4	8:2 FTS	ND		16	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11B Lab Sample ID: 480-156213-6
 Matrix: Water Lab File ID: SC080119E009.d
 Analysis Method: 537 (modified) Date Collected: 07/10/2019 11:37
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 305.3 (mL) Date Analyzed: 08/02/2019 04:53
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	85		25-150
STL00992	13C4 PFBA	93		25-150
STL01893	13C5 PFPeA	94		25-150
STL00993	13C2 PFHxA	97		50-150
STL01892	13C4 PFHpA	96		50-150
STL00990	13C4 PFOA	92		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	91		50-150
STL00997	13C2 PFUnA	88		50-150
STL00998	13C2 PFDoA	82		50-150
STL02116	13C2 PFTeDA	65		50-150
STL02337	13C3 PFBS	96		50-150
STL00994	18O2 PFHxS	97		50-150
STL00991	13C4 PFOS	94		50-150
STL02118	d3-NMeFOSAA	74		50-150
STL02117	d5-NEtFOSAA	71		50-150
STL02279	M2-6:2 FTS	108		25-150
STL02280	M2-8:2 FTS	97		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
 Lims ID: 480-156213-F-6-A
 Client ID: 356023-MW11B
 Sample Type: Client
 Inject. Date: 02-Aug-2019 04:53:34 ALS Bottle#: 2 Worklist Smp#: 9
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-6-A
 Misc. Info.: 200-0037095-009 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:59:21
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.508	3476762	46.7	93.4	12039	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.708	1.699	0.009	1.000	18408	0.2872		3.2		M
D 3 13C5 PFPeA	267.90 > 223.00	2.068	2.054	0.014	0.615	3301998	47.2	94.4	7805	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.068	2.067	0.001	1.000	13713	0.2146		0.8		M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	3062152	44.6	95.9	615209	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.093	2.093	0.0	1.000	9822	0.1467	Target=1.90	15.2		M
298.90 > 99.00	2.093	2.093	0.0	1.000	6178		1.59(0.95-2.85)	6.6		
D 7 13C2 PFHxA	315.00 > 270.00	2.471	2.459	0.012	0.734	3379392	48.6	97.3	6401	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.471	2.459	0.012	1.000	16049	0.2306	Target=13.23	4.7		M
313.00 > 119.00	2.471	2.459	0.012	1.000	925		17.35(6.61-19.84)	1.6		M
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.870	1837059	45.7	96.5	7468	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.874	3278236	48.2	96.3	8592	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	6633	0.1296	Target=3.37	9.7		M
399.00 > 99.00	2.928	2.928	0.0	1.000	3091		2.15(1.69-5.06)	4.2		M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.939	2.928	0.011	1.000	5179	0.0843	Target=3.76	1.7		M
363.00 > 169.00	2.939	2.928	0.011	1.000	2077		2.49(1.88-5.65)	9.0		M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.346	3.335	0.011	0.995	429500	51.3		108	1243	
13 1H,1H,2H,2H-perfluorooctanesulfonyl fluoride										
427.00 > 407.00	3.355	3.336	0.019	1.003	9057	0.5840			19.5	M
D 14 13C4 PFOA										
417.00 > 372.00	3.364	3.344	0.020	1.000	3302450	46.0		91.9	8591	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.364	3.355	0.009	1.000	23260	0.3236	Target=2.84		2.9	M
413.00 > 169.00	3.364	3.355	0.009	1.000	9333		2.49(1.42-4.25)		29.3	M
* 62 13C2 PFOA										
415.00 > 370.00	3.364	3.355	0.009		3951300	50.0			10455	
D 18 13C4 PFOS										
503.00 > 80.00	3.713	3.695	0.018	1.104	1498833	44.7		93.5	4463	
D 19 13C5 PFNA										
468.00 > 423.00	3.734	3.715	0.019	1.110	3079265	47.0		93.9	12475	
20 Perfluorononanoic acid										
463.00 > 419.00	3.734	3.723	0.011	1.000	2515	0.0451	Target=8.15		1.0	M
463.00 > 169.00	3.745	3.723	0.022	1.003	418		6.02(4.08-12.23)		5.4	M
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.036	0.011	1.203	2393235	45.6		91.3	10699	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.060	4.036	0.024	1.207	359154	46.5		97.0	830	
D 21 13C8 FOSA										
506.00 > 78.00	4.072	4.061	0.011	1.210	2554579	42.4		84.8	11388	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.072	4.072	0.0	1.000	2675	0.0574			27.5	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.178	0.009	1.245	246703	36.8		73.7	2644	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.284	2098448	43.9		87.9	10232	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.307	4.307	0.0	0.997	4602	0.1278	Target=7.95		1.8	
563.00 > 169.00	4.307	4.307	0.0	0.997	648		7.10(3.98-11.93)		5.1	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.308	0.011	1.284	265689	35.6		71.2	950	
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.537	0.012	1.352	2095830	40.8		81.5	6627	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.965	0.014	1.480	2311050	32.6		65.3	7874	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.972	4.972	0.0	0.999	630	0.1024	Target=1.02		5.2	R
713.00 > 219.00	4.972	4.972	0.0	0.999	404		1.56(0.51-1.54)		9.0	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d

Injection Date: 02-Aug-2019 04:53:34

Instrument ID: LC812

Lims ID: 480-156213-F-6-A

Lab Sample ID: 200-156213-6

Client ID: 356023-MW11B

Operator ID: lc812tech

ALS Bottle#: 2

Worklist Smp#: 9

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

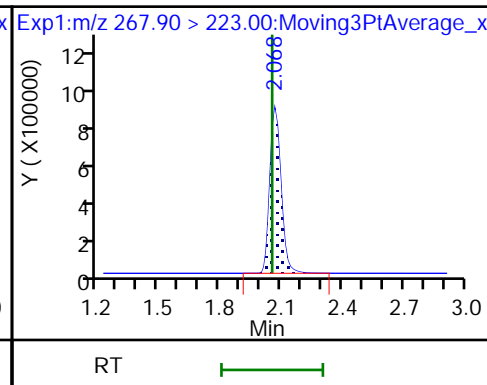
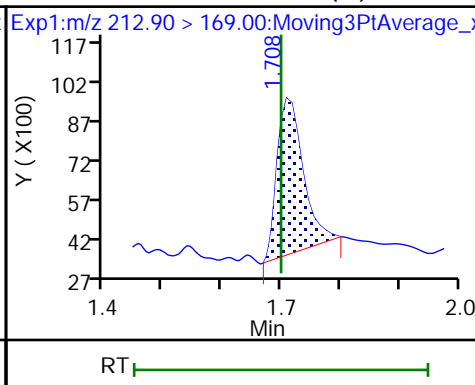
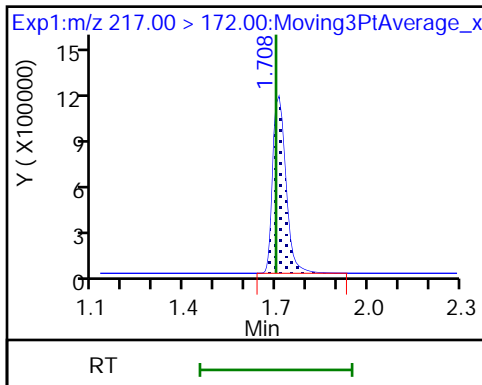
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

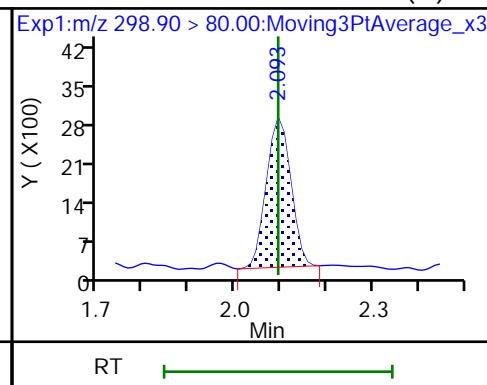
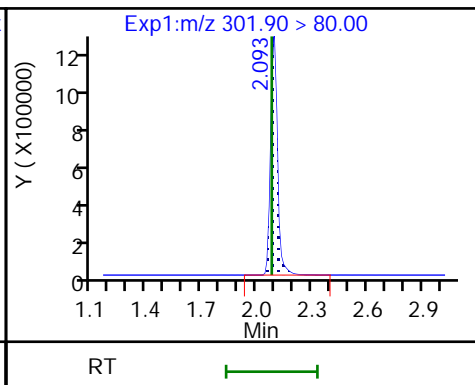
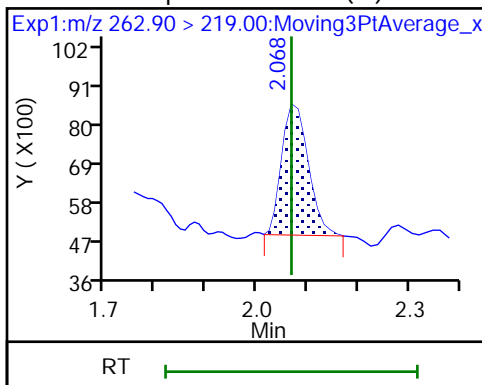
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

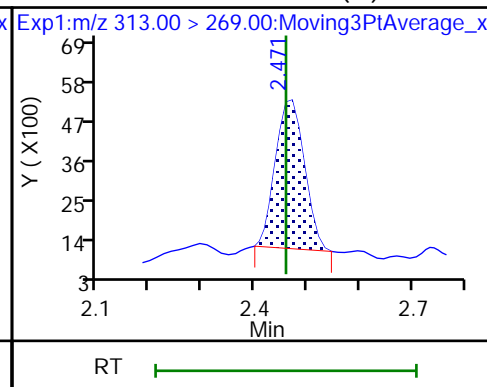
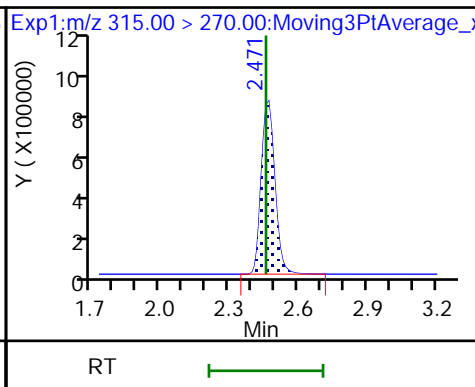
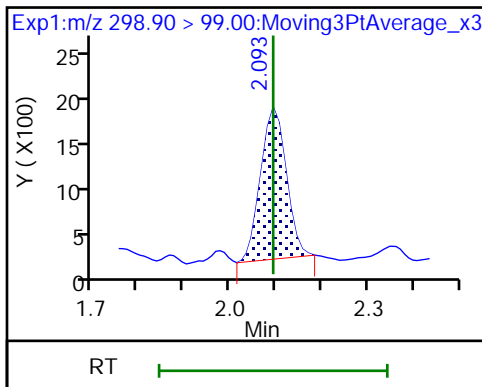
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

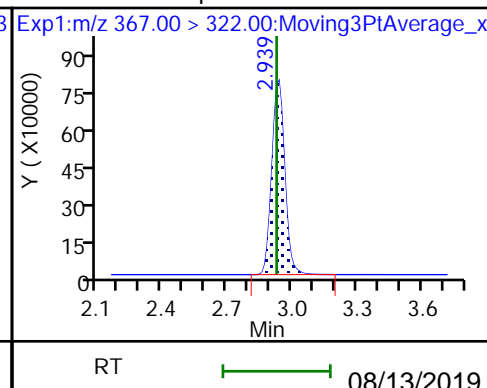
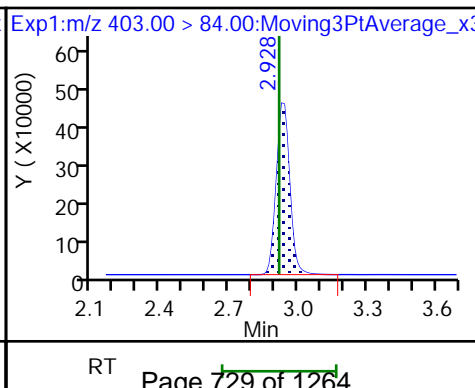
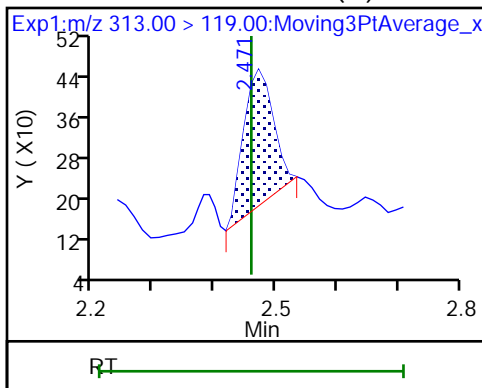
6 Perfluorohexanoic acid (M)

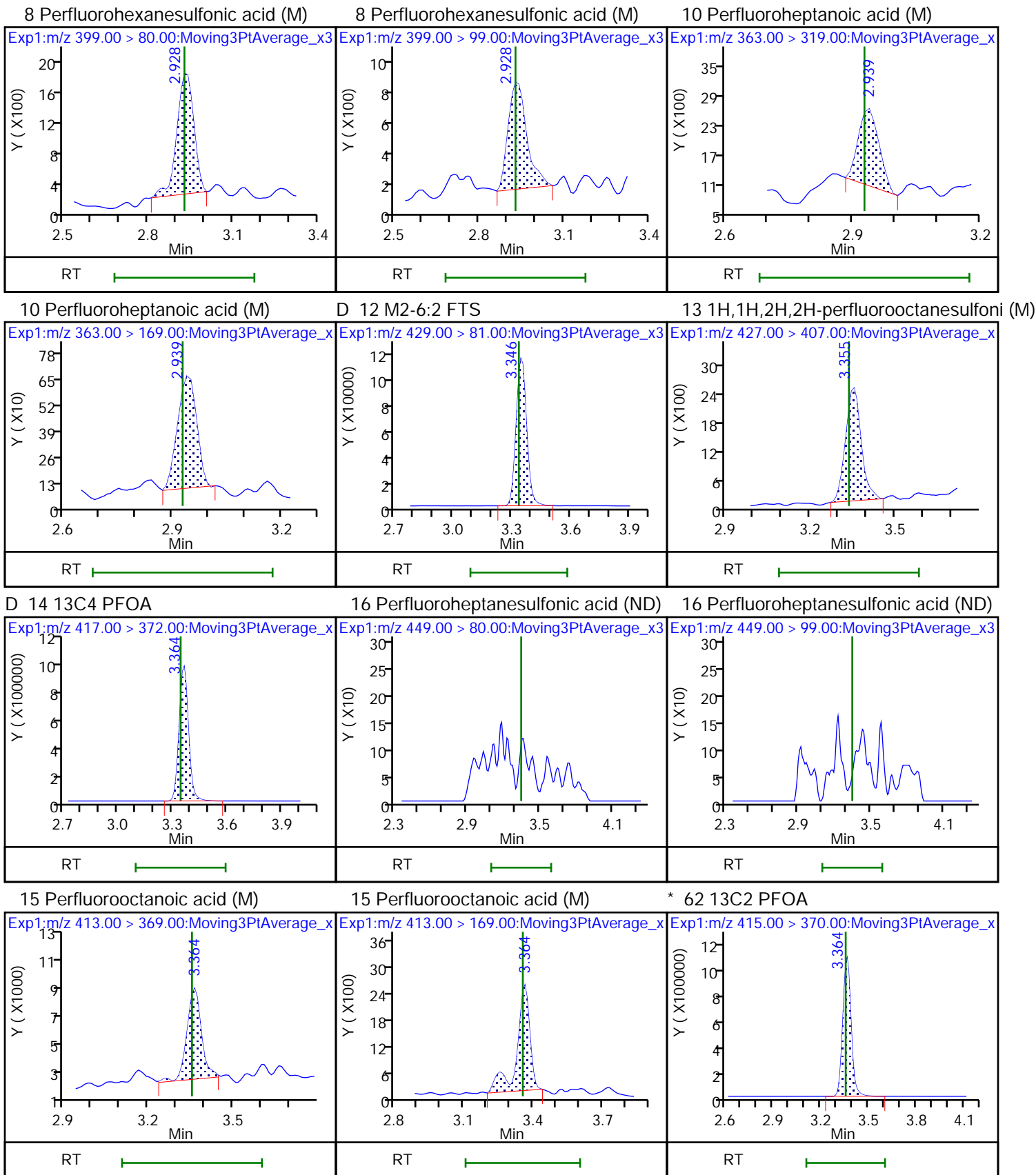


6 Perfluorohexanoic acid (M)

D 11 18O2 PFHxS

D 9 13C4 PFHpA

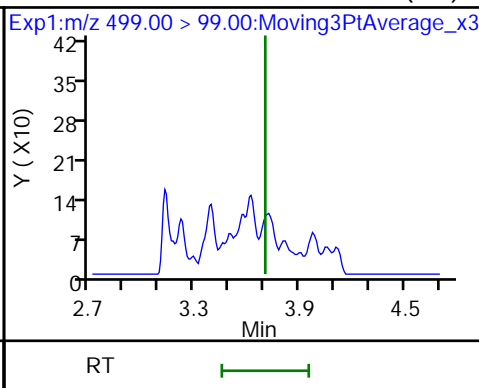
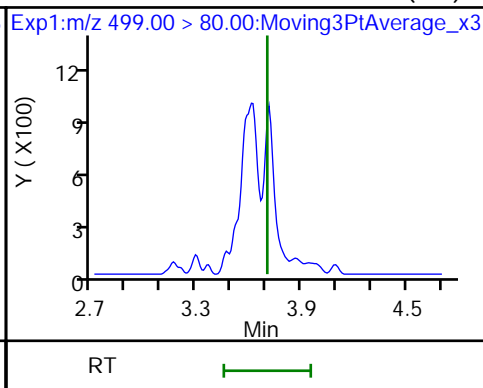
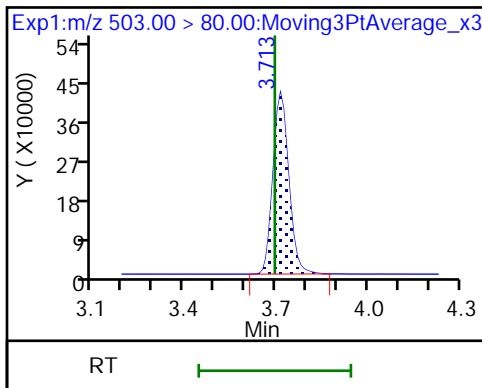




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (ND)

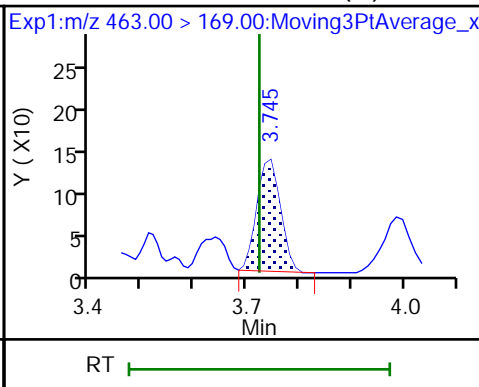
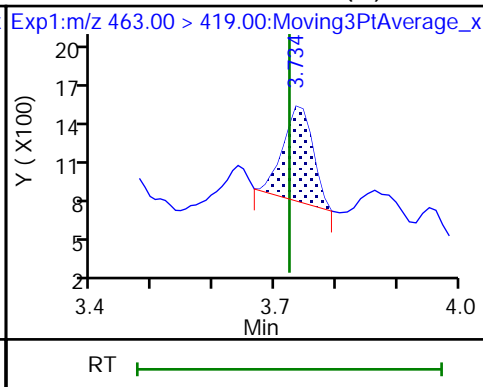
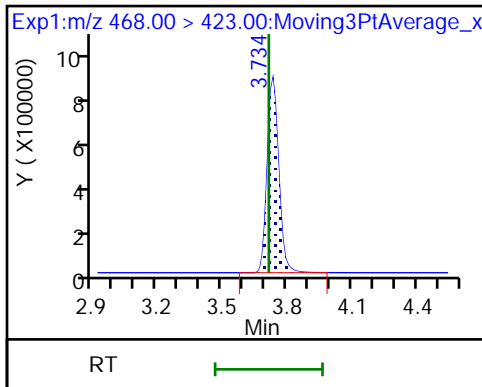
17 Perfluorooctanesulfonic acid (ND)



D 19 13C5 PFNA

20 Perfluorononanoic acid (M)

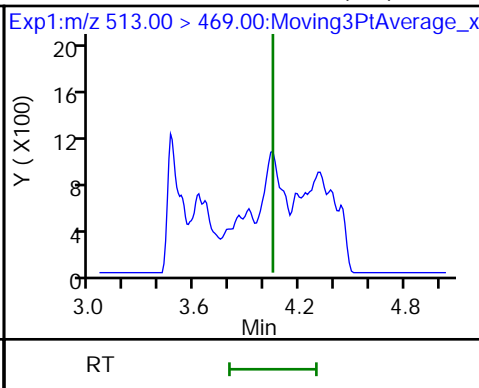
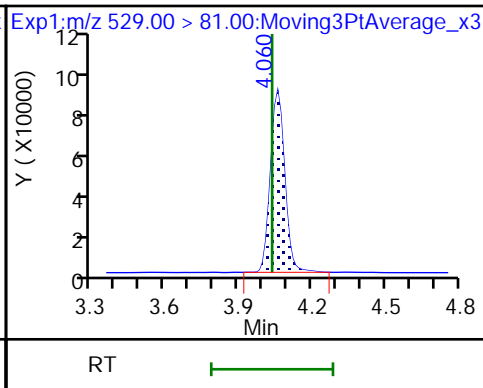
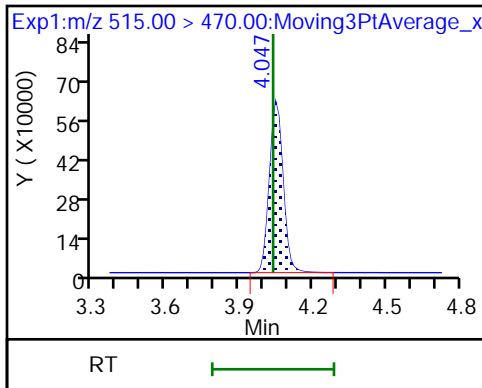
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

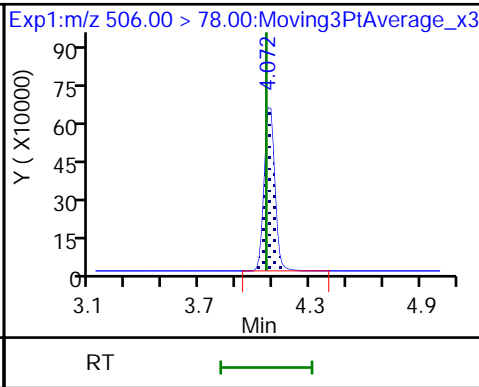
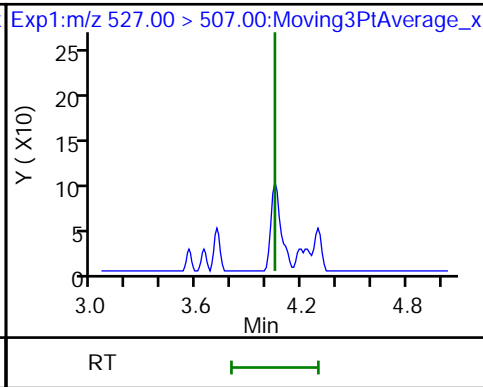
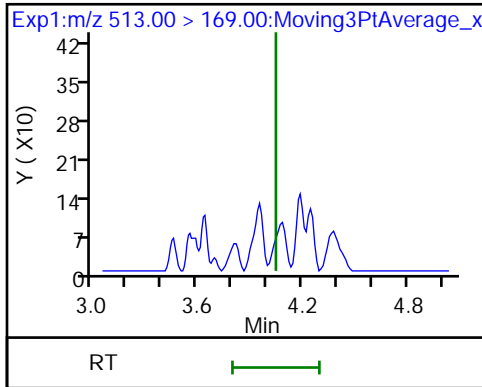
24 Perfluorodecanoic acid (ND)



24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (ND)

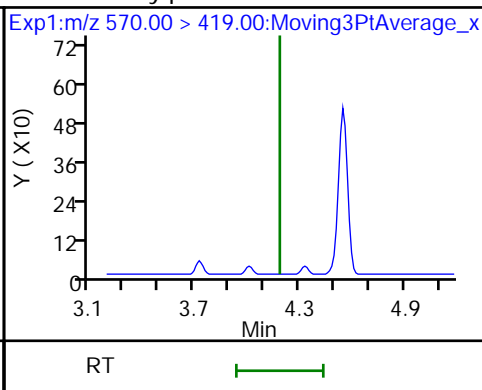
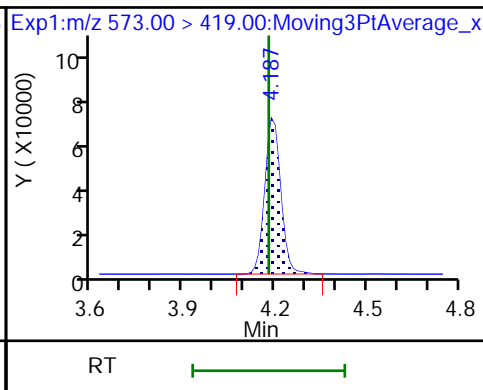
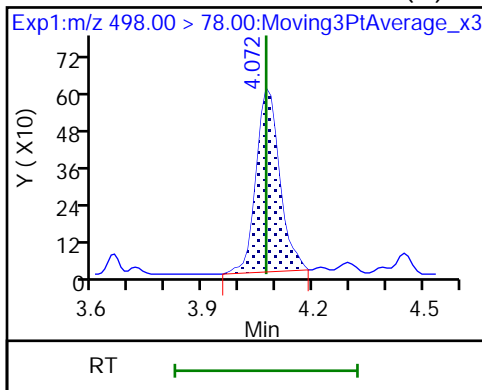
(ND) 3C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

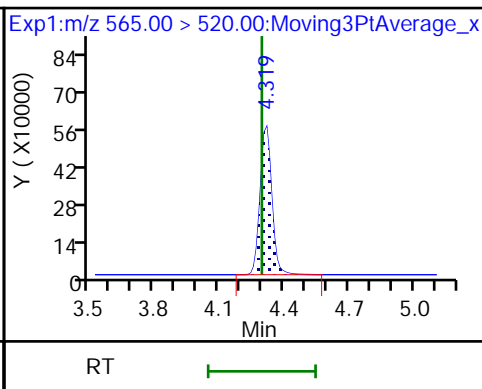
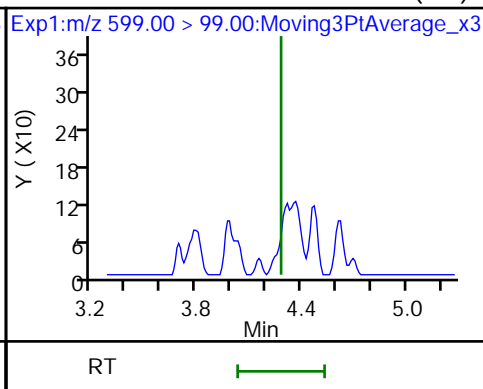
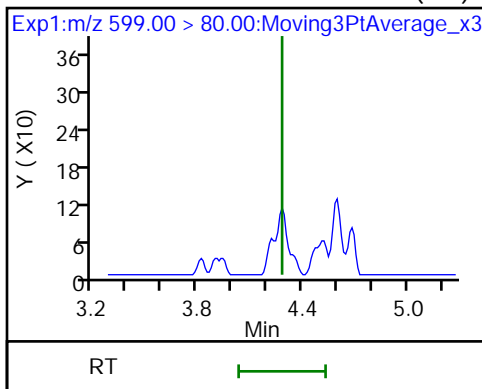
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

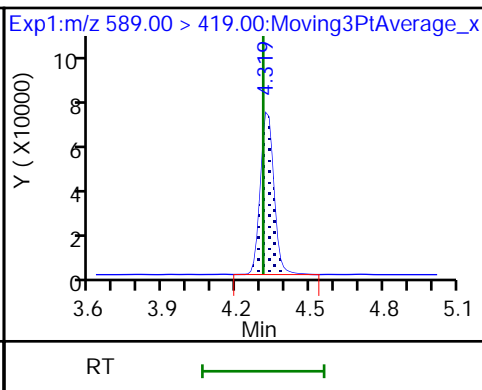
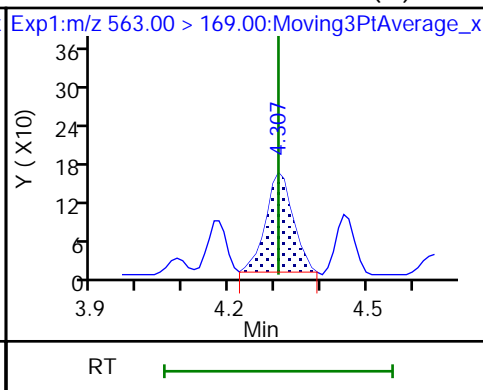
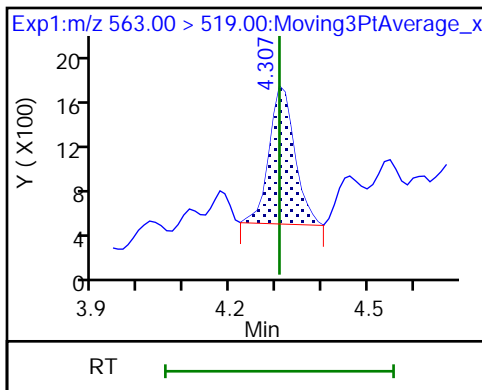
D 30 13C2 PFUoA



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid (M)

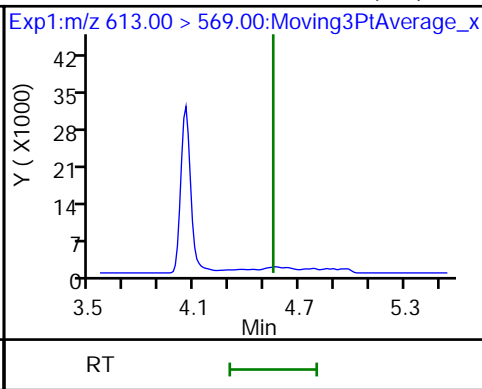
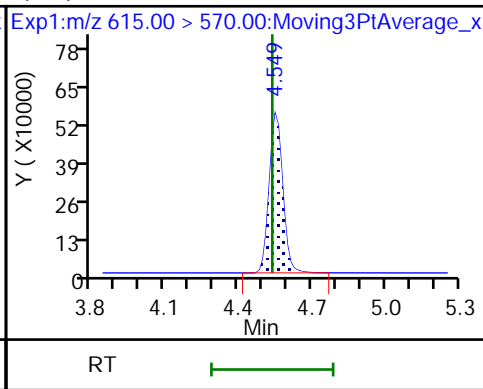
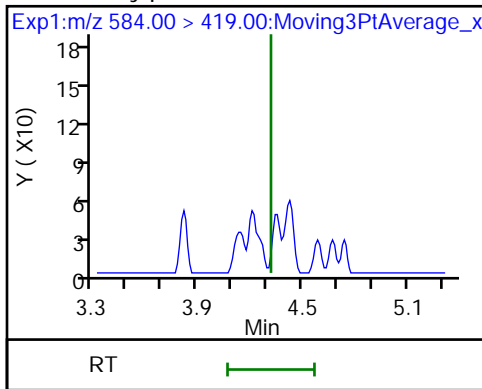
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (ND)

D 33 13C2 PFDoA

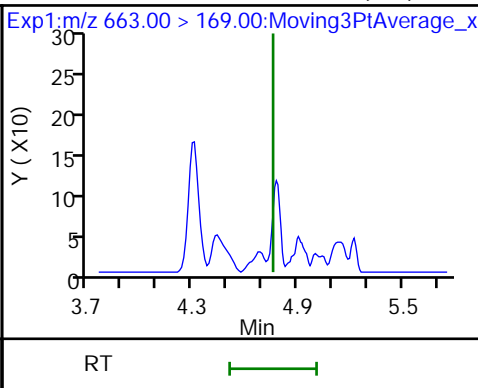
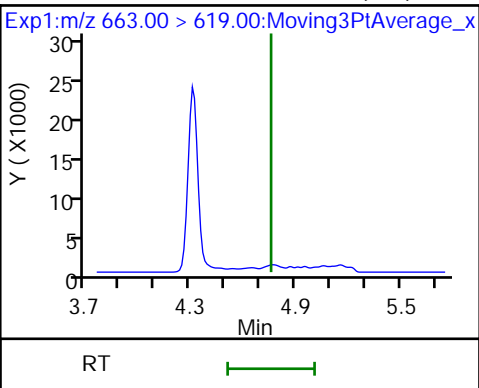
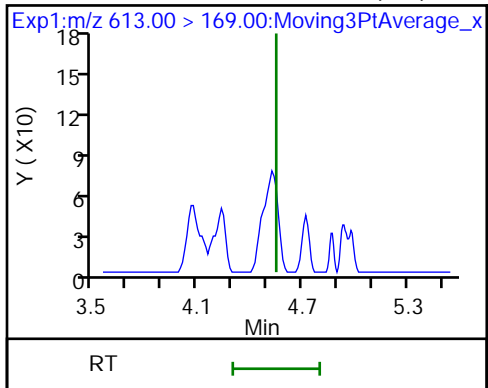
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

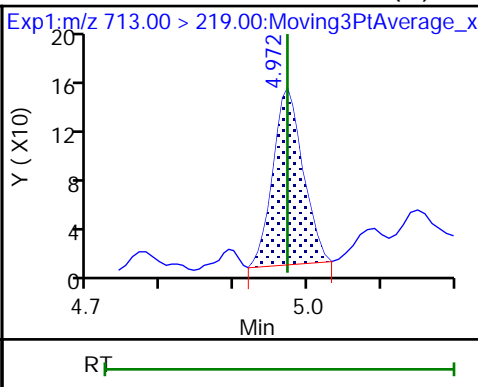
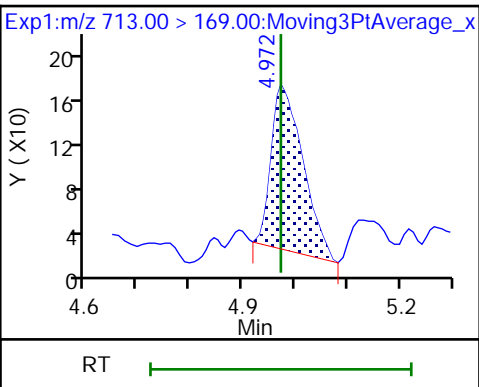
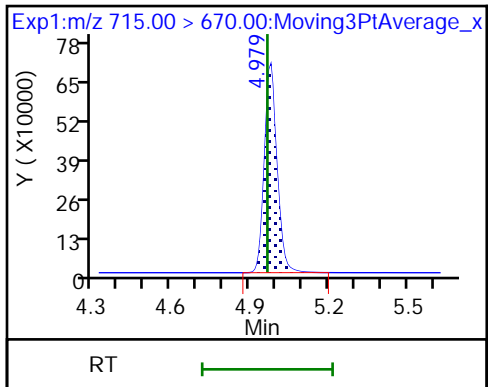
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)



Euofins TestAmerica, Burlington

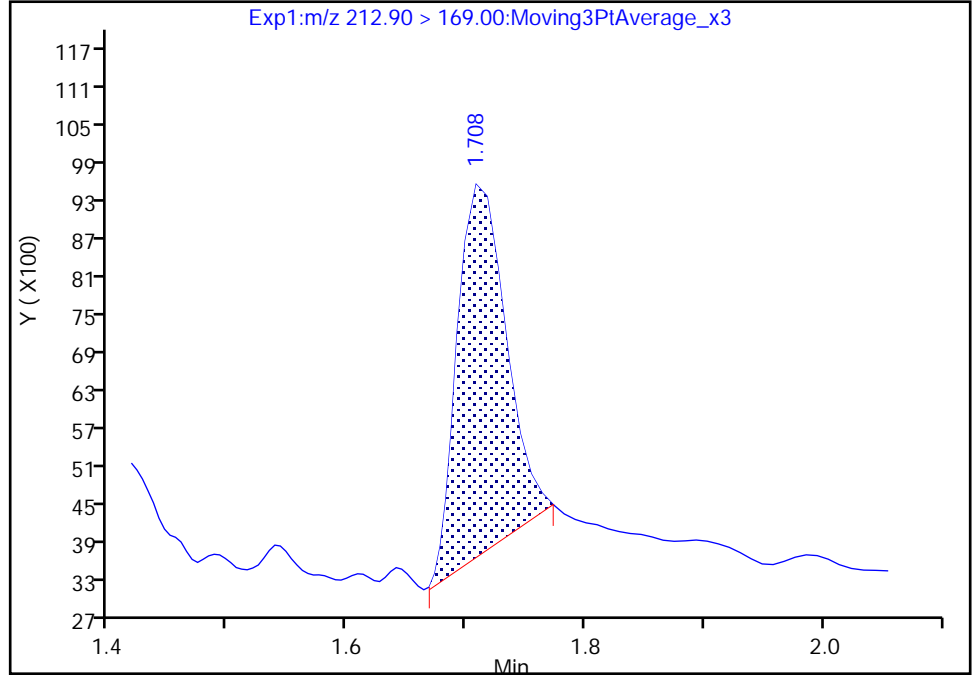
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

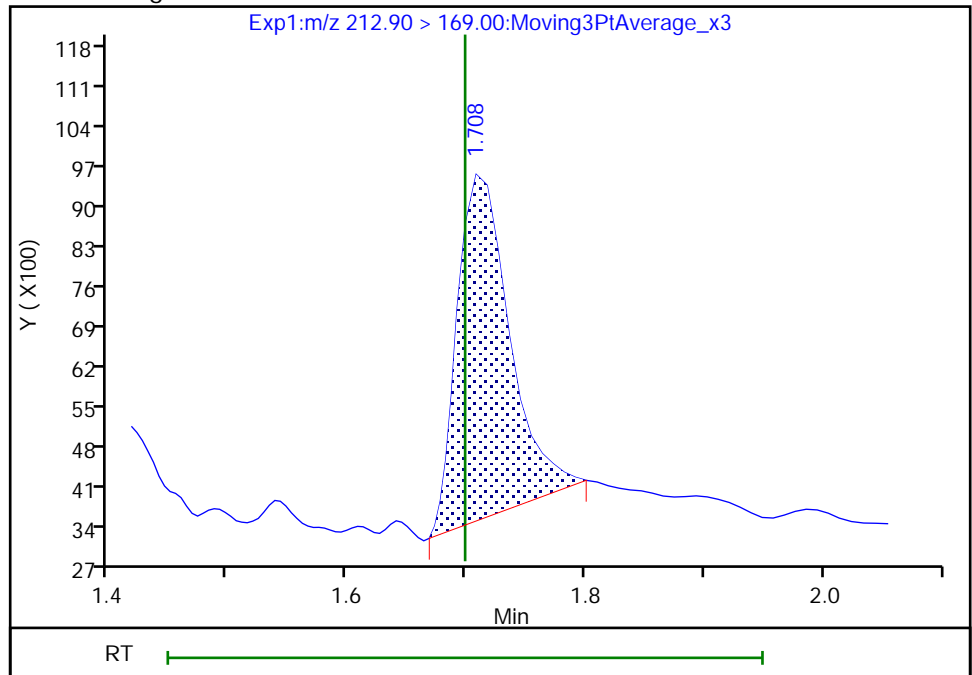
RT: 1.71
Area: 16614
Amount: 0.259240
Amount Units: ng/ml

Processing Integration Results



RT: 1.71
Area: 18408
Amount: 0.287233
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:55:00
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

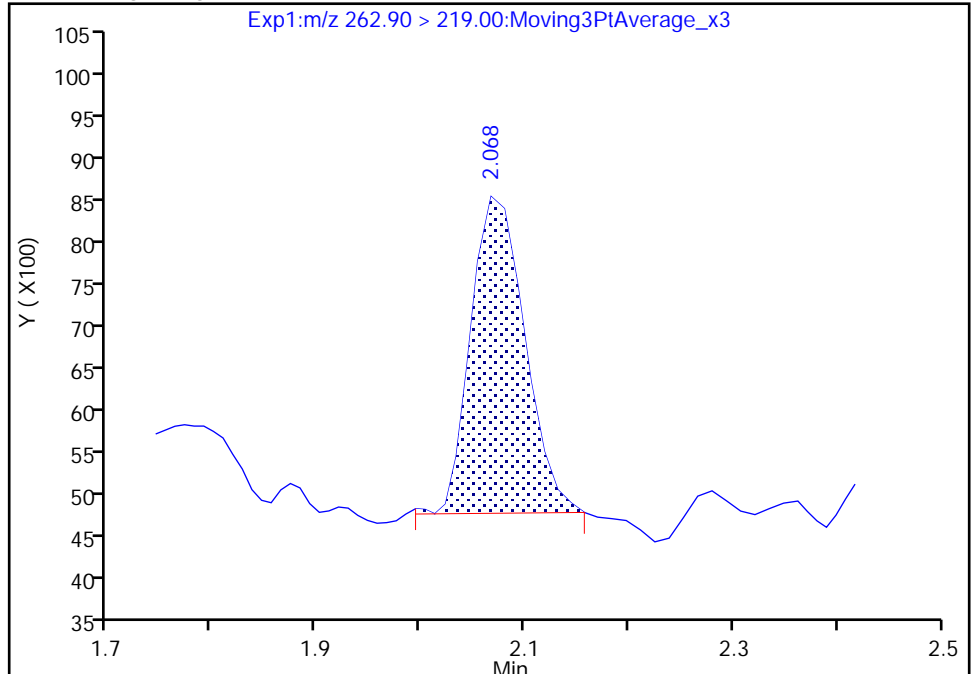
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

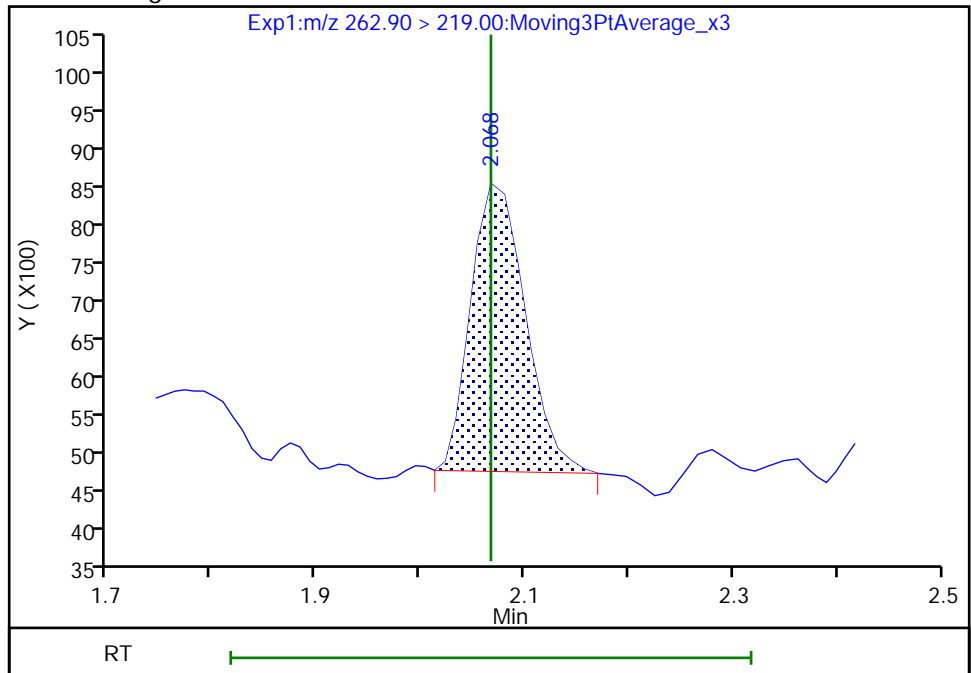
RT: 2.07
Area: 13511
Amount: 0.211425
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 13713
Amount: 0.214586
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:55:08
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

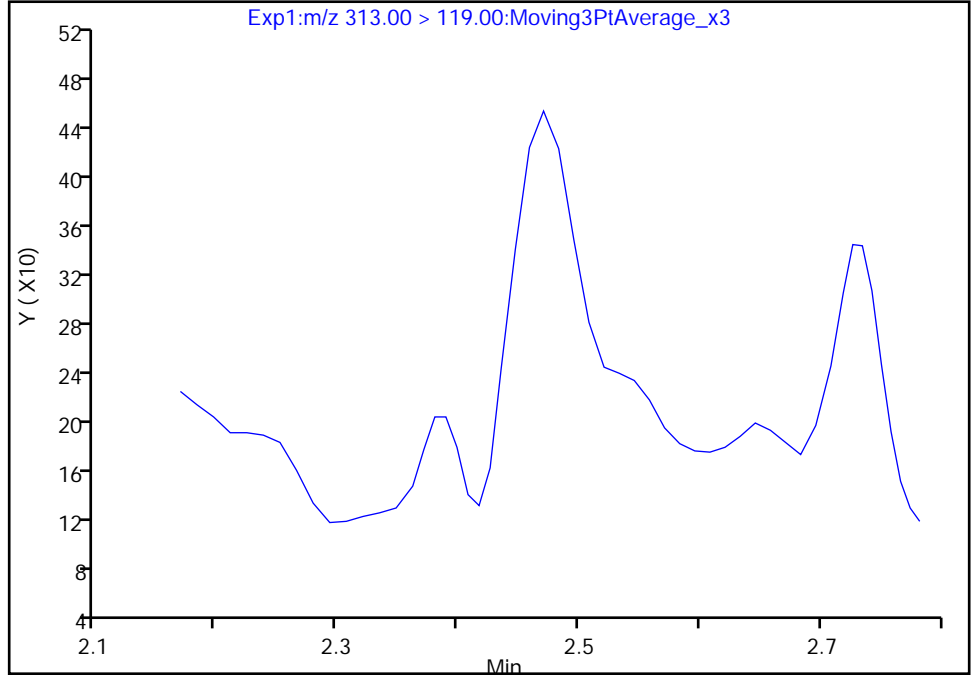
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

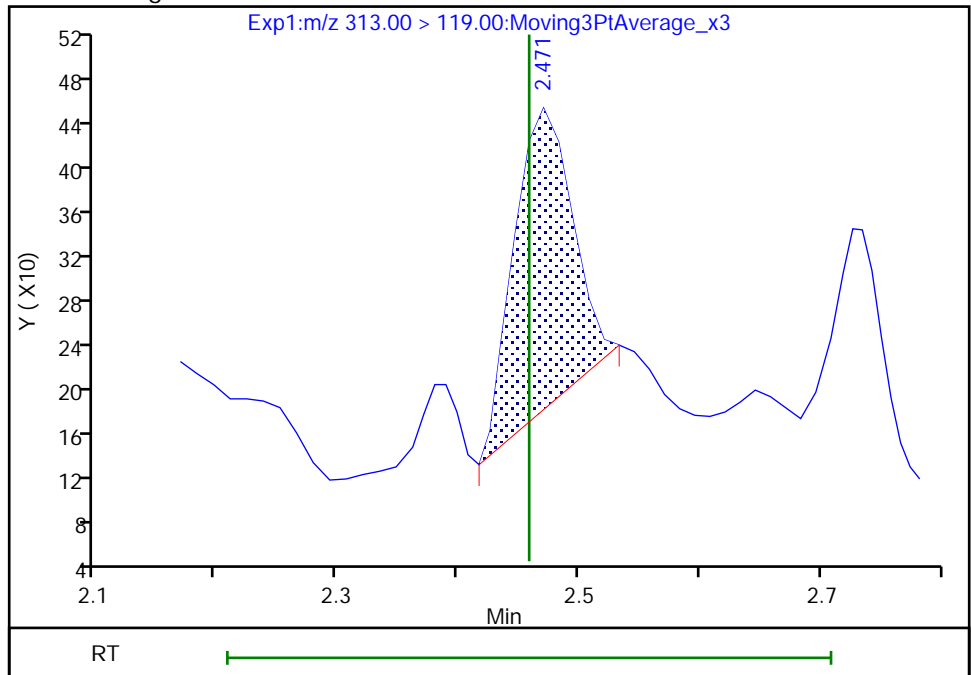
Not Detected
Expected RT: 2.46

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 925
Amount: 0.230587
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:55:29
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

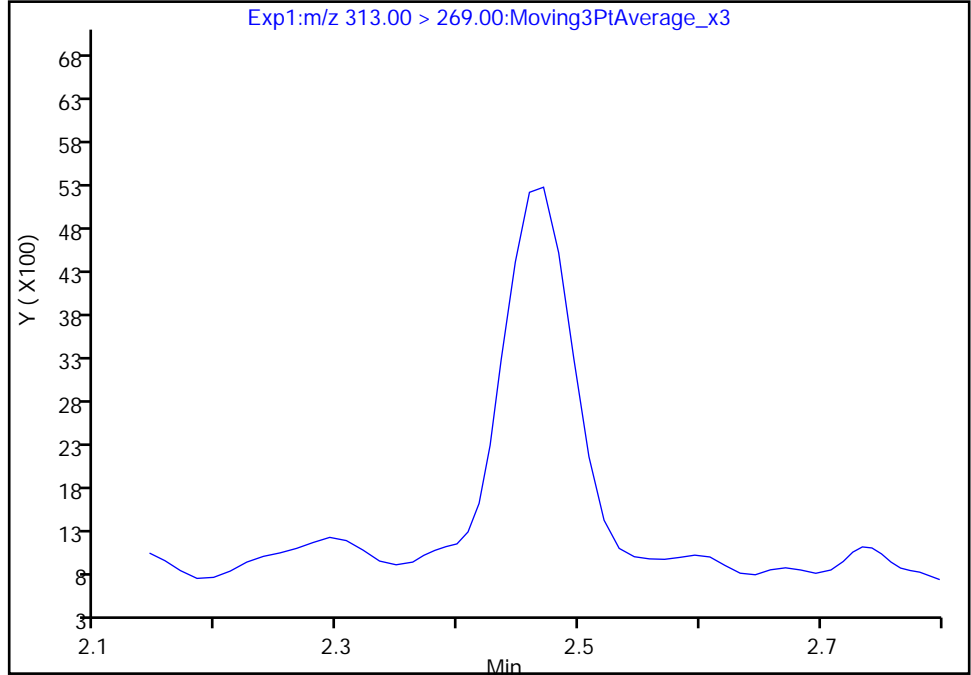
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

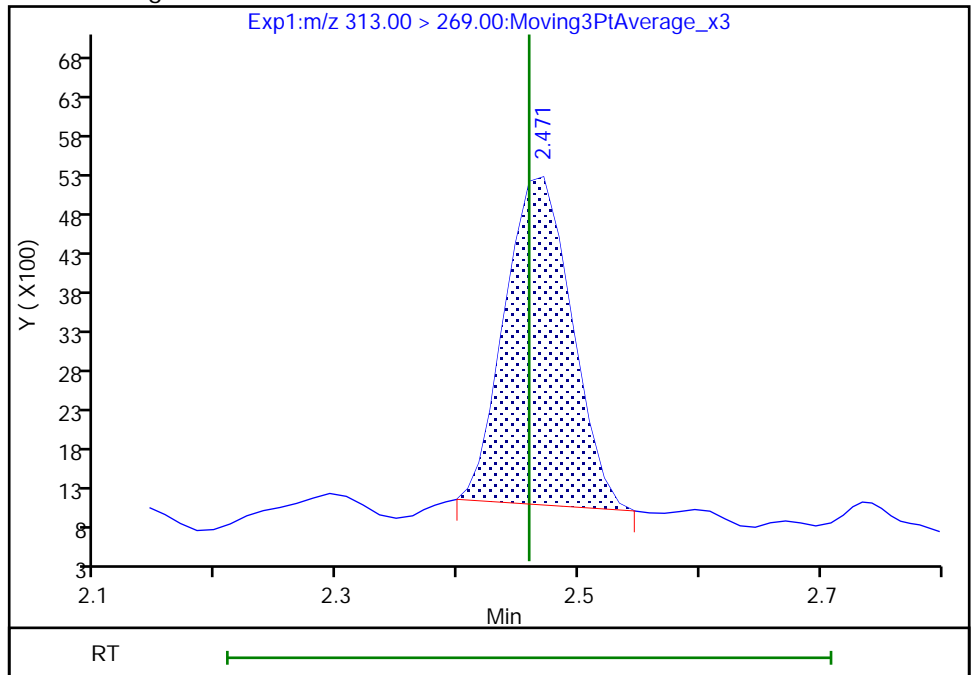
Not Detected
Expected RT: 2.46

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 16049
Amount: 0.230587
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

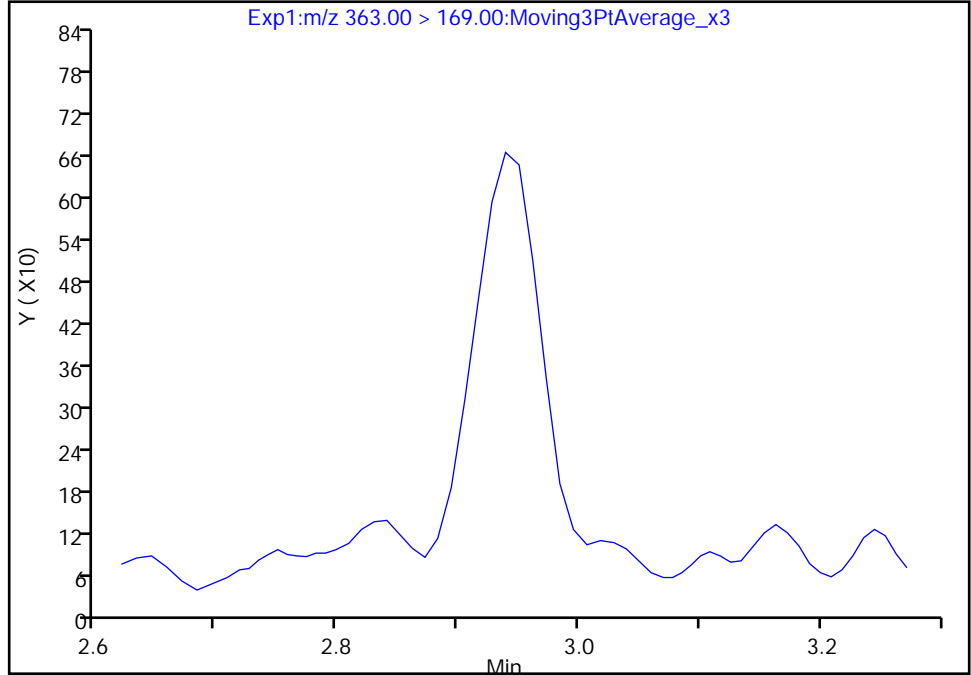
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

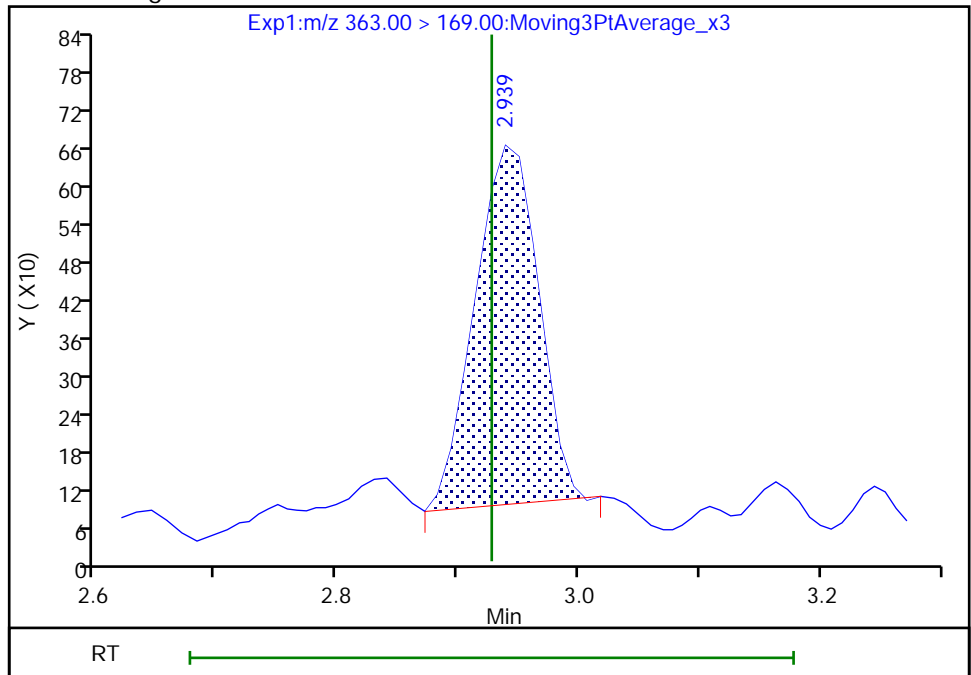
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 2077
Amount: 0.084333
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:57:31
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

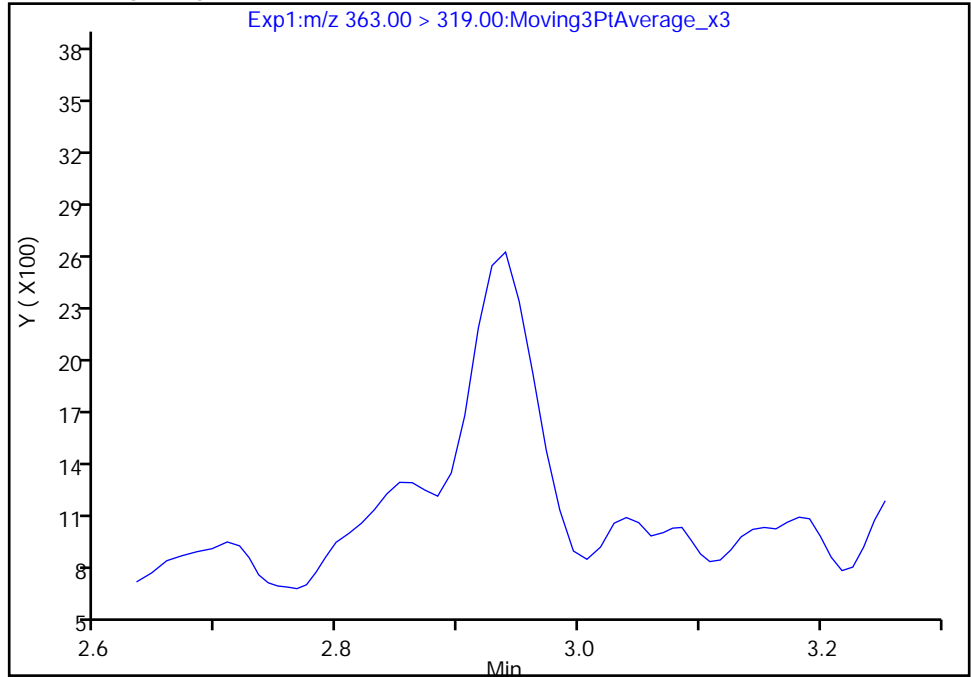
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

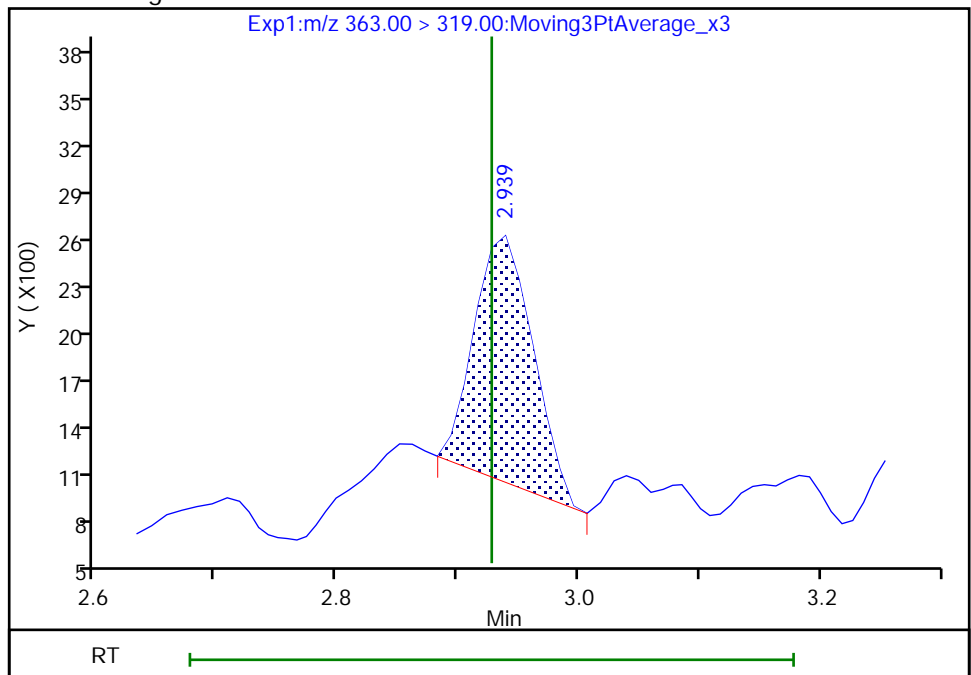
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 5179
Amount: 0.084333
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

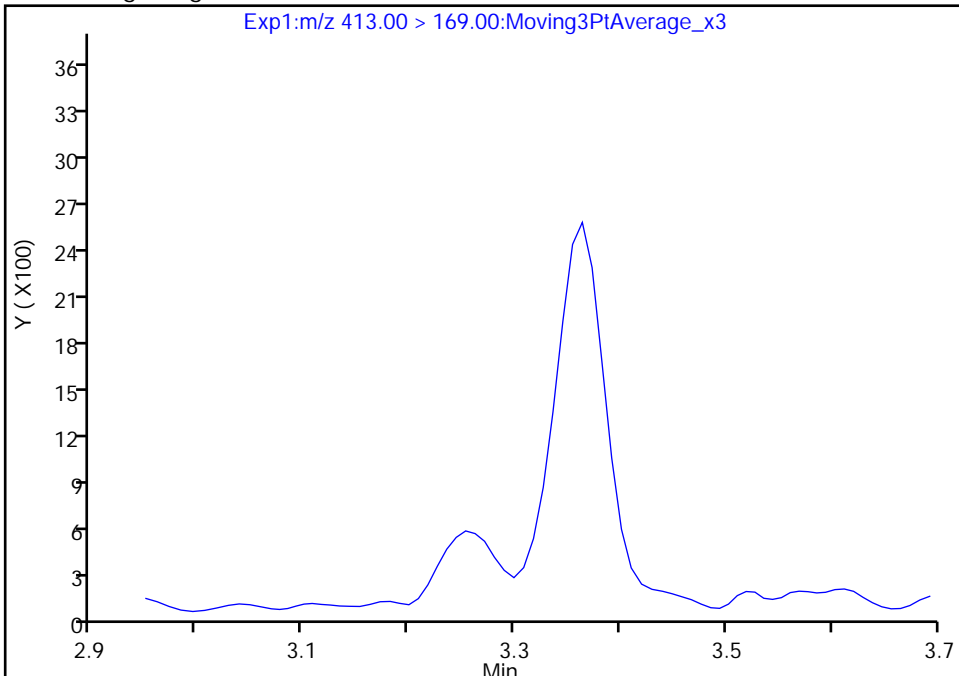
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

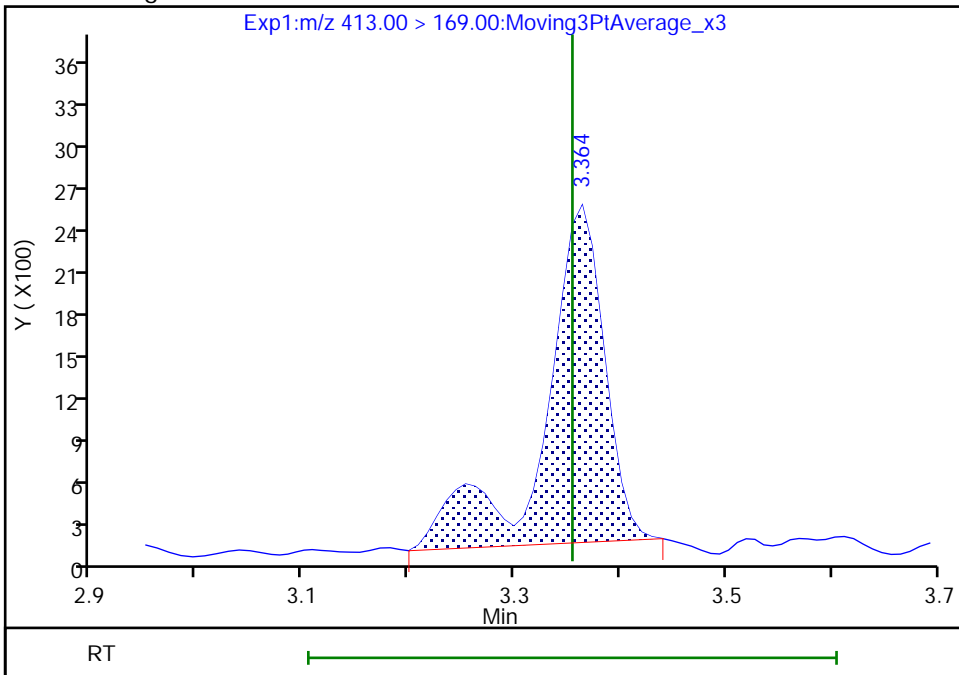
Not Detected
Expected RT: 3.35

Processing Integration Results



RT: 3.36
Area: 9333
Amount: 0.323641
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:57:54
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

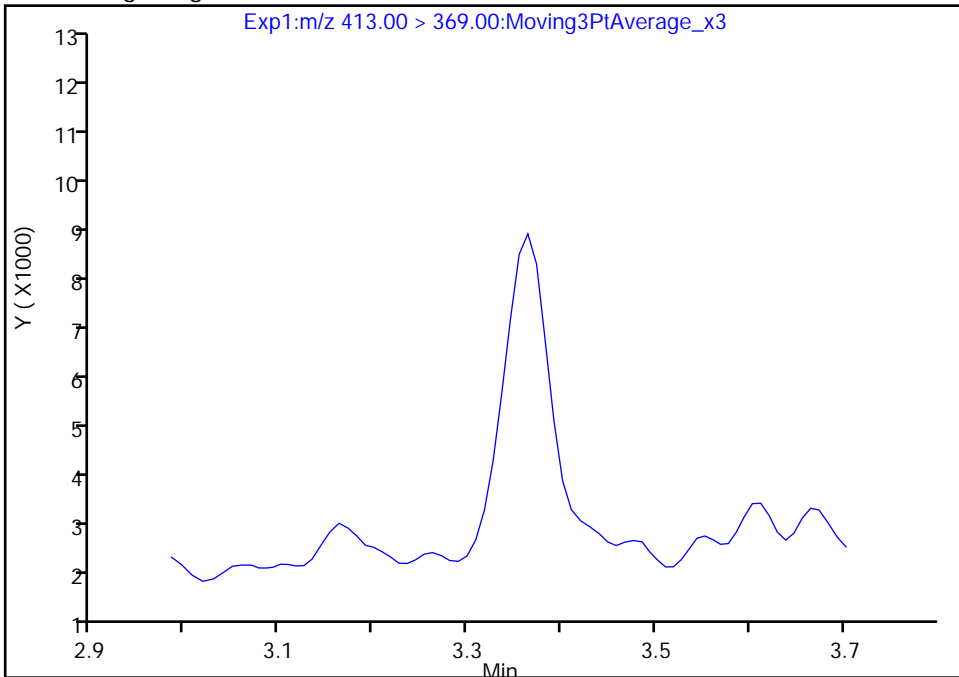
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

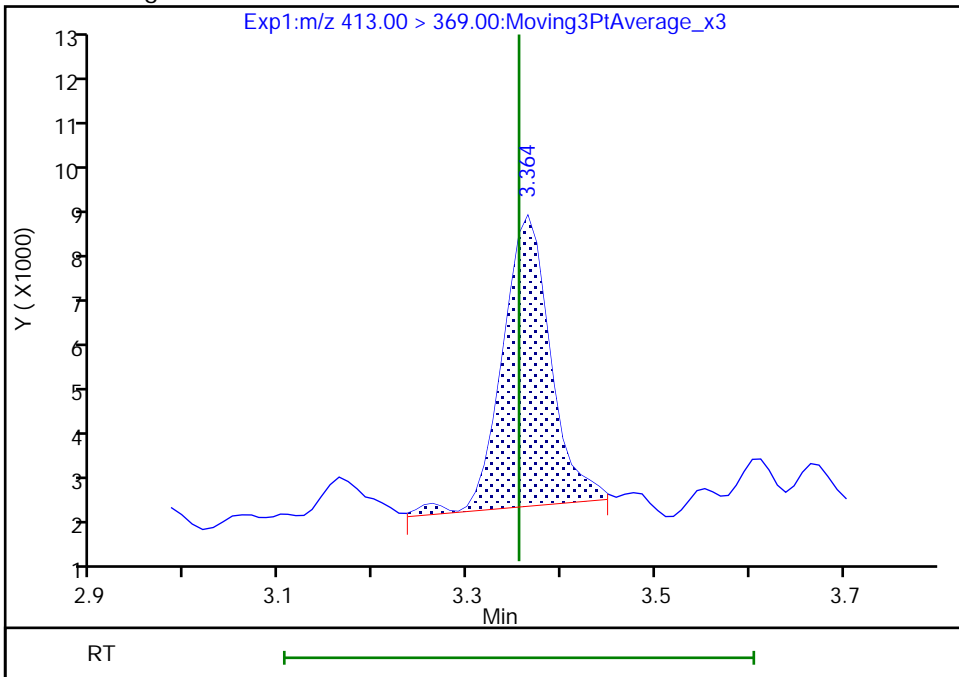
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 23260
Amount: 0.323641
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

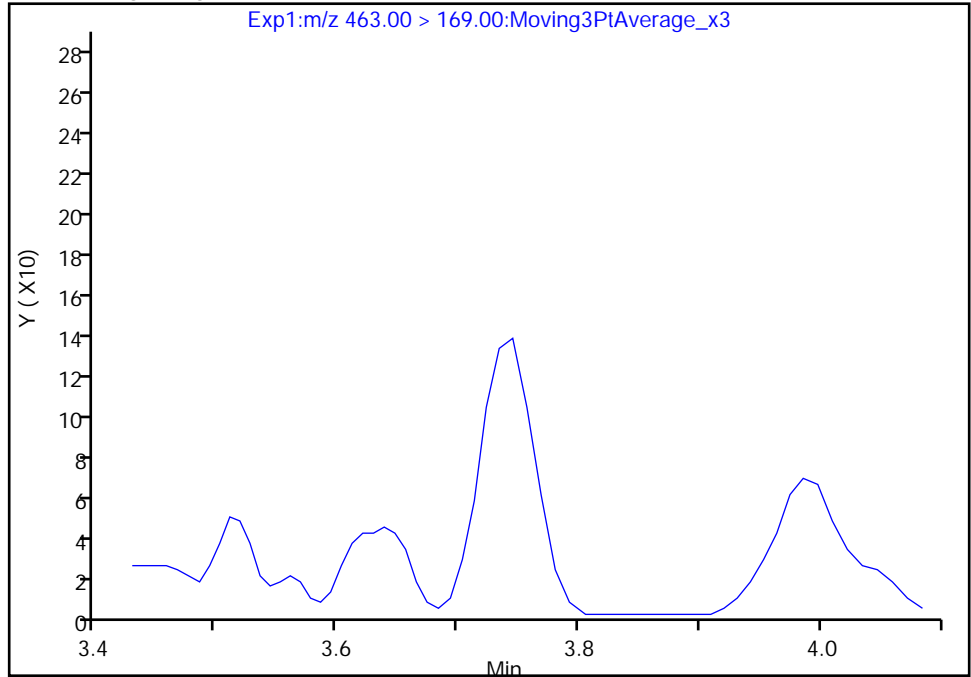
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

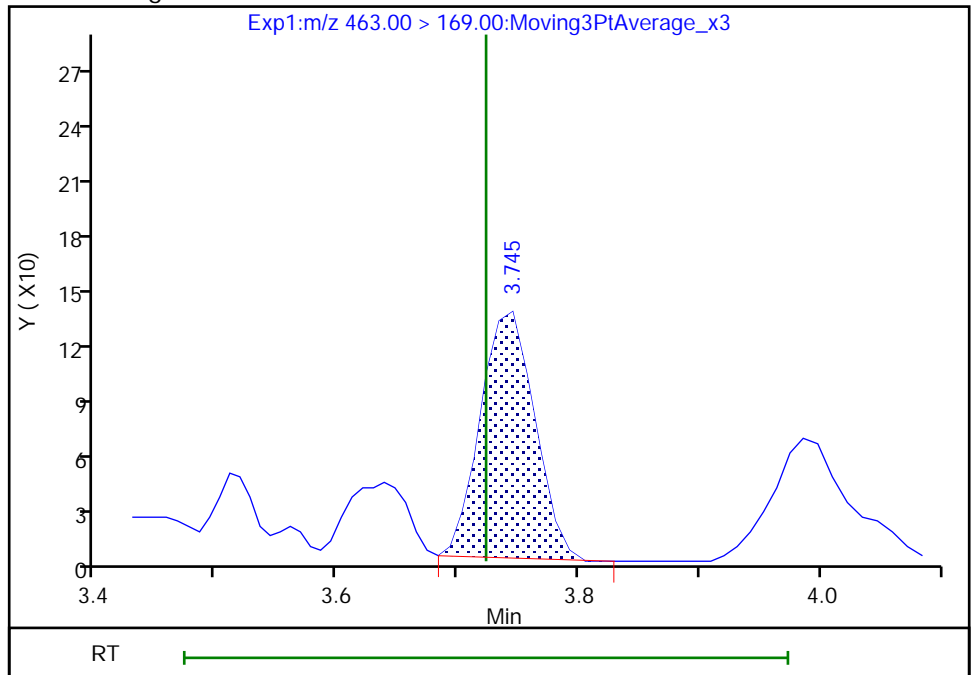
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.75
Area: 418
Amount: 0.045080
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:58:23
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

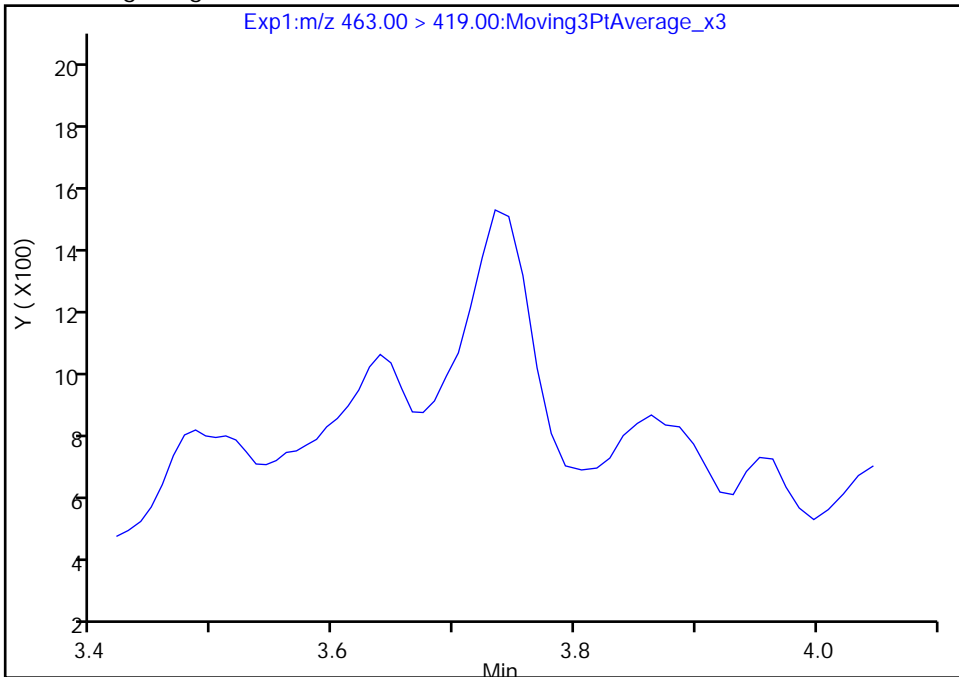
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

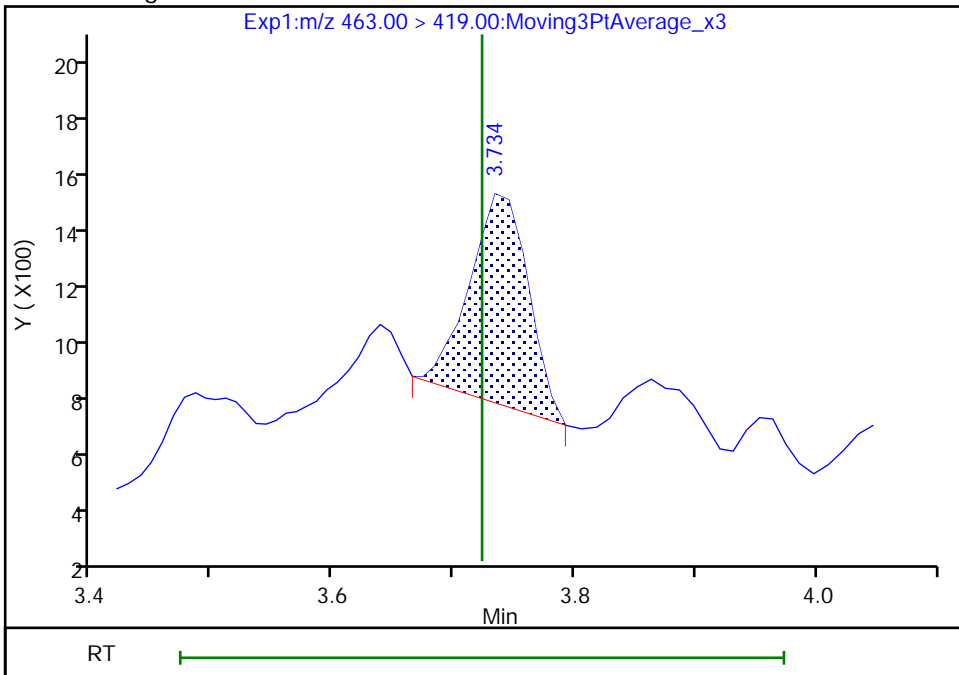
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.73
Area: 2515
Amount: 0.045080
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

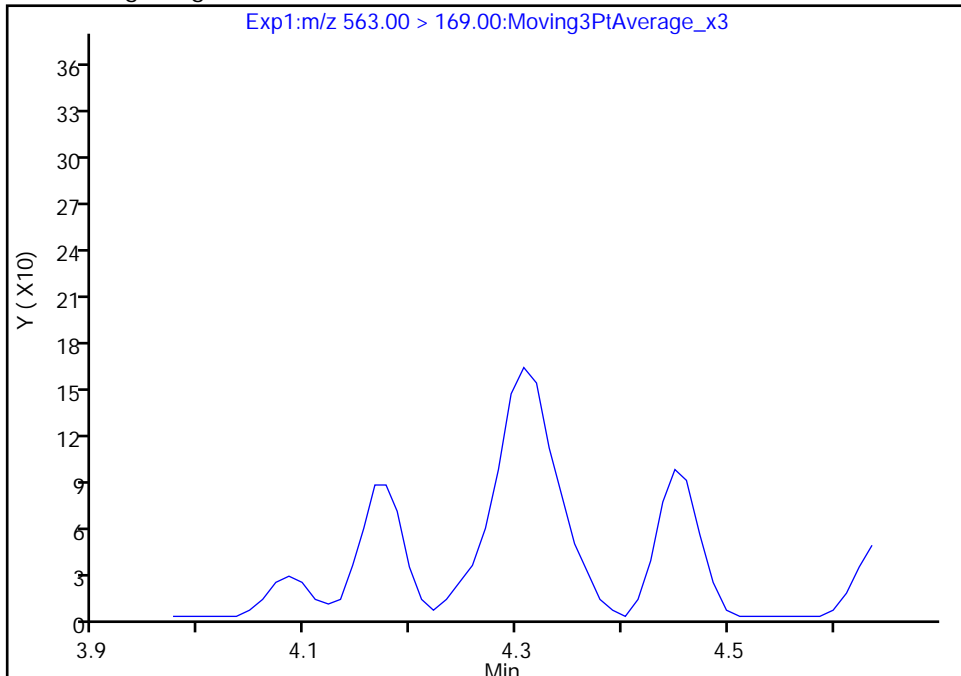
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

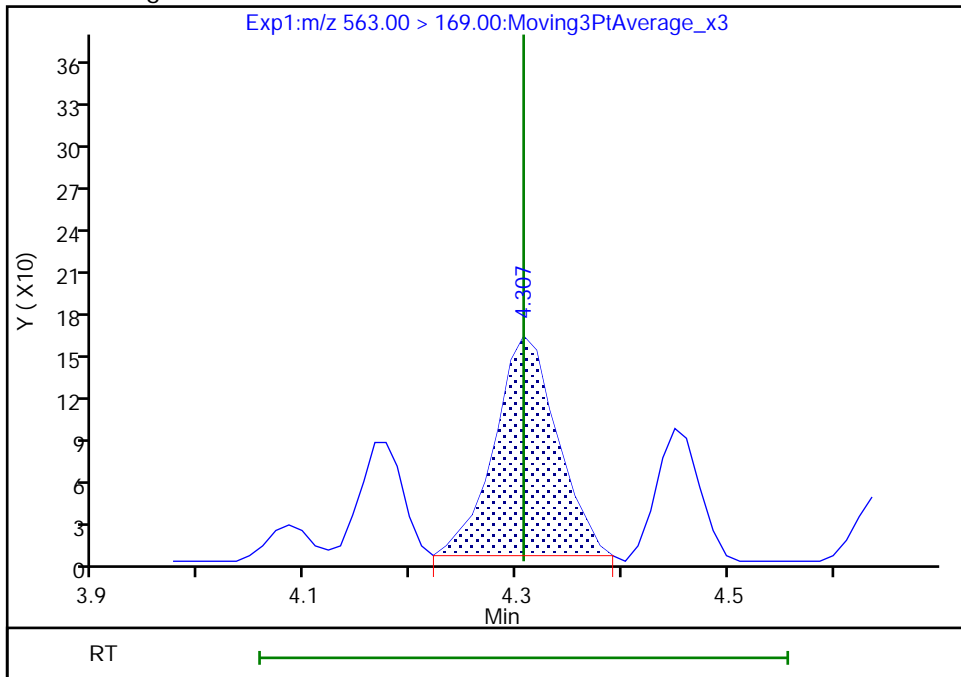
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 648
Amount: 0.127792
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:58:55
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

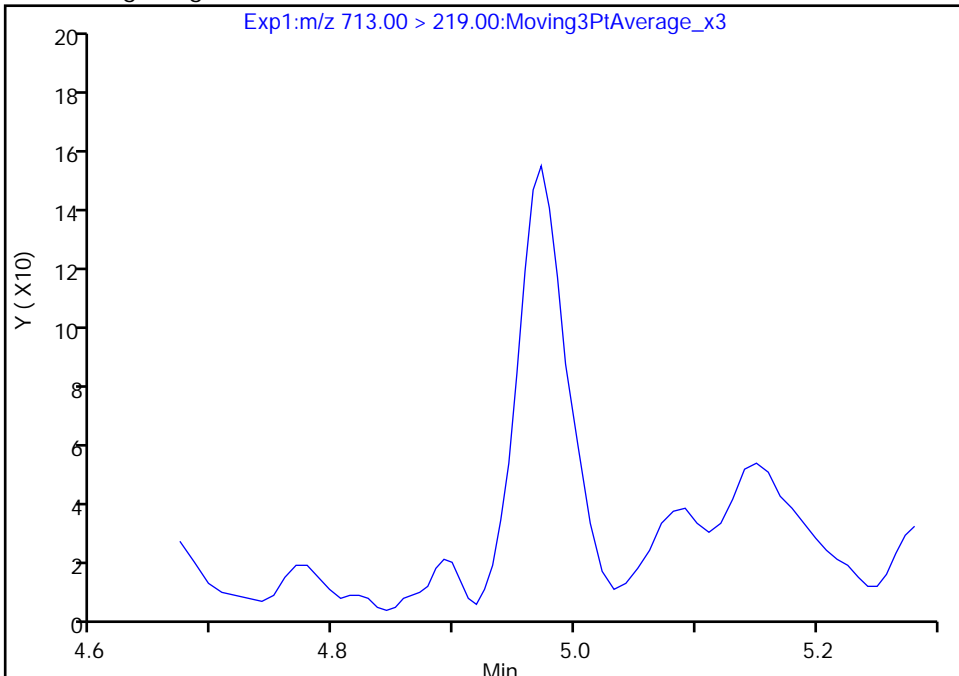
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

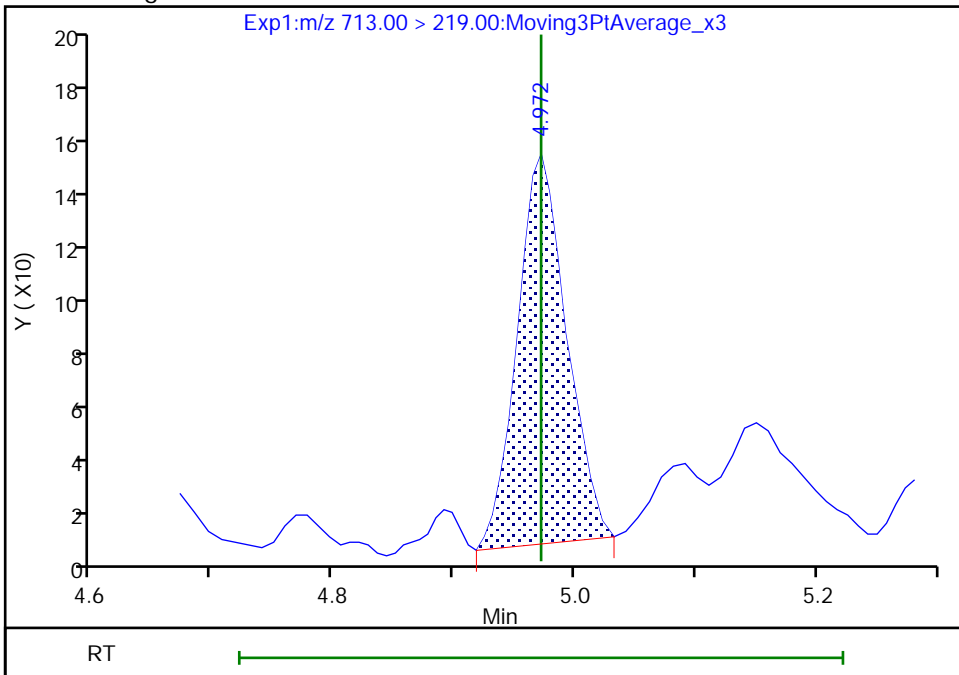
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 404
Amount: 0.102388
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:59:10
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

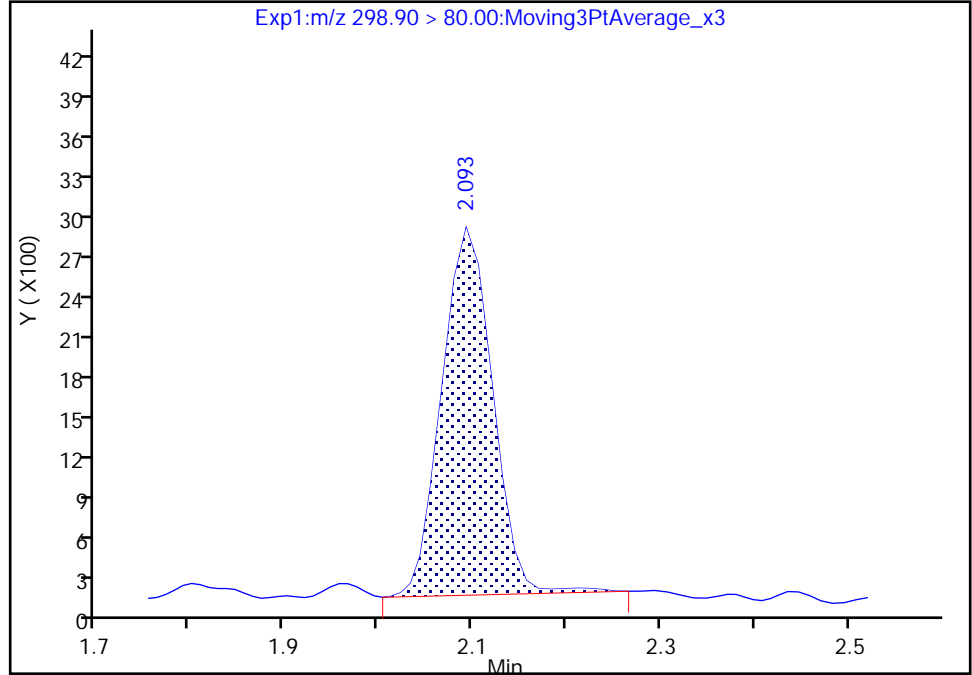
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

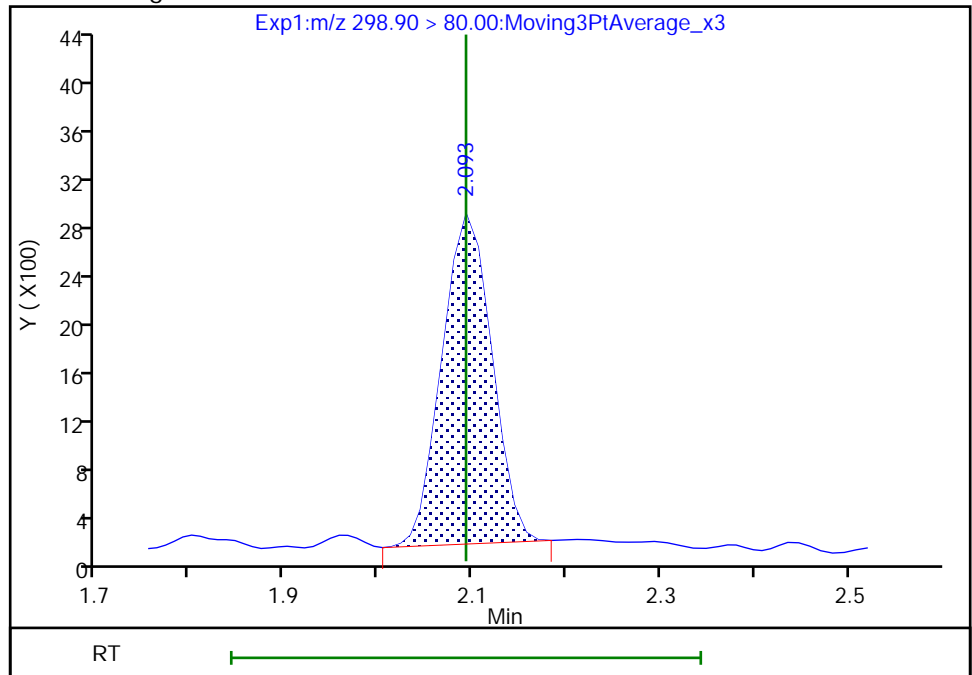
RT: 2.09
Area: 10073
Amount: 0.150468
Amount Units: ng/ml

Processing Integration Results



RT: 2.09
Area: 9822
Amount: 0.146719
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:55:13
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

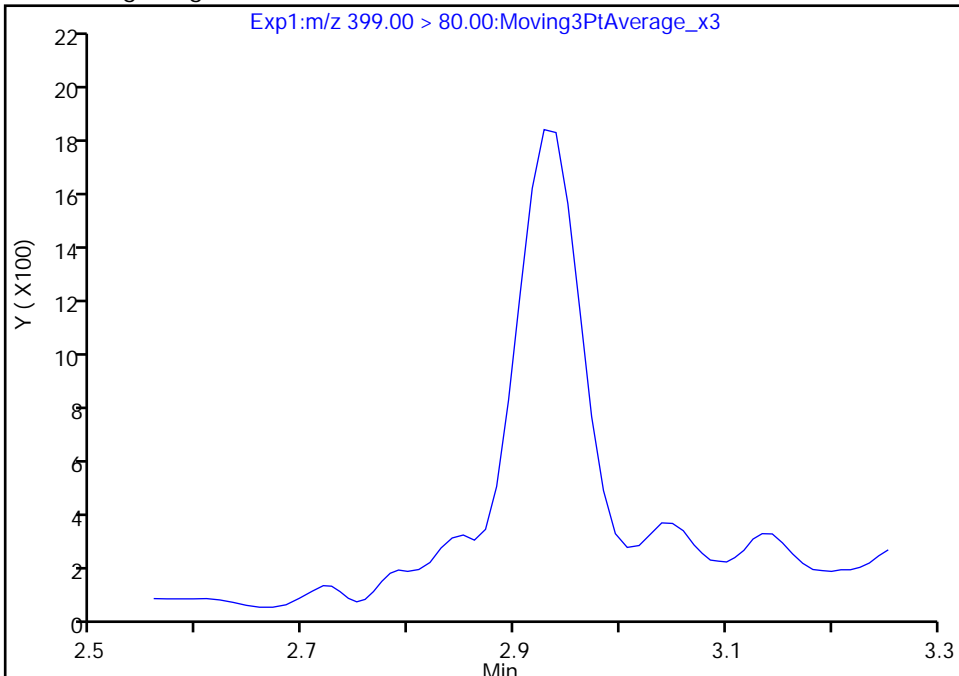
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

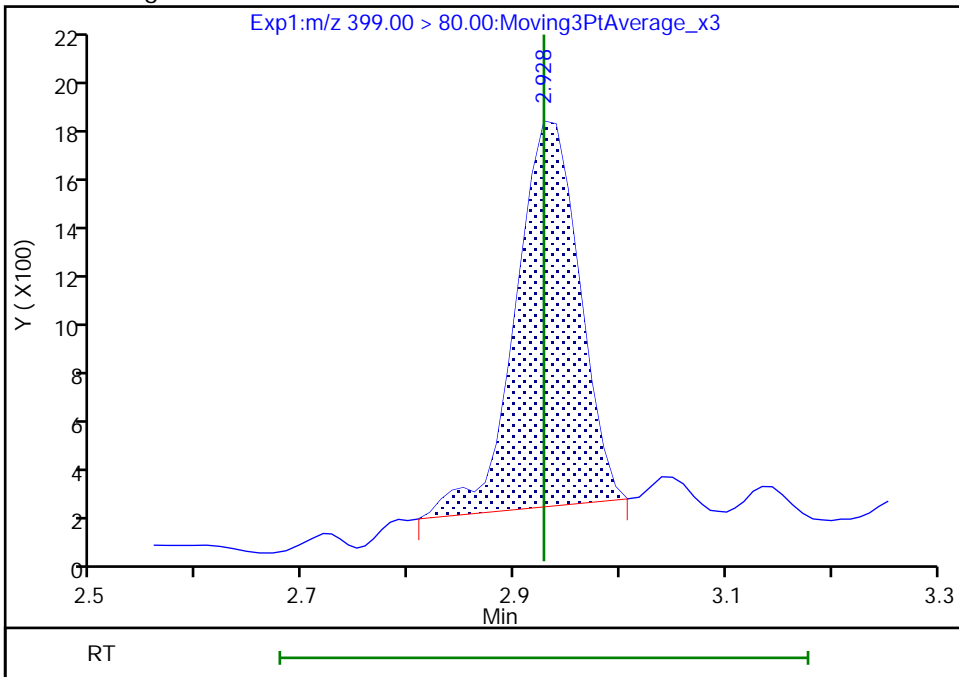
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 6633
Amount: 0.129599
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:55:46
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

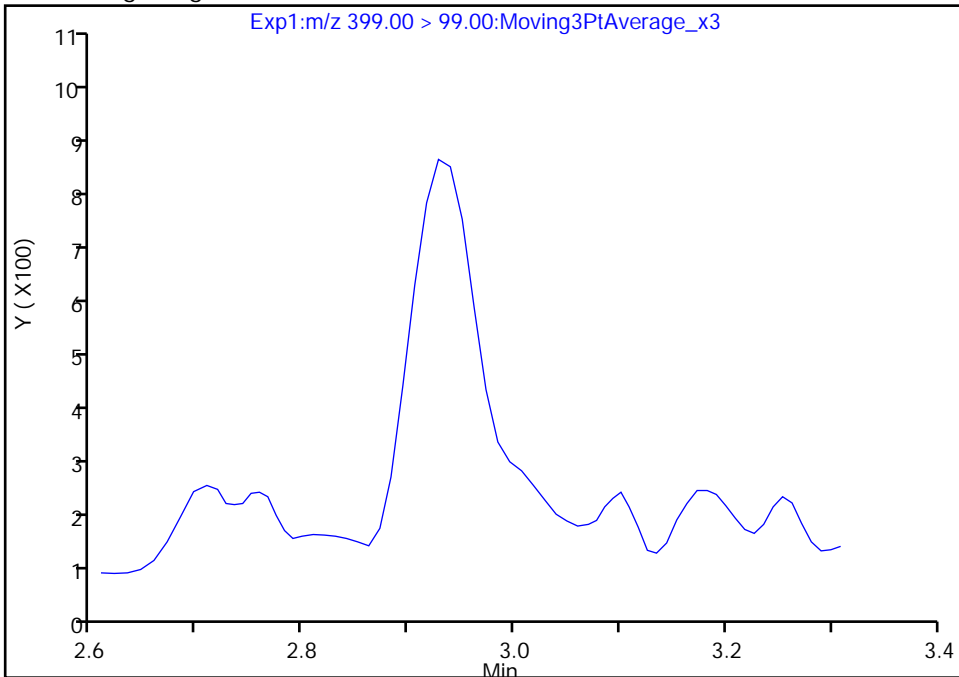
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

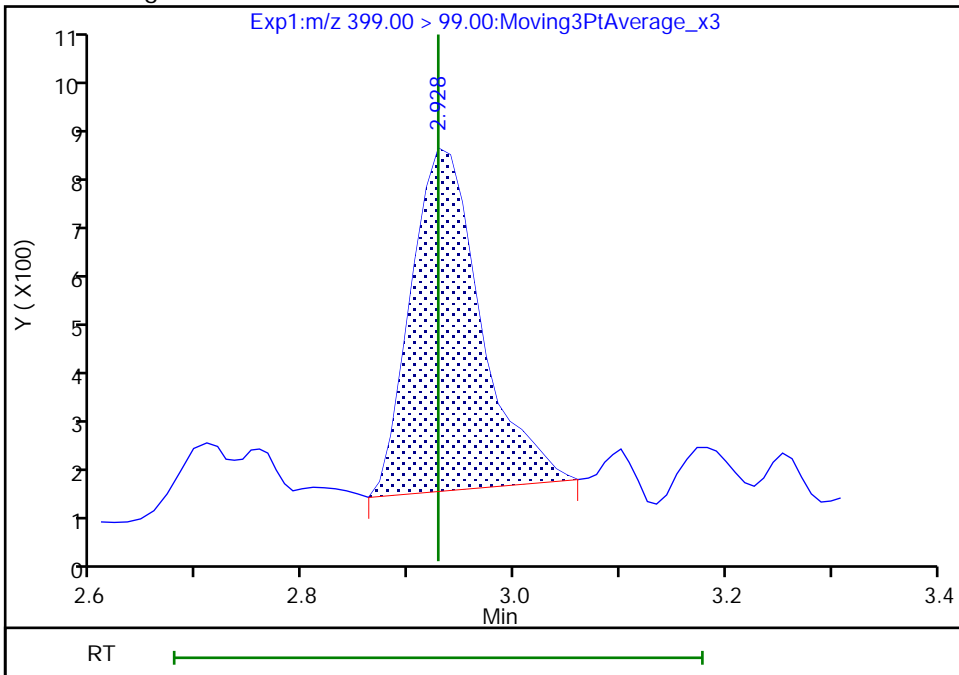
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 3091
Amount: 0.129599
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

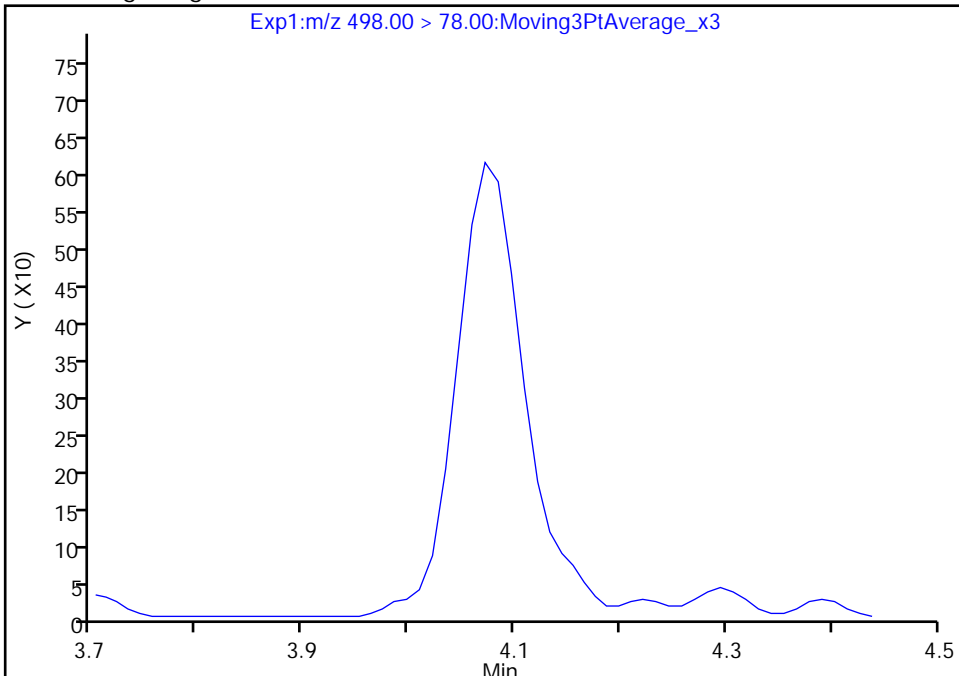
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

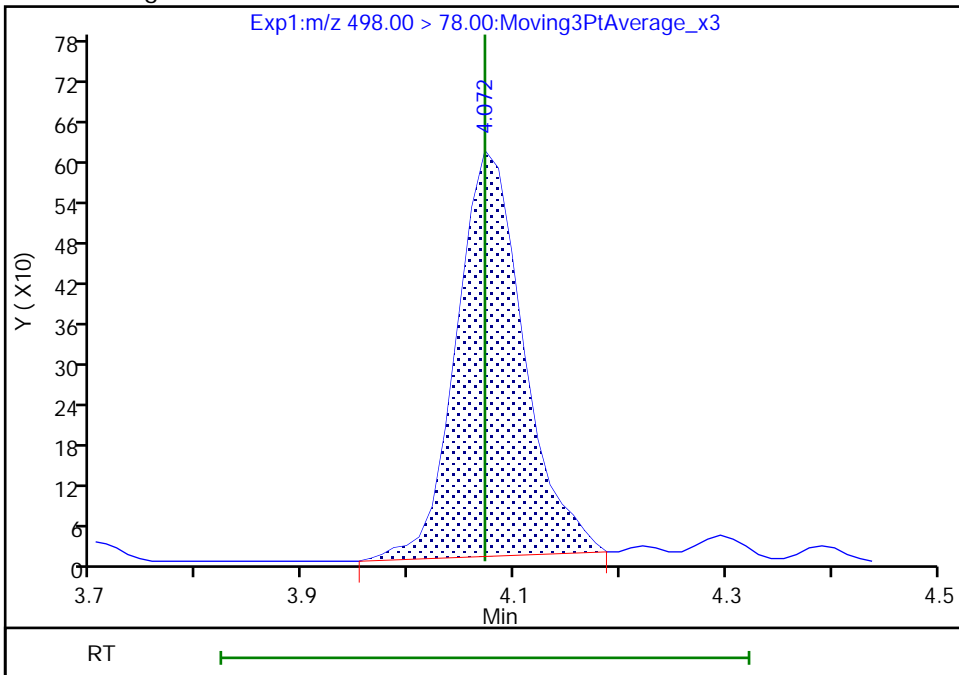
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.07
Area: 2675
Amount: 0.057351
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:58:42
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

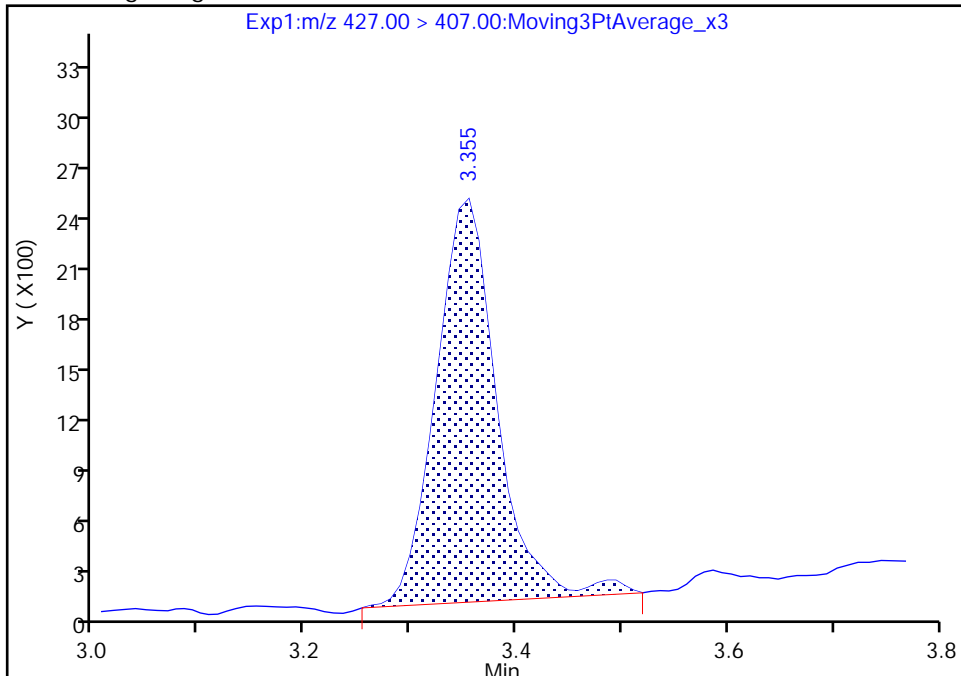
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E009.d
Injection Date: 02-Aug-2019 04:53:34 Instrument ID: LC812
Lims ID: 480-156213-F-6-A Lab Sample ID: 200-156213-6
Client ID: 356023-MW11B
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

13 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:, CAS: 27619-97-2

Signal: 1

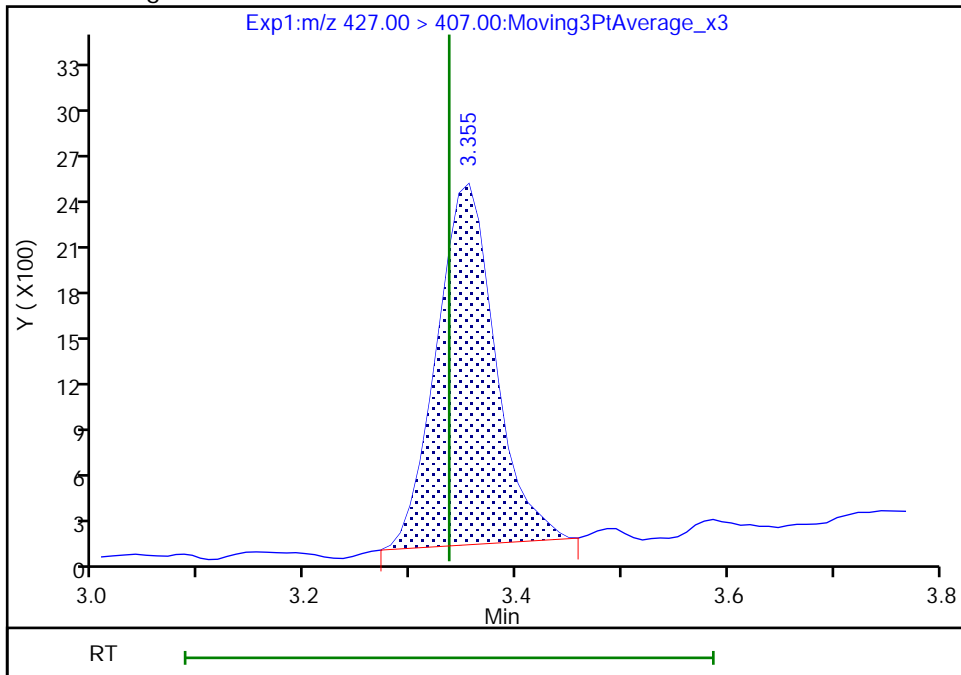
RT: 3.35
Area: 9539
Amount: 0.615113
Amount Units: ng/ml

Processing Integration Results



RT: 3.35
Area: 9057
Amount: 0.584032
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:57:41
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11C Lab Sample ID: 480-156213-7
 Matrix: Water Lab File ID: SC080119E010.d
 Analysis Method: 537 (modified) Date Collected: 07/10/2019 15:23
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 309.4 (mL) Date Analyzed: 08/02/2019 05:01
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.6	0.81
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.6	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.6	0.61
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.74
335-67-1	Perfluorooctanoic acid (PFOA)	0.56	J	1.6	0.51
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.62
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.74
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.65
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.77
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.49
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.1	8.1
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.7
39108-34-4	8:2 FTS	ND		16	2.3

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW11C Lab Sample ID: 480-156213-7
 Matrix: Water Lab File ID: SC080119E010.d
 Analysis Method: 537 (modified) Date Collected: 07/10/2019 15:23
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 309.4 (mL) Date Analyzed: 08/02/2019 05:01
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	79		25-150
STL00992	13C4 PFBA	87		25-150
STL01893	13C5 PFPeA	95		25-150
STL00993	13C2 PFHxA	94		50-150
STL01892	13C4 PFHpA	95		50-150
STL00990	13C4 PFOA	90		50-150
STL00995	13C5 PFNA	92		50-150
STL00996	13C2 PFDA	94		50-150
STL00997	13C2 PFUnA	90		50-150
STL00998	13C2 PFDoA	78		50-150
STL02116	13C2 PFTeDA	65		50-150
STL02337	13C3 PFBS	97		50-150
STL00994	18O2 PFHxS	91		50-150
STL00991	13C4 PFOS	88		50-150
STL02118	d3-NMeFOSAA	75		50-150
STL02117	d5-NEtFOSAA	66		50-150
STL02279	M2-6:2 FTS	101		25-150
STL02280	M2-8:2 FTS	110		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
 Lims ID: 480-156213-F-7-A
 Client ID: 356023-MW11C
 Sample Type: Client
 Inject. Date: 02-Aug-2019 05:01:38 ALS Bottle#: 3 Worklist Smp#: 10
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-7-A
 Misc. Info.: 200-0037095-010 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:02:09
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.508	3135060	43.5	87.0	10385	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.717	1.699	0.018	1.005	10789	0.1867		2.1		M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	3228689	47.7	95.4	7522	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.067	2.067	0.0	1.000	13694	0.2192		0.6		M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	2992634	45.0	96.8	414950	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.093	2.093	0.0	1.000	7480	0.1143	Target=1.90	5.2		
298.90 > 99.00	2.093	2.093	0.0	1.000	3940		1.90(0.95-2.85)	3.9		M
D 7 13C2 PFHxA	315.00 > 270.00	2.470	2.459	0.011	0.735	3167044	47.1	94.2	6263	
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.871	1668328	42.9	90.6	4948	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.874	3132007	47.6	95.1	7434	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	7921	0.1704	Target=3.37	8.4		M
399.00 > 99.00	2.928	2.928	0.0	1.000	1925		4.11(1.69-5.06)	2.8		M
D 12 M2-6:2 FTS	429.00 > 81.00	3.344	3.335	0.009	0.994	386892	47.7	101	725	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.354	3.336	0.018	1.003	11658	0.8345		21.8		
D 14 13C4 PFOA	417.00 > 372.00	3.363	3.344	0.019	1.000	3140456	45.2	90.3	9913	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.363	3.355	0.008	1.000	23551	0.3446	Target=2.84	2.6		M
413.00 > 169.00	3.363	3.355	0.008	1.000	8151		2.89(1.42-4.25)	30.4		M
* 62 13C2 PFOA										
415.00 > 370.00	3.363	3.355	0.008		3823047	50.0			9394	
D 18 13C4 PFOS										
503.00 > 80.00	3.715	3.695	0.020	1.105	1357084	41.8		87.5	4893	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.715	3.703	0.012	1.000	4565	0.1699	Target=4.33	13.4		M
499.00 > 99.00	3.715	3.703	0.012	1.000	1663		2.75(2.16-6.49)	3.4		M
D 19 13C5 PFNA										
468.00 > 423.00	3.735	3.715	0.020	1.111	2932198	46.2		92.5	11382	
D 23 13C2 PFDA										
515.00 > 470.00	4.049	4.036	0.013	1.204	2380006	46.9		93.8	19206	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.061	4.036	0.025	1.208	394166	52.7		110	940	
D 21 13C8 FOSA										
506.00 > 78.00	4.074	4.061	0.013	1.211	2305756	39.6		79.2	5811	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.074	4.072	0.002	1.000	5425	0.1289			52.4	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.189	4.178	0.011	1.246	244148	37.7		75.3	3121	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.168	4.187	-0.019	0.995	122	0.0330		0.4		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.320	4.296	0.024	1.285	2076247	44.9		89.8	9579	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.320	4.307	0.013	1.000	4224	0.1185	Target=7.95	2.1		M
563.00 > 169.00	4.320	4.307	0.013	1.000	517		8.17(3.98-11.93)	4.8		M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.308	0.012	1.285	240106	33.2		66.5	1097	
D 36 13C2 PFDoA										
615.00 > 570.00	4.550	4.537	0.013	1.353	1949556	39.2		78.4	5545	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.479	2223417	32.5		64.9	7604	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.972	0.007	1.001	420	0.0709	Target=1.02	4.1		M
713.00 > 219.00	4.972	4.972	0.0	1.000	415		1.01(0.51-1.54)	8.1		M

QC Flag Legend

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d

Injection Date: 02-Aug-2019 05:01:38

Instrument ID: LC812

Lims ID: 480-156213-F-7-A

Lab Sample ID: 200-156213-7

Client ID: 356023-MW11C

Operator ID: lc812tech

ALS Bottle#: 3

Worklist Smp#: 10

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

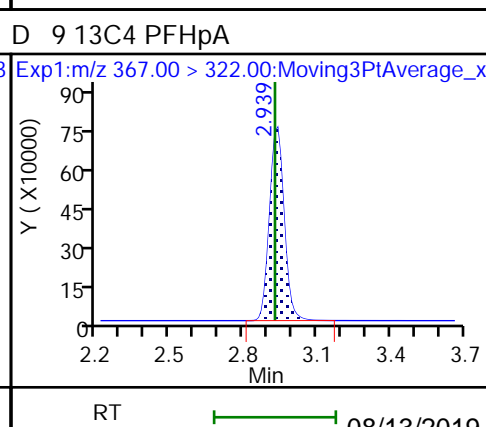
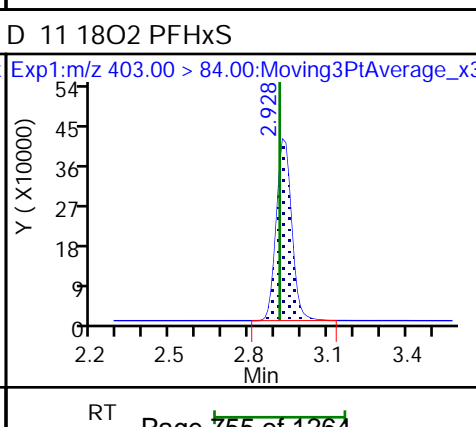
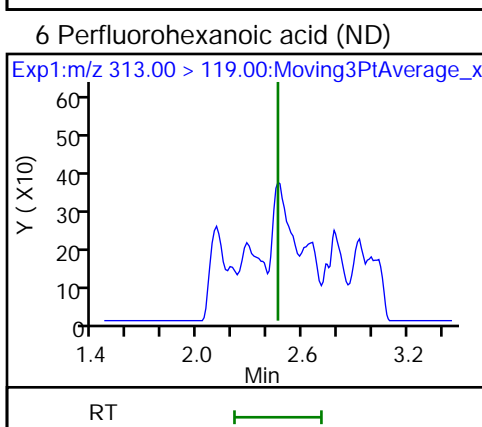
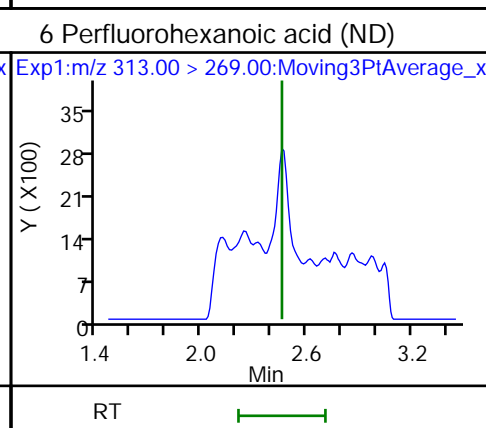
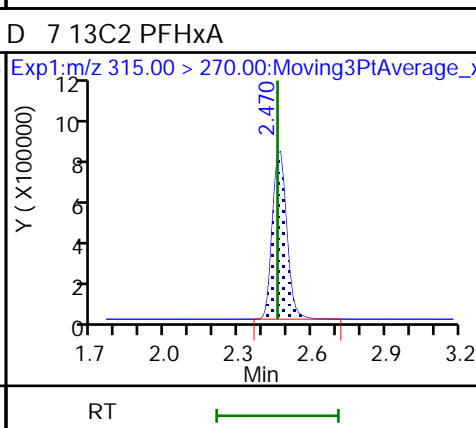
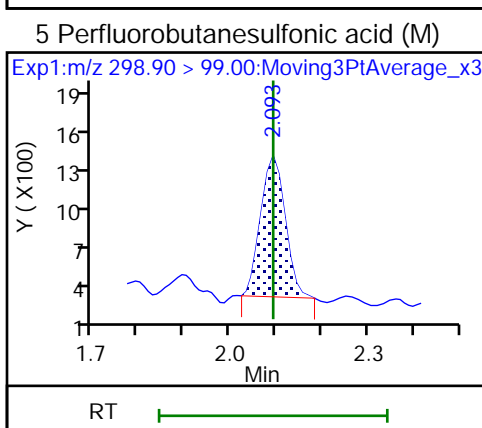
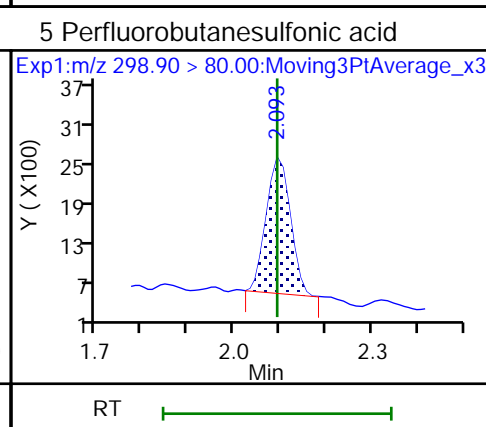
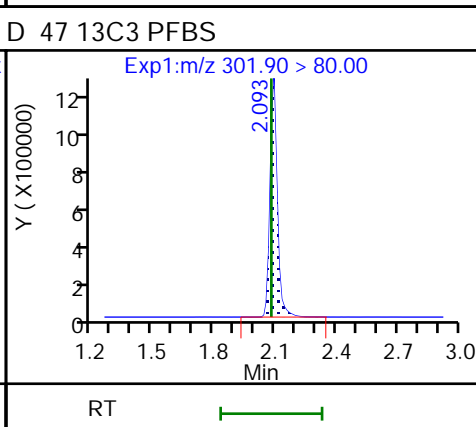
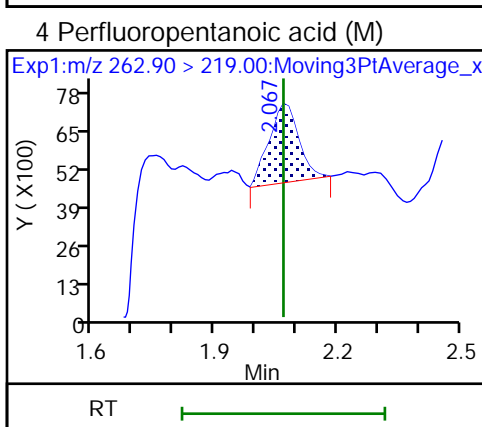
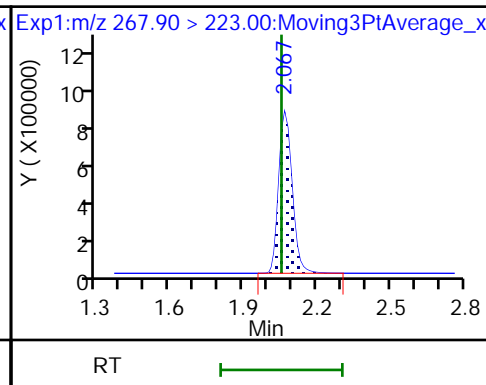
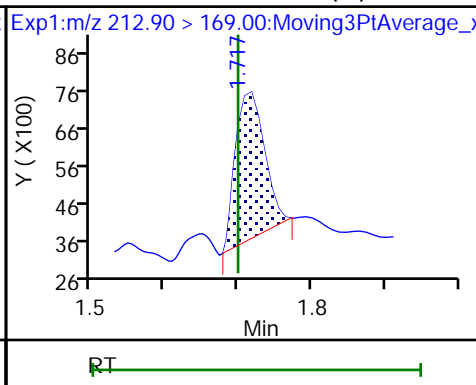
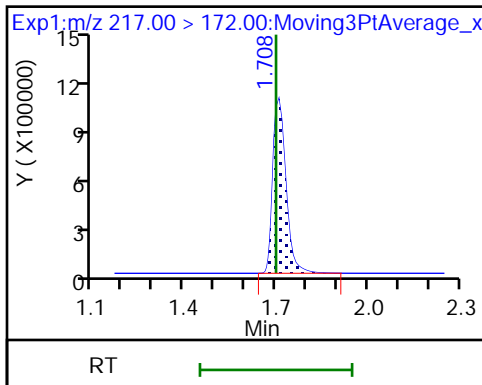
Method: PFC_LC812

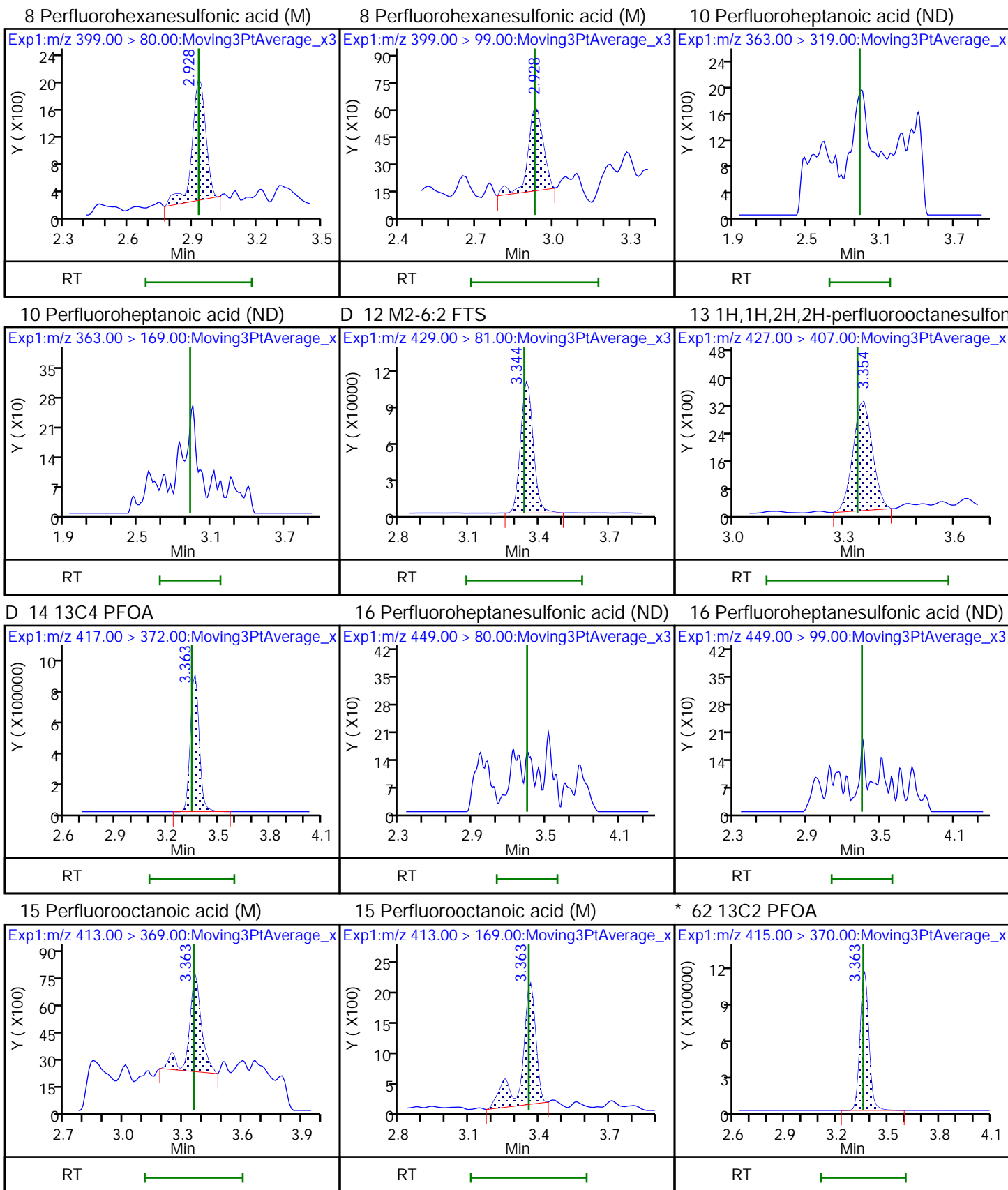
Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

D 3 13C5 PFPeA

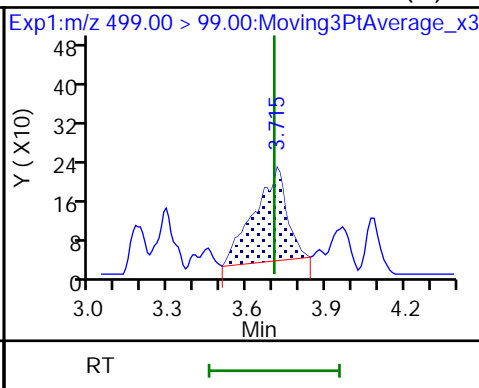
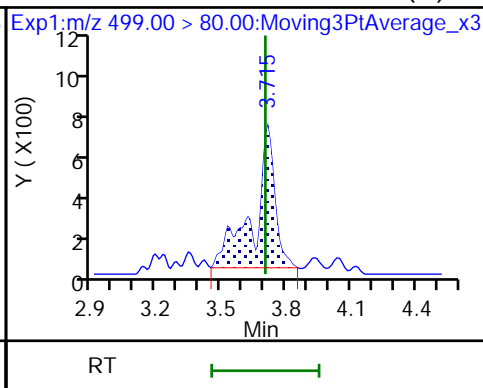
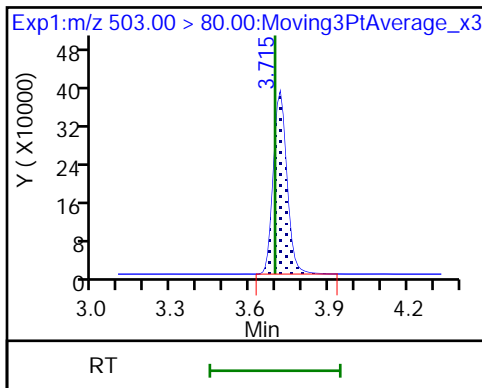




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

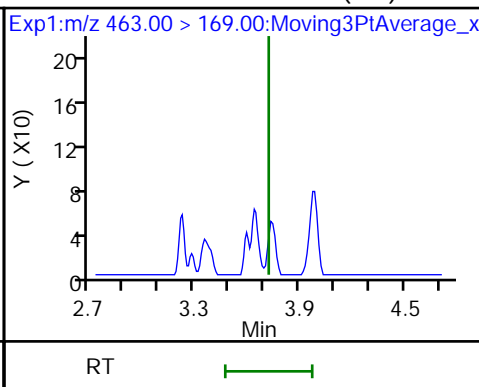
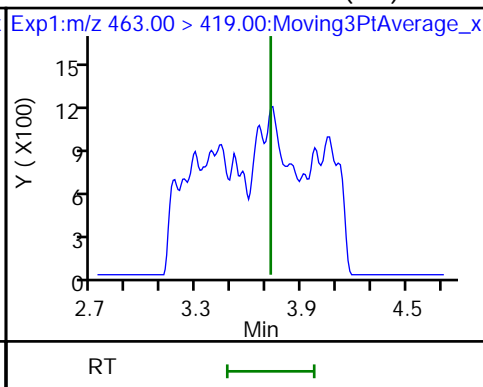
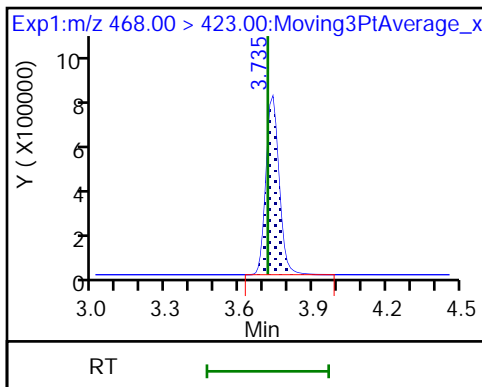
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (ND)

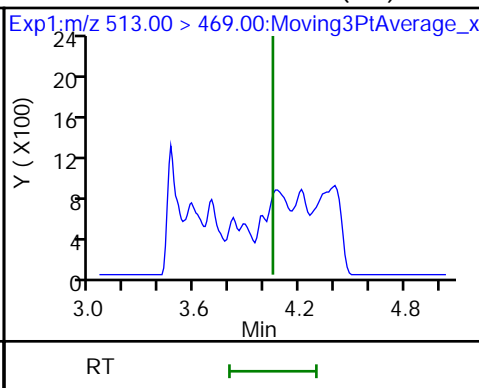
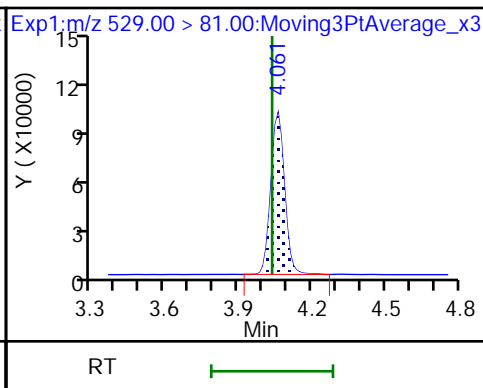
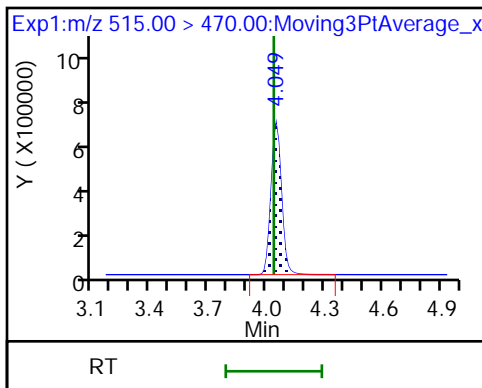
20 Perfluorononanoic acid (ND)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

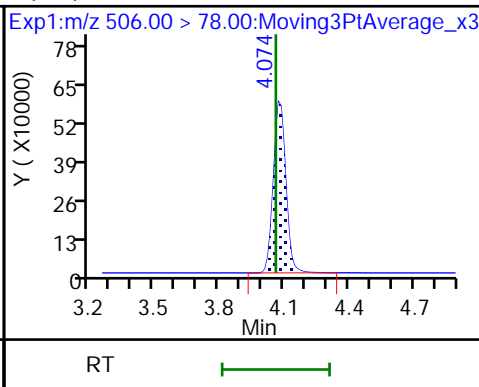
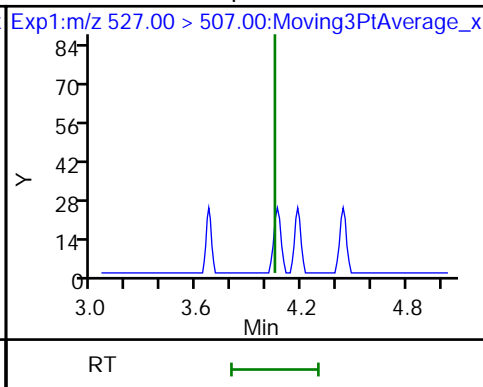
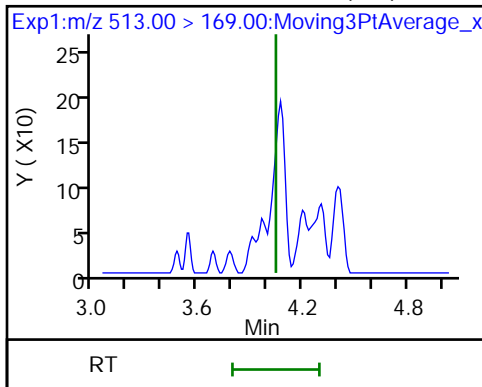
24 Perfluorodecanoic acid (ND)

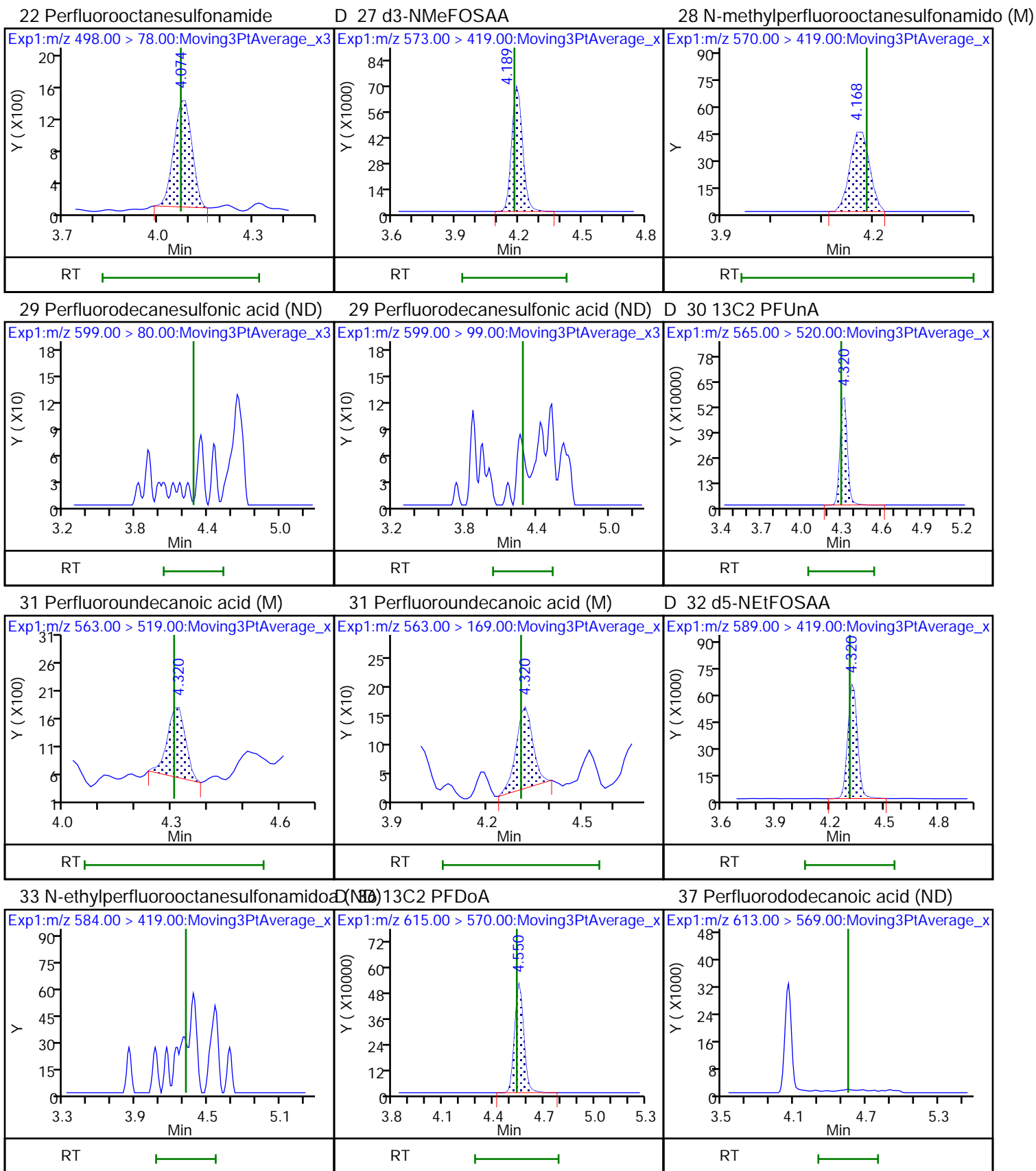


24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (ND)

(ND) 13C8 FOSA

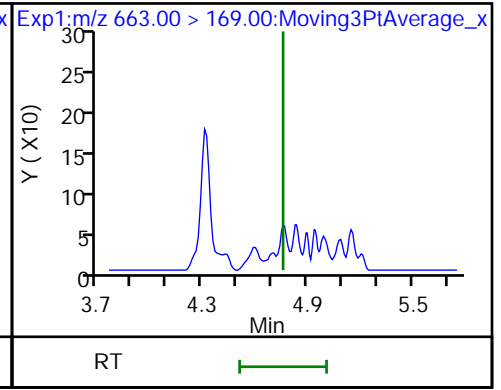
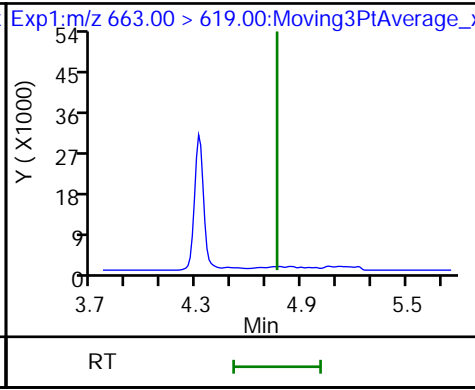
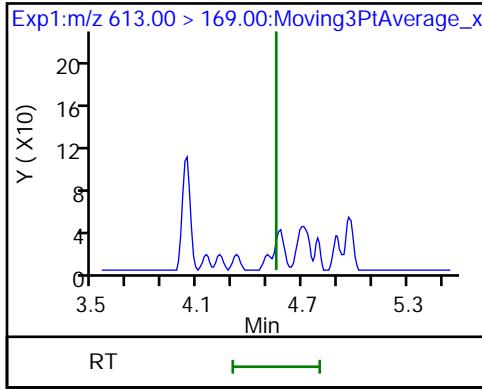




37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

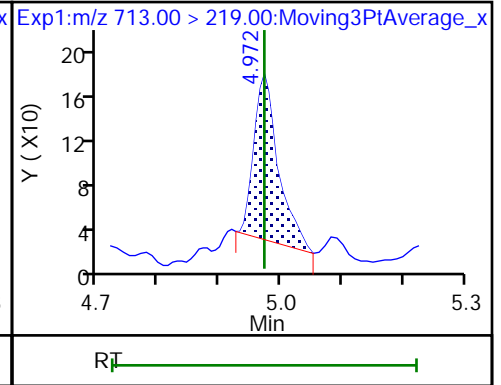
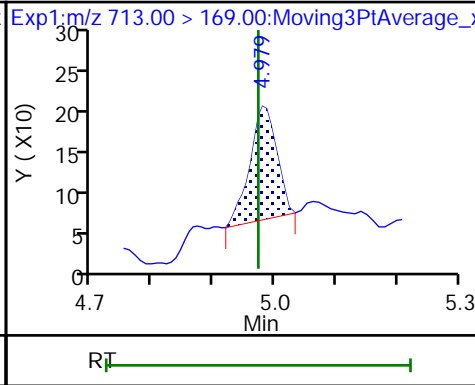
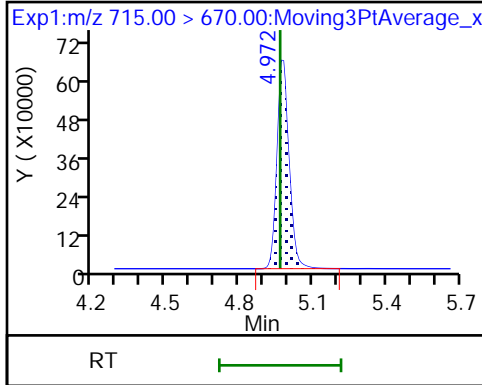
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)



Eurofins TestAmerica, Burlington

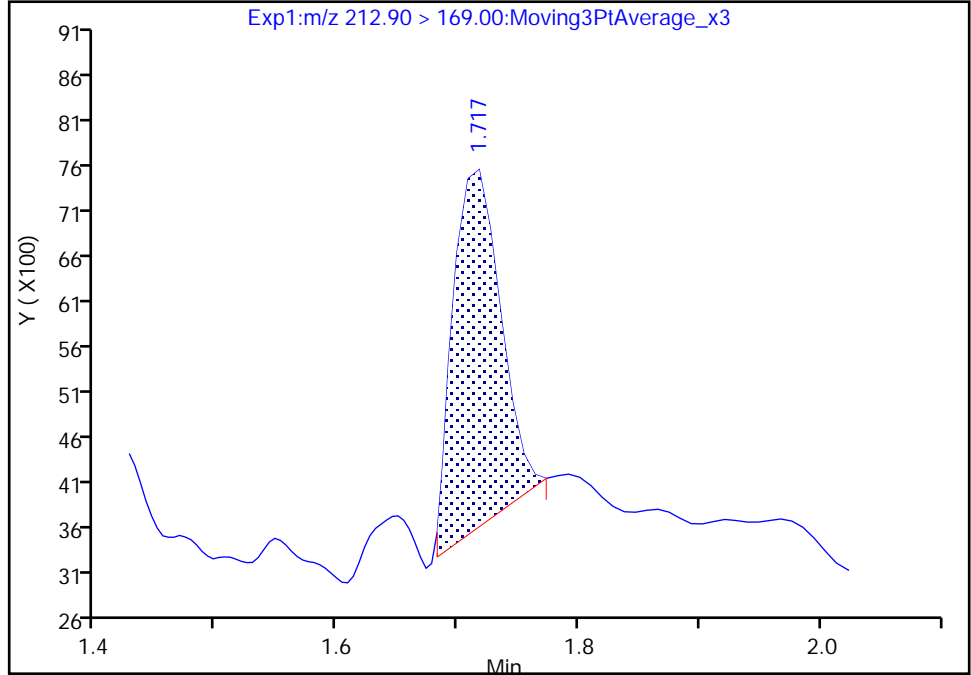
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

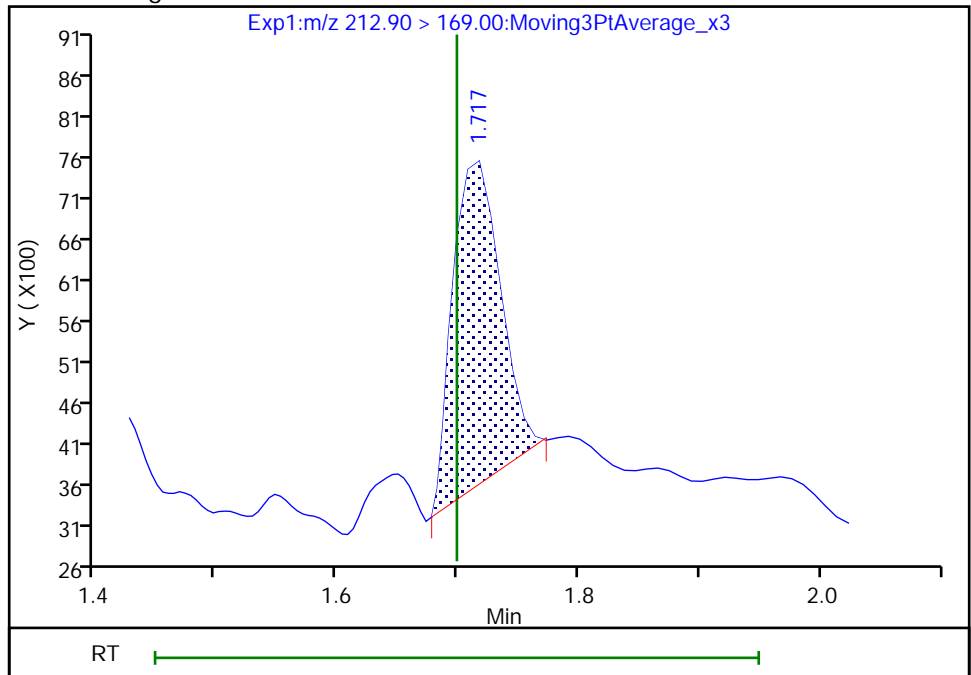
RT: 1.72
Area: 10763
Amount: 0.186248
Amount Units: ng/ml

Processing Integration Results



RT: 1.72
Area: 10789
Amount: 0.186697
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:59:48

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

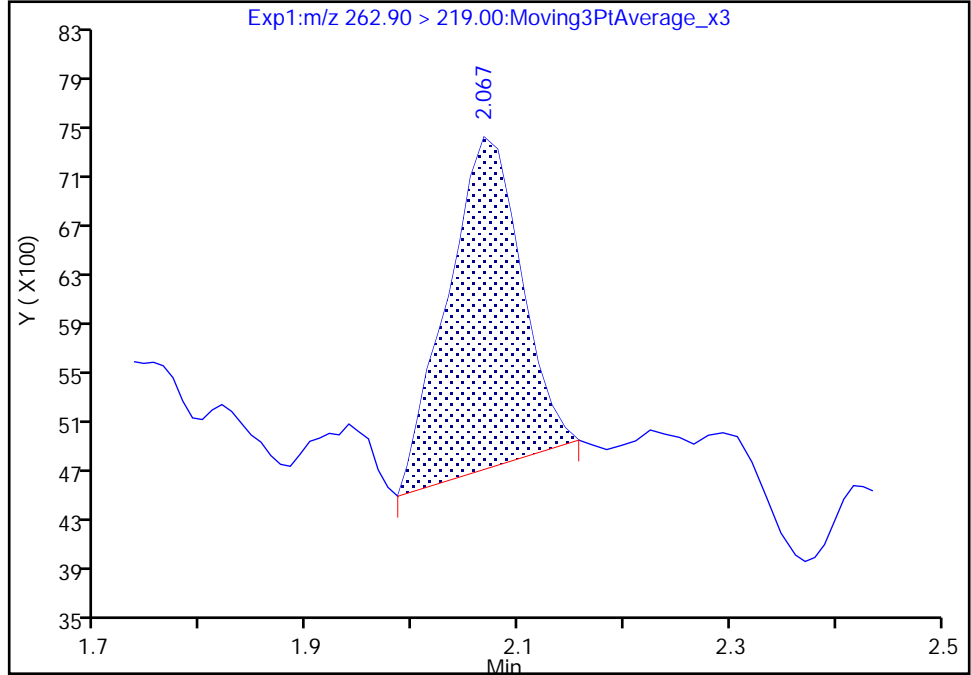
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

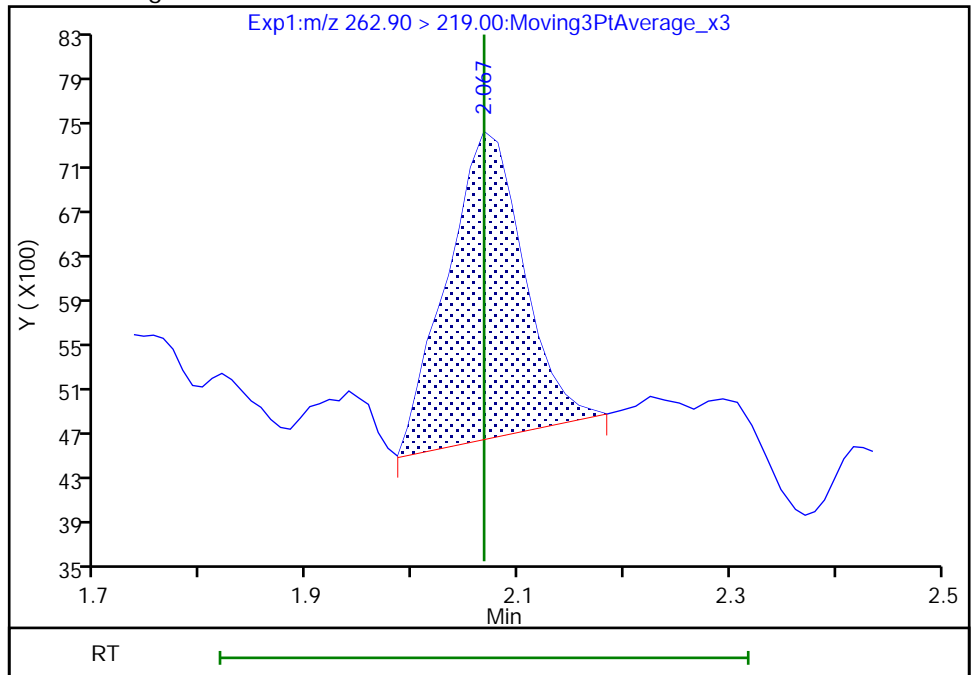
RT: 2.07
Area: 12881
Amount: 0.206143
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 13694
Amount: 0.219154
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:59:54
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

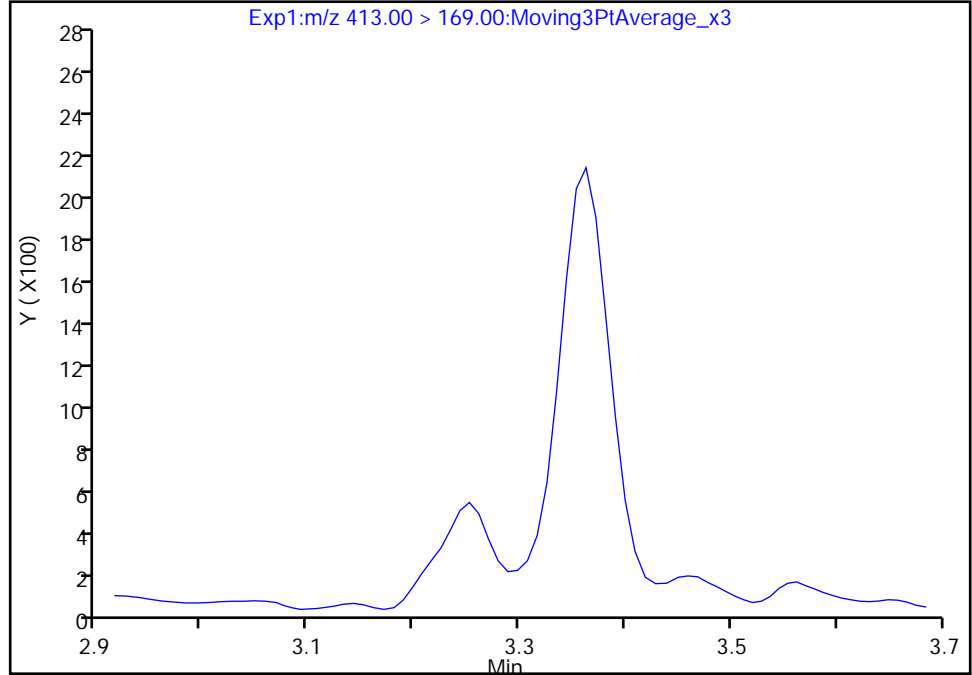
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

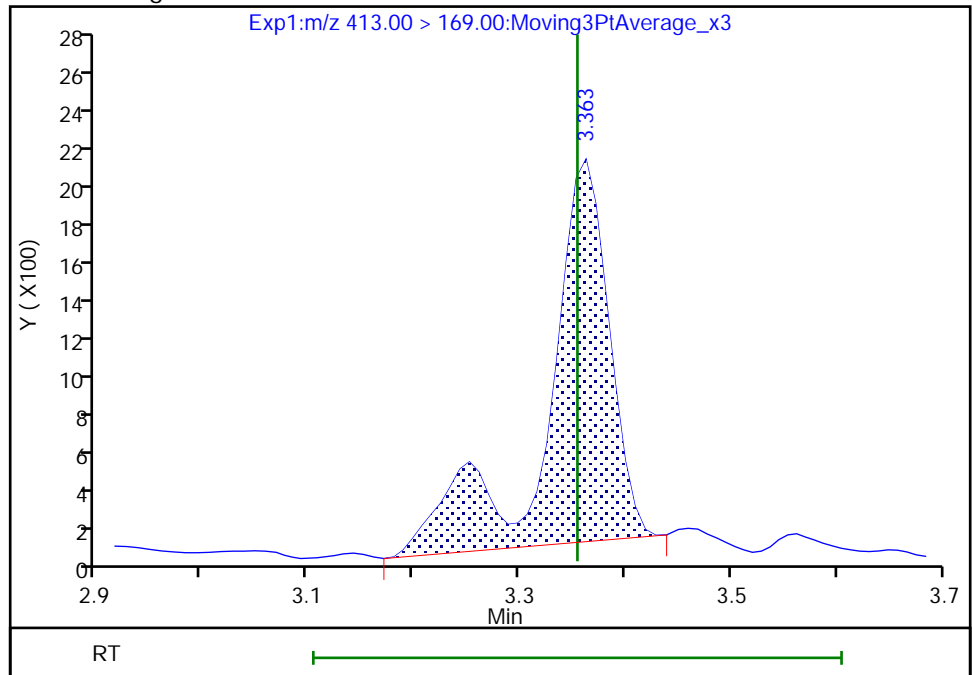
Not Detected
Expected RT: 3.35

Processing Integration Results



RT: 3.36
Area: 8151
Amount: 0.344593
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:00:31
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

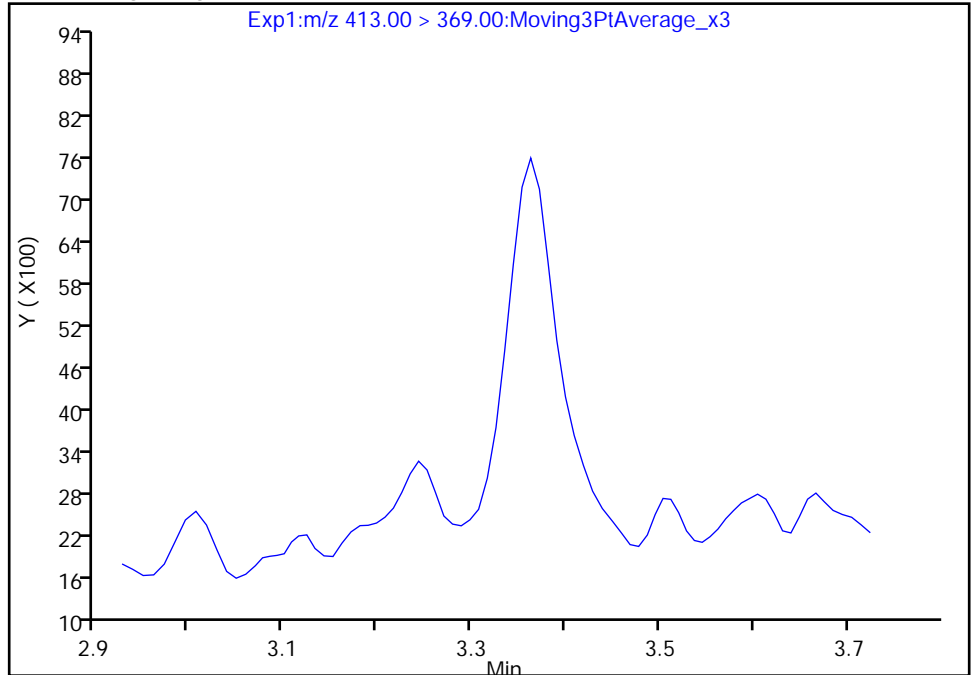
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

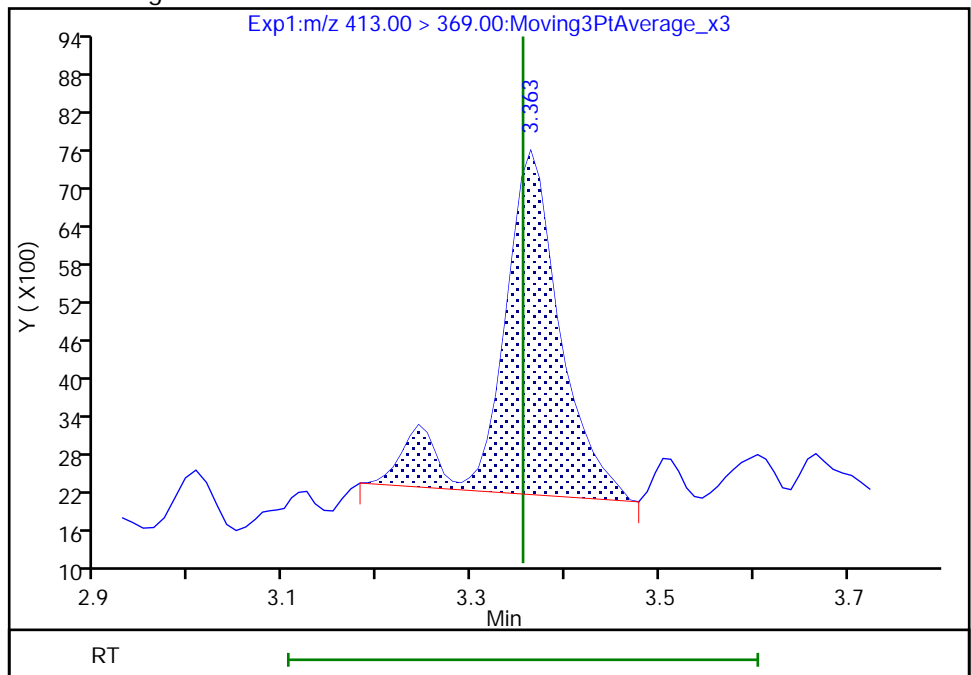
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 23551
Amount: 0.344593
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:00:35

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

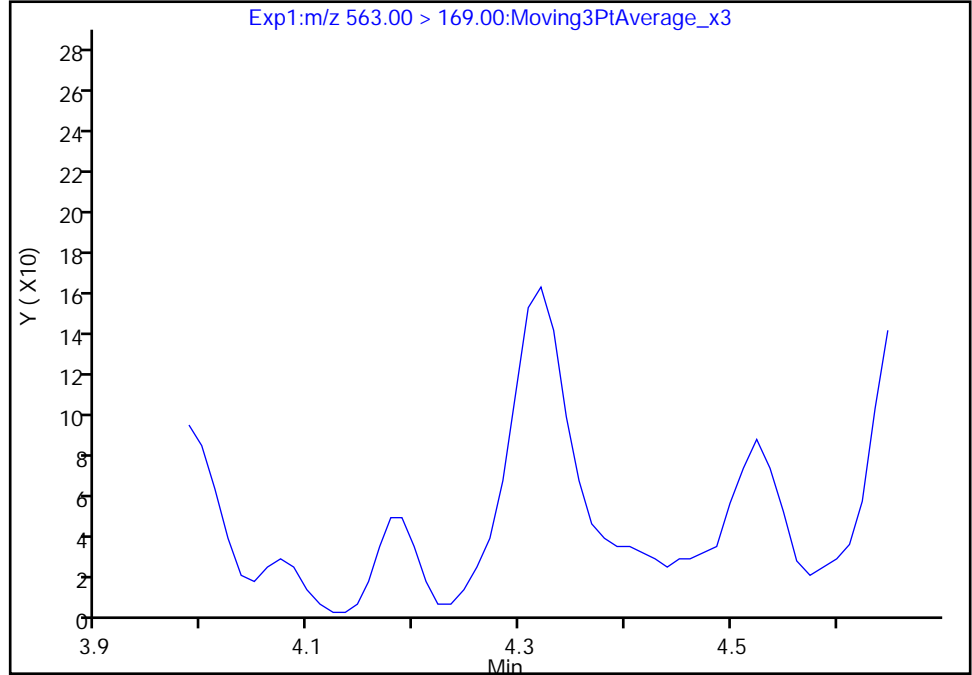
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

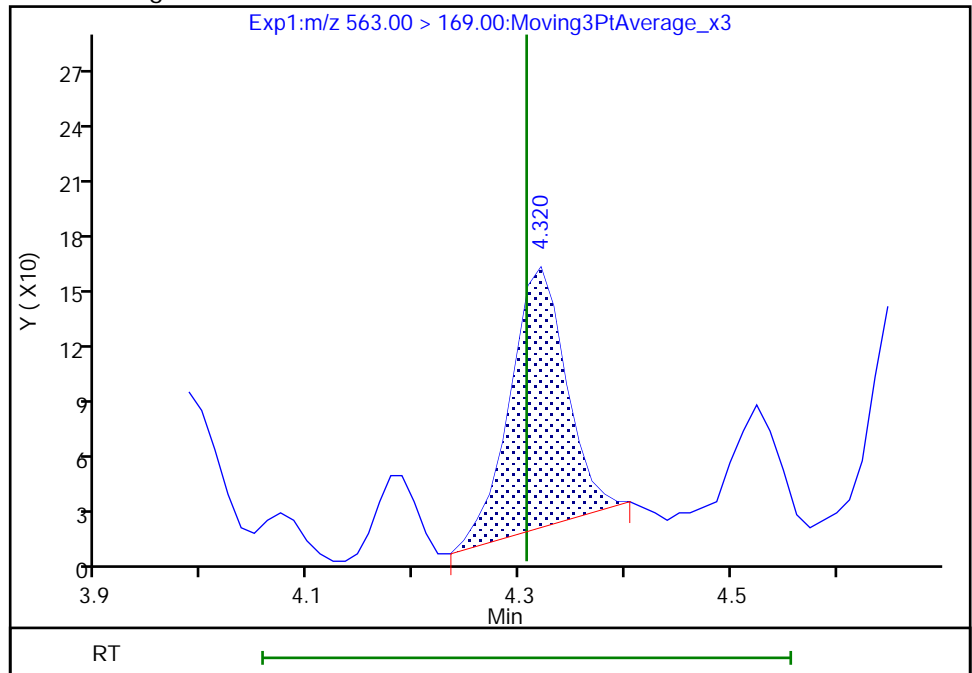
Not Detected
Expected RT: 4.31

Processing Integration Results



RT: 4.32
Area: 517
Amount: 0.118550
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:01:39
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

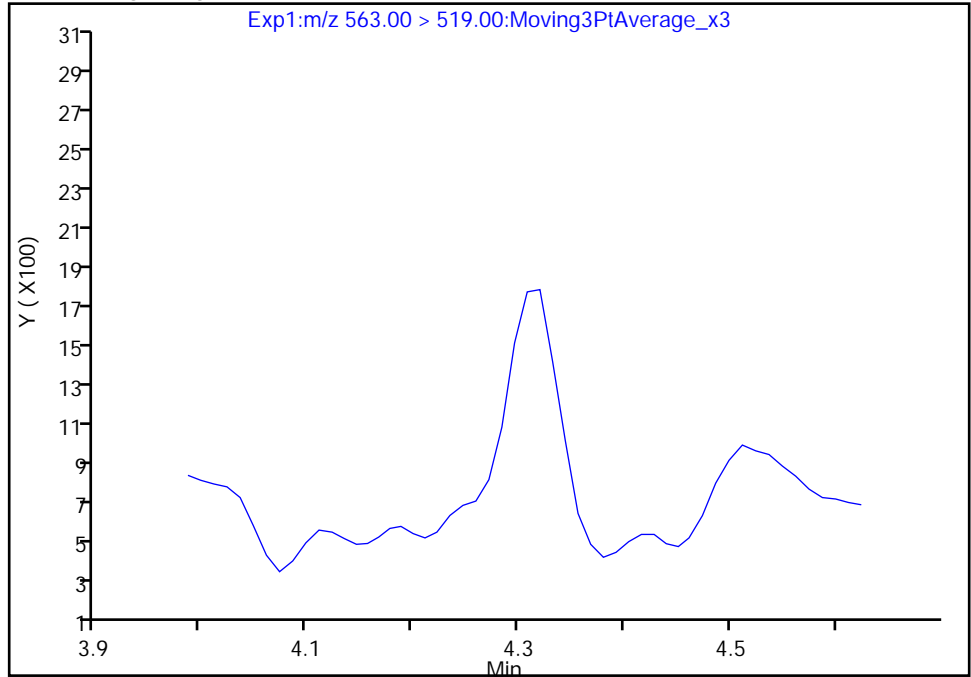
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

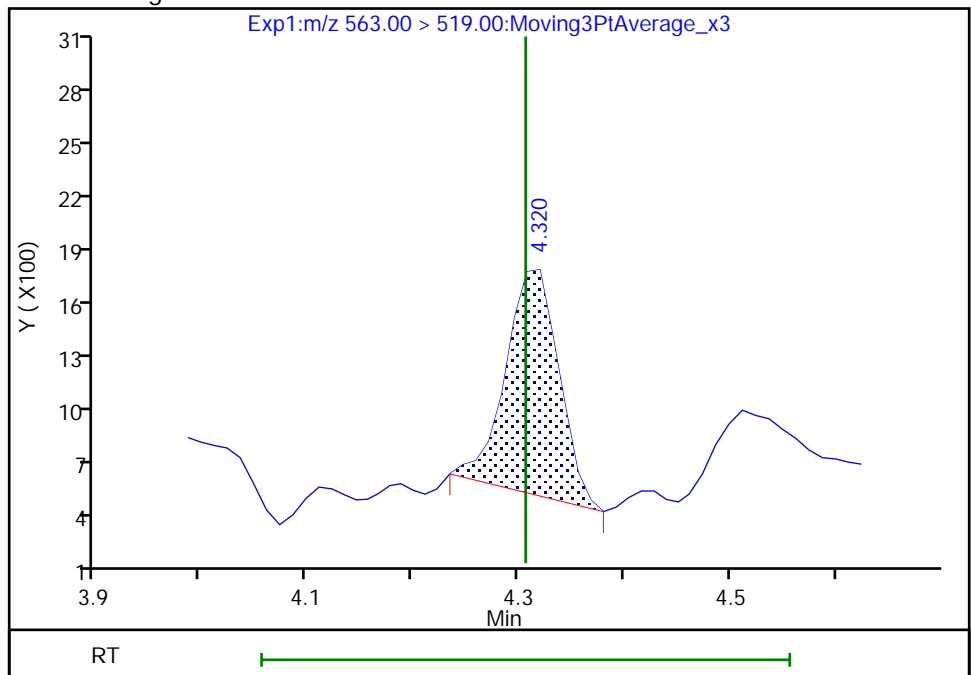
Not Detected
Expected RT: 4.31

Processing Integration Results



RT: 4.32
Area: 4224
Amount: 0.118550
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:01:39

Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

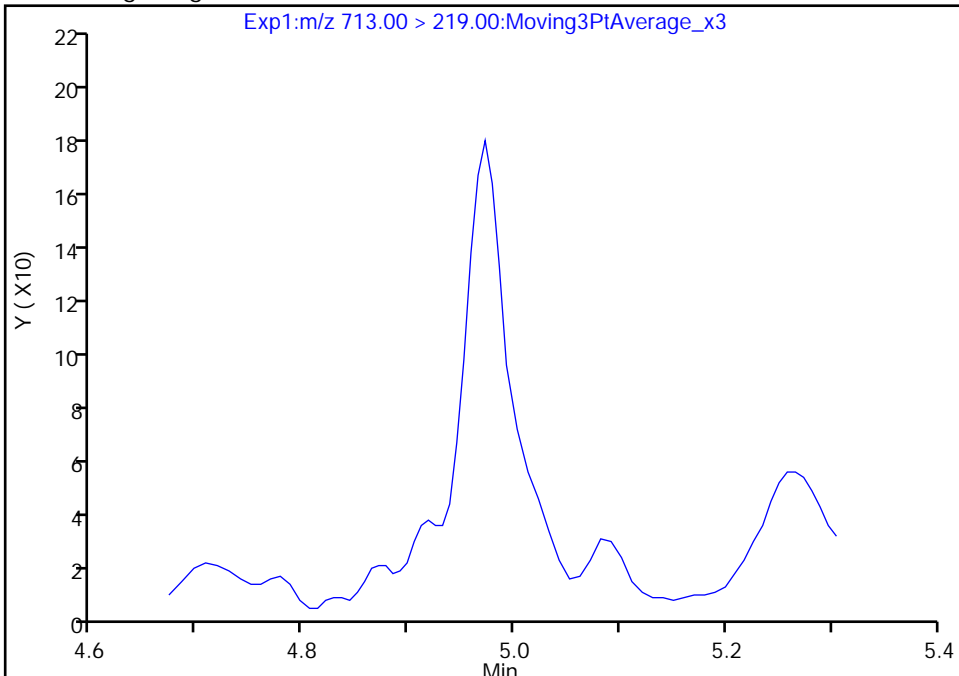
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

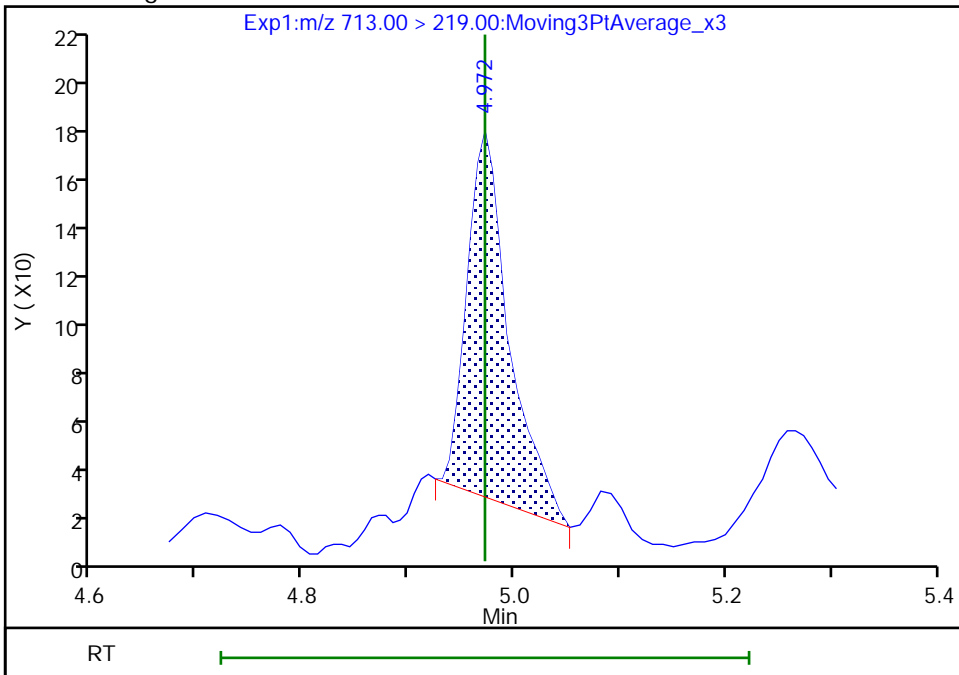
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 415
Amount: 0.070949
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

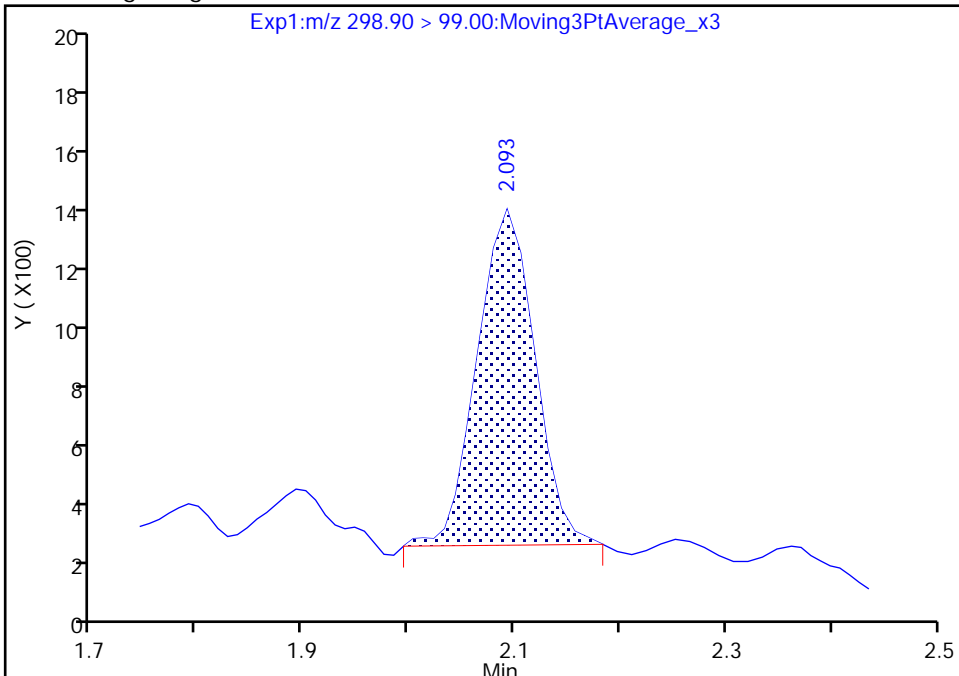
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 2

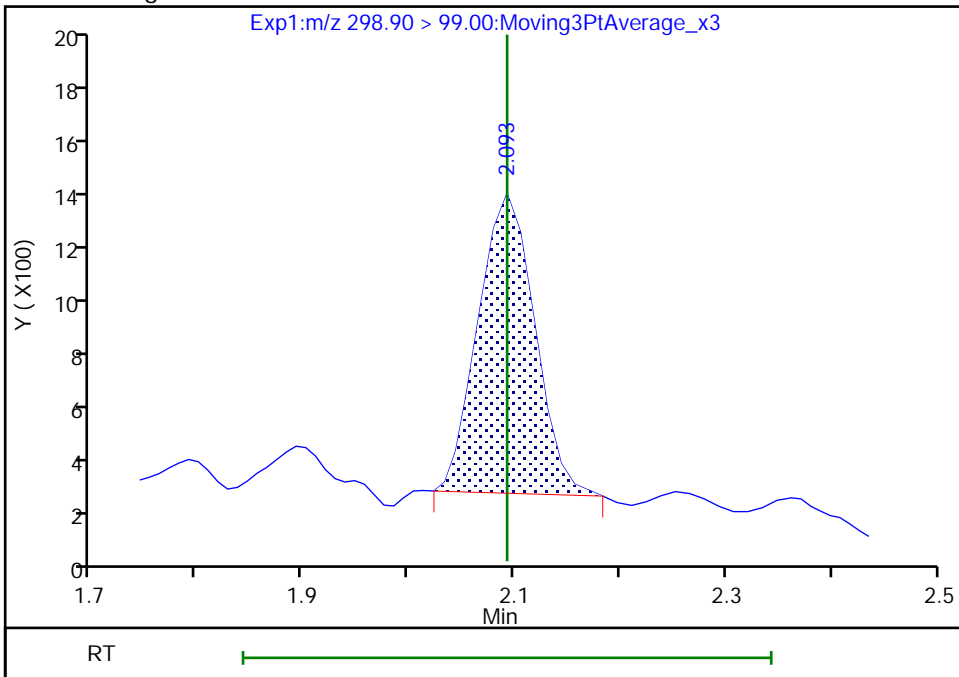
RT: 2.09
Area: 4086
Amount: 0.114330
Amount Units: ng/ml

Processing Integration Results



RT: 2.09
Area: 3940
Amount: 0.114330
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:00:02
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

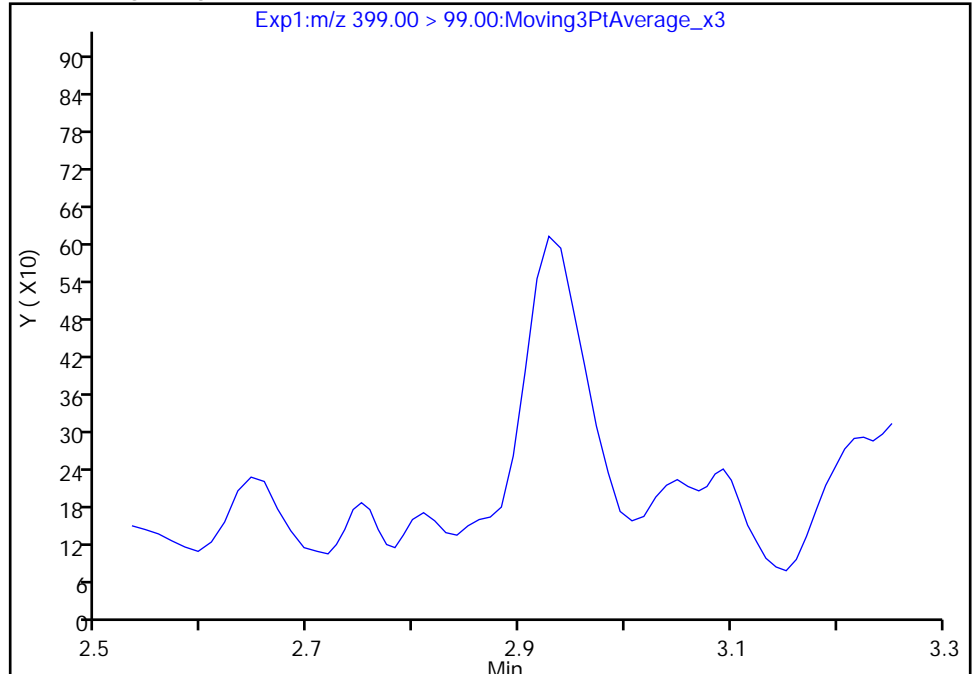
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

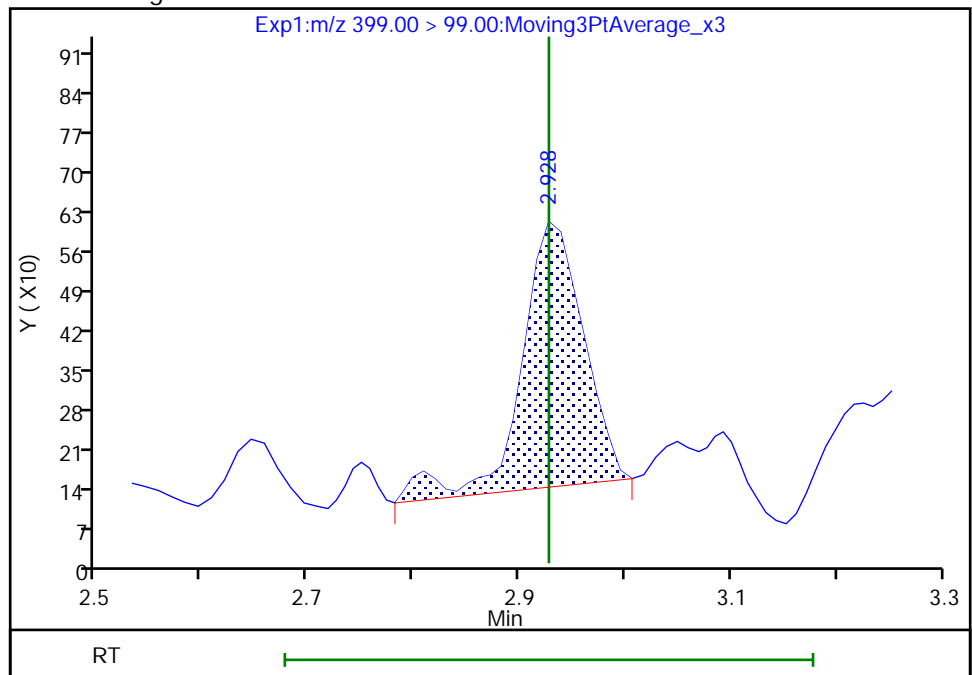
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 1925
Amount: 0.170417
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:00:17
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

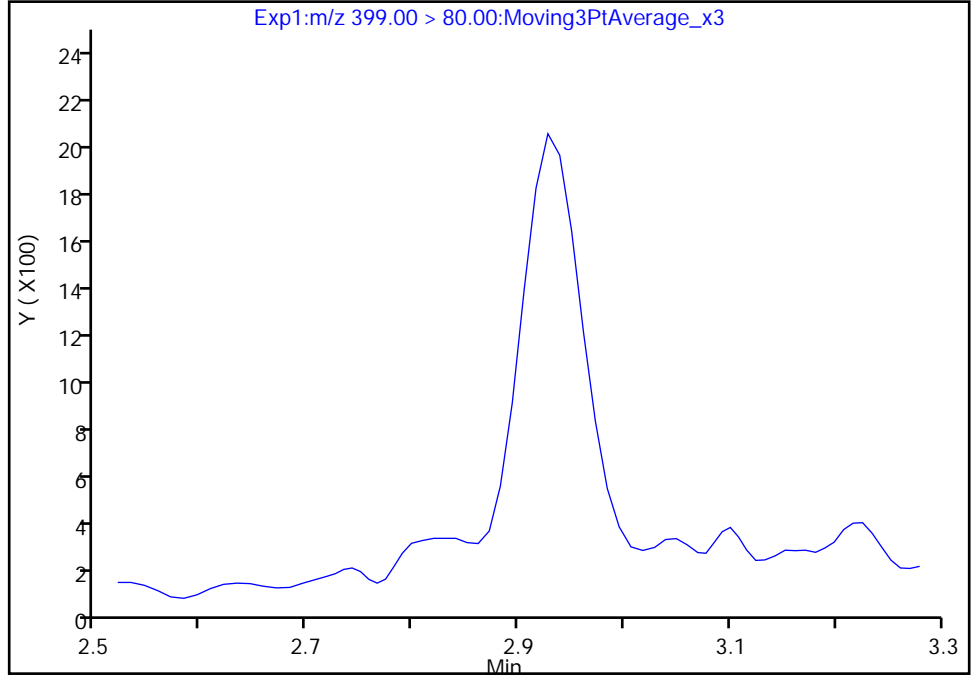
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

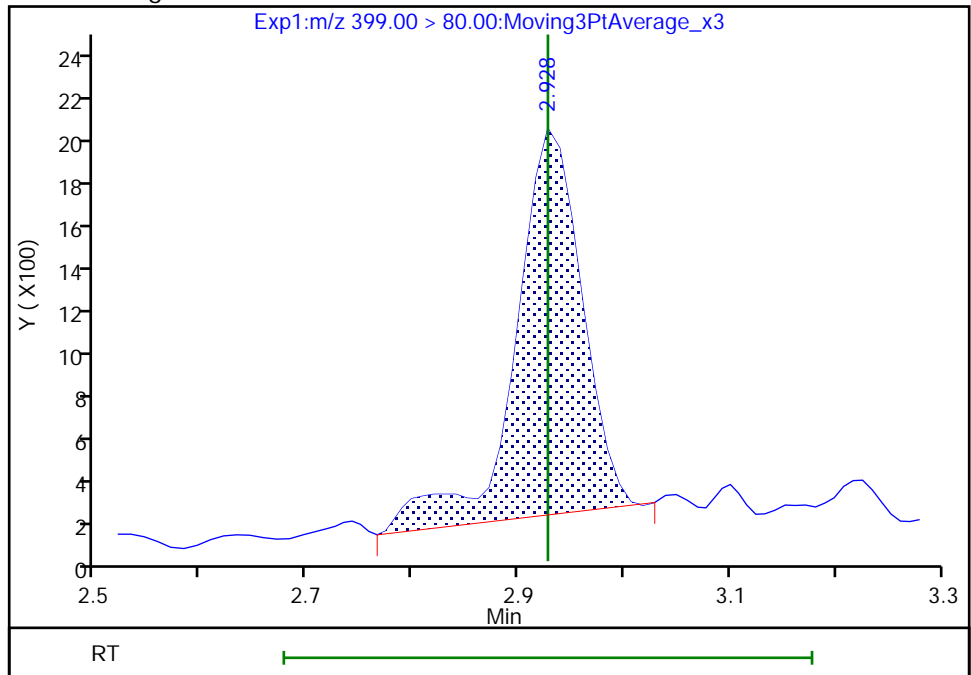
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 7921
Amount: 0.170417
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:00:17

Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

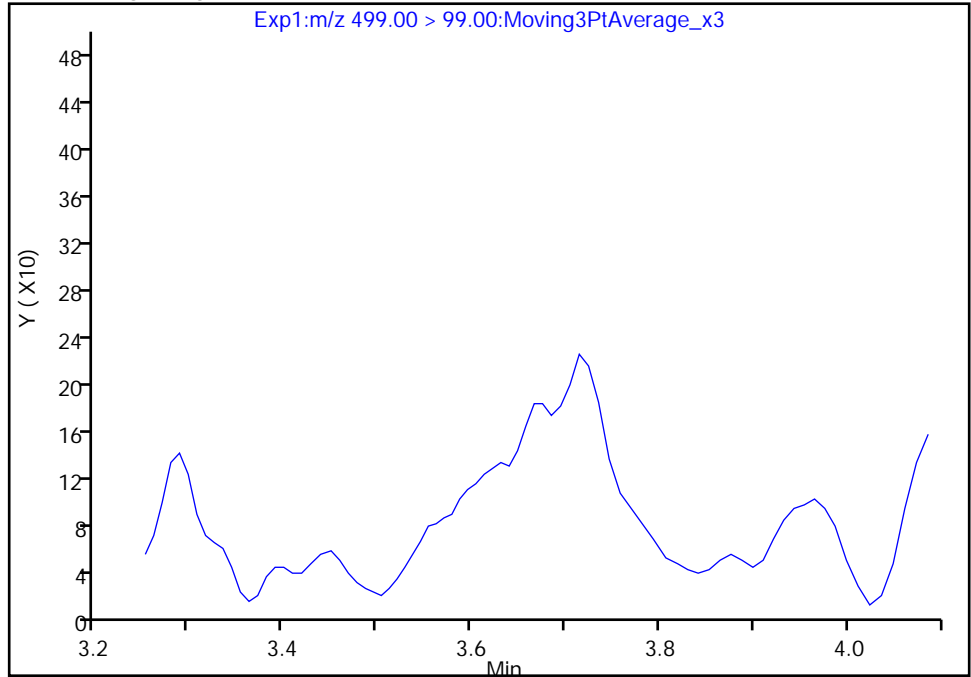
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

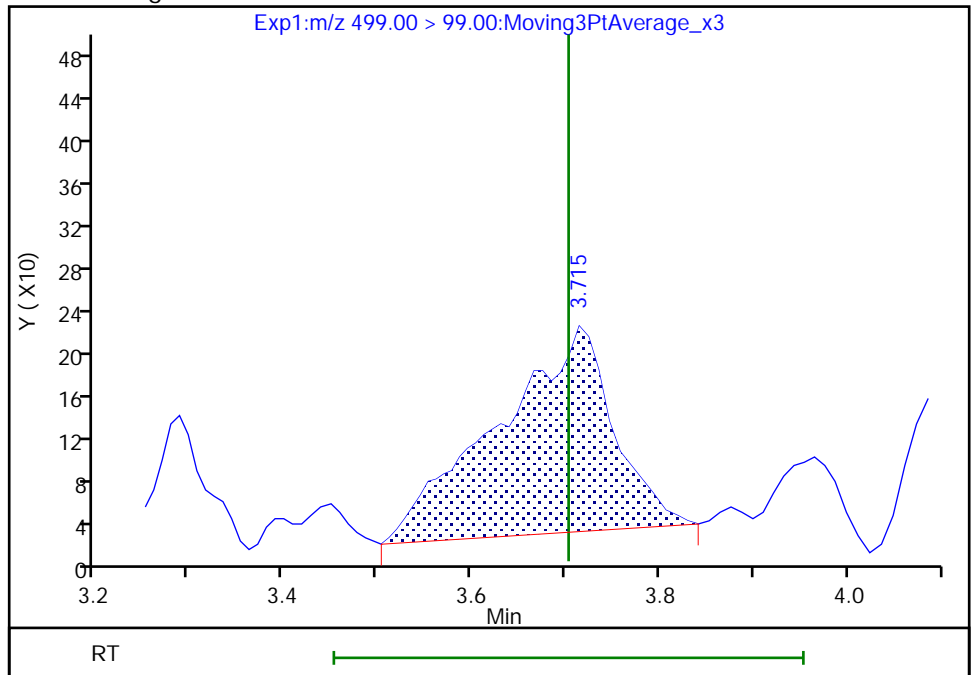
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.71
Area: 1663
Amount: 0.169877
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:00:49
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

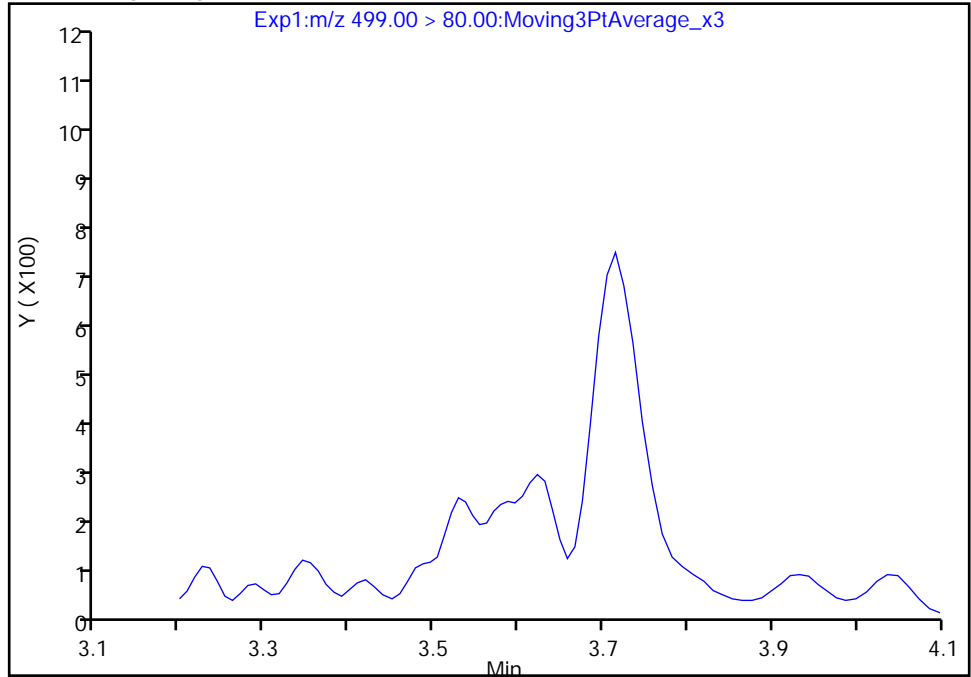
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

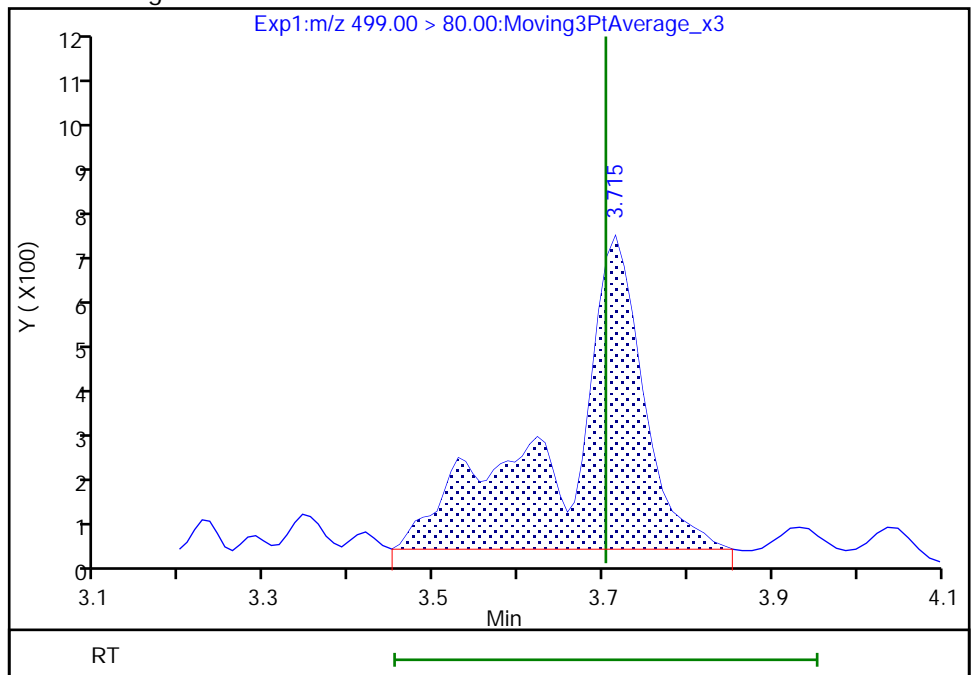
Not Detected
Expected RT: 3.70

Processing Integration Results



RT: 3.71
Area: 4565
Amount: 0.169877
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

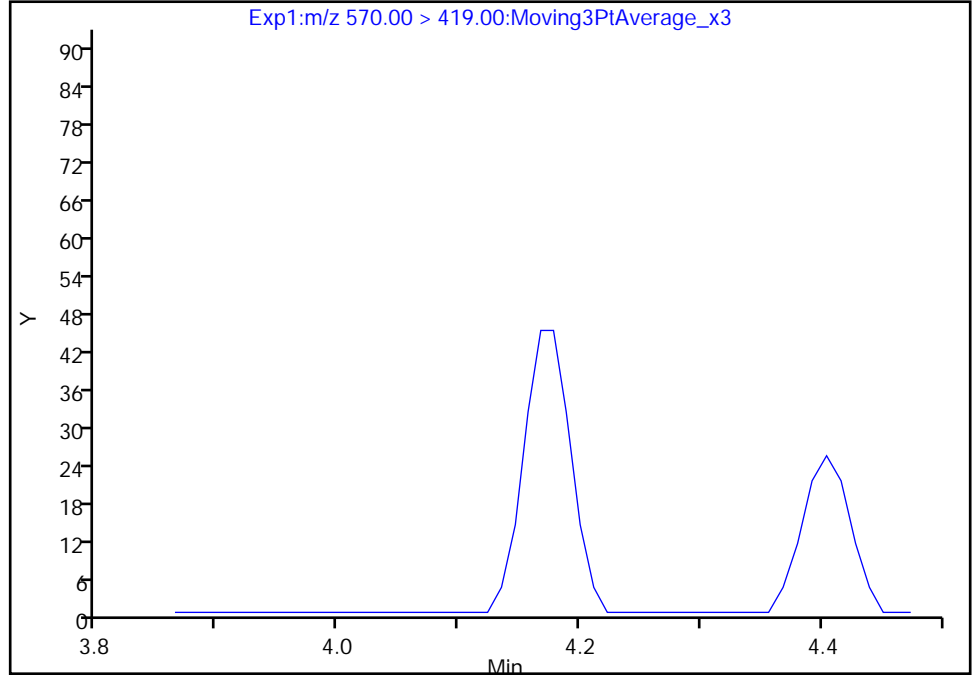
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E010.d
Injection Date: 02-Aug-2019 05:01:38 Instrument ID: LC812
Lims ID: 480-156213-F-7-A Lab Sample ID: 200-156213-7
Client ID: 356023-MW11C
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

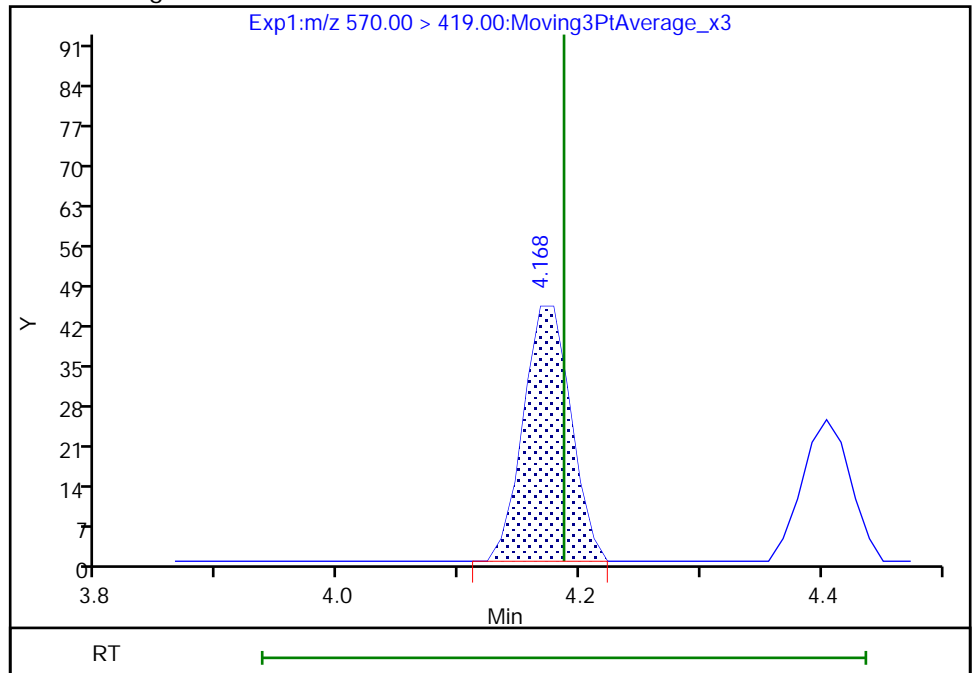
Not Detected
Expected RT: 4.19

Processing Integration Results



RT: 4.17
Area: 122
Amount: 0.033018
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:01:08
Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5B Lab Sample ID: 480-156213-11
 Matrix: Water Lab File ID: SC080119E011.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:10
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 313.3 (mL) Date Analyzed: 08/02/2019 05:09
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	4.2		1.6	0.80
2706-90-3	Perfluoropentanoic acid (PFPeA)	3.7		1.6	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	2.7		1.6	0.61
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.0	J	1.6	0.73
335-67-1	Perfluorooctanoic acid (PFOA)	2.4		1.6	0.50
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.61
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.42
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.73
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.6	0.39
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.64
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.0		1.6	0.49
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.0	8.0
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.7
39108-34-4	8:2 FTS	ND		16	2.3

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5B Lab Sample ID: 480-156213-11
 Matrix: Water Lab File ID: SC080119E011.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:10
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 313.3 (mL) Date Analyzed: 08/02/2019 05:09
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	68		25-150
STL00992	13C4 PFBA	79		25-150
STL01893	13C5 PFPeA	84		25-150
STL00993	13C2 PFHxA	85		50-150
STL01892	13C4 PFHpA	87		50-150
STL00990	13C4 PFOA	84		50-150
STL00995	13C5 PFNA	90		50-150
STL00996	13C2 PFDA	85		50-150
STL00997	13C2 PFUnA	75		50-150
STL00998	13C2 PFDoA	73		50-150
STL02116	13C2 PFTeDA	63		50-150
STL02337	13C3 PFBS	94		50-150
STL00994	18O2 PFHxS	94		50-150
STL00991	13C4 PFOS	80		50-150
STL02118	d3-NMeFOSAA	62		50-150
STL02117	d5-NEtFOSAA	62		50-150
STL02279	M2-6:2 FTS	105		25-150
STL02280	M2-8:2 FTS	97		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
 Lims ID: 480-156213-F-11-A
 Client ID: 356023-MW5B
 Sample Type: Client
 Inject. Date: 02-Aug-2019 05:09:41 ALS Bottle#: 4 Worklist Smp#: 11
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-11-A
 Misc. Info.: 200-0037095-011 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:05:49
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.508	3111830	39.4	78.8	11409	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.000	150197	2.62		24.8	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	3102522	41.8	83.7	5577	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	138215	2.30		5.8	M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	3182067	43.7	93.9	344150	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	43823	0.6299	Target=1.90	12.2	M
	298.90 > 99.00	2.093	2.093	0.0	1.000	22664		1.93(0.95-2.85)	12.2	
D 7 13C2 PFHxA	315.00 > 270.00	2.471	2.459	0.012	0.734	3113988	42.3	84.6	5983	
6 Perfluorohexanoic acid	313.00 > 269.00	2.471	2.459	0.012	1.000	107216	1.67	Target=13.23	13.8	M
	313.00 > 119.00	2.471	2.459	0.012	1.000	7450		14.39(6.61-19.84)	11.3	
D 11 18O2 PFHxS	403.00 > 84.00	2.939	2.916	0.023	0.874	1905956	44.7	94.5	6158	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.874	3155613	43.7	87.5	7458	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.939	2.928	0.011	1.000	15431	0.2906	Target=3.37	8.9	M
	399.00 > 99.00	2.939	2.928	0.011	1.000	5694		2.71(1.69-5.06)	5.2	M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.000	36943	0.6249	Target=3.76	5.6	M
	363.00 > 169.00	2.939	2.928	0.011	1.000	10502		3.52(1.88-5.65)	30.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.345	3.335	0.010	0.995	444131	50.0		105	536	
13 1H,1H,2H,2H-perfluorooctanesuloni										
427.00 > 407.00	3.345	3.336	0.009	1.000	10008	0.6241			20.8	
D 14 13C4 PFOA										
417.00 > 372.00	3.364	3.344	0.020	1.000	3187534	41.8		83.7	10949	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.364	3.355	0.009	1.000	104960	1.51	Target=2.84	8.9		Ma
413.00 > 169.00	3.364	3.355	0.009	1.000	52342		2.01(1.42-4.25)	142		M
* 62 13C2 PFOA										
415.00 > 370.00	3.364	3.355	0.009		4189298	50.0			10216	
D 18 13C4 PFOS										
503.00 > 80.00	3.713	3.695	0.018	1.104	1351163	38.0		79.5	2947	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.603	3.703	-0.100	0.970	32714	1.22	Target=4.33	45.0		M
499.00 > 99.00	3.713	3.703	0.010	1.000	5637		5.80(2.16-6.49)	7.4		M
D 19 13C5 PFNA										
468.00 > 423.00	3.734	3.715	0.019	1.110	3115023	44.8		89.6	15497	
20 Perfluorononanoic acid										
463.00 > 419.00	3.734	3.723	0.011	1.000	7055	0.1250	Target=8.15	2.1		M
463.00 > 169.00	3.734	3.723	0.011	1.000	1364		5.17(4.08-12.23)	10.4		M
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.036	0.011	1.203	2366598	42.6		85.1	13271	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.036	0.023	1.207	380253	46.4		96.9	761	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.059	4.047	0.012	1.003	4201	0.0917	Target=9.58	1.5		M
513.00 > 169.00	4.059	4.047	0.012	1.003	537		7.82(4.79-14.37)	3.5		M
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.214	2160312	33.8		67.7	8806	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.084	4.072	0.012	1.000	3812	0.0966			30.6	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.178	0.009	1.245	218536	30.8		61.5	1804	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.284	1908568	37.7		75.4	8199	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.307	0.012	1.000	2543	0.0776	Target=7.95	1.3		RM
563.00 > 169.00	4.319	4.307	0.012	1.000	1031		2.47(3.98-11.93)	9.1		M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.308	0.023	1.287	246779	31.2		62.4	1060	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.319	4.319	0.0	0.997	275	0.0871			2.6	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.537	0.012	1.352	1992903	36.6		73.1	6702	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.965	0.014	1.480	2364725	31.5		63.0	7830	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

a - User Assigned ID

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d

Injection Date: 02-Aug-2019 05:09:41

Instrument ID: LC812

Lims ID: 480-156213-F-11-A

Lab Sample ID: 200-156213-11

Client ID: 356023-MW5B

Operator ID: lc812tech

ALS Bottle#: 4

Worklist Smp#: 11

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

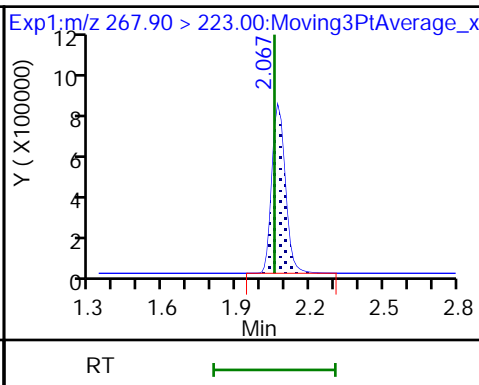
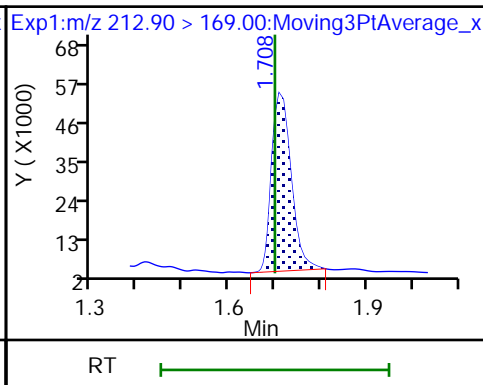
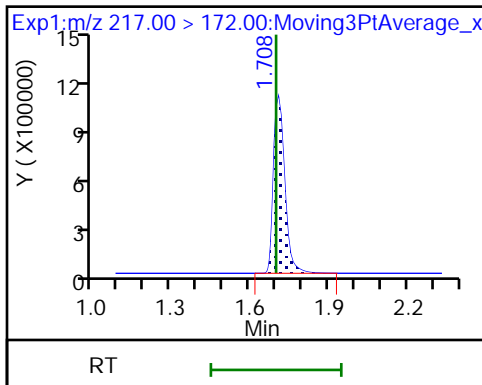
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

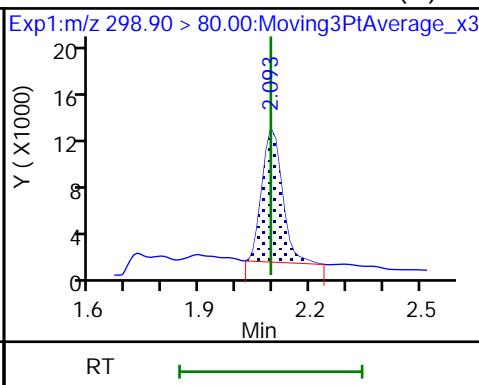
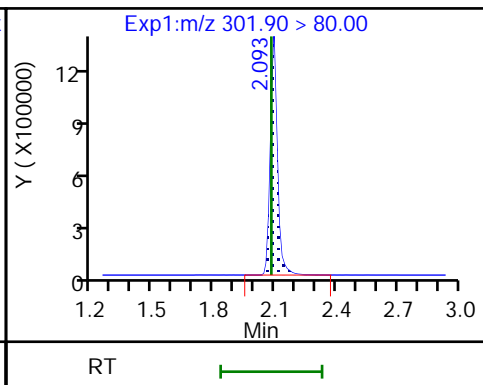
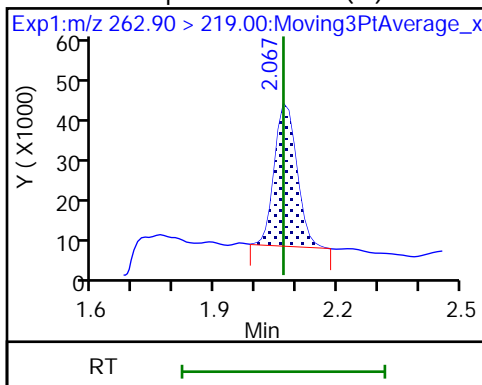
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

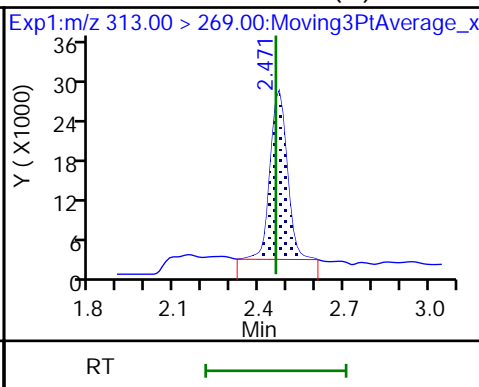
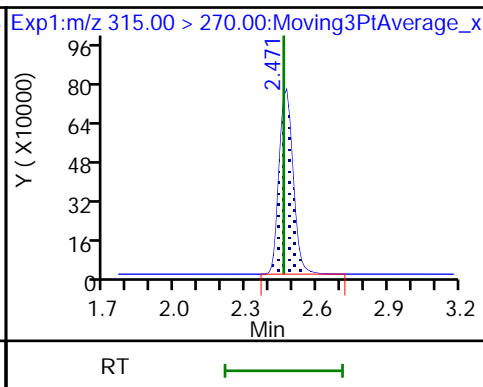
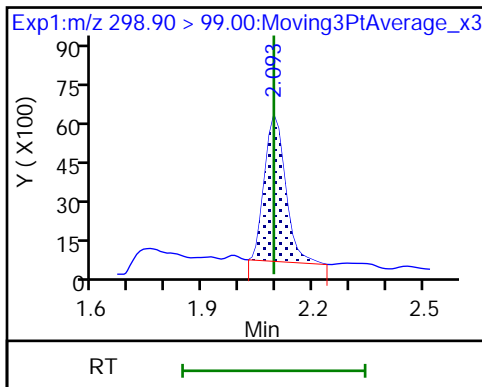
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

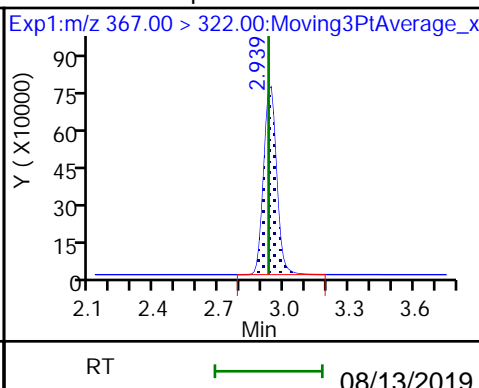
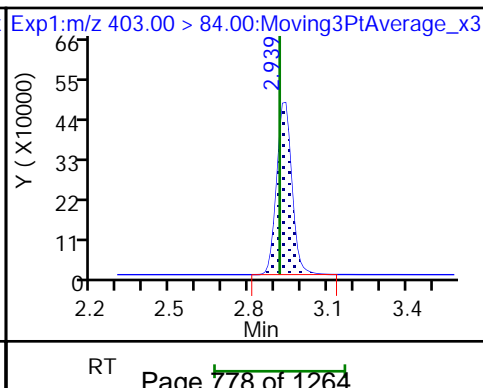
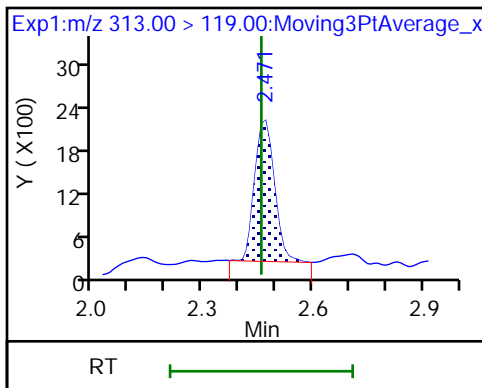
6 Perfluorohexanoic acid (M)

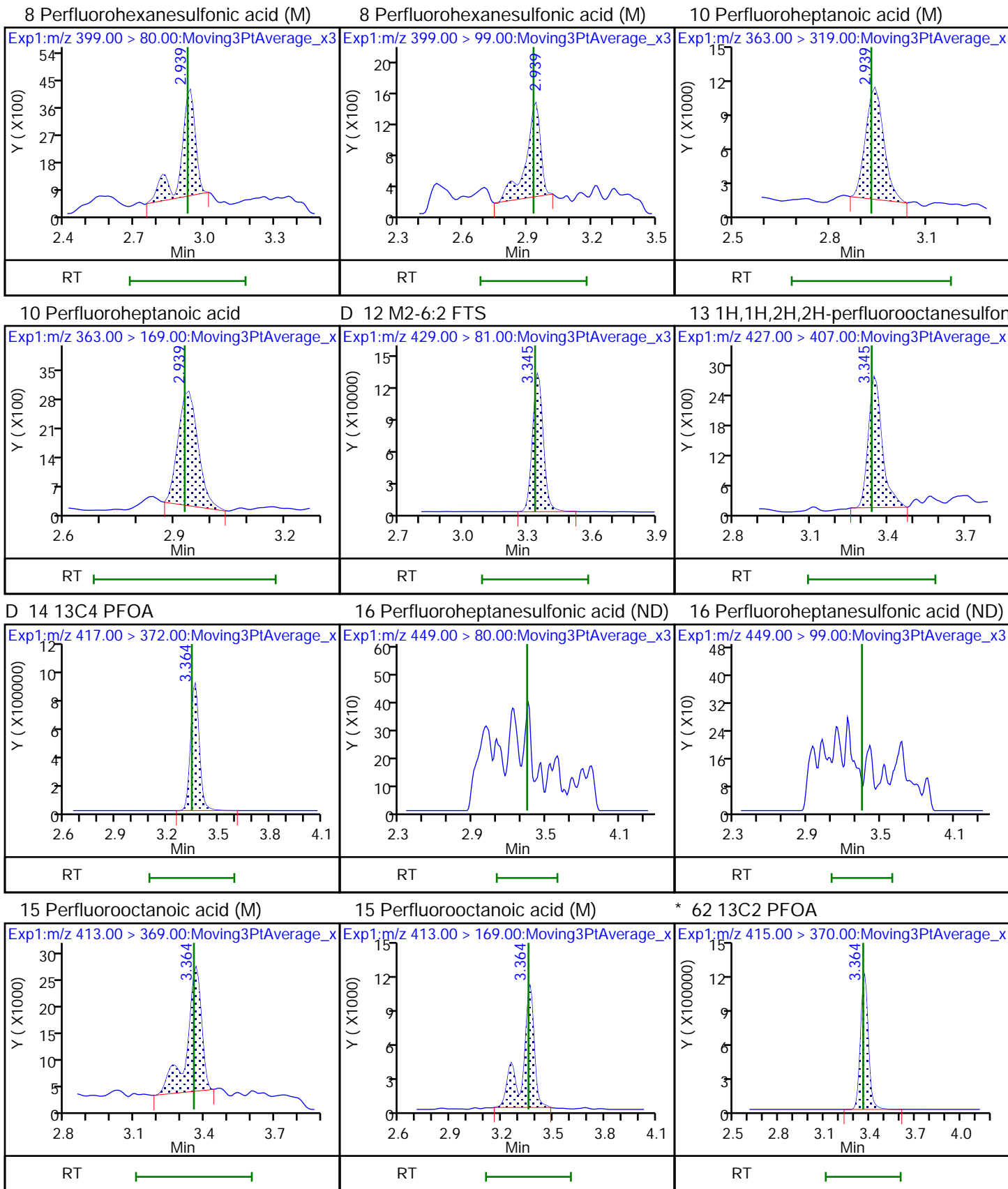


6 Perfluorohexanoic acid

D 11 18O2 PFHxS

D 9 13C4 PFHpA

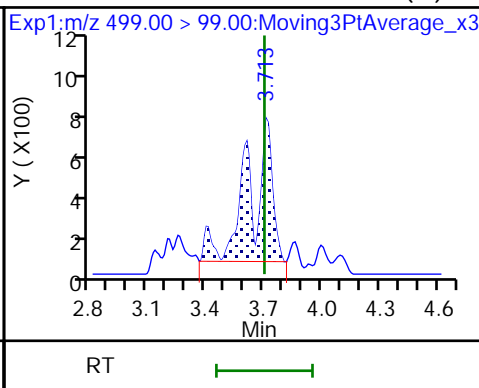
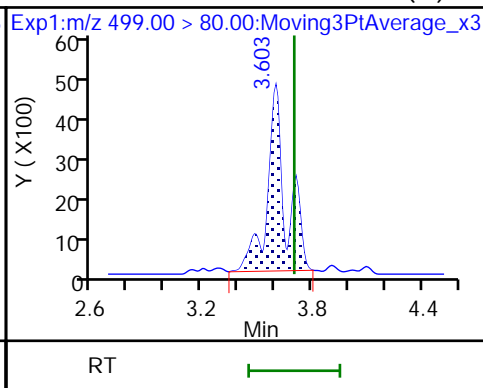
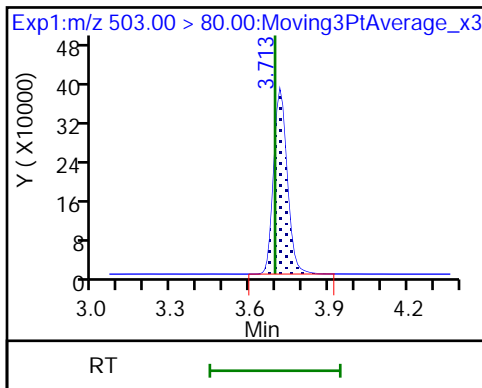




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

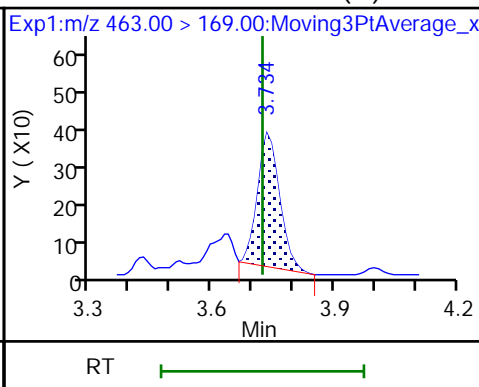
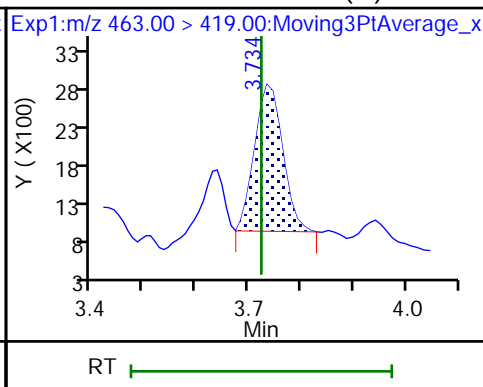
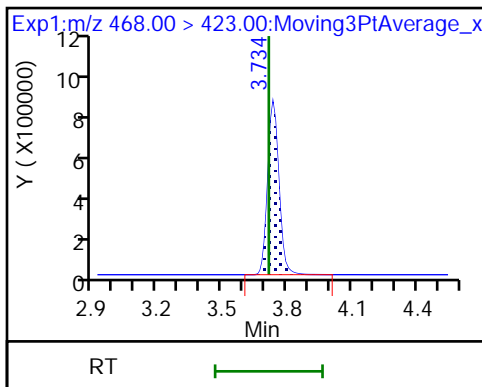
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (M)

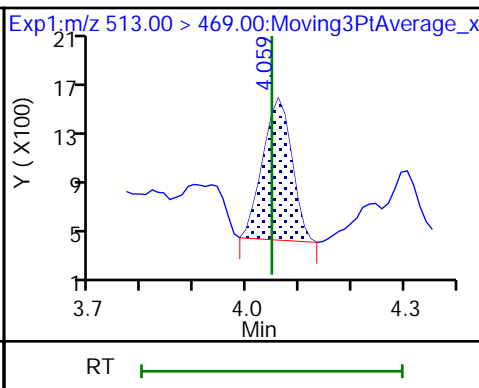
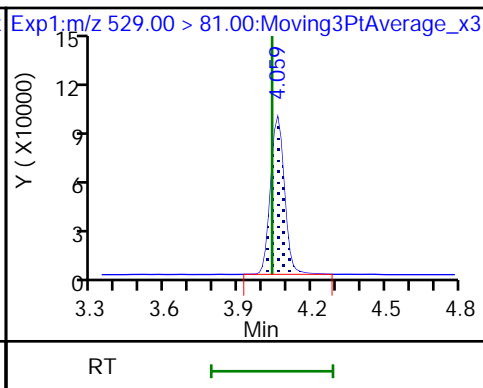
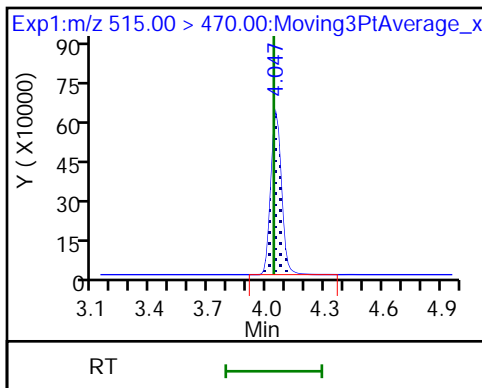
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

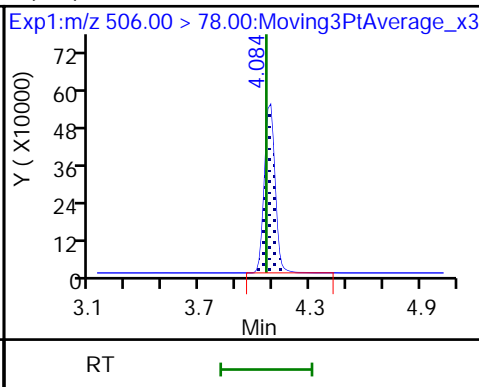
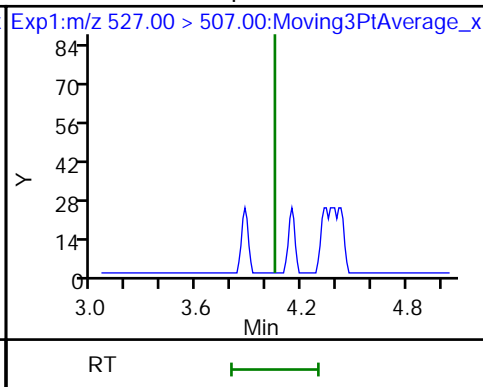
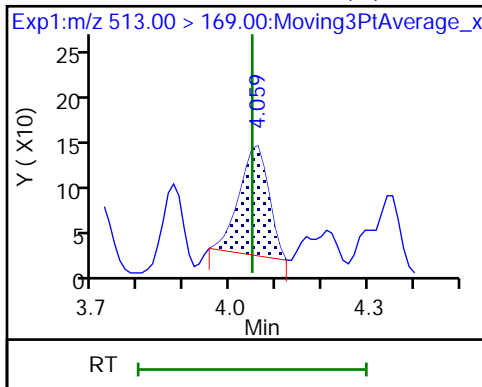
24 Perfluorodecanoic acid



24 Perfluorodecanoic acid (M)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

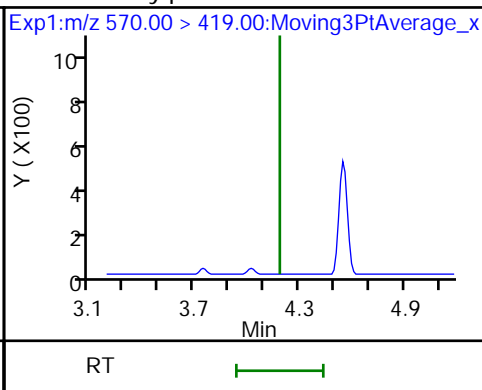
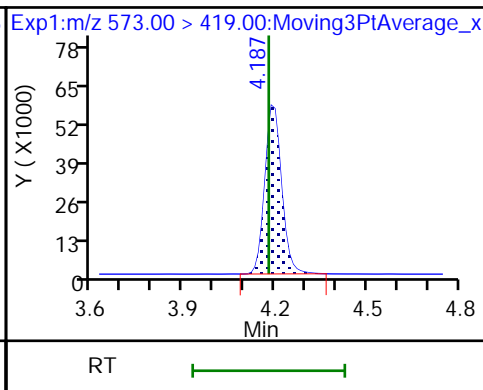
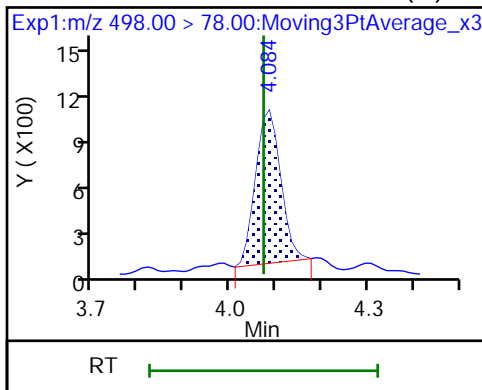
(M) 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

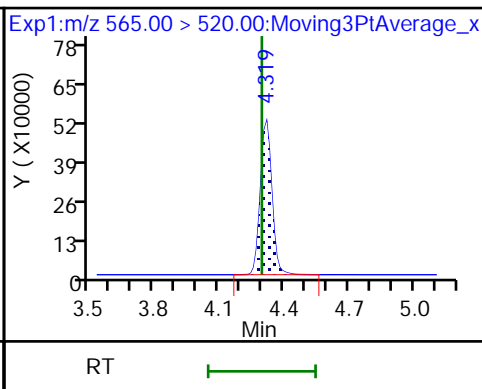
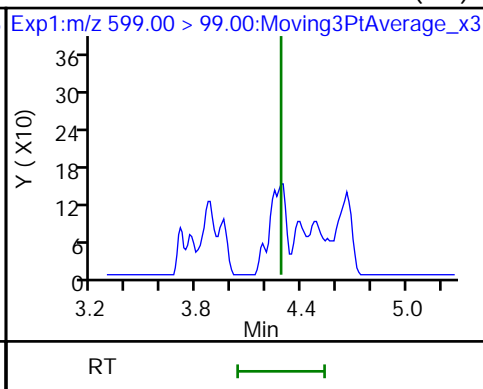
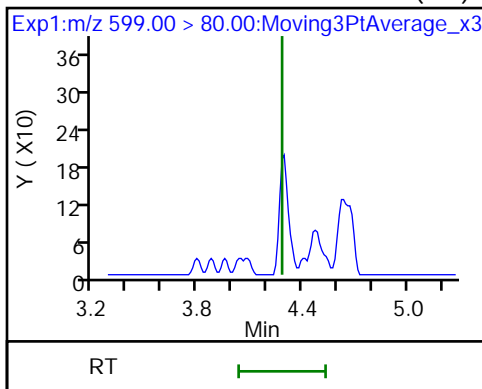
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

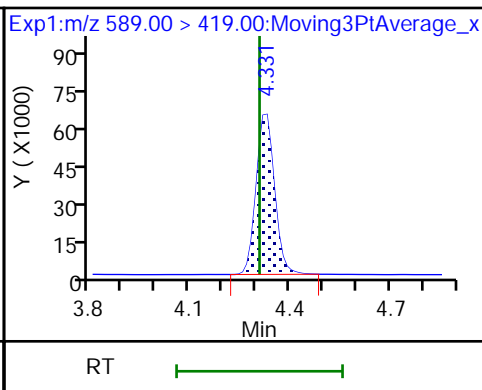
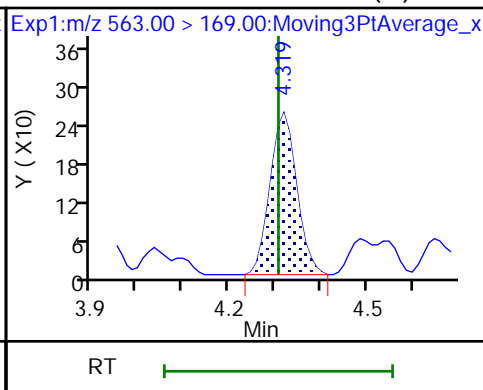
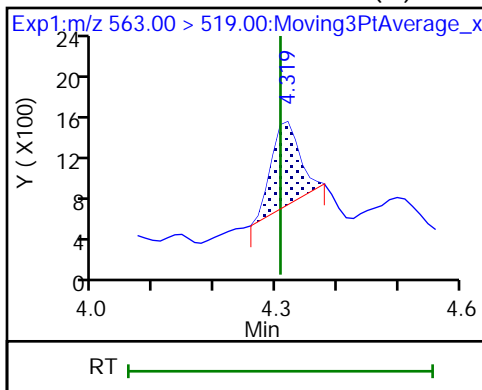
D 30 13C2 PFUoA



31 Perfluoroundecanoic acid (M)

31 Perfluoroundecanoic acid (M)

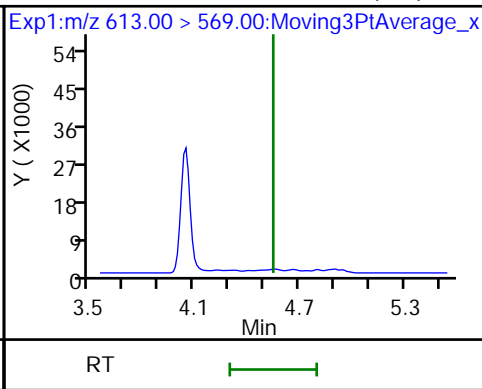
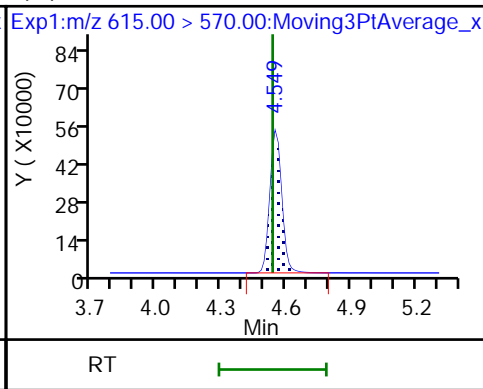
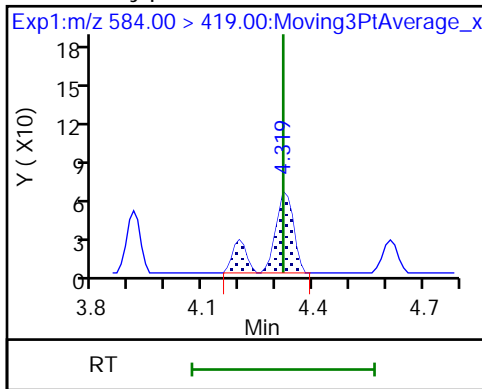
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 36 13C2 PFDoA

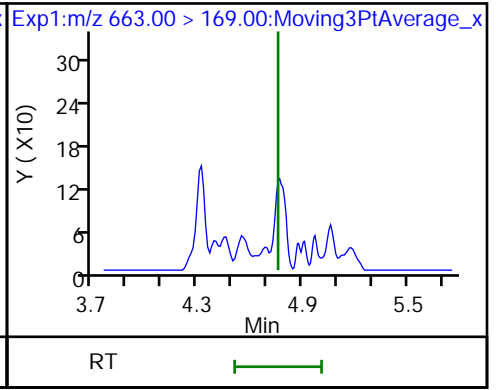
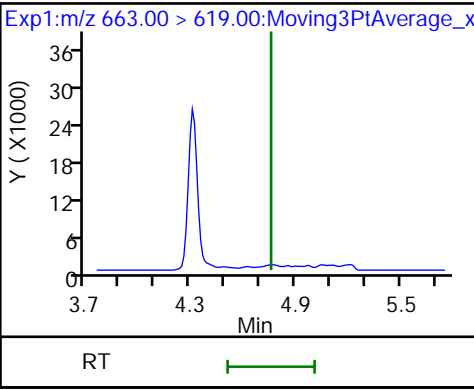
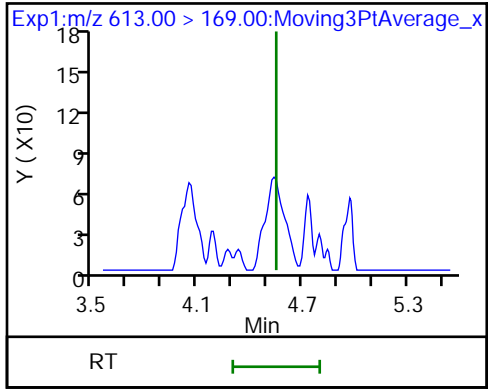
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

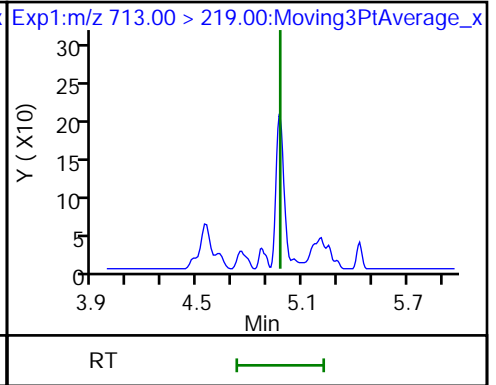
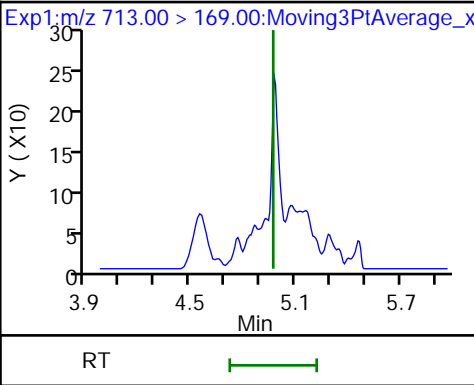
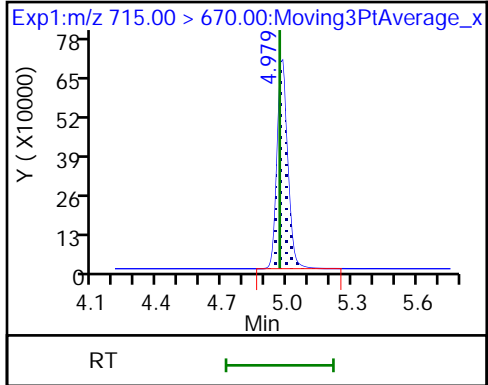
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (ND)

42 Perfluorotetradecanoic acid (ND)



Eurofins TestAmerica, Burlington

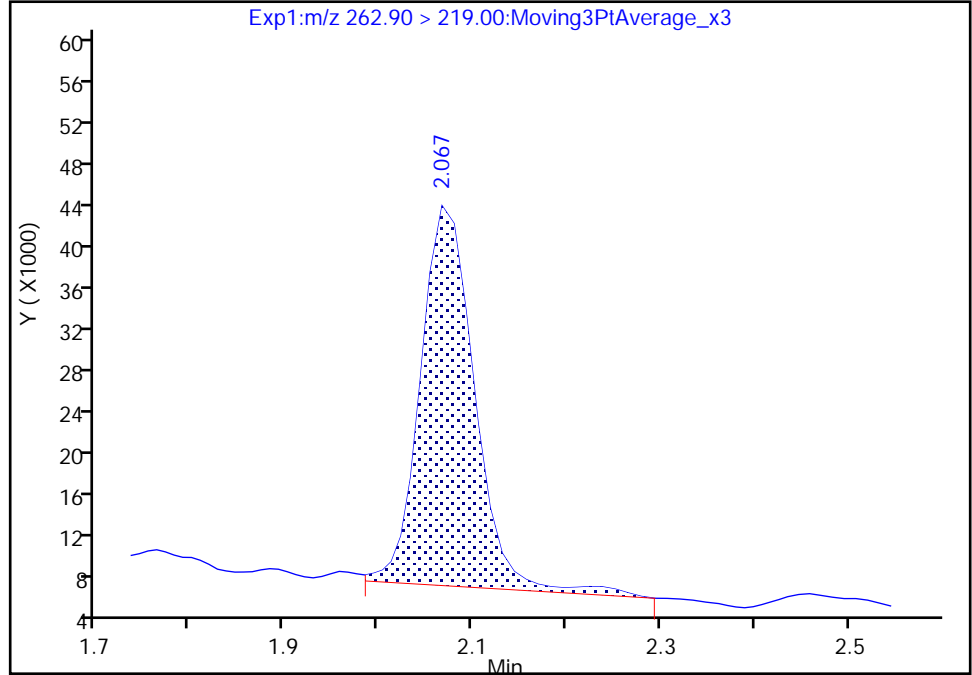
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

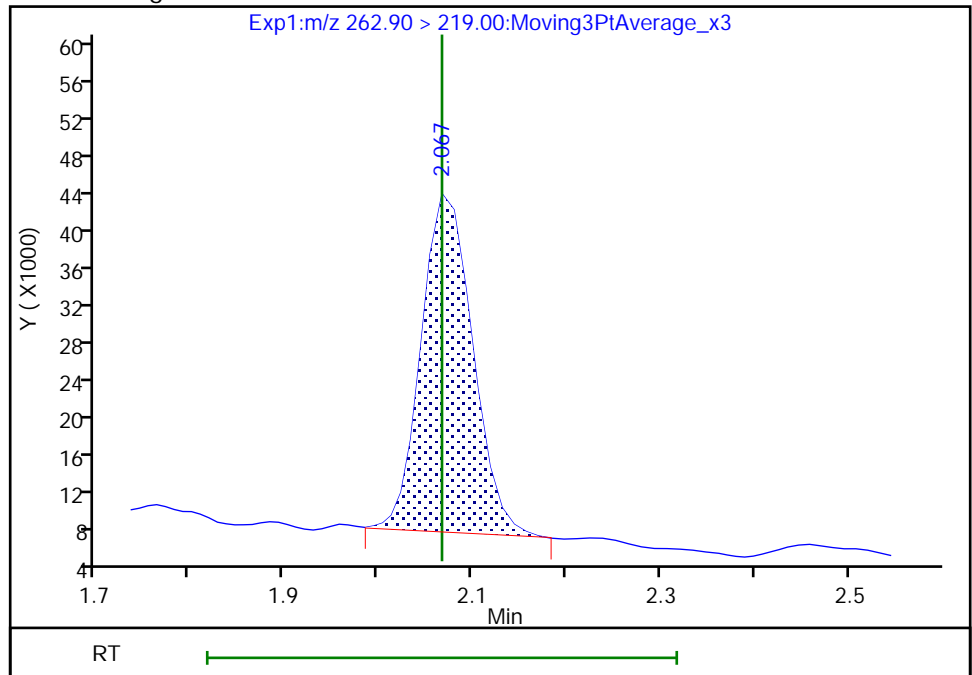
RT: 2.07
Area: 148019
Amount: 2.465173
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 138215
Amount: 2.301893
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:02:42
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

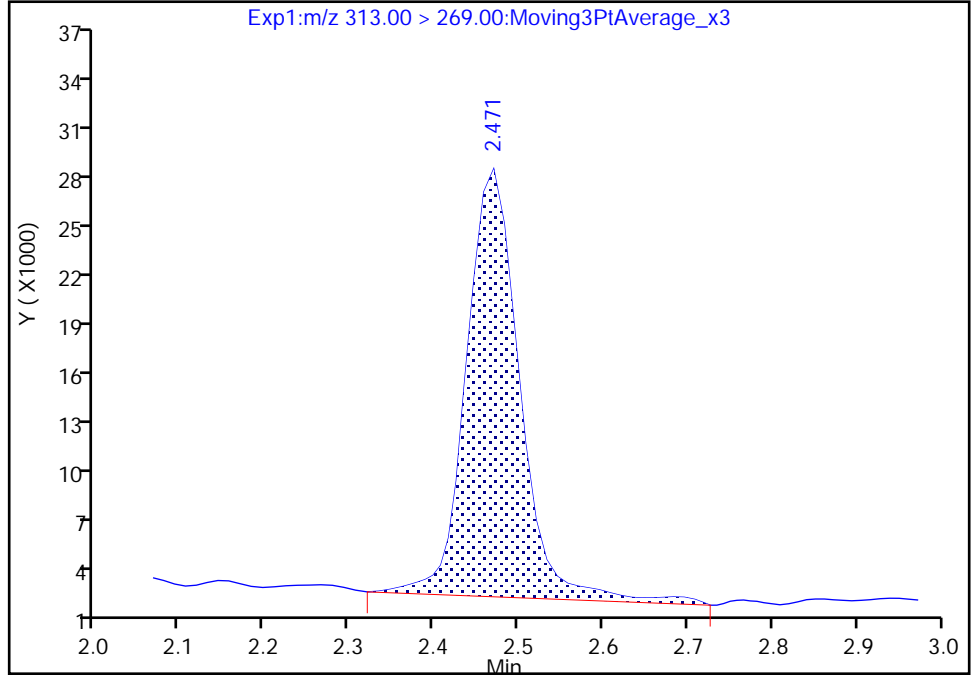
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

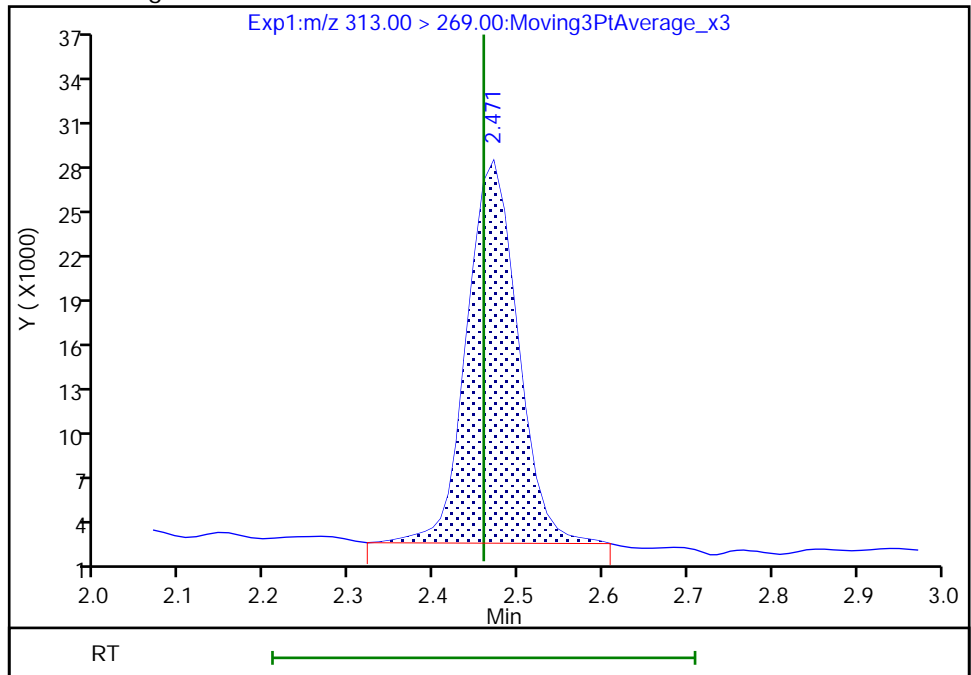
RT: 2.47
Area: 113953
Amount: 1.776784
Amount Units: ng/ml

Processing Integration Results



RT: 2.47
Area: 107216
Amount: 1.671739
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:02:58

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

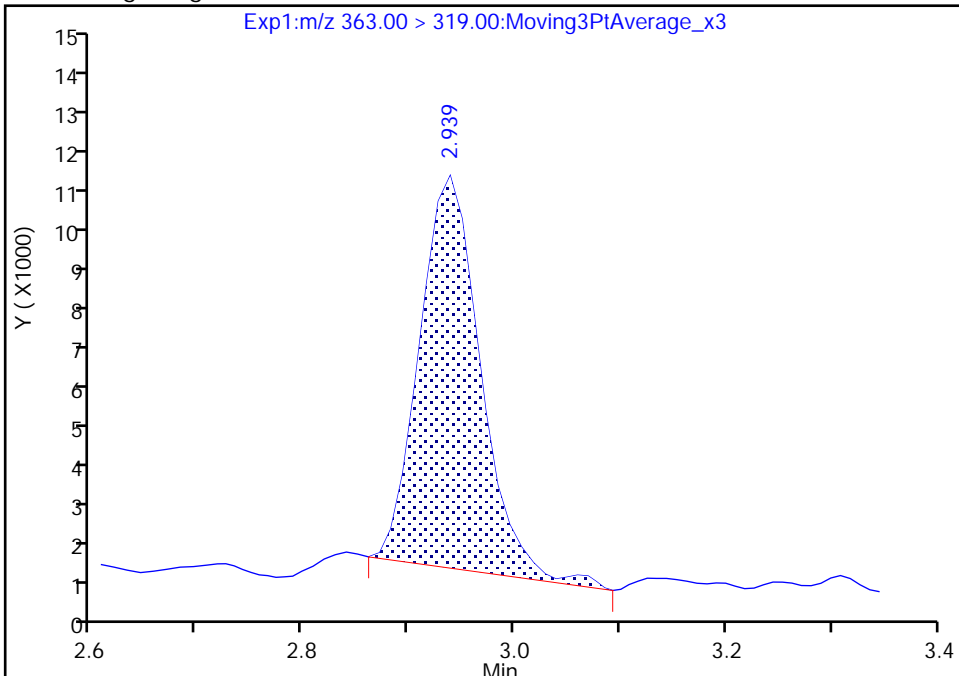
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

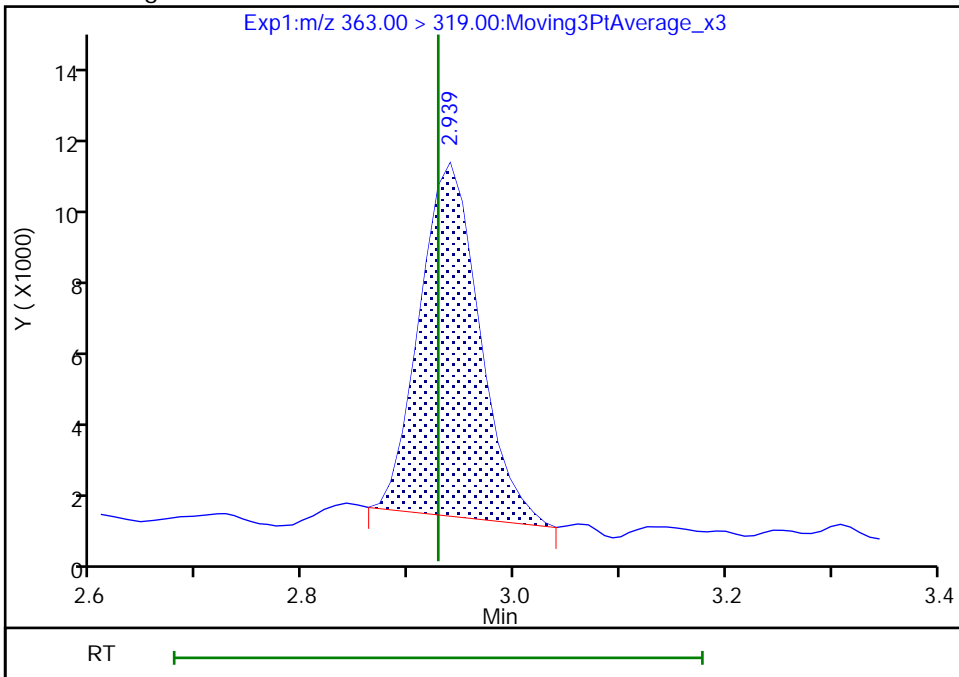
RT: 2.94
Area: 37915
Amount: 0.641386
Amount Units: ng/ml

Processing Integration Results



RT: 2.94
Area: 36943
Amount: 0.624943
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:03:20
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

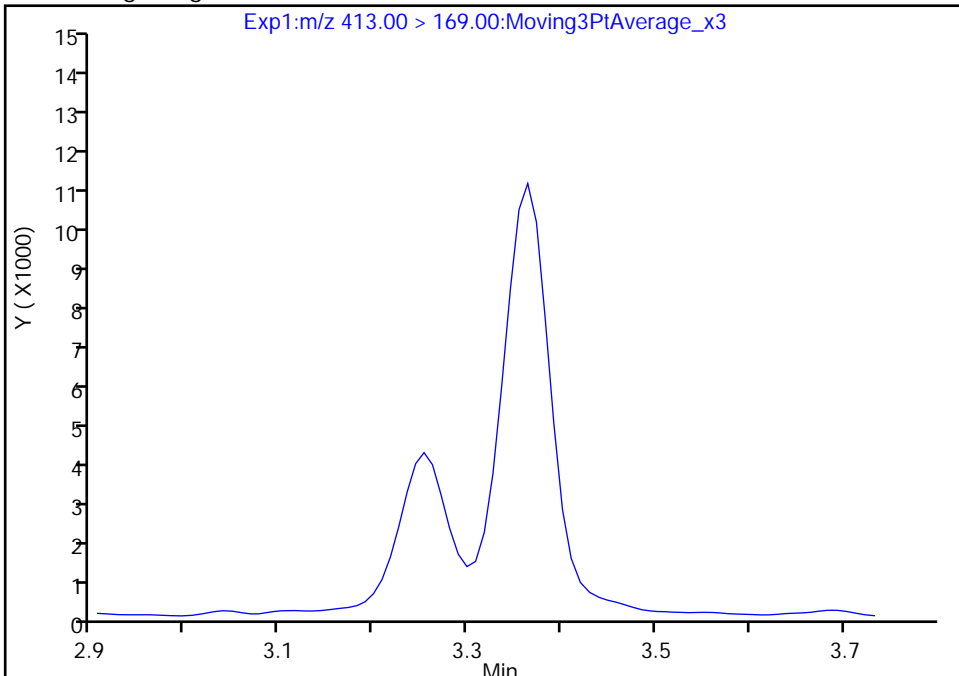
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

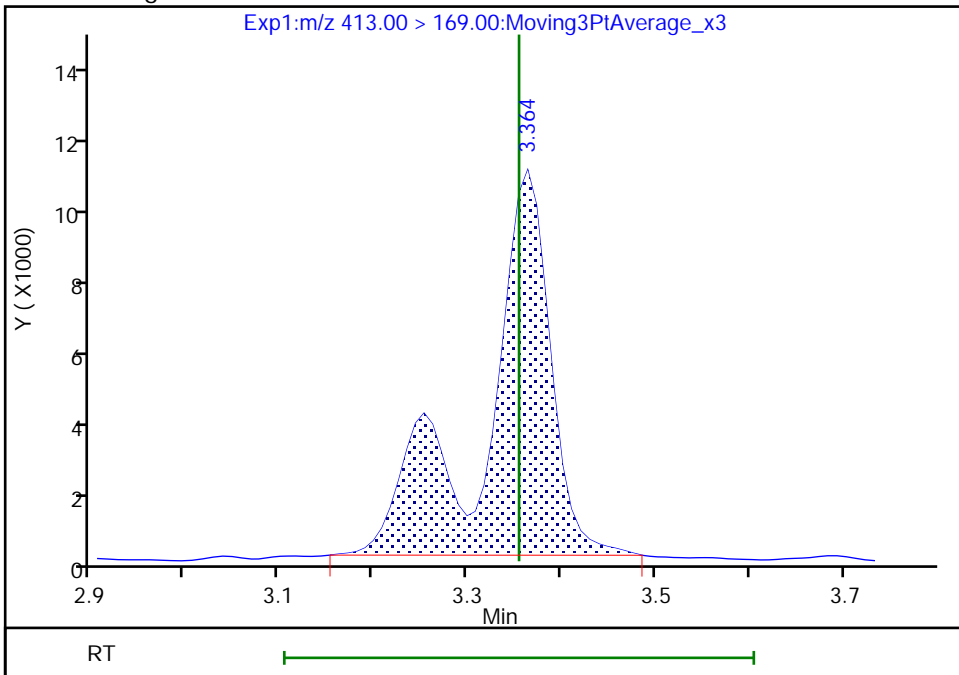
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 52342
Amount: 1.513071
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:03:53
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

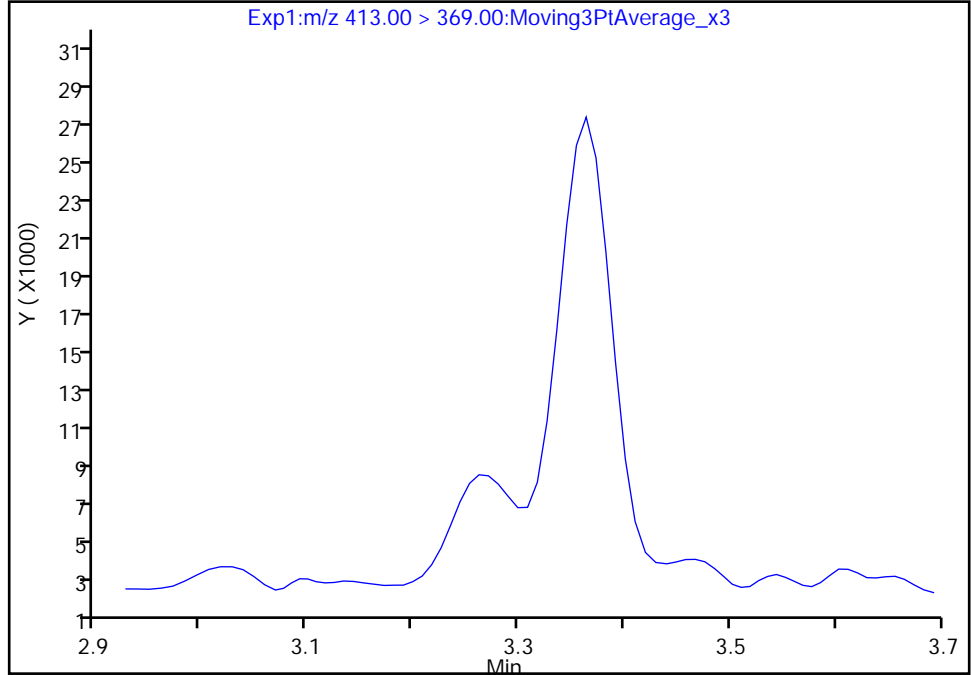
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

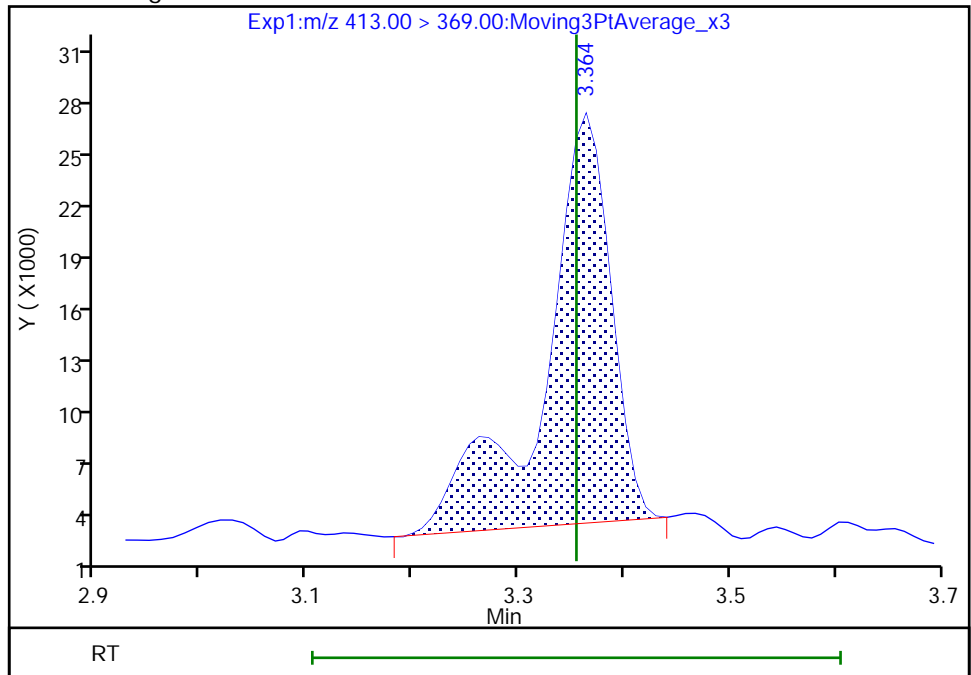
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 104960
Amount: 1.513071
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

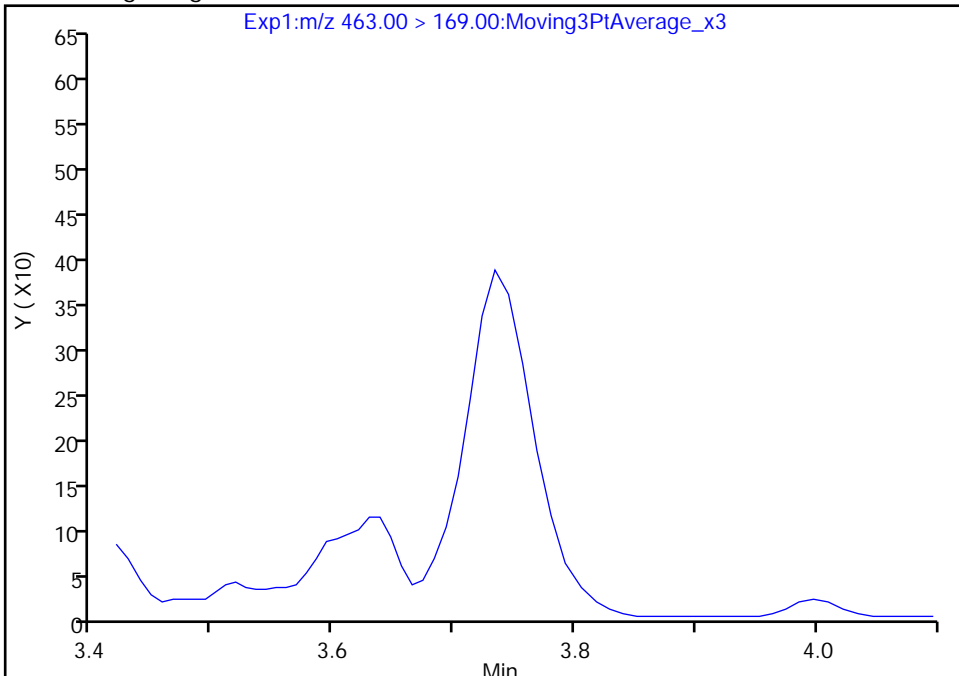
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

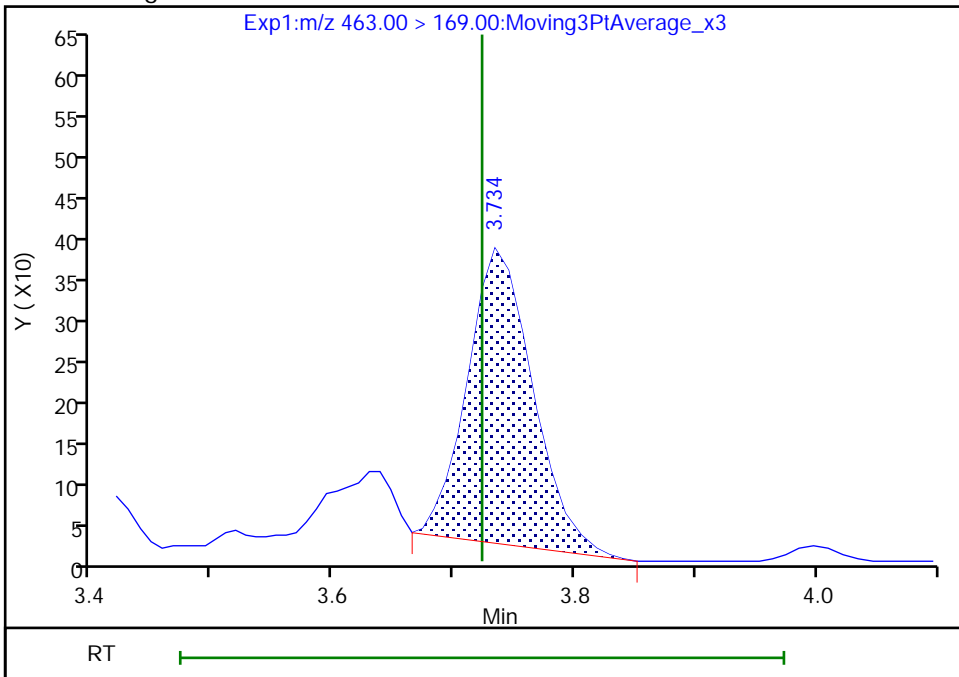
Not Detected
Expected RT: 3.72

Processing Integration Results



RT: 3.73
Area: 1364
Amount: 0.125005
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:04:36
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

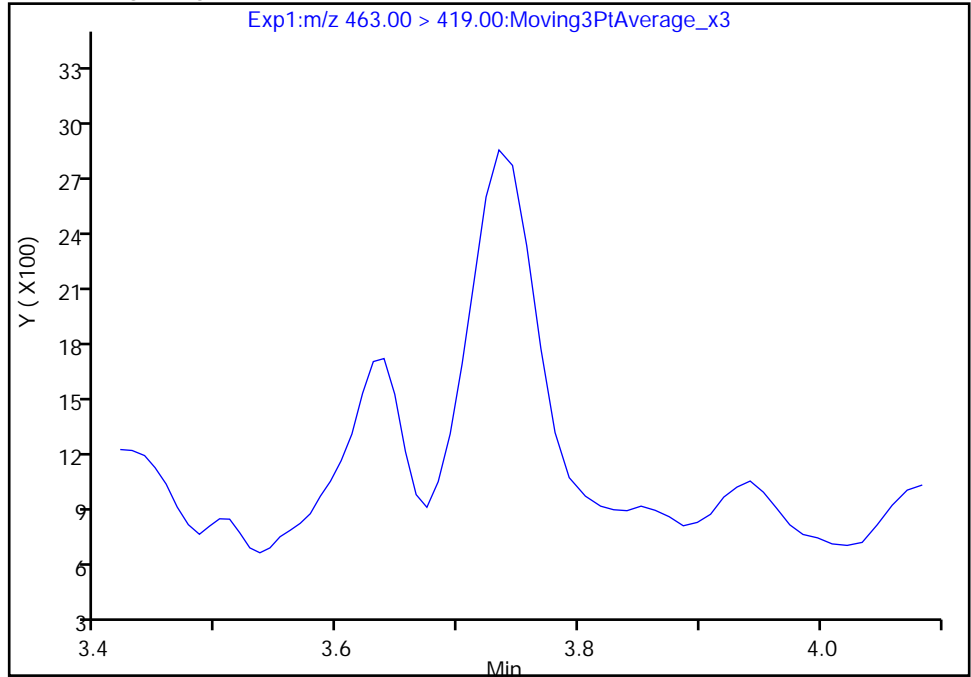
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

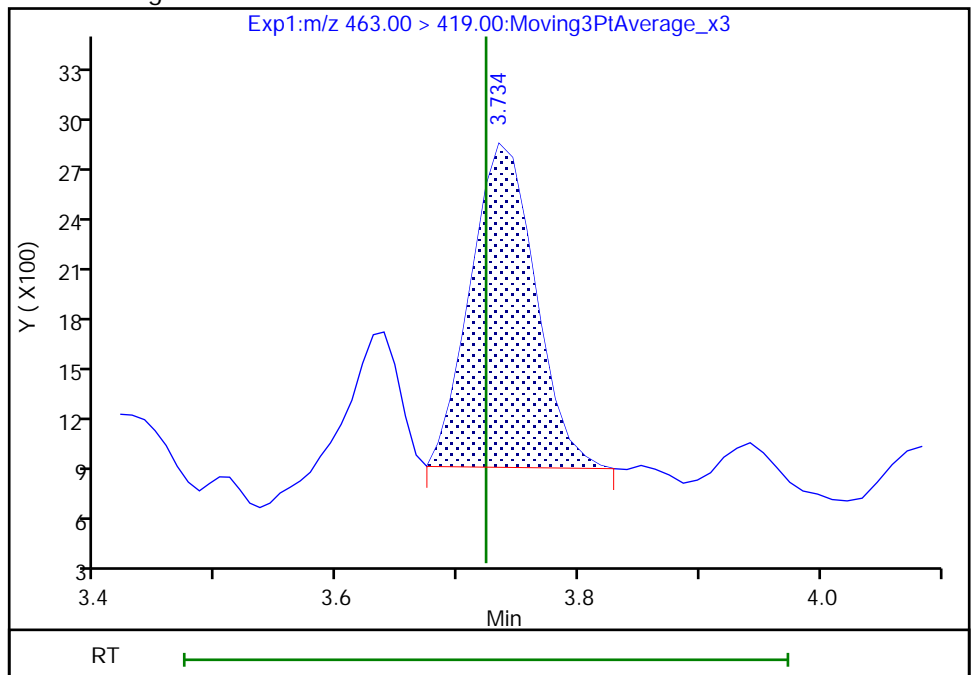
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.73
Area: 7055
Amount: 0.125005
Amount Units: ng/ml



Euofins TestAmerica, Burlington

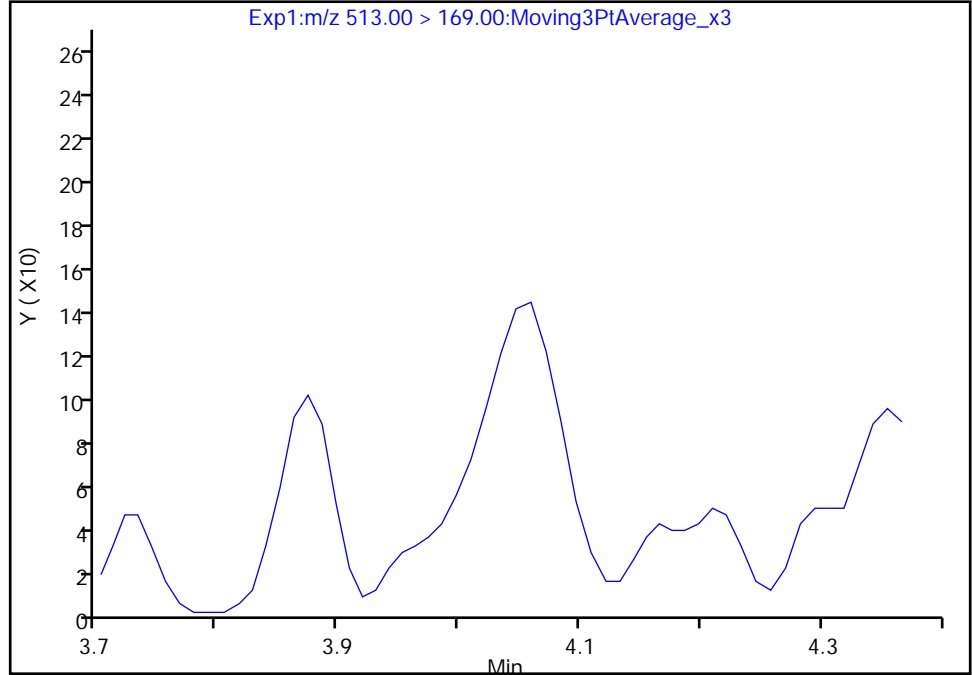
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

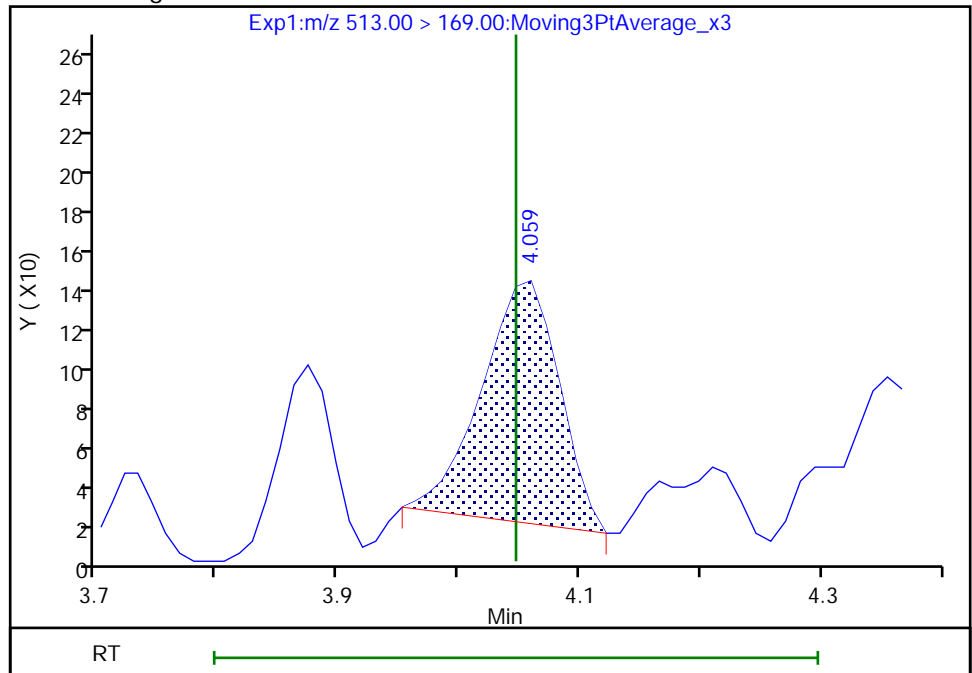
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.06
Area: 537
Amount: 0.091672
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:04:45
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

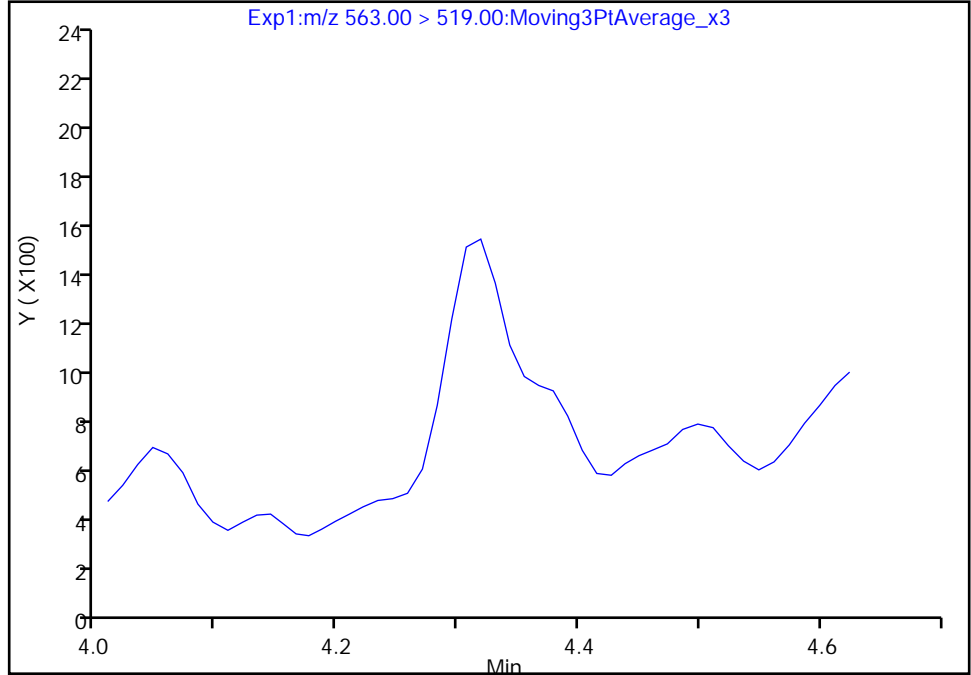
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

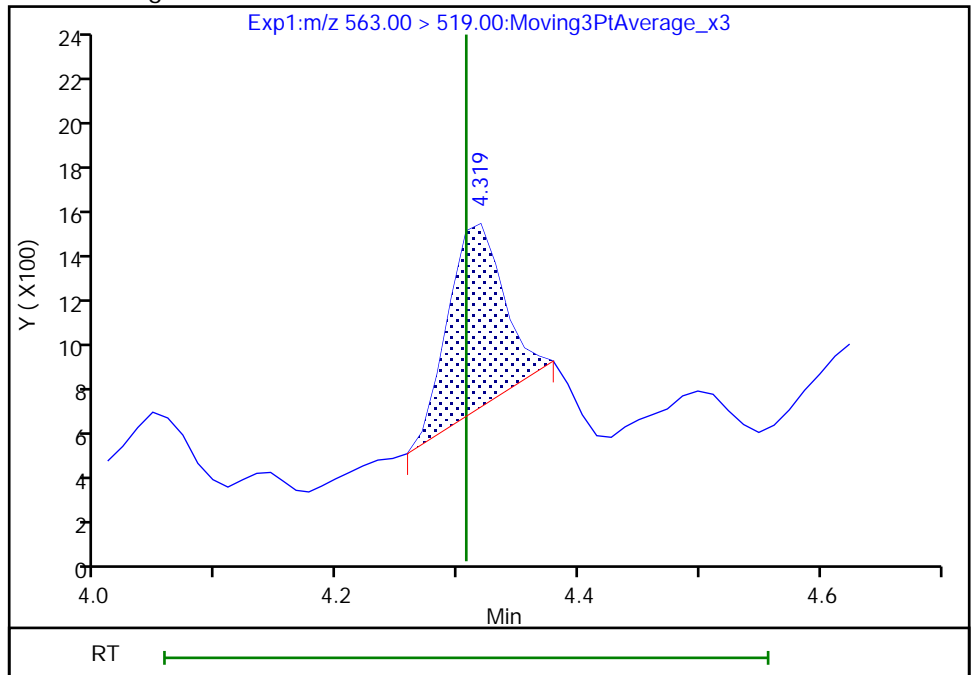
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 2543
Amount: 0.077642
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:05:06
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

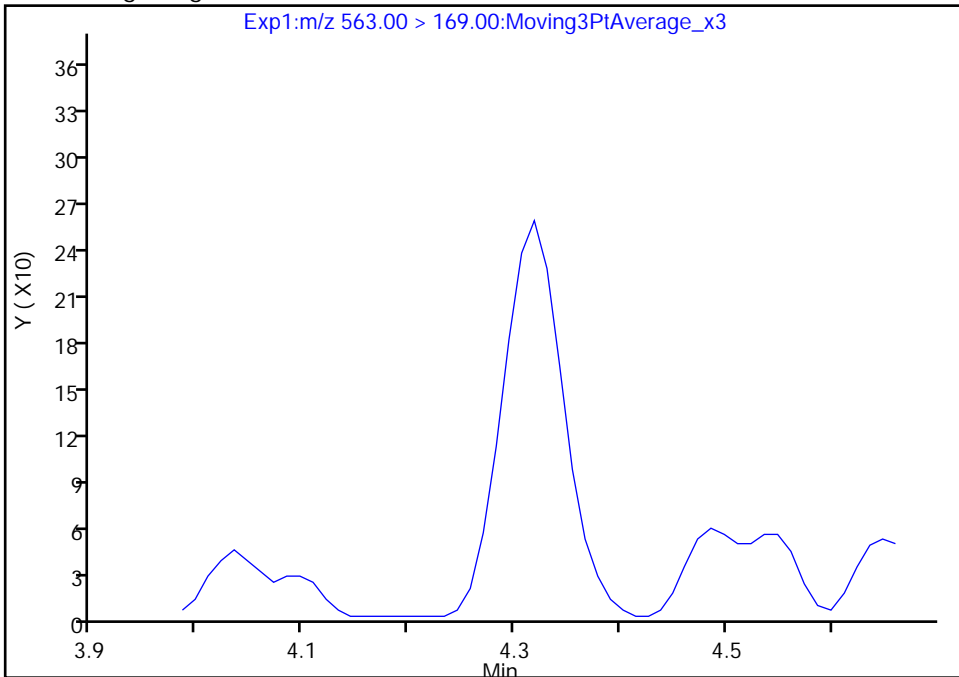
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

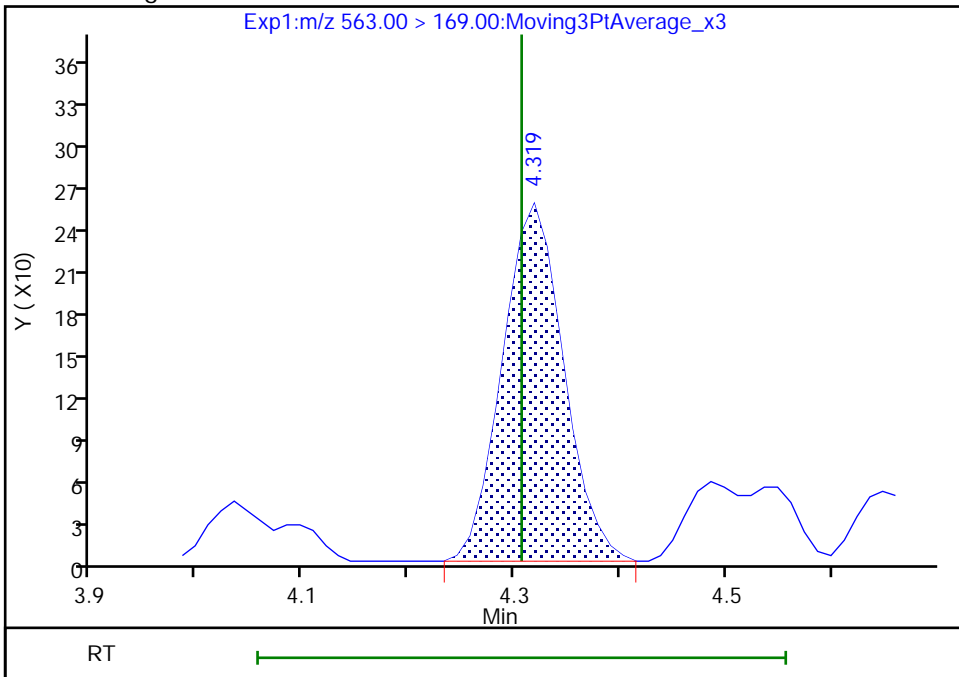
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 1031
Amount: 0.077642
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

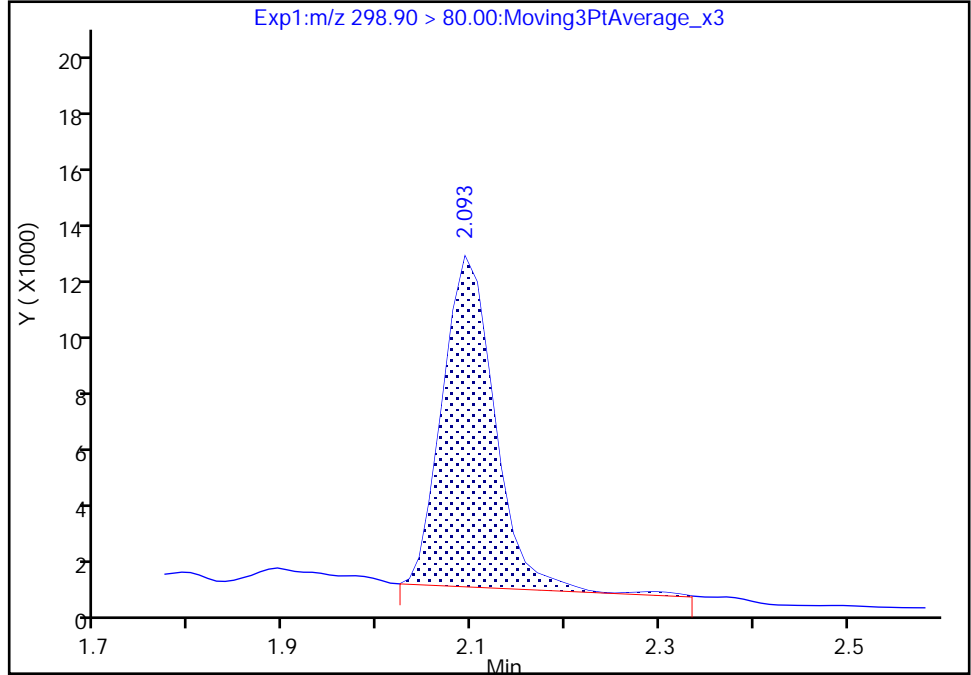
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

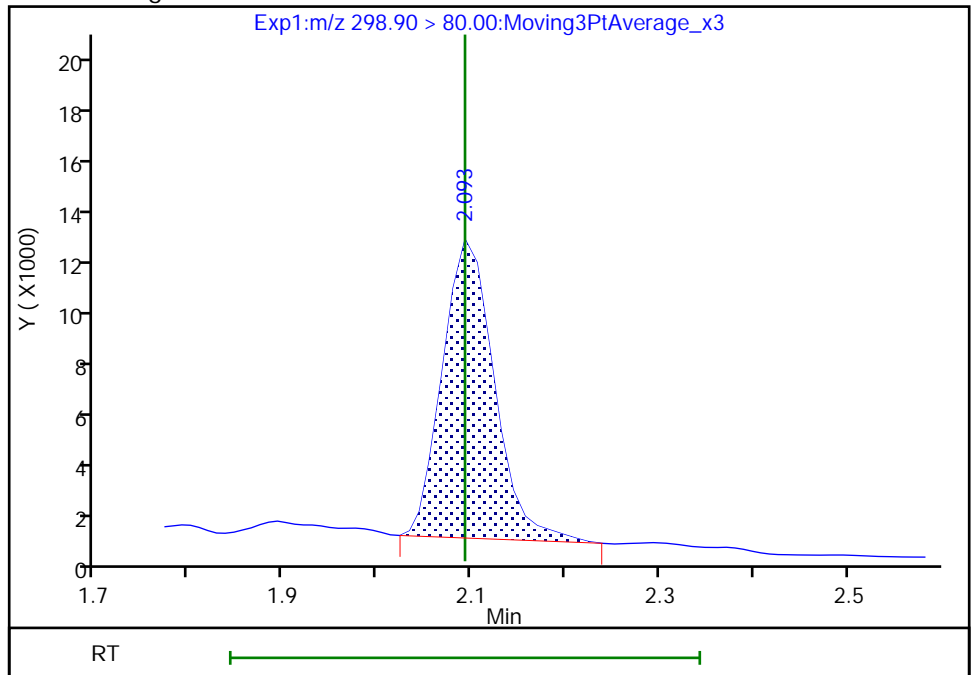
RT: 2.09
Area: 44326
Amount: 0.637178
Amount Units: ng/ml

Processing Integration Results



RT: 2.09
Area: 43823
Amount: 0.629948
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:02:52

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

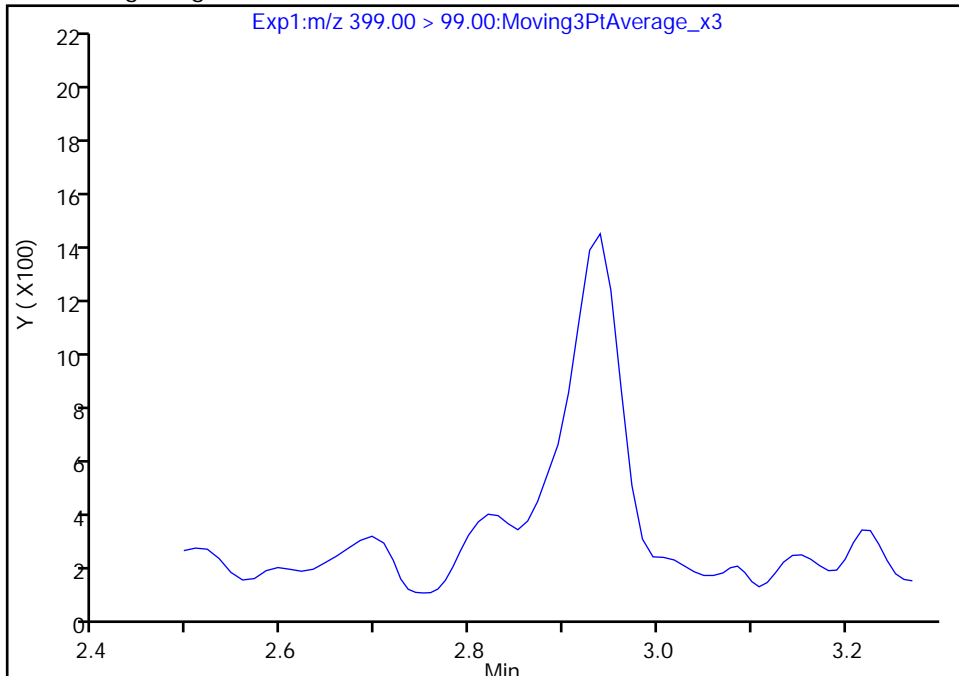
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

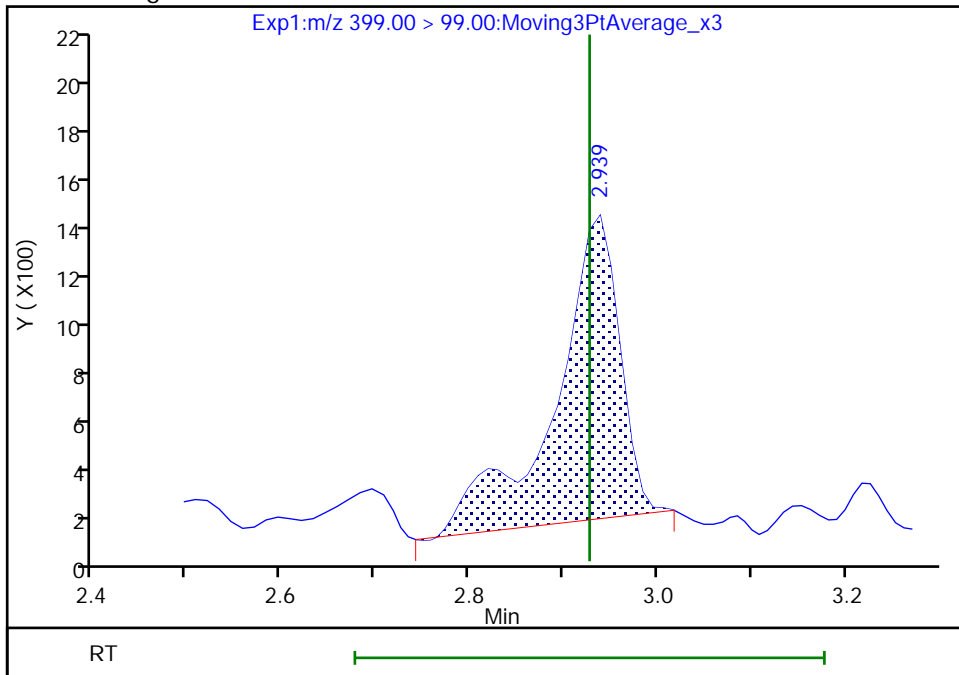
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 5694
Amount: 0.290600
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

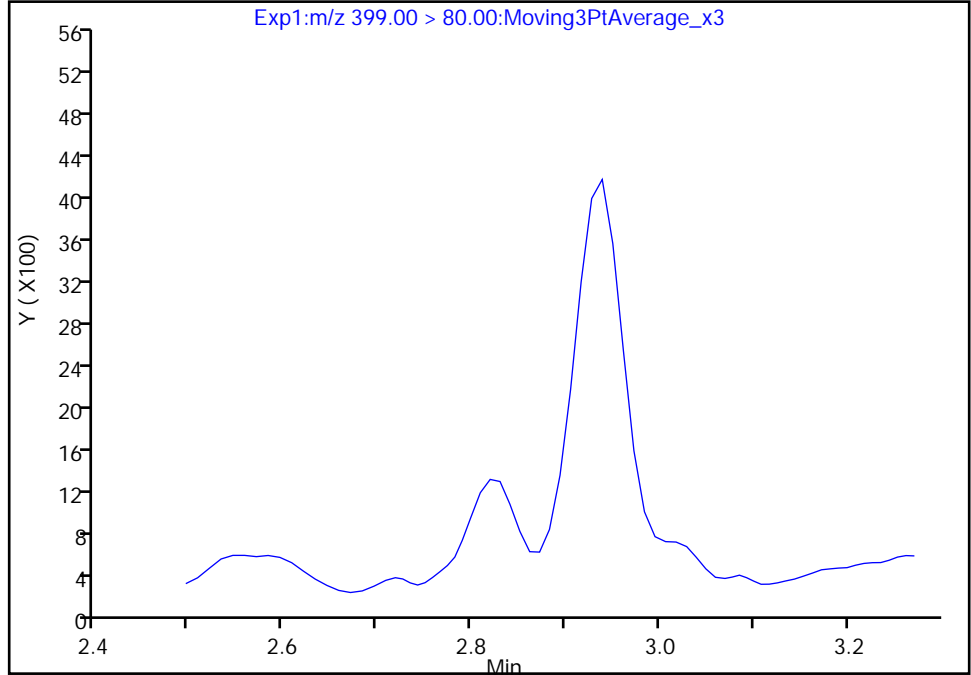
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

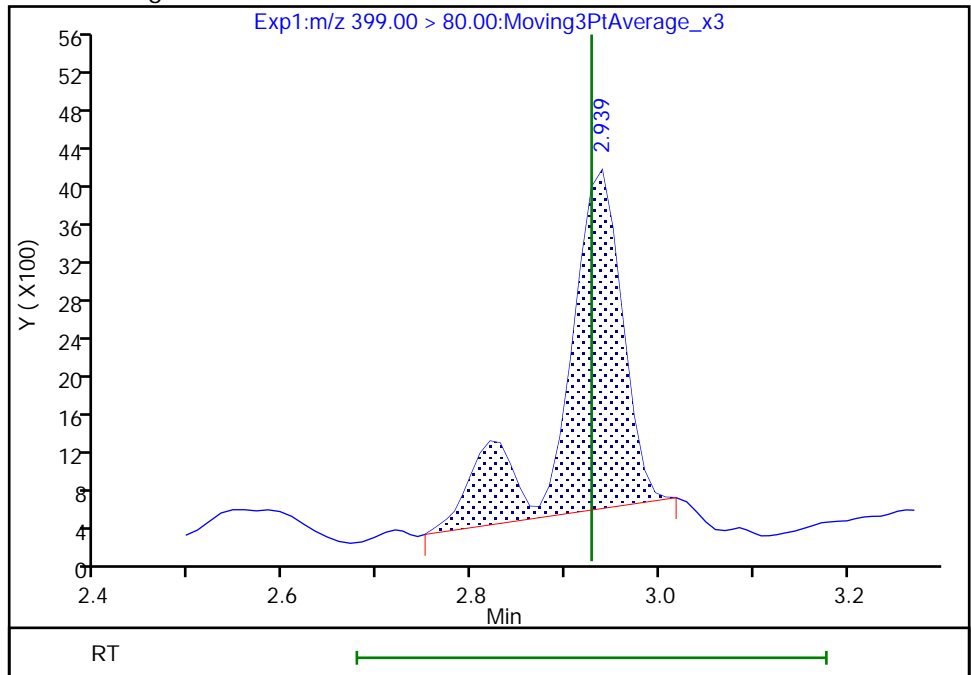
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 15431
Amount: 0.290600
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:03:12

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

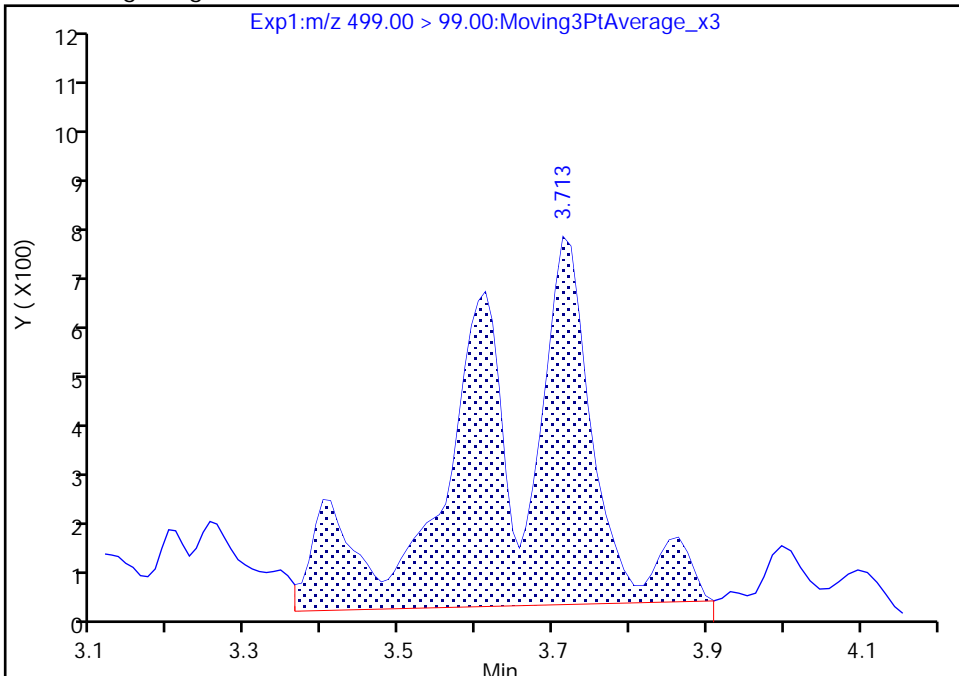
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

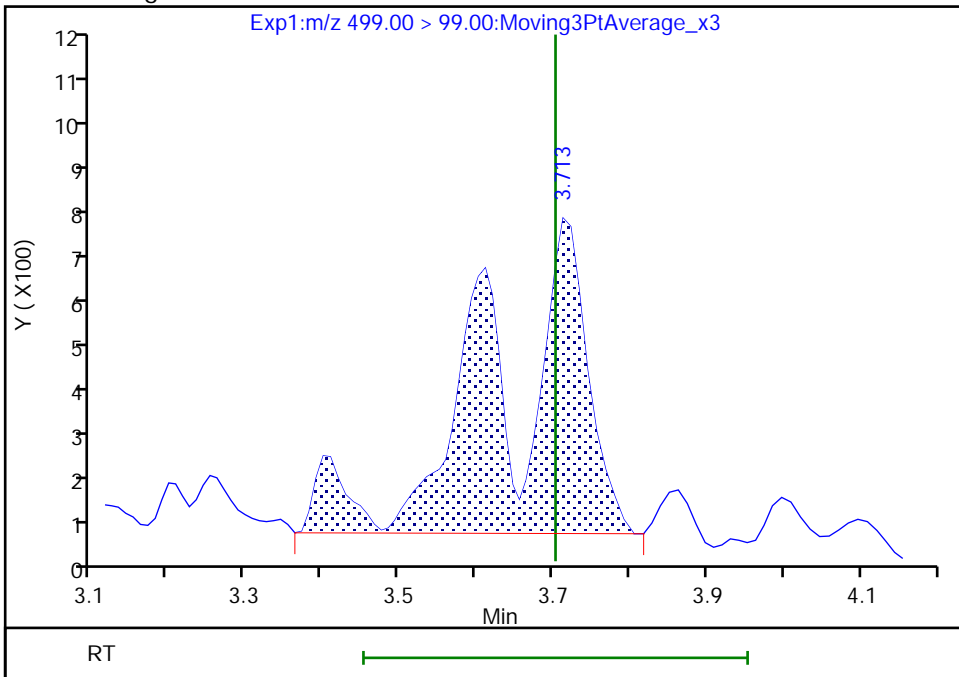
RT: 3.71
Area: 7161
Amount: 1.266558
Amount Units: ng/ml

Processing Integration Results



RT: 3.71
Area: 5637
Amount: 1.222716
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:04:16
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

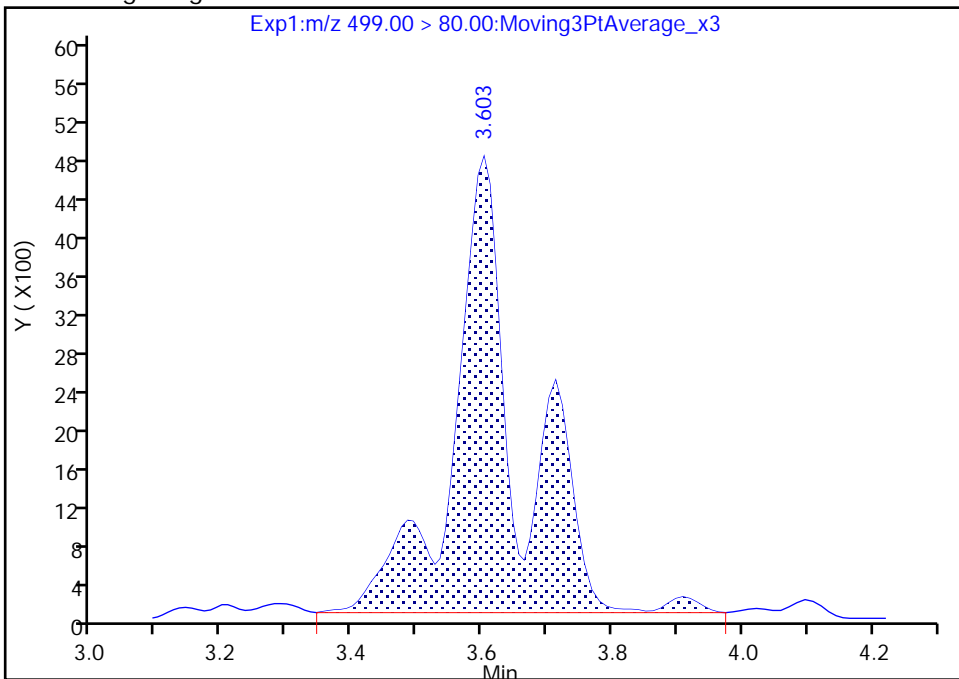
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

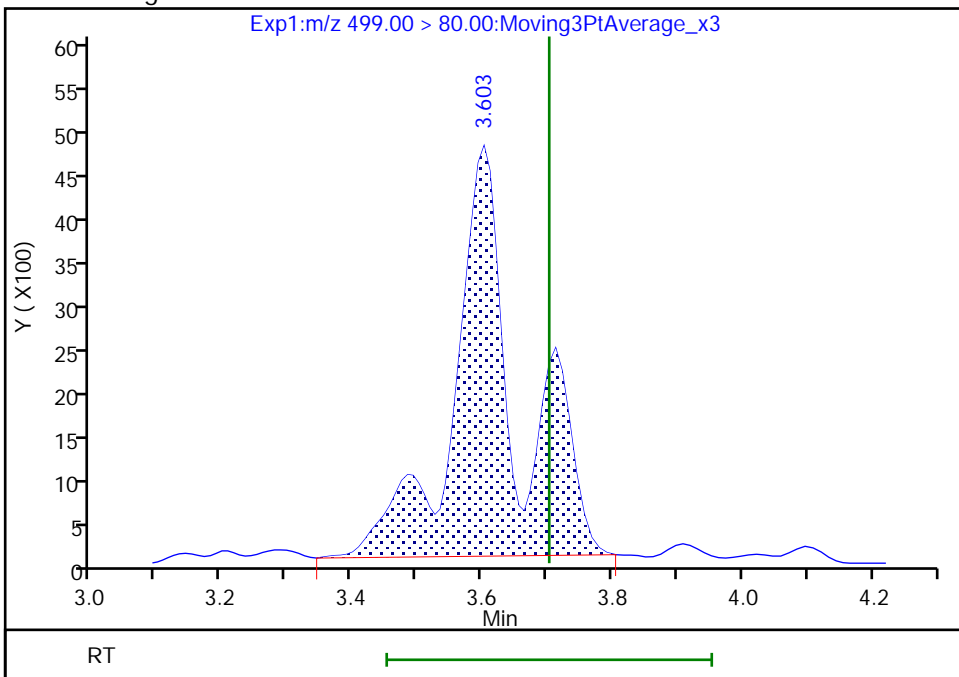
RT: 3.60
Area: 33887
Amount: 1.266558
Amount Units: ng/ml

Processing Integration Results



RT: 3.60
Area: 32714
Amount: 1.222716
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:04:21

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

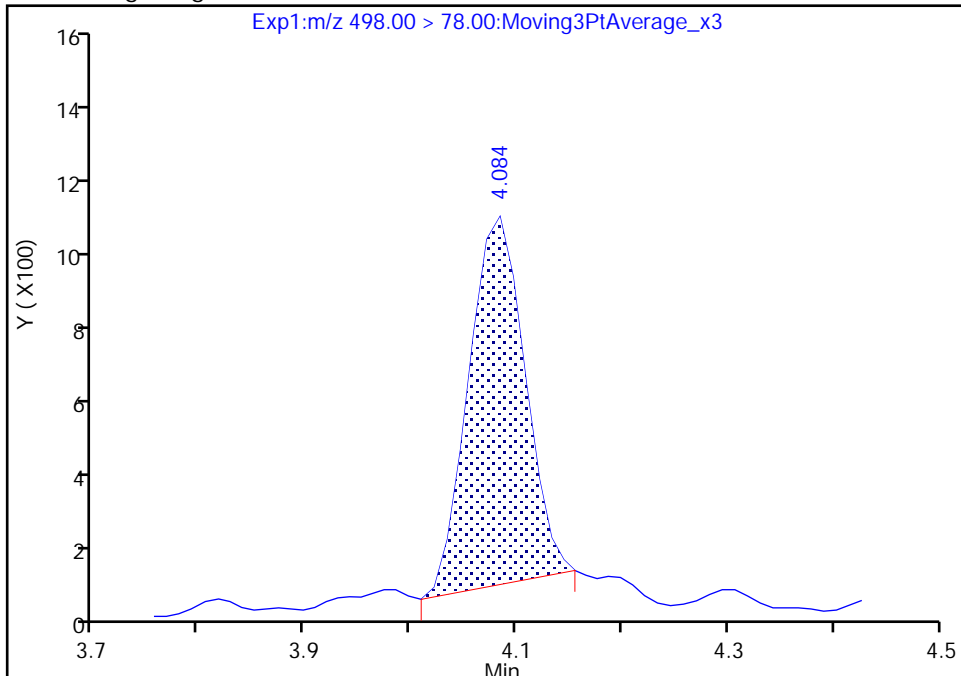
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

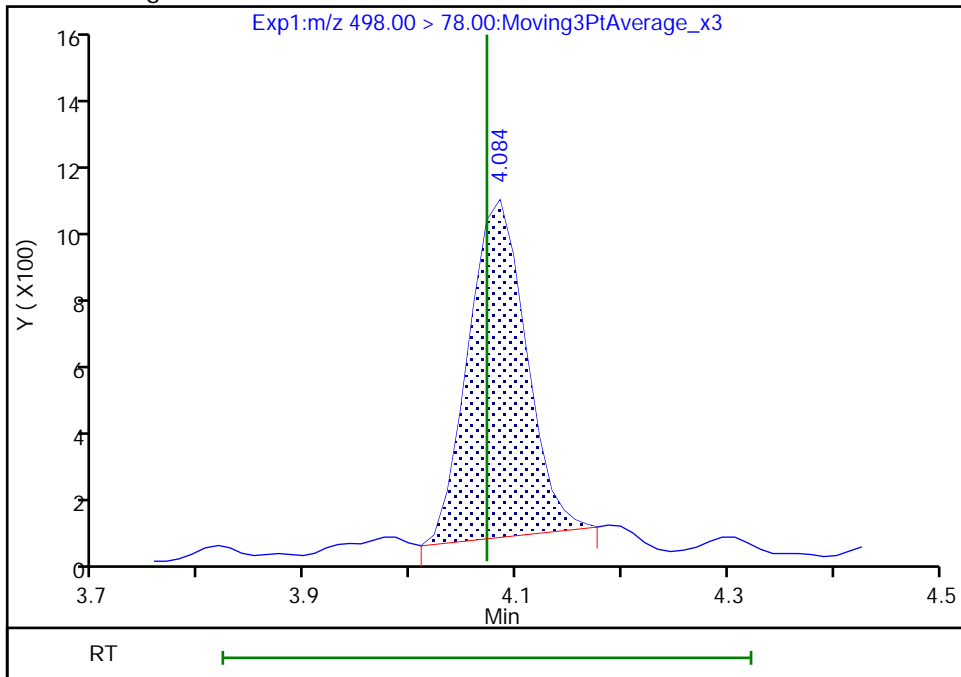
RT: 4.08
Area: 3667
Amount: 0.092967
Amount Units: ng/ml

Processing Integration Results



RT: 4.08
Area: 3812
Amount: 0.096643
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:04:55
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

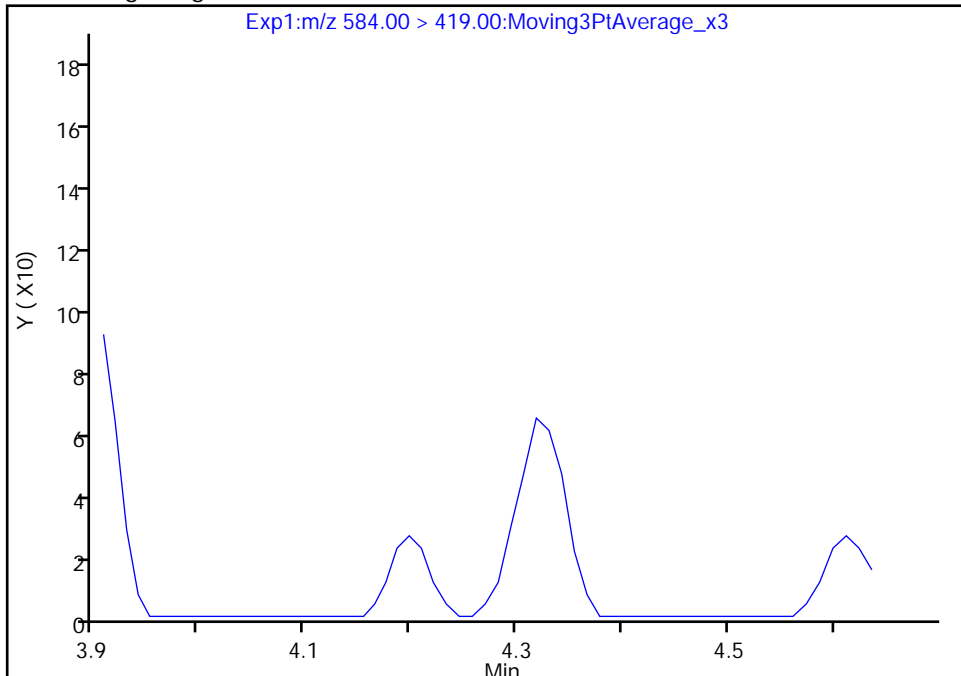
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E011.d
Injection Date: 02-Aug-2019 05:09:41 Instrument ID: LC812
Lims ID: 480-156213-F-11-A Lab Sample ID: 200-156213-11
Client ID: 356023-MW5B
Operator ID: lc812tech ALS Bottle#: 4 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

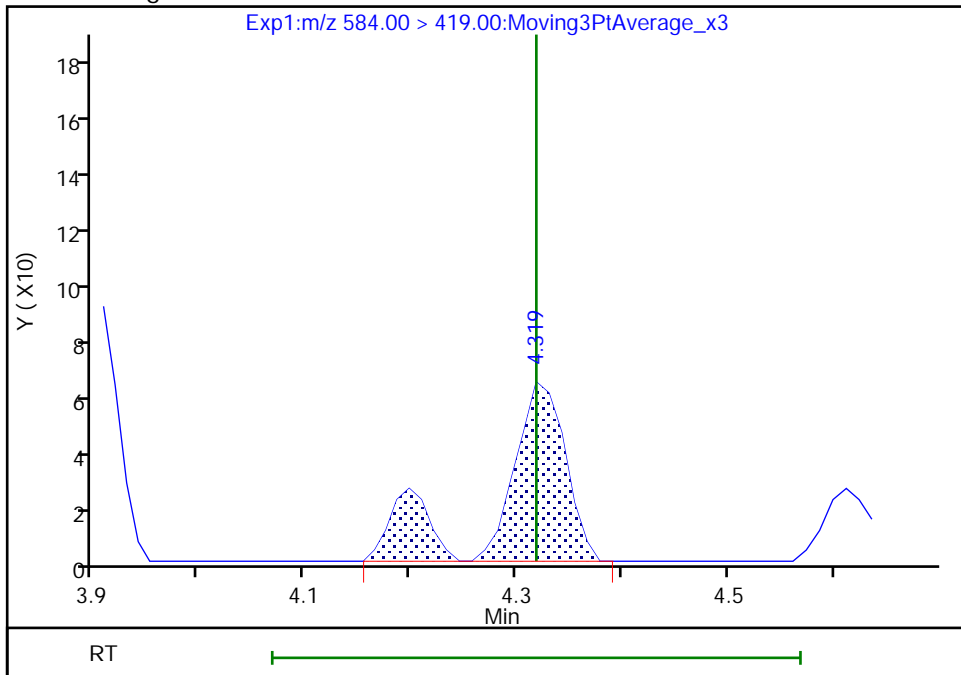
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 275
Amount: 0.087064
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:05:27
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-ERT4 Lab Sample ID: 480-156213-12
 Matrix: Water Lab File ID: SC080119E013.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 11:20
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 306.3 (mL) Date Analyzed: 08/02/2019 05:25
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	7.4		1.6	0.82
2706-90-3	Perfluoropentanoic acid (PFPeA)	7.8		1.6	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	5.7		1.6	0.62
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.5		1.6	0.74
335-67-1	Perfluorooctanoic acid (PFOA)	6.8		1.6	0.51
375-95-1	Perfluorononanoic acid (PFNA)	1.0	J	1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.63
2058-94-8	Perfluoroundecanoic acid (PFUnA)	0.61	J	1.6	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.5	J	1.6	0.40
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.1	J	1.6	0.65
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.78
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.5		1.6	0.50
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.2	8.2
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.8
39108-34-4	8:2 FTS	ND		16	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-ERT4 Lab Sample ID: 480-156213-12
 Matrix: Water Lab File ID: SC080119E013.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 11:20
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 306.3 (mL) Date Analyzed: 08/02/2019 05:25
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	80		25-150
STL00992	13C4 PFBA	76		25-150
STL01893	13C5 PFPeA	90		25-150
STL00993	13C2 PFHxA	89		50-150
STL01892	13C4 PFHpA	92		50-150
STL00990	13C4 PFOA	86		50-150
STL00995	13C5 PFNA	90		50-150
STL00996	13C2 PFDA	91		50-150
STL00997	13C2 PFUnA	88		50-150
STL00998	13C2 PFDoA	78		50-150
STL02116	13C2 PFTeDA	61		50-150
STL02337	13C3 PFBS	95		50-150
STL00994	18O2 PFHxS	90		50-150
STL00991	13C4 PFOS	82		50-150
STL02118	d3-NMeFOSAA	65		50-150
STL02117	d5-NEtFOSAA	66		50-150
STL02279	M2-6:2 FTS	99		25-150
STL02280	M2-8:2 FTS	102		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
 Lims ID: 480-156213-G-12-A
 Client ID: 356023-ERT4
 Sample Type: Client
 Inject. Date: 02-Aug-2019 05:25:47 ALS Bottle#: 6 Worklist Smp#: 13
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-G-12-A
 Misc. Info.: 200-0037095-013 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:10:23
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.507	2685545	38.0	76.0	9221	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.005	223956	4.52		32.9	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.616	2997361	45.2	90.3	5271	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	277604	4.79		9.6	M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.624	2879546	44.2	95.0	215726	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	59191	0.9403	Target=1.90	12.6	
	298.90 > 99.00	2.093	2.093	0.0	1.000	31124		1.90(0.95-2.85)	12.6	
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.733	2935890	44.5	89.1	6400	
6 Perfluorohexanoic acid	313.00 > 269.00	2.459	2.459	0.0	1.000	211657	3.50	Target=13.23	22.5	
	313.00 > 119.00	2.459	2.459	0.0	1.000	15805		13.39(6.61-19.84)	18.6	
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.873	1628253	42.6	90.1	5268	
D 9 13C4 PFHpA	367.00 > 322.00	2.928	2.928	0.0	0.873	2976304	46.1	92.2	7520	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.928	2.928	0.0	1.000	29286	0.6456	Target=3.37	12.5	M
	399.00 > 99.00	2.928	2.928	0.0	1.000	7952		3.68(1.69-5.06)	7.0	M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.928	2.928	0.0	1.000	87021	1.56	Target=3.76	11.5	
	363.00 > 169.00	2.928	2.928	0.0	1.000	24404		3.57(1.88-5.65)	62.9	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.344	3.335	0.009	0.997	374846	47.2		99.3	379	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.344	3.336	0.008	1.000	9131	0.6747		22.4		M
D 14 13C4 PFOA										
417.00 > 372.00	3.354	3.344	0.010	1.000	2933376	43.0		86.0	7969	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.363	3.355	0.008	1.003	264558	4.14	Target=2.84	23.0		
413.00 > 169.00	3.354	3.355	-0.001	1.000	108450		2.44(1.42-4.25)	270		M
* 62 13C2 PFOA										
415.00 > 370.00	3.354	3.355	-0.001		3750236	50.0			12803	
D 18 13C4 PFOS										
503.00 > 80.00	3.705	3.695	0.010	1.105	1252722	39.4		82.4	2590	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.715	3.703	0.012	1.003	69029	2.78	Target=4.33	88.3		M
499.00 > 99.00	3.705	3.703	0.002	1.000	13564		5.09(2.16-6.49)	28.0		M
D 19 13C5 PFNA										
468.00 > 423.00	3.724	3.715	0.009	1.111	2806748	45.1		90.2	13713	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.724	3.723	0.001	1.000	31947	0.6282	Target=8.15	8.6		
463.00 > 169.00	3.735	3.723	0.012	1.003	5026		6.36(4.08-12.23)	41.7		M
D 23 13C2 PFDA										
515.00 > 470.00	4.049	4.036	0.013	1.207	2264175	45.5		91.0	8844	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.049	4.036	0.013	1.207	358269	48.8		102	625	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.049	4.047	0.002	1.000	10145	0.2314	Target=9.58	3.6		
513.00 > 169.00	4.049	4.047	0.002	1.000	1745		5.81(4.79-14.37)	15.6		
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.049	4.047	0.002	1.000	475	0.0475		8.5		M
D 21 13C8 FOSA										
506.00 > 78.00	4.074	4.061	0.013	1.215	2286567	40.0		80.0	6735	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.074	4.072	0.002	1.000	5338	0.1279		21.1		M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.189	4.178	0.011	1.249	205915	32.4		64.8	2003	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.178	4.187	-0.009	0.997	439	0.1409		3.0		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.308	4.296	0.012	1.285	1990211	43.9		87.8	6911	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.320	4.307	0.013	1.003	12663	0.3708	Target=7.95	5.8		M
563.00 > 169.00	4.308	4.307	0.001	1.000	1484		8.53(3.98-11.93)	17.4		M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.308	0.012	1.288	234410	33.1		66.2	1153	
D 36 13C2 PFDoA										
615.00 > 570.00	4.550	4.537	0.013	1.357	1893350	38.8		77.6	6044	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.550	4.549	0.001	1.000	6698	0.1730	Target=7.49	0.8		M
613.00 > 169.00	4.550	4.549	0.001	1.000	781		8.58(3.75-11.24)	10.0		M
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.769	4.760	0.009	1.048	4543	0.1307	Target=5.71	0.5		M
663.00 > 169.00	4.760	4.760	0.0	1.046	1078		4.21(2.85-8.56)	10.2		M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.483	2043411	30.4		60.8	6955	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.972	4.972	0.0	1.000	1060	0.1948	Target=1.02	11.6		
713.00 > 219.00	4.972	4.972	0.0	1.000	1179		0.90(0.51-1.54)	18.1		M

QC Flag Legend

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d

Injection Date: 02-Aug-2019 05:25:47

Instrument ID: LC812

Lims ID: 480-156213-G-12-A

Lab Sample ID: 200-156213-12

Client ID: 356023-ERT4

Operator ID: lc812tech

ALS Bottle#: 6

Worklist Smp#: 13

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

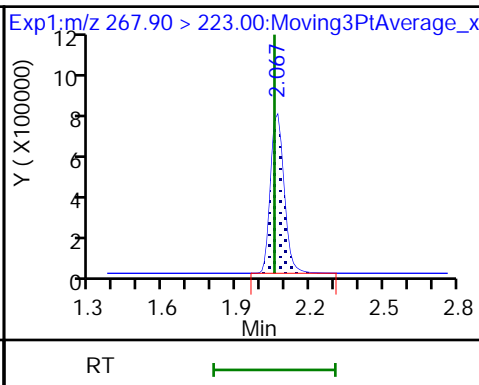
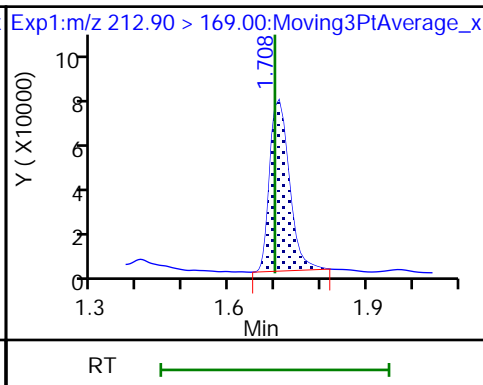
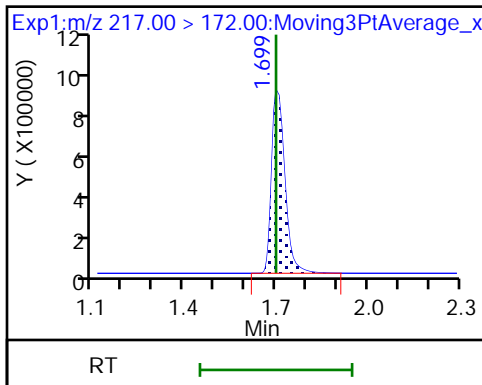
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

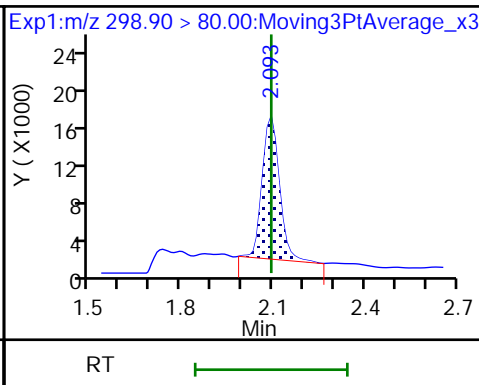
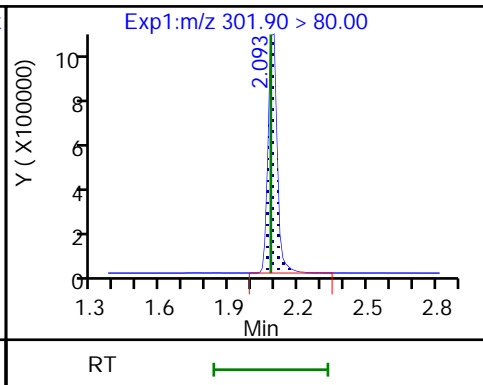
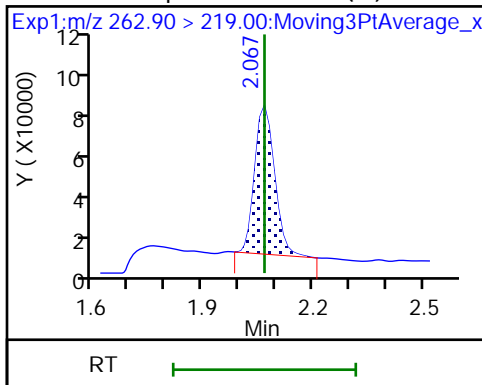
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

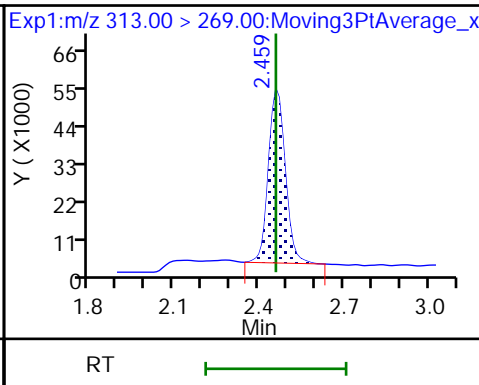
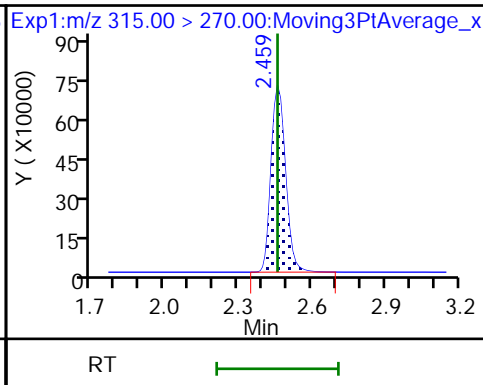
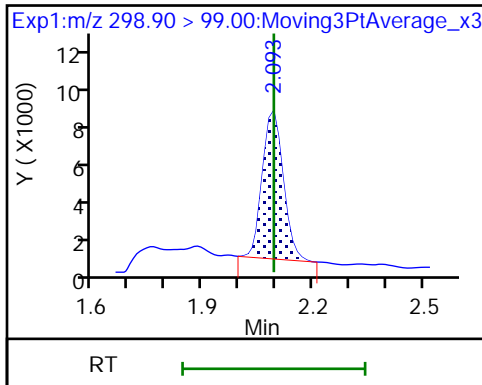
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

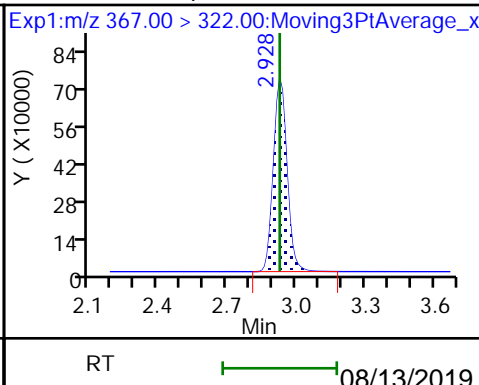
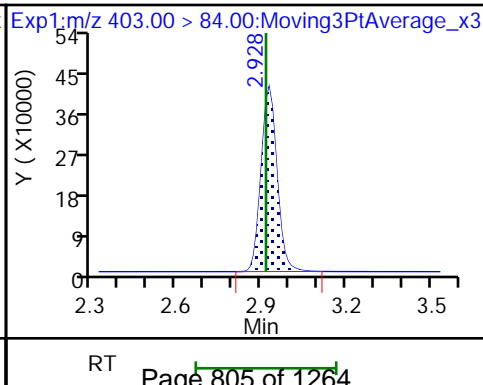
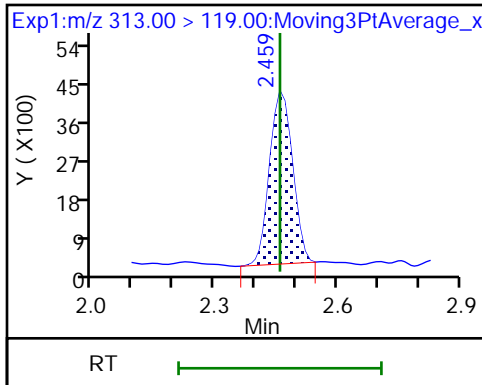
6 Perfluorohexanoic acid

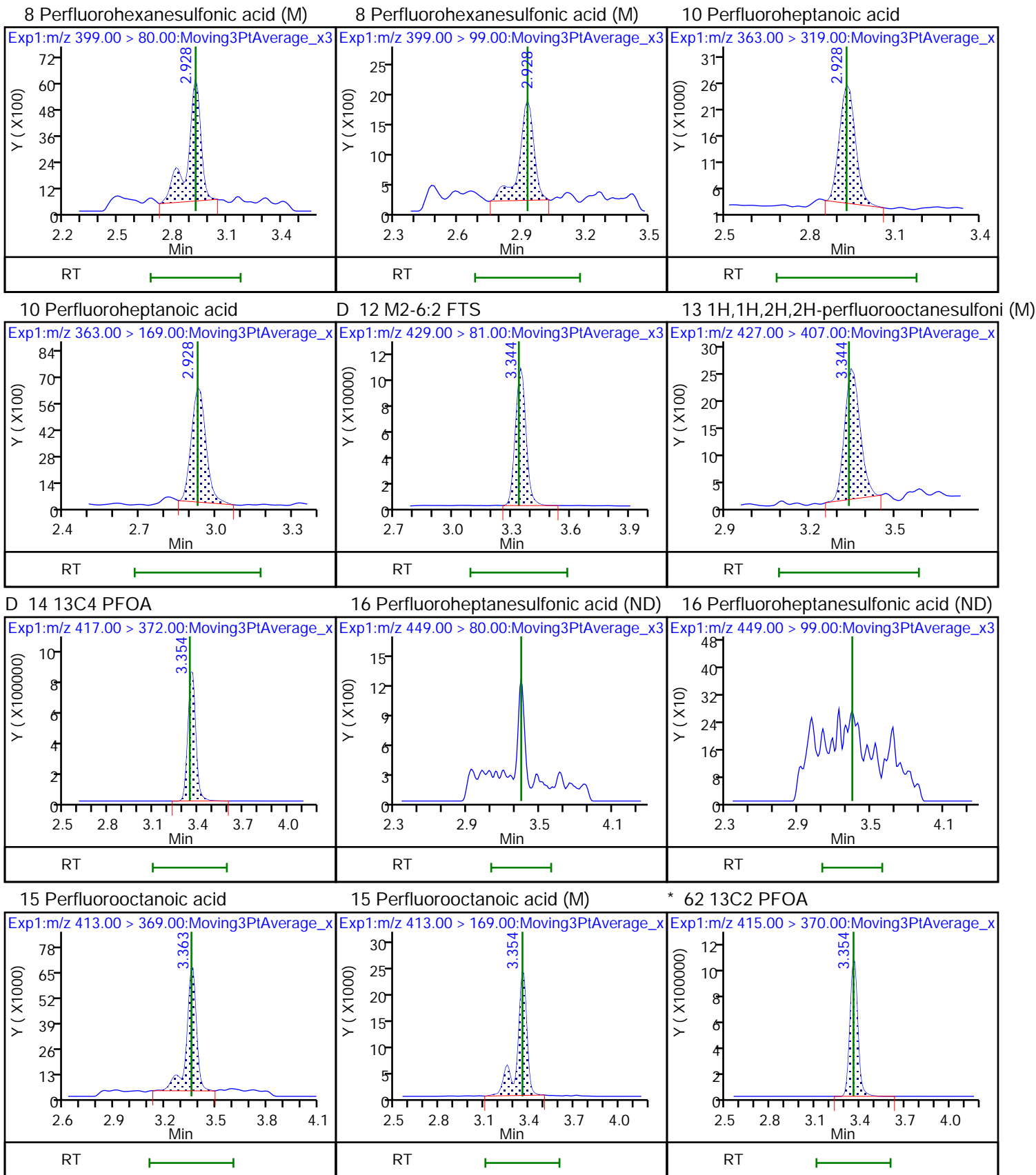


6 Perfluorohexanoic acid

D 11 18O2 PFHxS

D 9 13C4 PFHpA

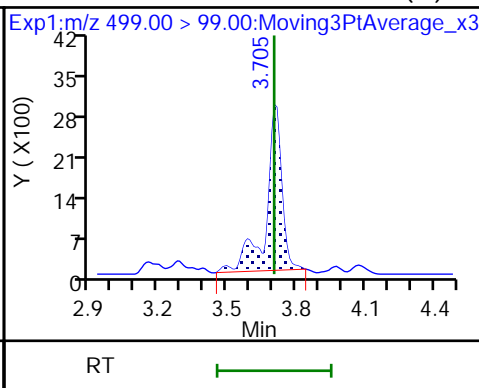
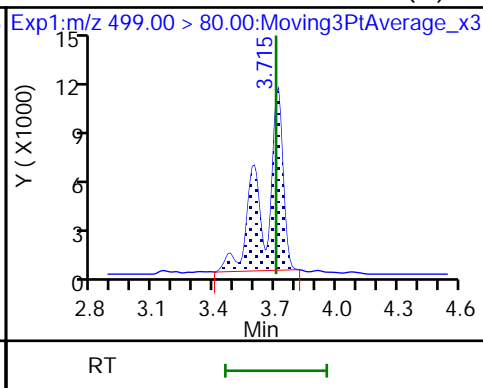
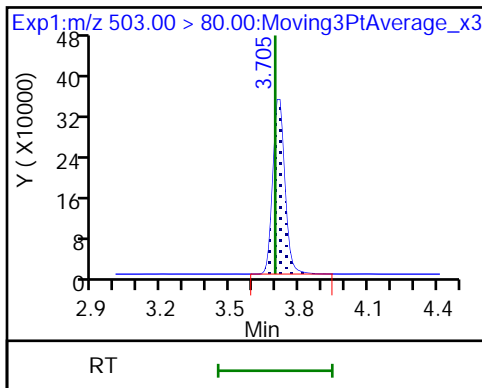




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

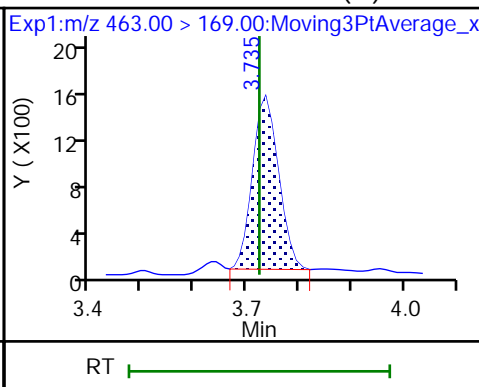
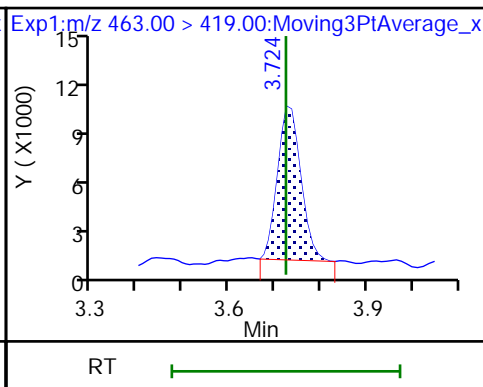
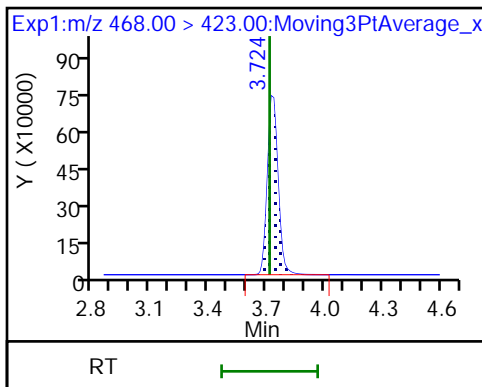
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid

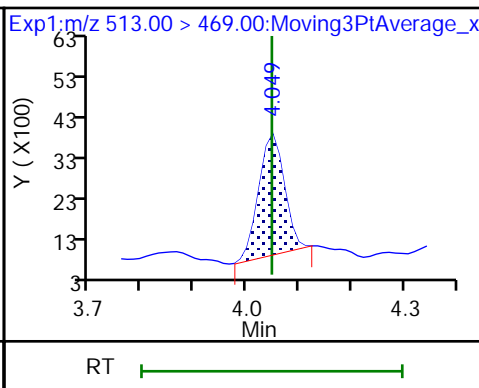
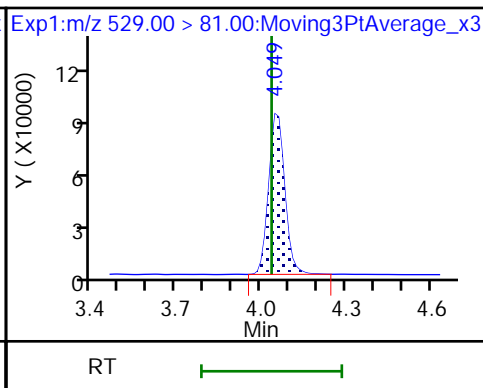
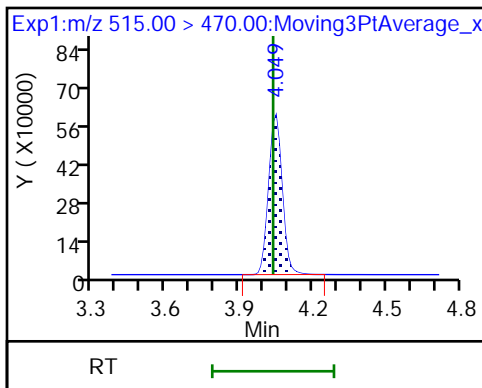
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

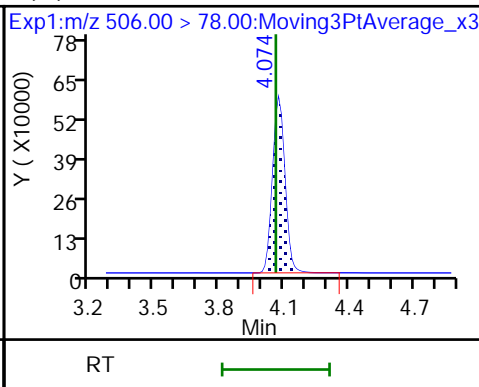
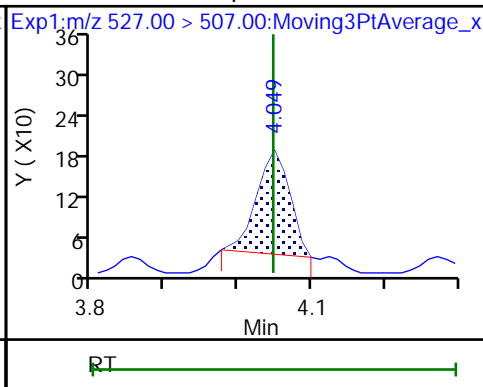
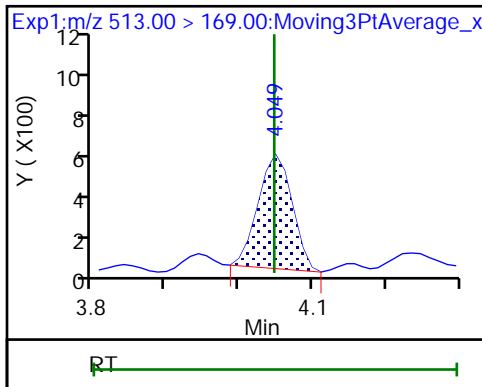
D 26 M2-8:2 FTS

24 Perfluorodecanoic acid



24 Perfluorodecanoic acid

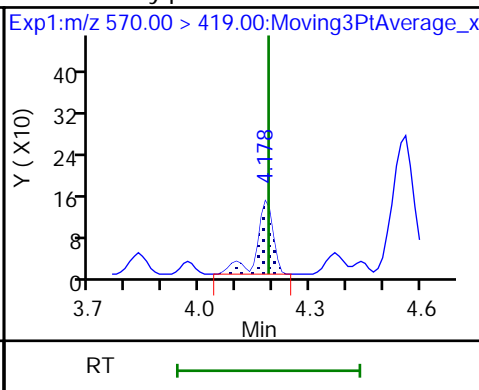
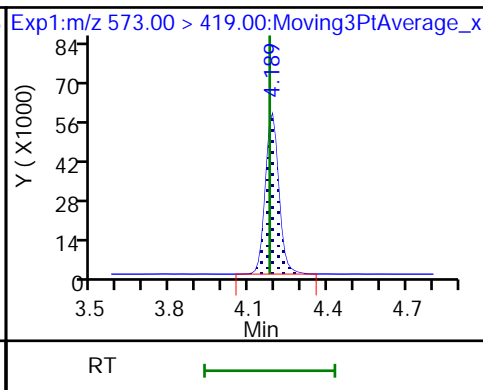
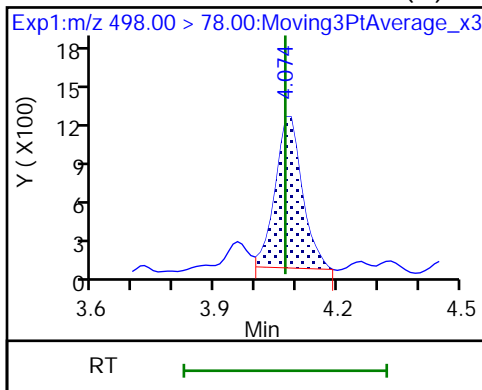
25 1H,1H,2H,2H-perfluorodecanesulfonate (M) 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

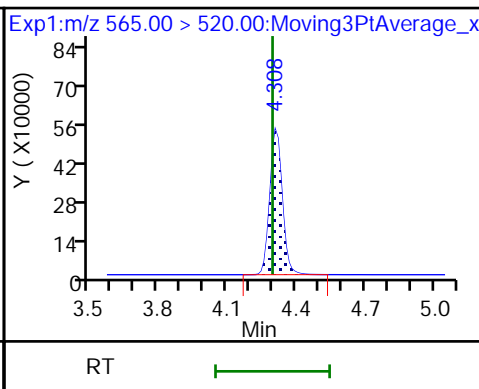
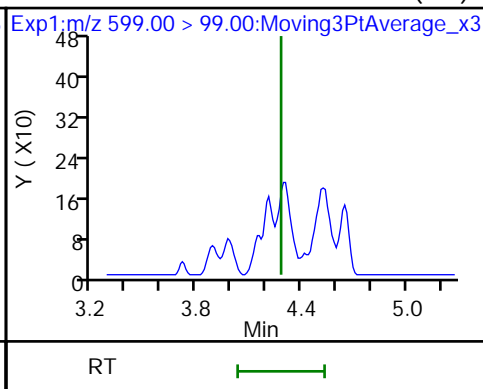
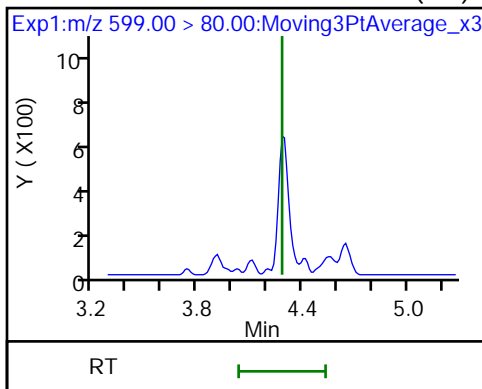
28 N-methylperfluorooctanesulfonamido (M)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

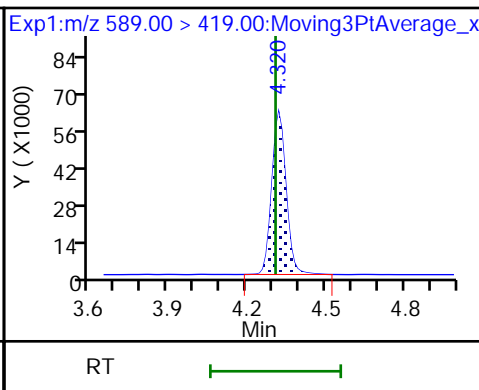
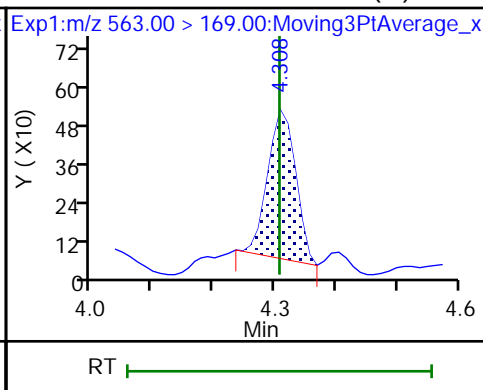
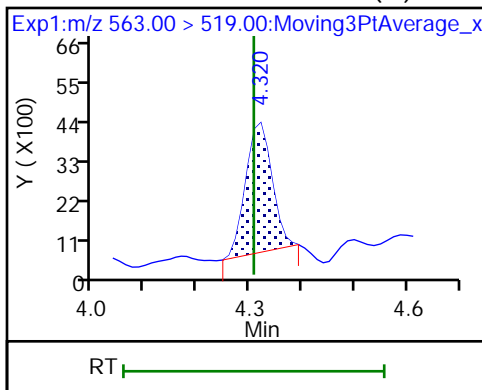
D 30 13C2 PFUoA



31 Perfluoroundecanoic acid (M)

31 Perfluoroundecanoic acid (M)

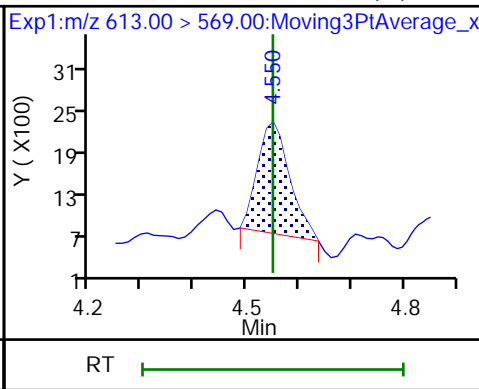
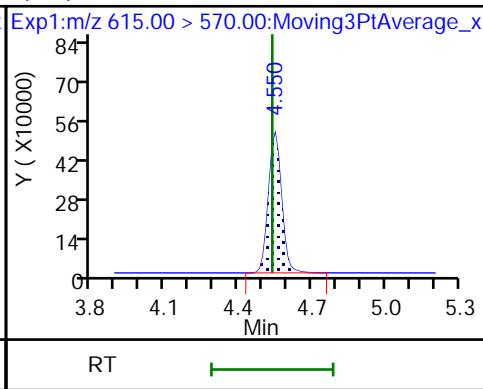
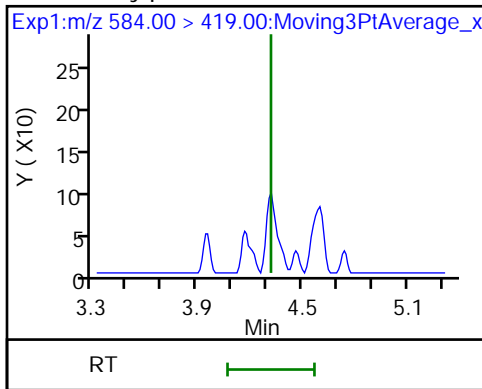
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 33 13C2 PFDoA

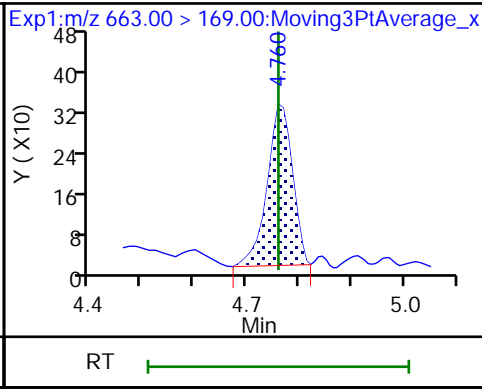
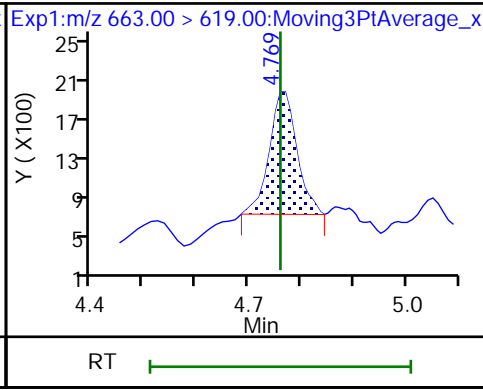
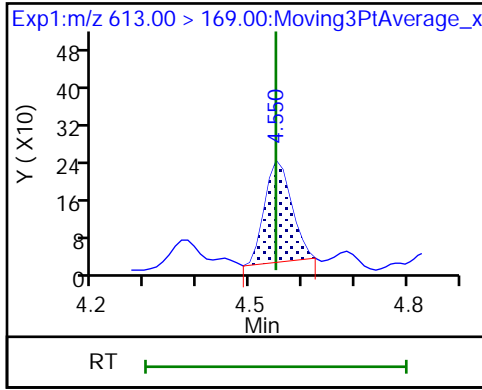
37 Perfluorododecanoic acid (M)



37 Perfluorododecanoic acid (M)

41 Perfluorotridecanoic acid (M)

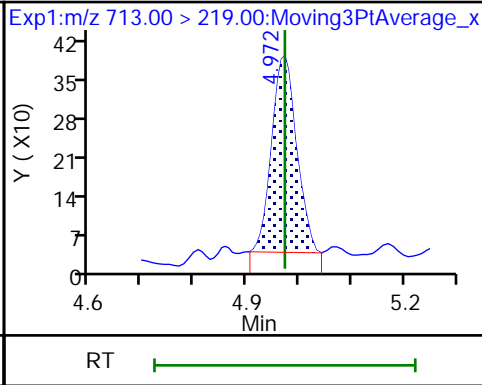
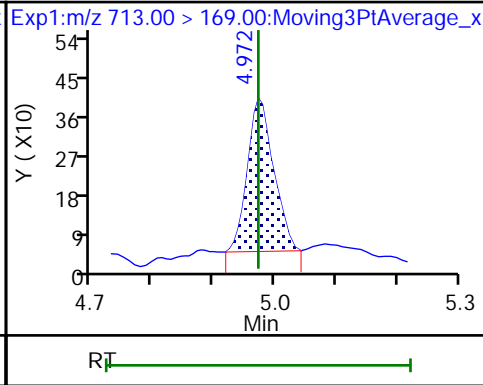
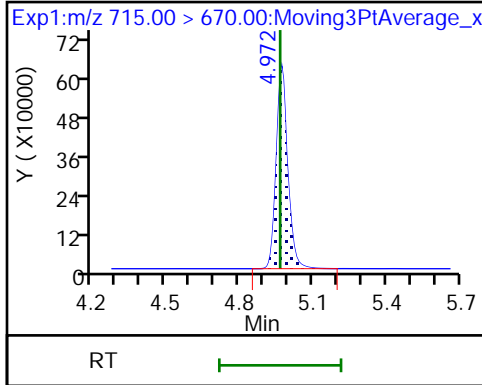
41 Perfluorotridecanoic acid (M)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)



Eurofins TestAmerica, Burlington

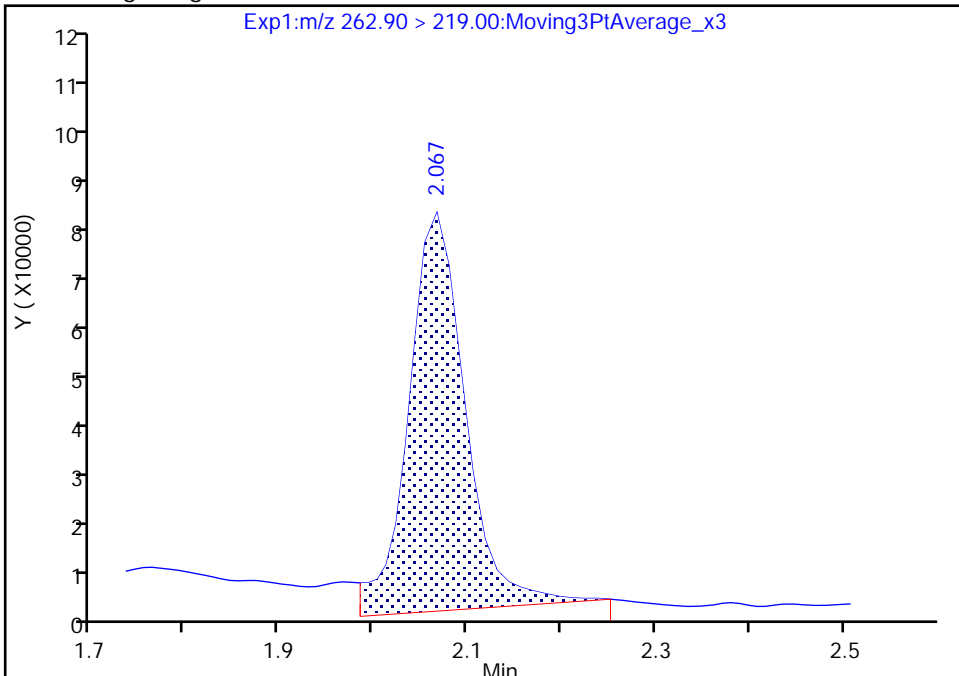
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

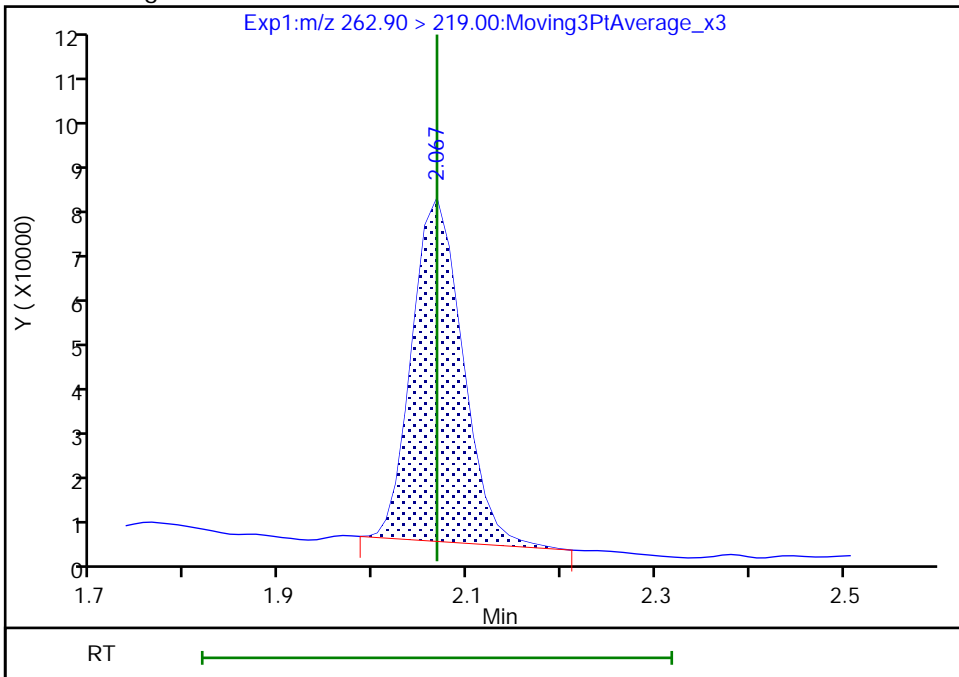
RT: 2.07
Area: 328500
Amount: 5.662930
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 277604
Amount: 4.785547
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:06:30
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

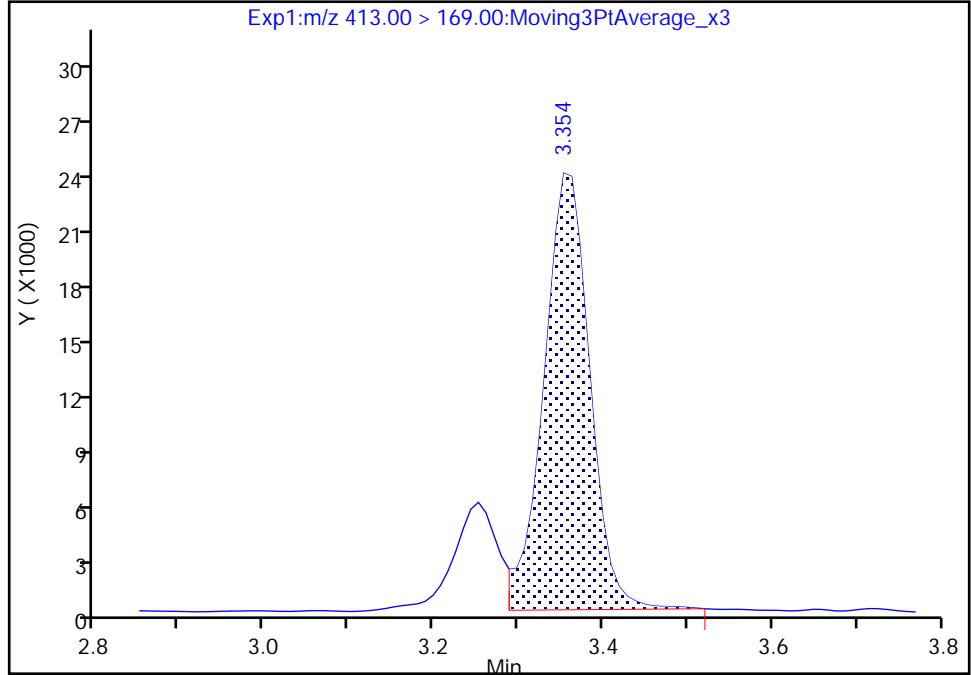
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

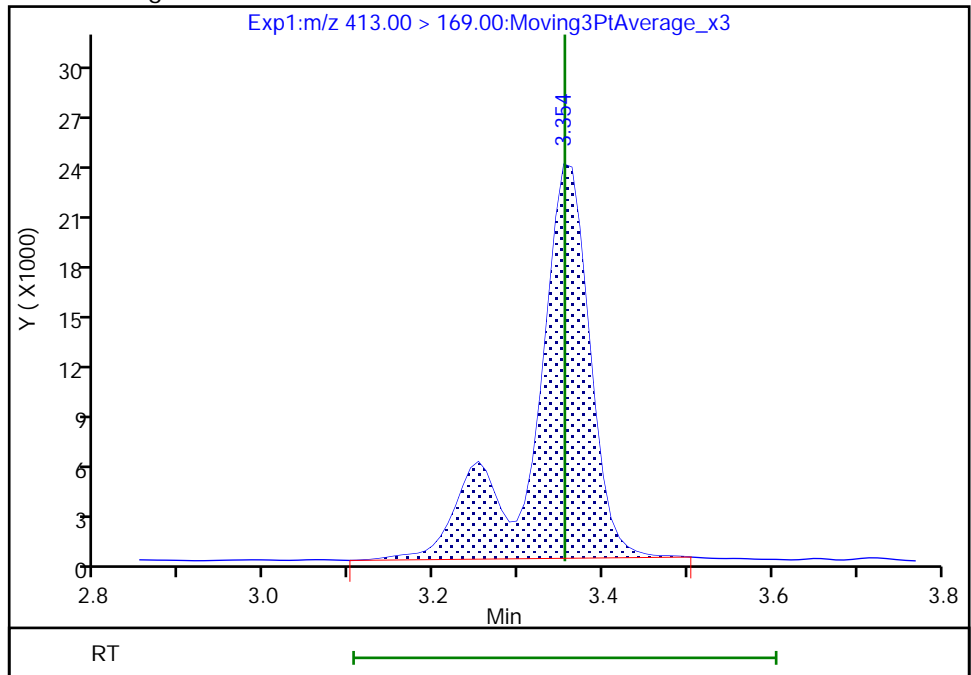
RT: 3.35
Area: 88291
Amount: 4.144228
Amount Units: ng/ml

Processing Integration Results



RT: 3.35
Area: 108450
Amount: 4.144228
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:07:08
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

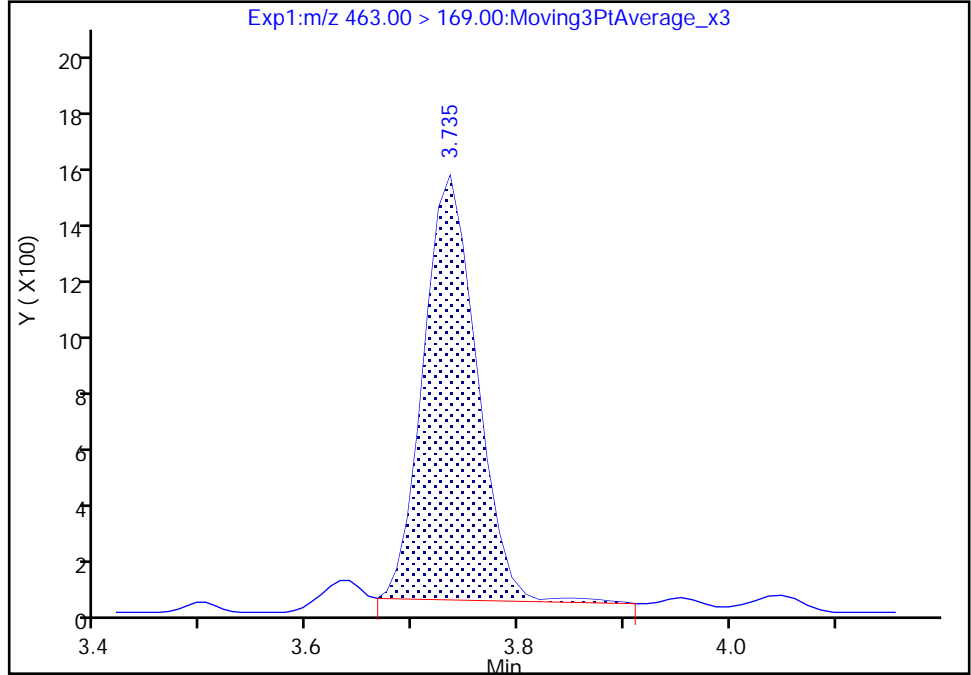
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

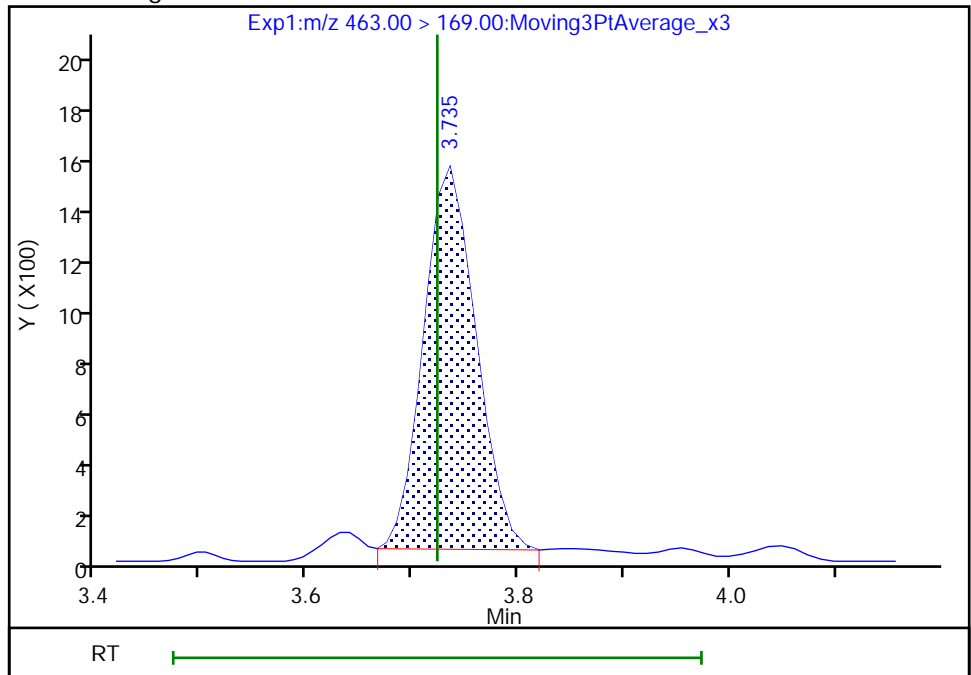
RT: 3.74
Area: 5105
Amount: 0.628228
Amount Units: ng/ml

Processing Integration Results



RT: 3.74
Area: 5026
Amount: 0.628228
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:07:44
Audit Action: Manually Integrated

Audit Reason: Isomers

Euofins TestAmerica, Burlington

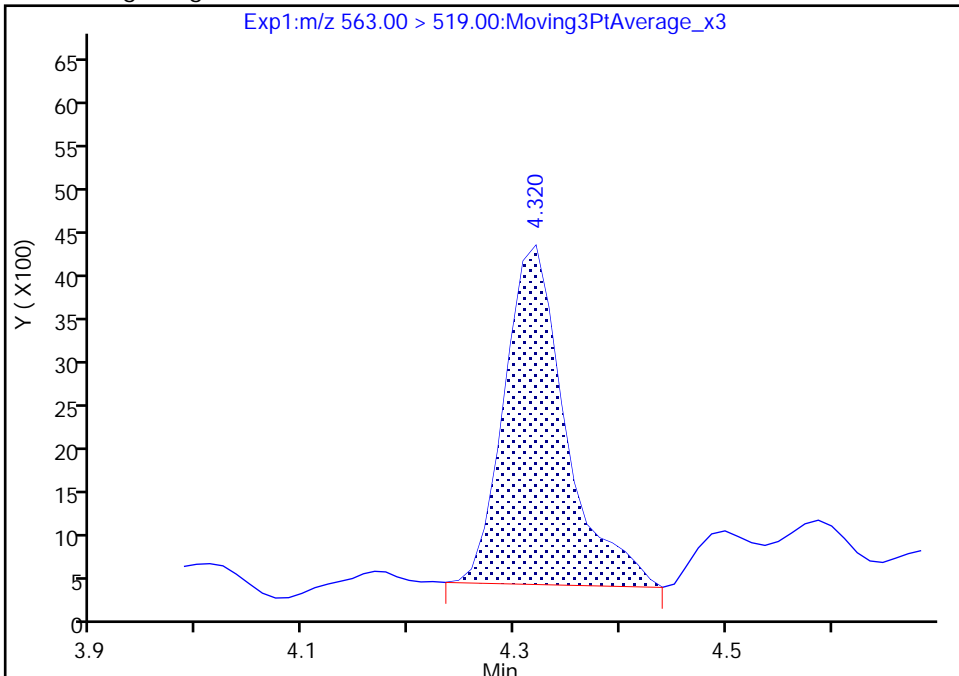
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

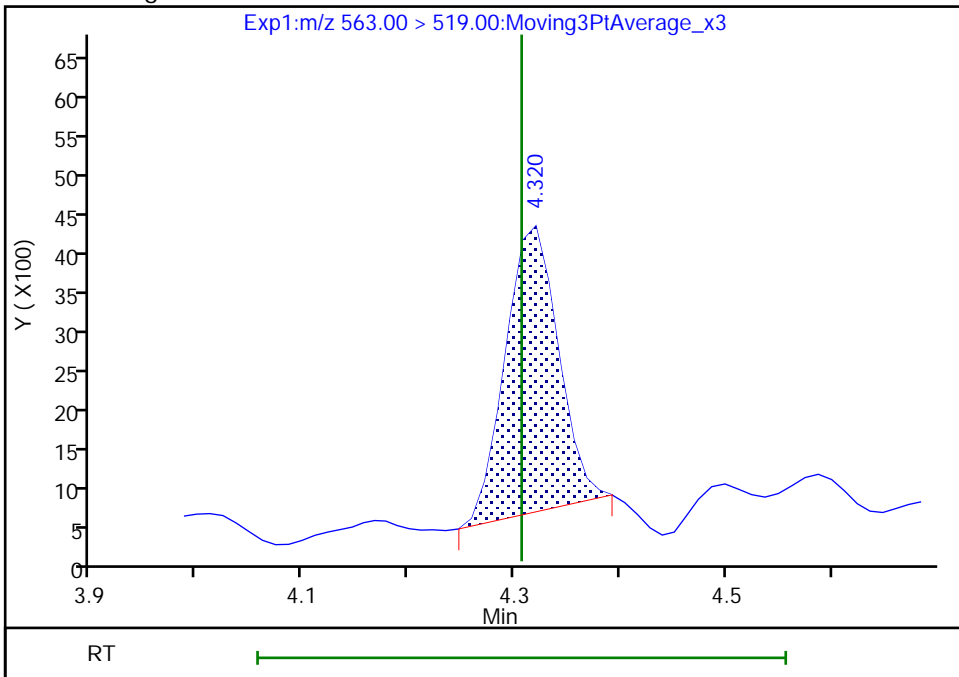
RT: 4.32
Area: 15659
Amount: 0.458480
Amount Units: ng/ml

Processing Integration Results



RT: 4.32
Area: 12663
Amount: 0.370760
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:09:12
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

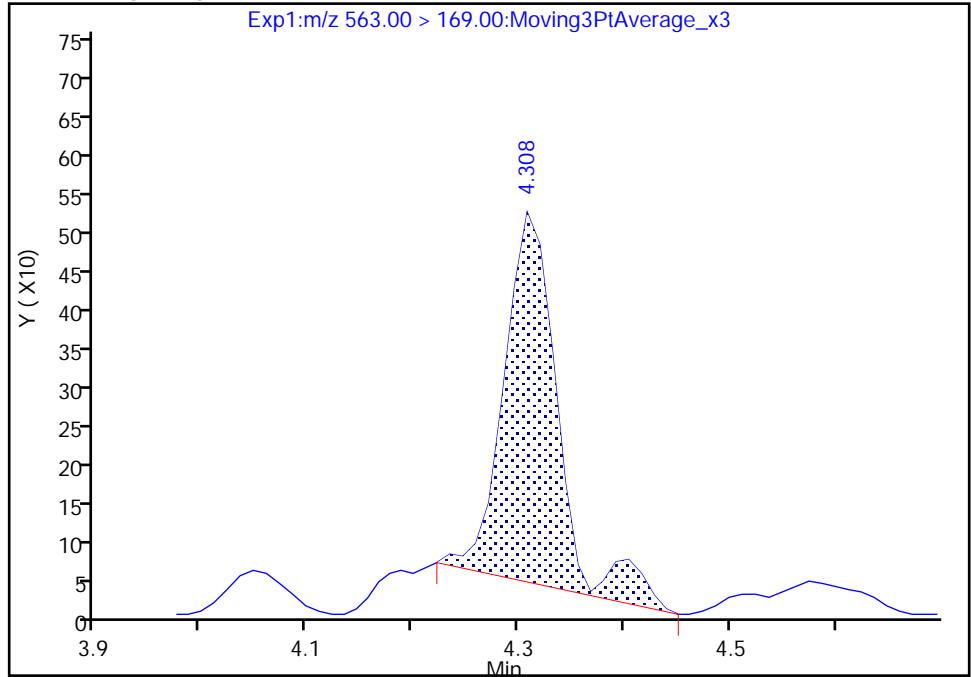
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

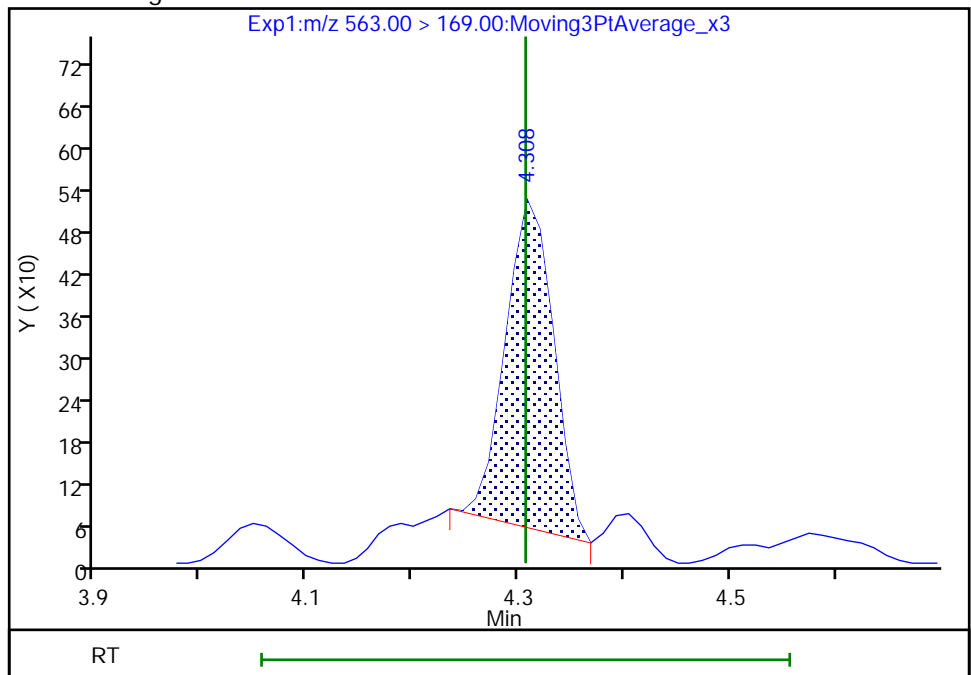
RT: 4.31
Area: 1709
Amount: 0.458480
Amount Units: ng/ml

Processing Integration Results



RT: 4.31
Area: 1484
Amount: 0.370760
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:09:16

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

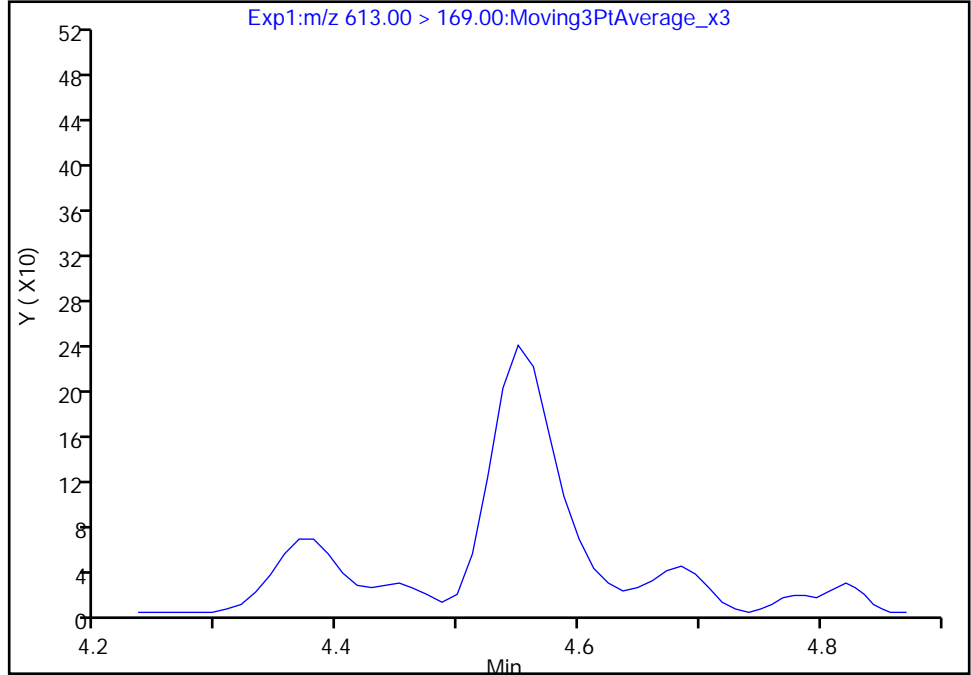
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

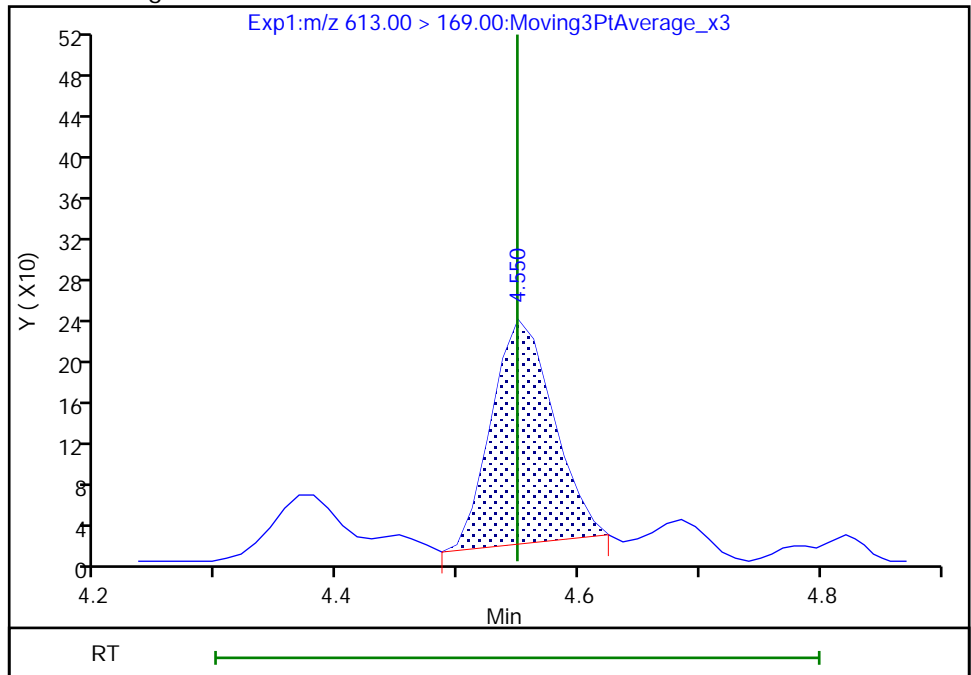
Not Detected
Expected RT: 4.55

Processing Integration Results



Manual Integration Results

RT: 4.55
Area: 781
Amount: 0.173014
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

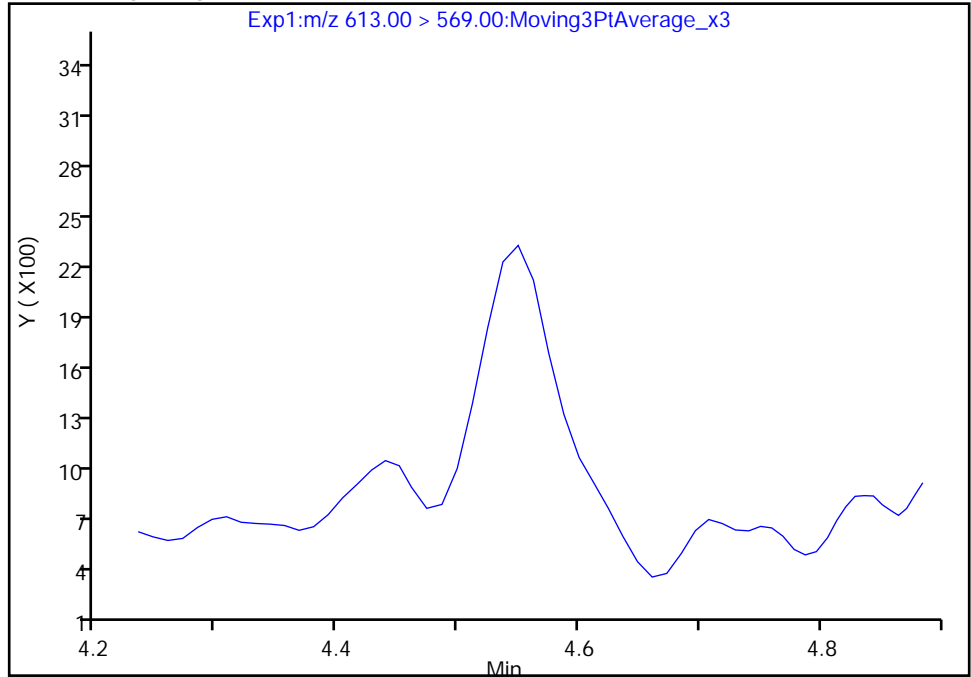
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

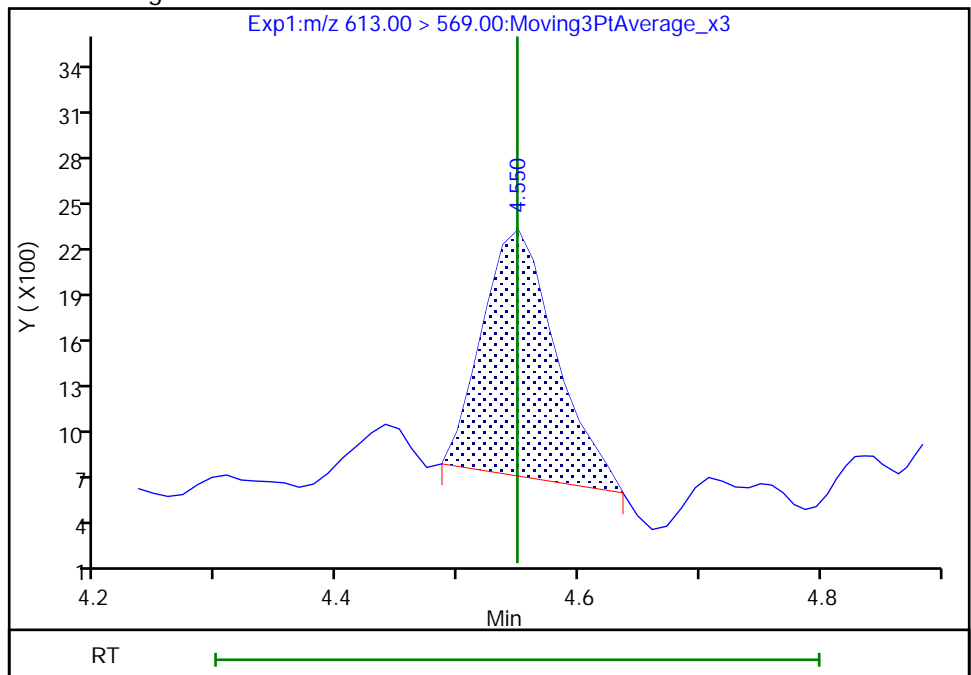
Not Detected
Expected RT: 4.55

Processing Integration Results



Manual Integration Results

RT: 4.55
Area: 6698
Amount: 0.173014
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

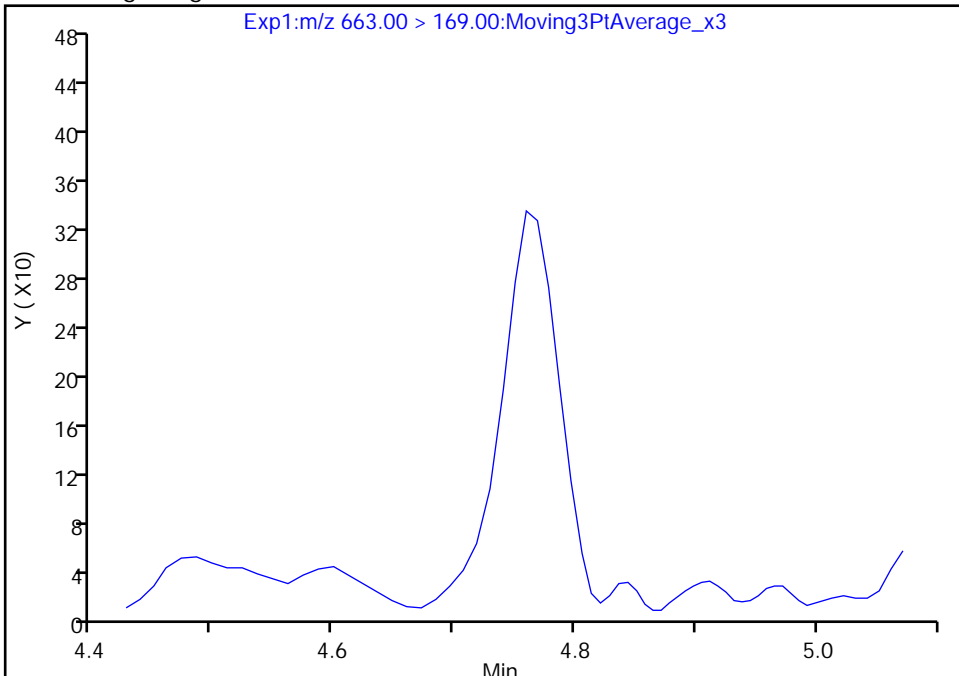
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

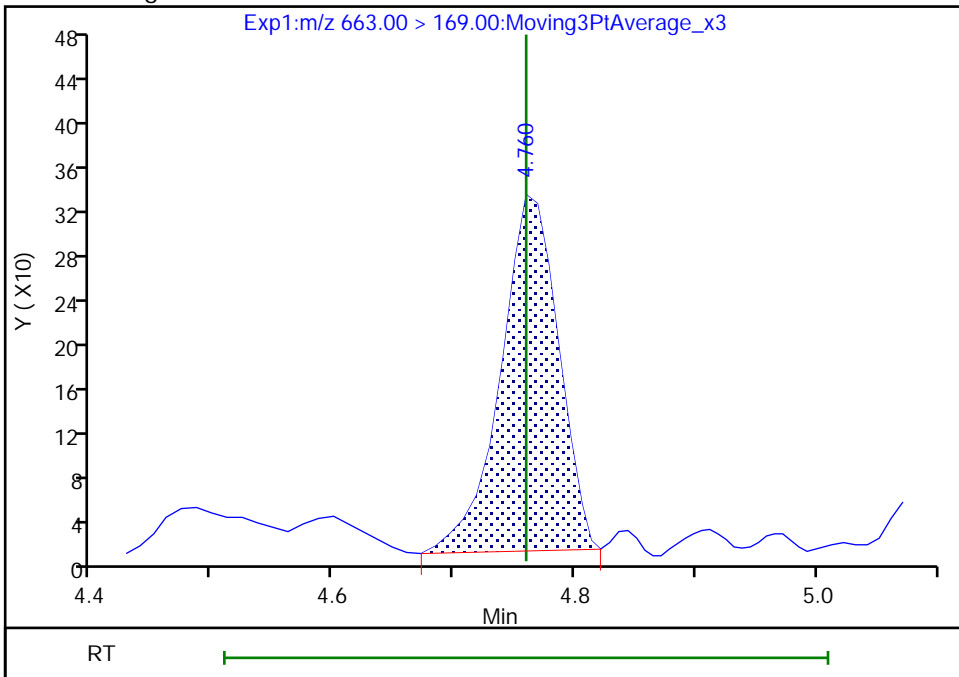
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.76
Area: 1078
Amount: 0.130745
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:09:53
Audit Action: Manually Integrated

Eurofins TestAmerica, Burlington

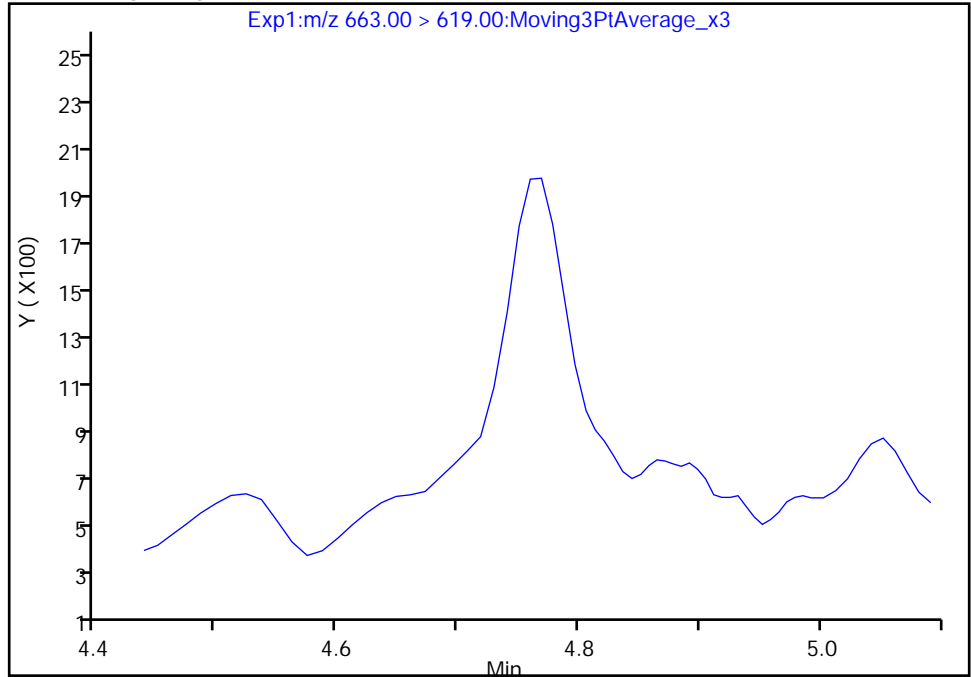
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

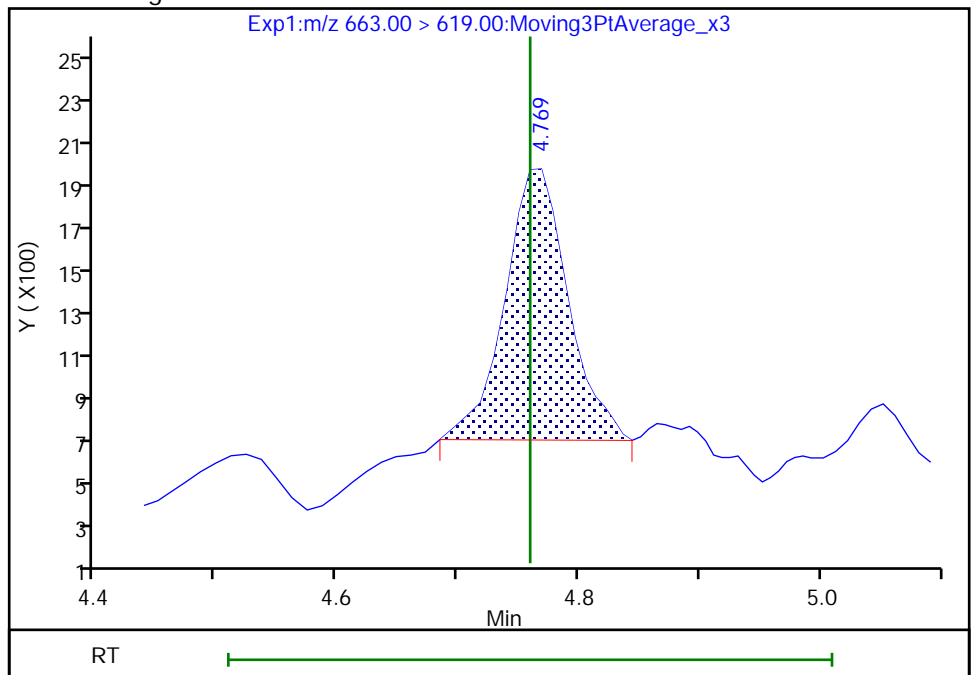
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.77
Area: 4543
Amount: 0.130745
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

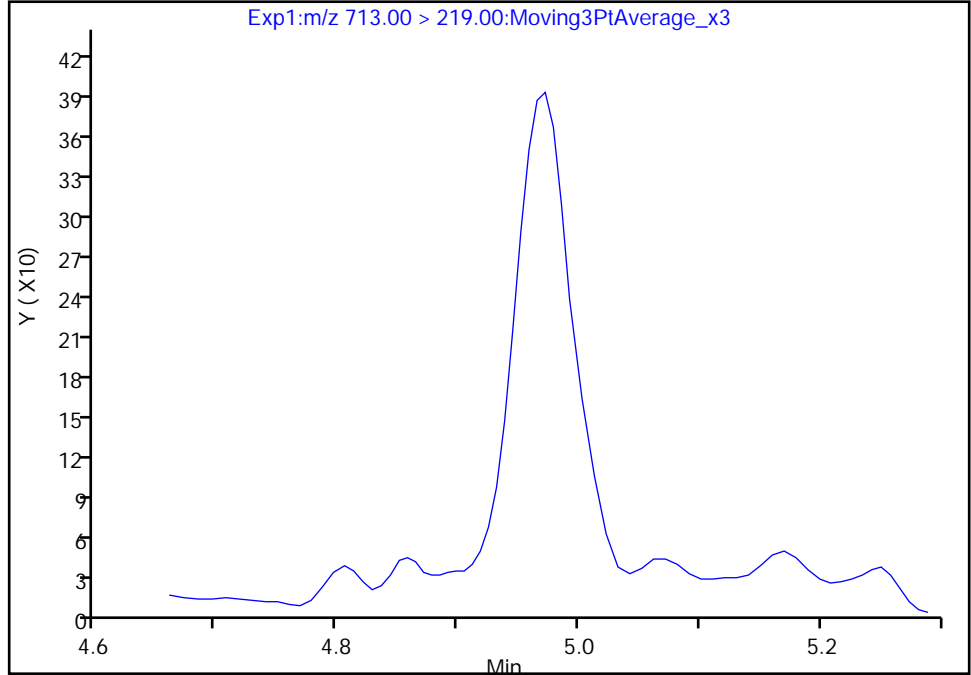
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

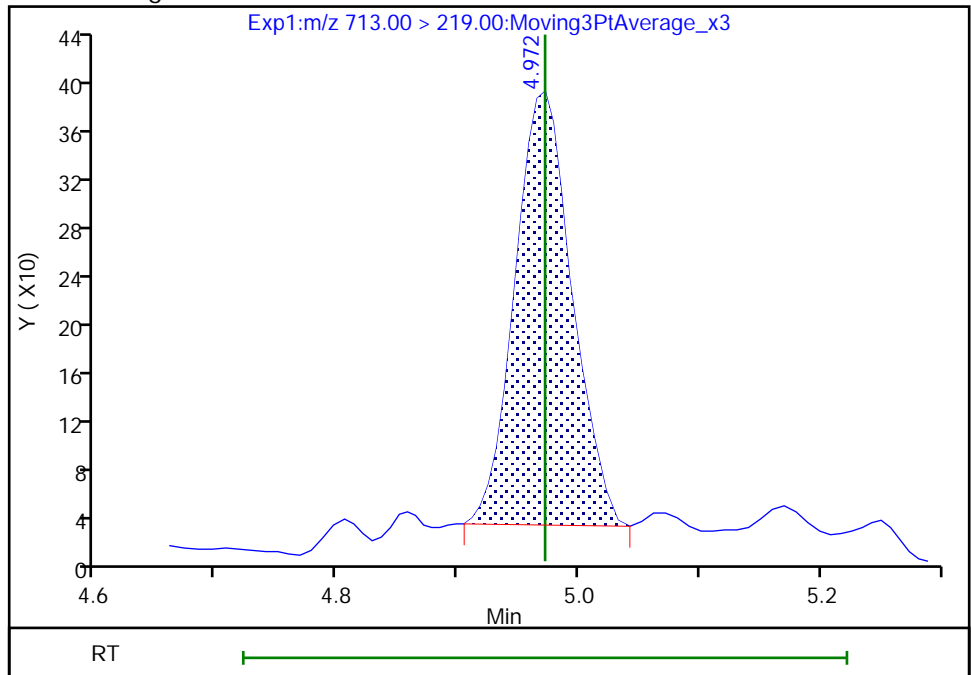
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 1179
Amount: 0.194836
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:10:06
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

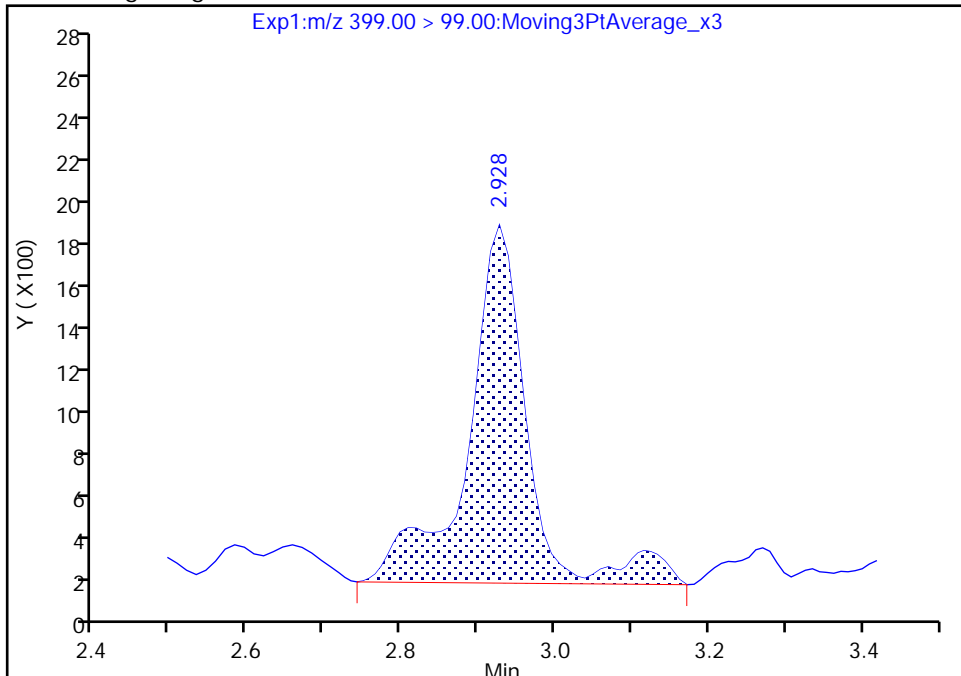
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

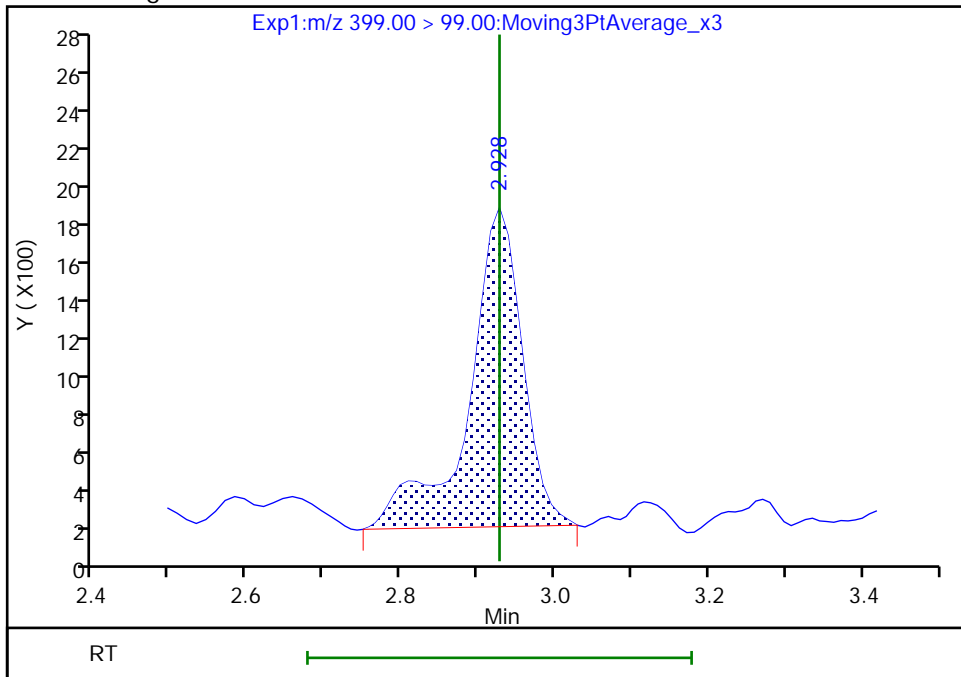
RT: 2.93
Area: 8975
Amount: 0.685528
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 7952
Amount: 0.645584
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:06:42
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

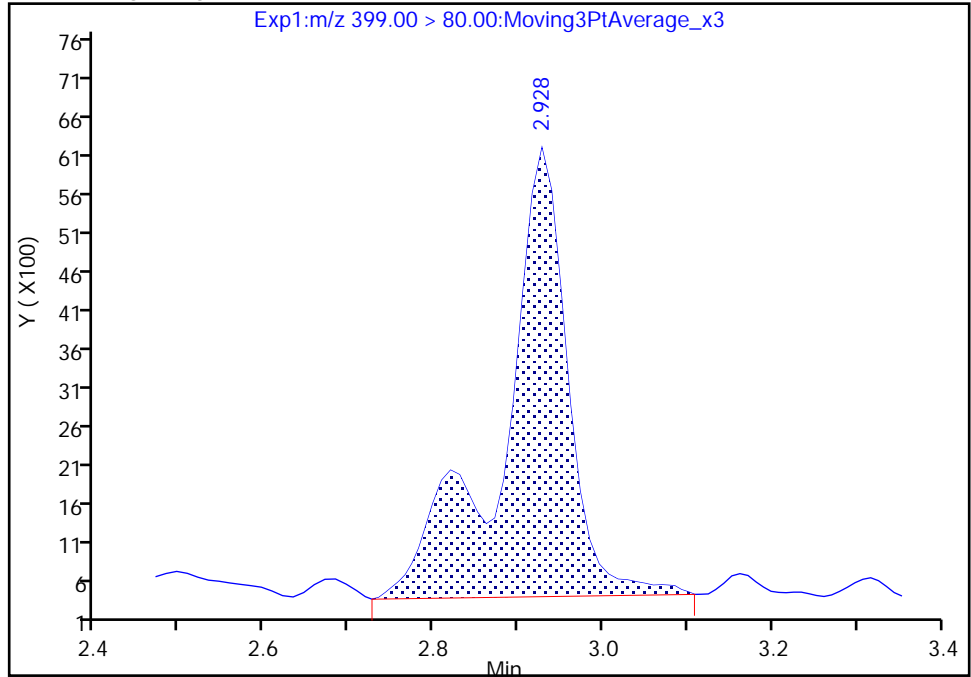
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

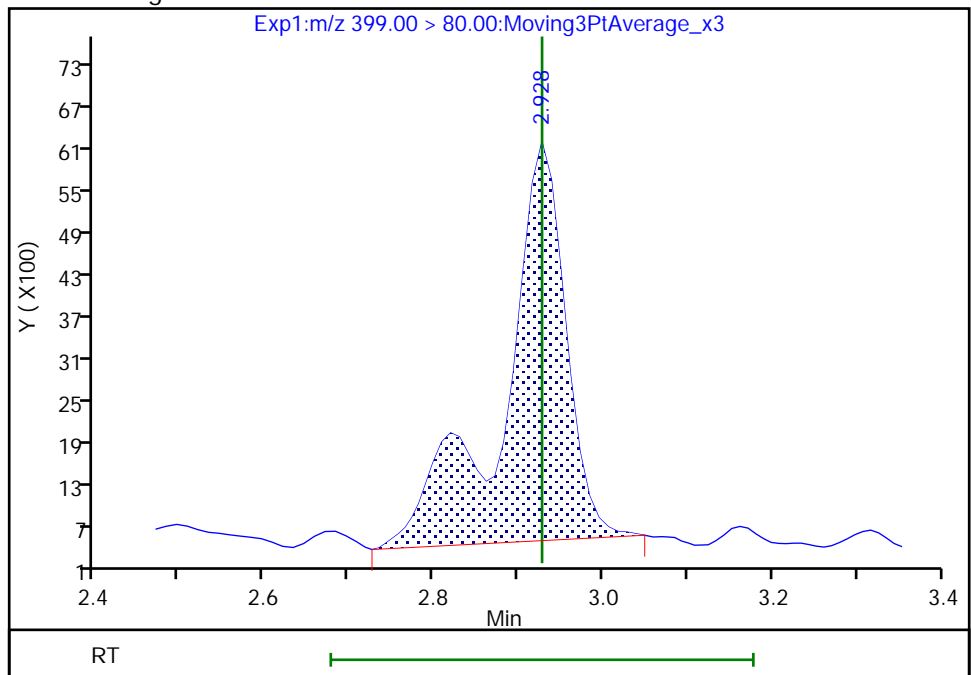
RT: 2.93
Area: 31098
Amount: 0.685528
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 29286
Amount: 0.645584
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:06:45

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

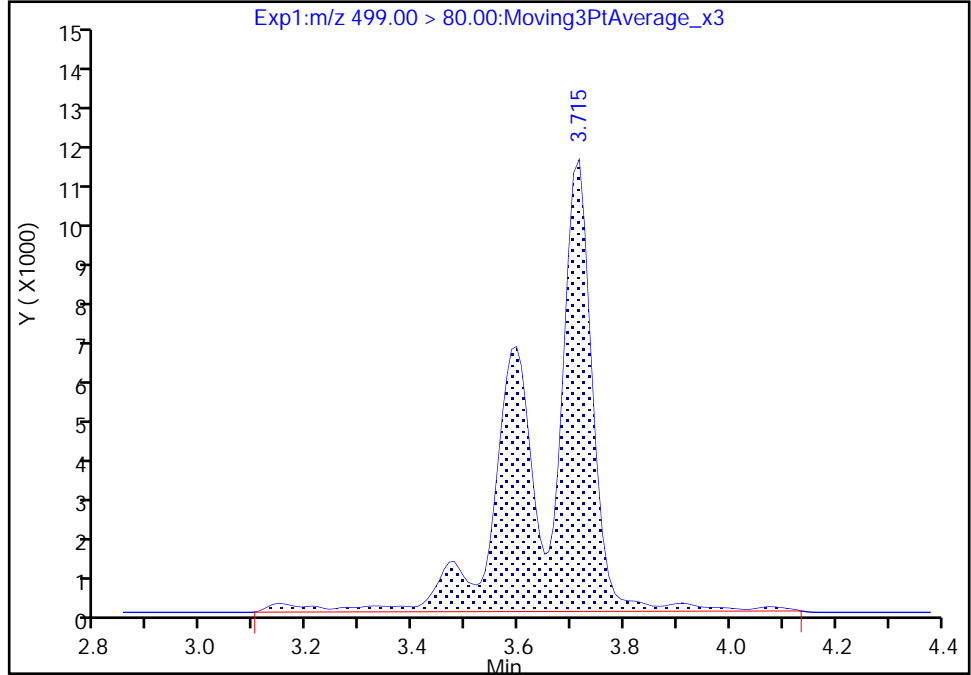
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

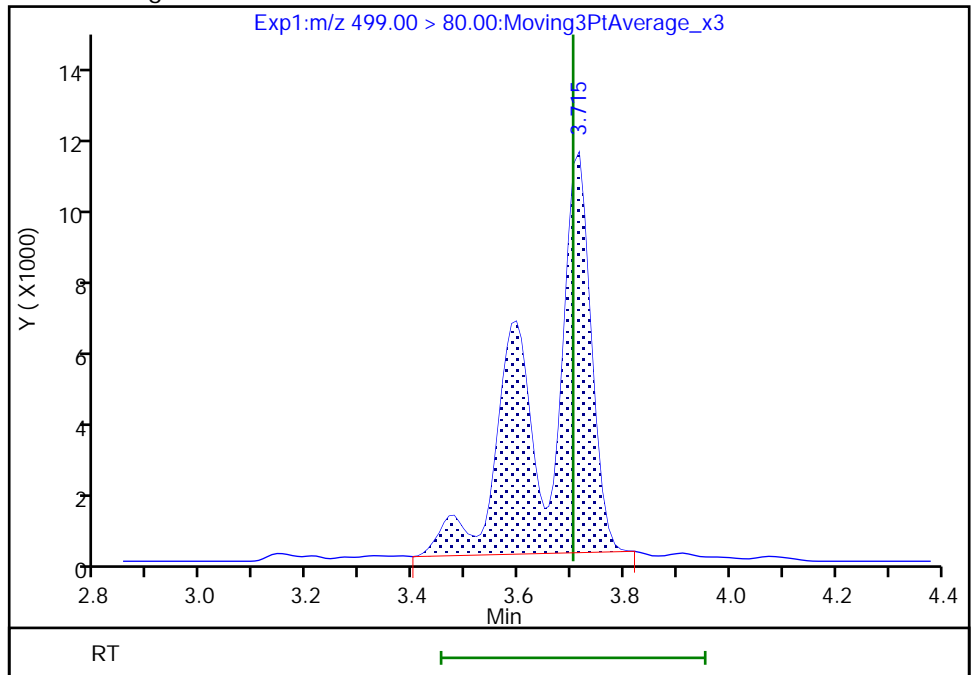
RT: 3.71
Area: 77469
Amount: 3.123008
Amount Units: ng/ml

Processing Integration Results



RT: 3.71
Area: 69029
Amount: 2.782766
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

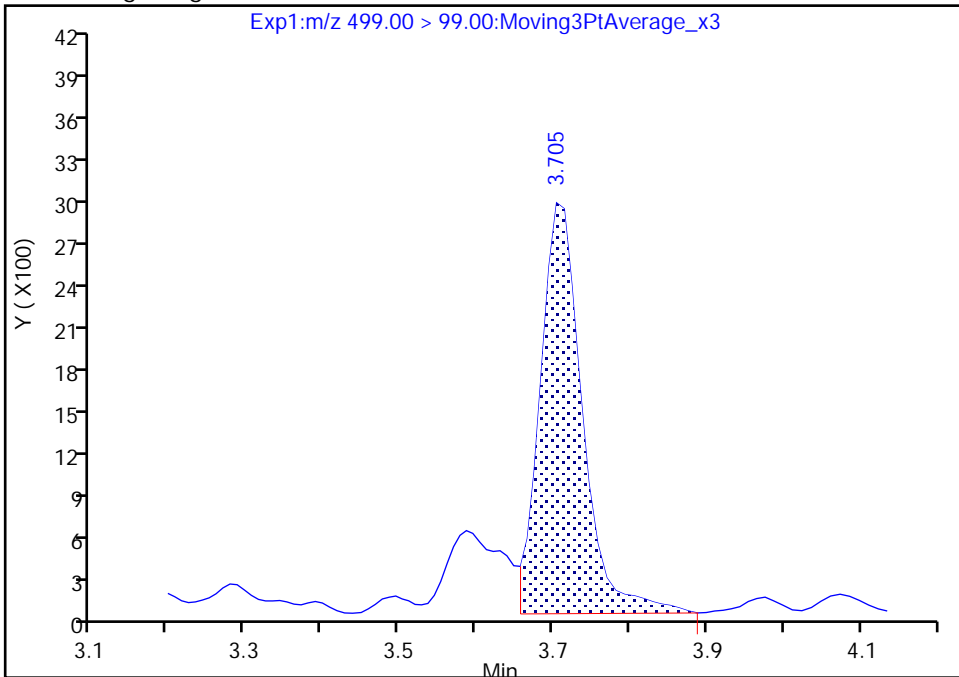
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

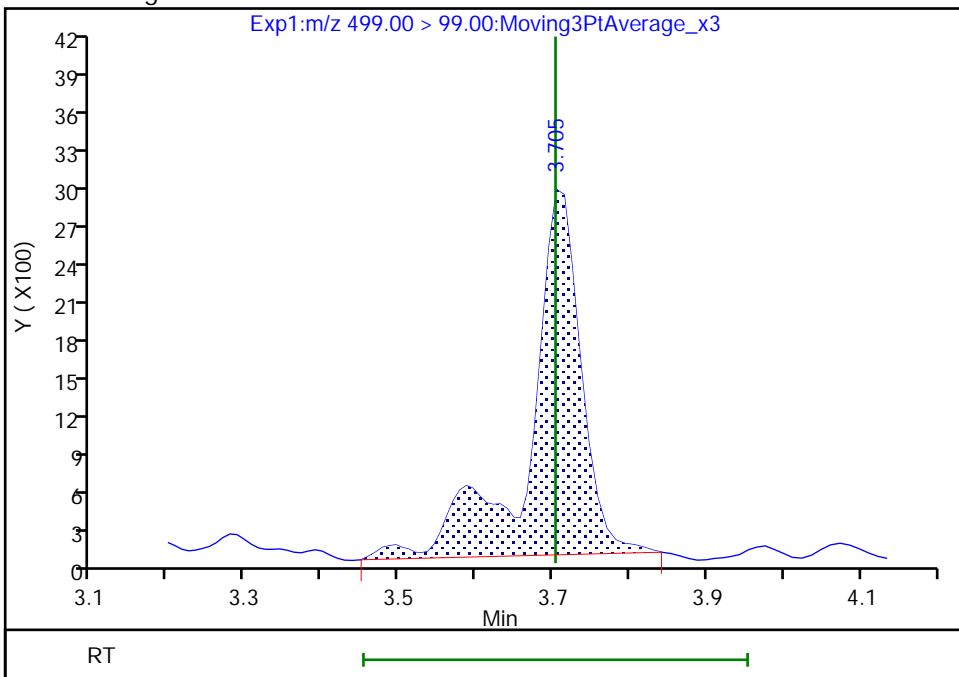
RT: 3.70
Area: 11140
Amount: 3.123008
Amount Units: ng/ml

Processing Integration Results



RT: 3.70
Area: 13564
Amount: 2.782766
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:07:37

Audit Action: Manually Integrated

Audit Reason: Isomers

Euofins TestAmerica, Burlington

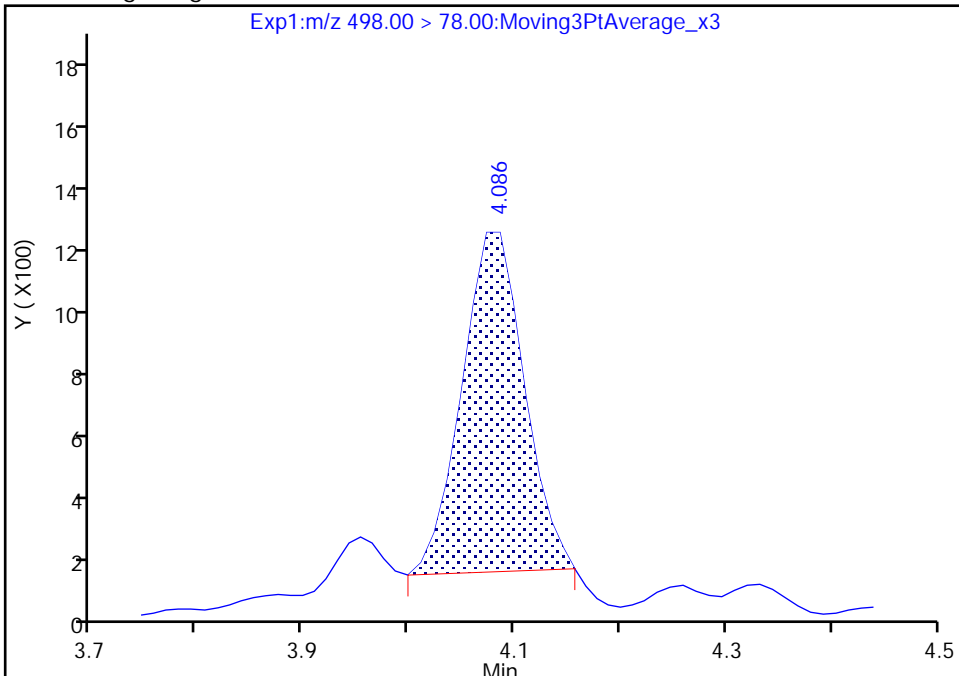
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

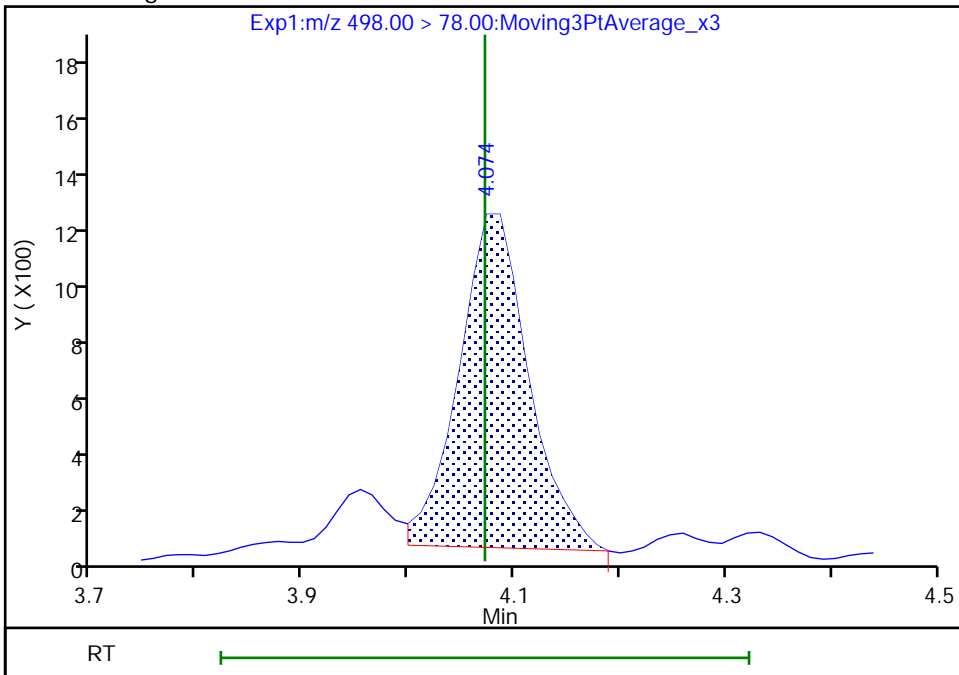
RT: 4.09
Area: 4381
Amount: 0.104936
Amount Units: ng/ml

Processing Integration Results



RT: 4.07
Area: 5338
Amount: 0.127858
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:08:27
Audit Action: Manually Integrated

Audit Reason: Split Peak

Eurofins TestAmerica, Burlington

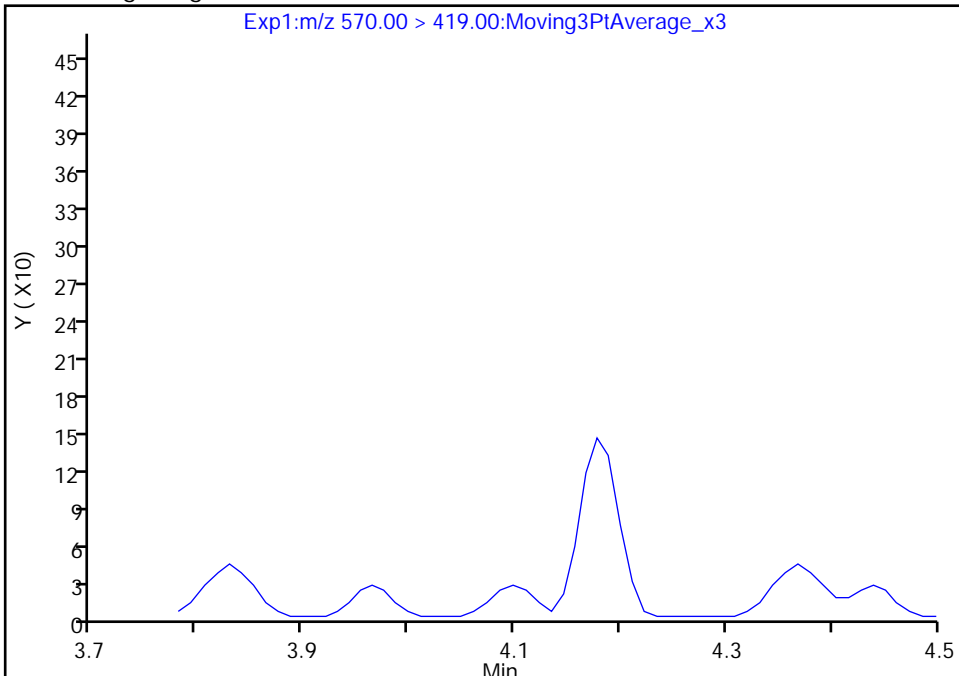
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

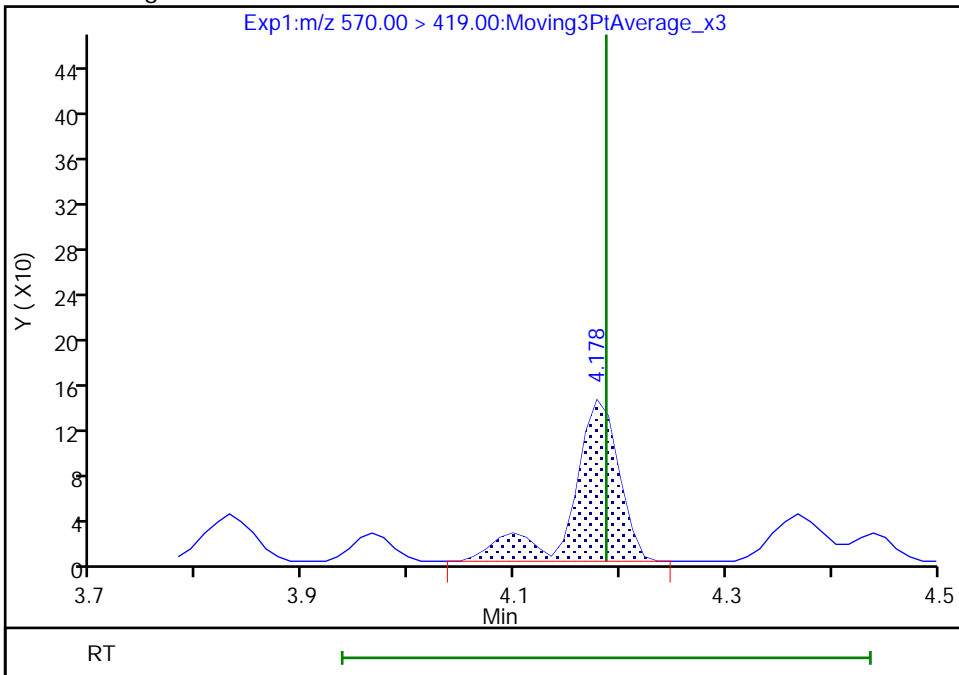
Processing Integration Results

Not Detected
Expected RT: 4.19



Manual Integration Results

RT: 4.18
Area: 439
Amount: 0.140873
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

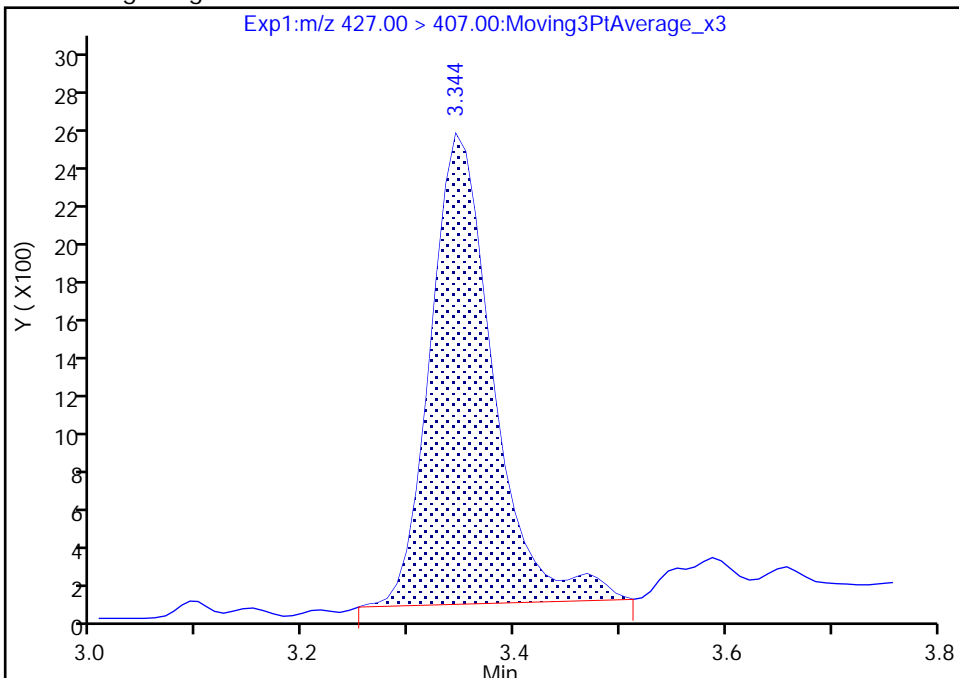
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

13 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:, CAS: 27619-97-2

Signal: 1

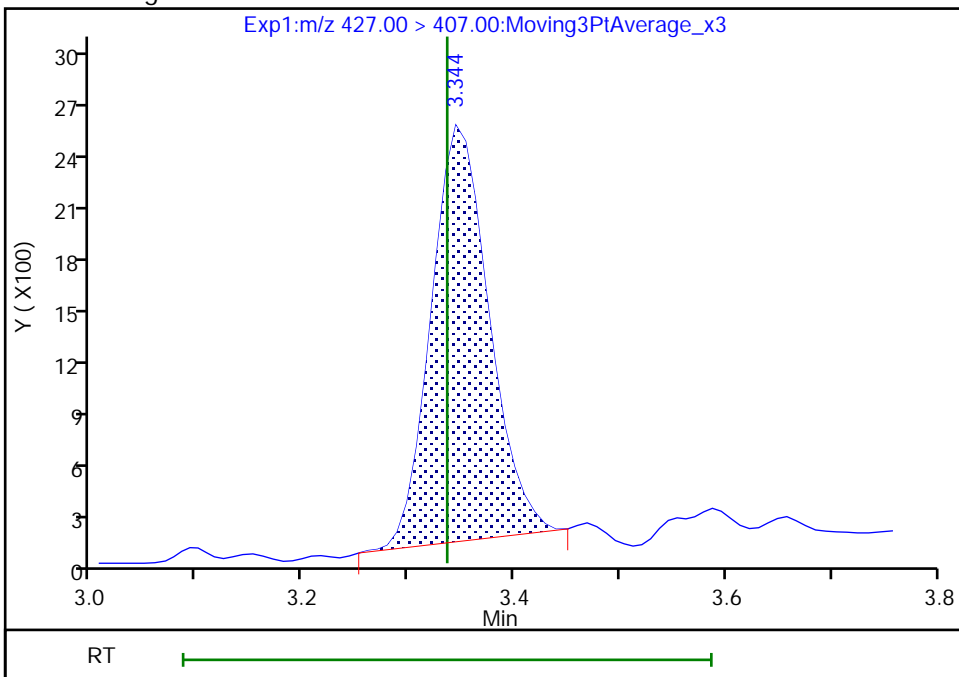
RT: 3.34
Area: 10083
Amount: 0.744993
Amount Units: ng/ml

Processing Integration Results



RT: 3.34
Area: 9131
Amount: 0.674653
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:06:57

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

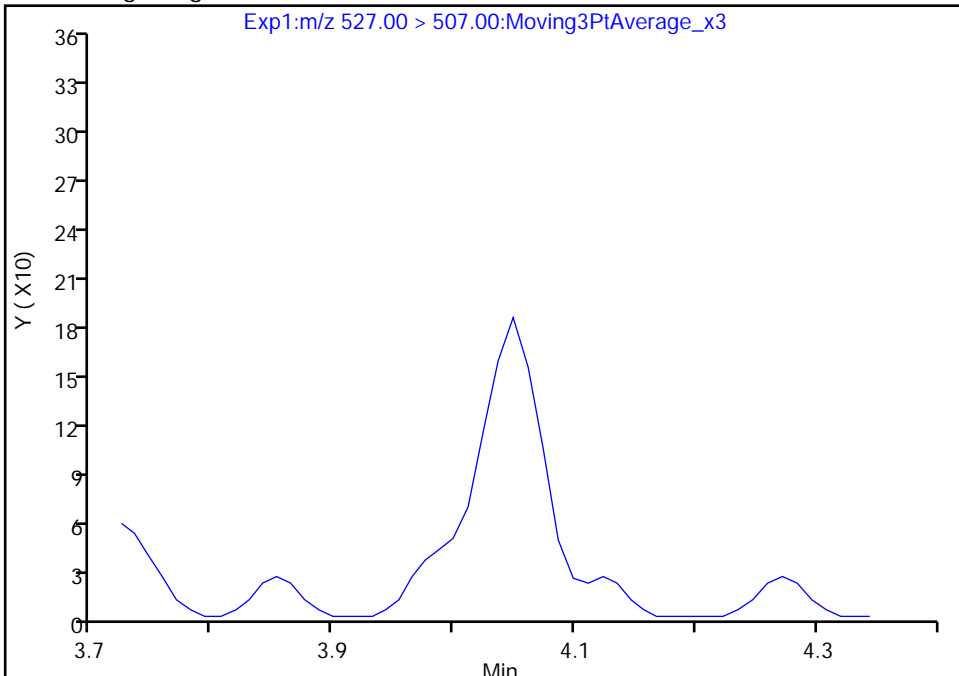
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E013.d
Injection Date: 02-Aug-2019 05:25:47 Instrument ID: LC812
Lims ID: 480-156213-G-12-A Lab Sample ID: 200-156213-12
Client ID: 356023-ERT4
Operator ID: lc812tech ALS Bottle#: 6 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

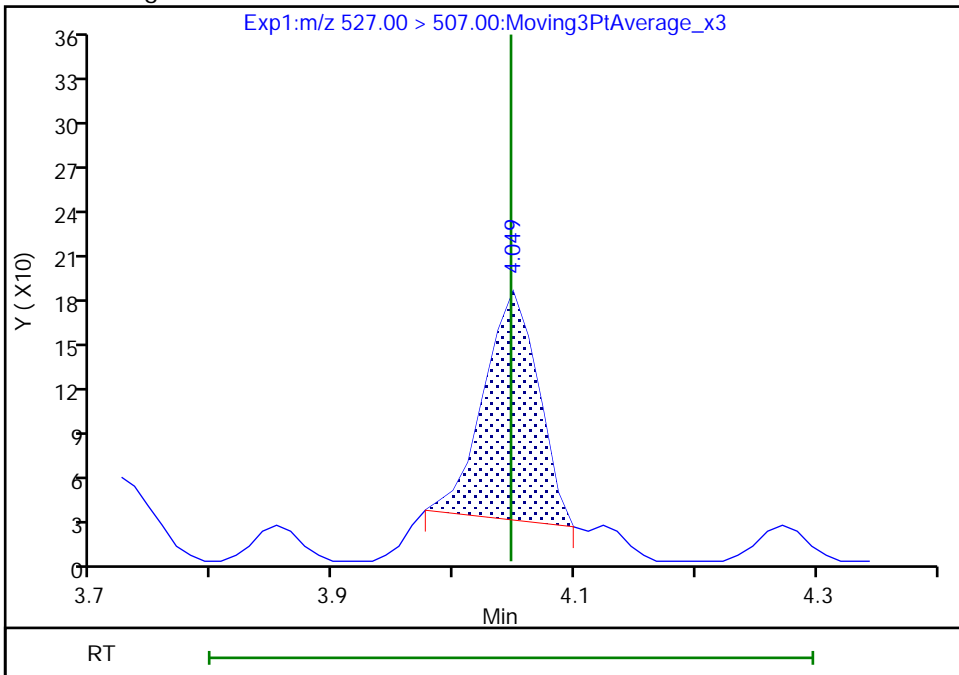
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 475
Amount: 0.047508
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:08:03
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW4 Lab Sample ID: 480-156213-13
 Matrix: Water Lab File ID: SC080119E014.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 14:47
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 311.5 (mL) Date Analyzed: 08/02/2019 05:33
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	6.9		1.6	0.80
2706-90-3	Perfluoropentanoic acid (PFPeA)	12		1.6	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	6.3		1.6	0.61
375-85-9	Perfluoroheptanoic acid (PFHpA)	2.2		1.6	0.73
335-67-1	Perfluorooctanoic acid (PFOA)	6.4		1.6	0.51
375-95-1	Perfluorononanoic acid (PFNA)	0.42	J	1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.62
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.74
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.7		1.6	0.39
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.72	J	1.6	0.64
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.1	I	1.6	0.49
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.0	8.0
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.7
39108-34-4	8:2 FTS	ND		16	2.3

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW4 Lab Sample ID: 480-156213-13
 Matrix: Water Lab File ID: SC080119E014.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 14:47
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 311.5 (mL) Date Analyzed: 08/02/2019 05:33
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	79		25-150
STL00992	13C4 PFBA	69		25-150
STL01893	13C5 PFPeA	85		25-150
STL00993	13C2 PFHxA	88		50-150
STL01892	13C4 PFHpA	90		50-150
STL00990	13C4 PFOA	90		50-150
STL00995	13C5 PFNA	90		50-150
STL00996	13C2 PFDA	93		50-150
STL00997	13C2 PFUnA	89		50-150
STL00998	13C2 PFDoA	78		50-150
STL02116	13C2 PFTeDA	60		50-150
STL02337	13C3 PFBS	89		50-150
STL00994	18O2 PFHxS	88		50-150
STL00991	13C4 PFOS	81		50-150
STL02118	d3-NMeFOSAA	70		50-150
STL02117	d5-NEtFOSAA	65		50-150
STL02279	M2-6:2 FTS	103		25-150
STL02280	M2-8:2 FTS	105		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
 Lims ID: 480-156213-F-13-A
 Client ID: 356023-MW4
 Sample Type: Client
 Inject. Date: 02-Aug-2019 05:33:49 ALS Bottle#: 7 Worklist Smp#: 14
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-13-A
 Misc. Info.: 200-0037095-014 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:14:41
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.508	2576064	34.5	69.0	8870	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.000	204928	4.32		27.3	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	2981626	42.5	85.1	4272	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	435640	7.55		13.2	M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	2854403	41.5	89.1	243211	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	65196	1.04	Target=1.90	12.7	
	298.90 > 99.00	2.093	2.093	0.0	1.000	28880		2.26(0.95-2.85)	9.1	
D 7 13C2 PFHxA	315.00 > 270.00	2.470	2.459	0.011	0.734	3069401	44.1	88.2	6780	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.000	249872	3.95	Target=13.23	22.1	M
	313.00 > 119.00	2.470	2.459	0.011	1.000	19870		12.58(6.61-19.84)	25.7	M
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.870	1671482	41.4	87.6	6272	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.874	3074124	45.1	90.1	6578	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.928	2.928	0.0	1.000	20853	0.4478	Target=3.37	6.8	M
	399.00 > 99.00	2.928	2.928	0.0	1.000	6959		3.00(1.69-5.06)	4.8	M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.000	79838	1.39	Target=3.76	8.0	M
	363.00 > 169.00	2.939	2.928	0.011	1.000	22170		3.60(1.88-5.65)	37.1	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.345	3.335	0.010	0.995	409019	48.7		103	369	
13 1H,1H,2H,2H-perfluorooctanesulfonyl										
427.00 > 407.00	3.345	3.336	0.009	1.000	8030	0.5437			19.4	
D 14 13C4 PFOA										
417.00 > 372.00	3.364	3.344	0.020	1.000	3228336	44.8		89.6	11023	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.364	3.355	0.009	1.000	280823	4.00	Target=2.84	22.8		M
413.00 > 169.00	3.364	3.355	0.009	1.000	120143		2.34(1.42-4.25)	188		M
* 62 13C2 PFOA										
415.00 > 370.00	3.364	3.355	0.009		3960360	50.0			11531	
D 18 13C4 PFOS										
503.00 > 80.00	3.713	3.695	0.018	1.104	1296911	38.6		80.7	2236	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.594	3.703	-0.109	0.968	34219	1.33	Target=4.33	36.7		RM
499.00 > 99.00	3.612	3.703	-0.091	0.973	4352		7.86(2.16-6.49)	3.6		RM
D 19 13C5 PFNA										
468.00 > 423.00	3.734	3.715	0.019	1.110	2963491	45.1		90.2	9954	
20 Perfluorononanoic acid										
463.00 > 419.00	3.734	3.723	0.011	1.000	13912	0.2591	Target=8.15	3.7		M
463.00 > 169.00	3.734	3.723	0.011	1.000	2526		5.51(4.08-12.23)	14.8		M
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.036	0.011	1.203	2441964	46.5		92.9	12627	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.036	0.023	1.207	389207	50.3		105	575	
25 1H,1H,2H,2H-perfluorodecanesulfonyl										
527.00 > 507.00	4.059	4.047	0.012	1.000	266	0.0245			3.9	M
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.214	2378570	39.4		78.8	5309	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.084	4.072	0.012	1.000	1802	0.0415			10.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.178	0.009	1.245	236593	35.2		70.5	1825	
28 N-methylperfluorooctanesulfonamide										
570.00 > 419.00	4.198	4.187	0.011	1.003	192	0.0536			1.3	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.284	2120172	44.3		88.6	13269	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.307	0.012	1.000	4085	0.1123	Target=7.95	1.9		M
563.00 > 169.00	4.307	4.307	-0.001	0.997	555		7.36(3.98-11.93)	6.1		M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.308	0.011	1.284	245018	32.7		65.5	894	
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.537	0.012	1.352	2013990	39.1		78.2	5277	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.549	4.549	0.0	1.000	2033	0.0494	Target=7.49	0.3		M
613.00 > 169.00	4.549	4.549	0.0	1.000	273		7.45(3.75-11.24)	3.4		M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.769	4.760	0.009	1.048	2154	0.0583	Target=5.71	0.3		
663.00 > 169.00	4.778	4.760	0.018	1.050	370		5.82(2.85-8.56)	3.0		M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.978	4.965	0.013	1.480	2136295	30.1		60.2	8262	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.972	4.972	0.0	0.999	654	0.1150	Target=1.02	8.1		M
713.00 > 219.00	4.978	4.972	0.006	1.000	663		0.99(0.51-1.54)	8.4		M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d

Injection Date: 02-Aug-2019 05:33:49

Instrument ID: LC812

Lims ID: 480-156213-F-13-A

Lab Sample ID: 200-156213-13

Client ID: 356023-MW4

Operator ID: lc812tech

ALS Bottle#: 7

Worklist Smp#: 14

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

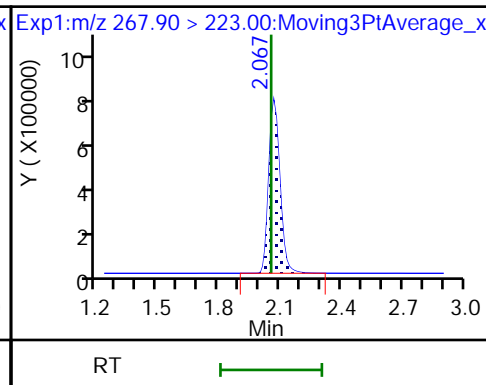
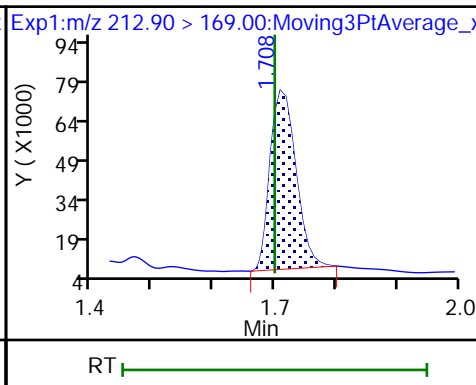
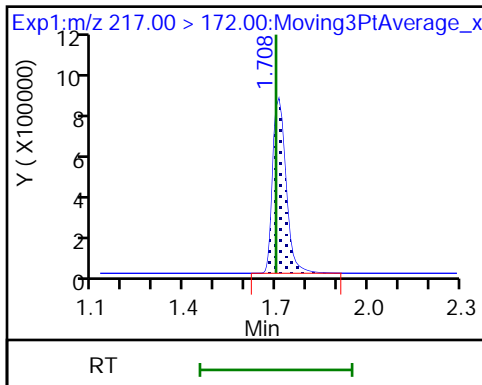
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

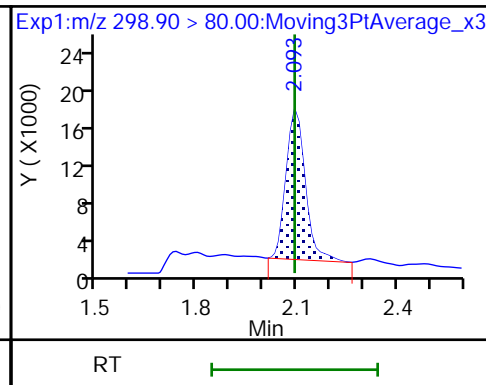
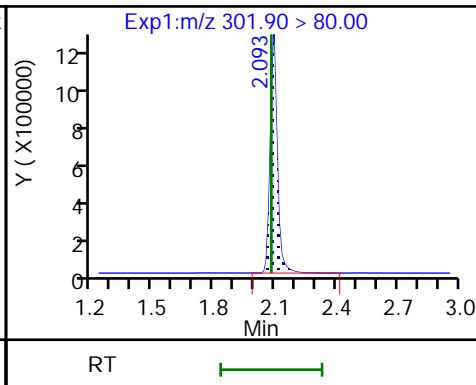
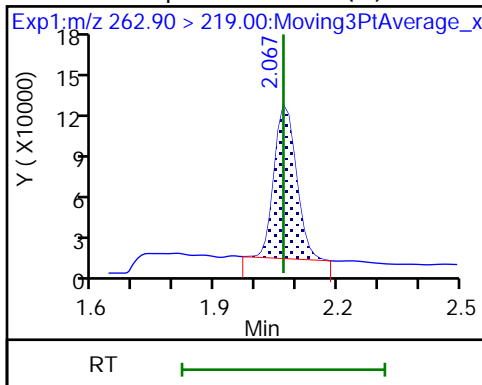
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

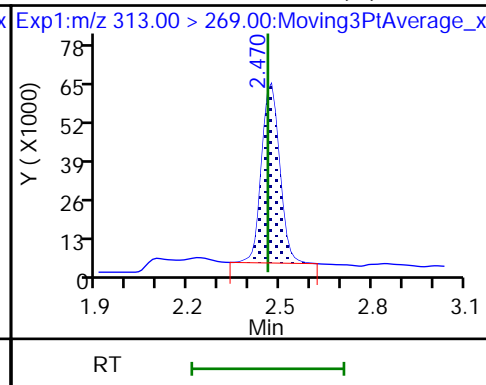
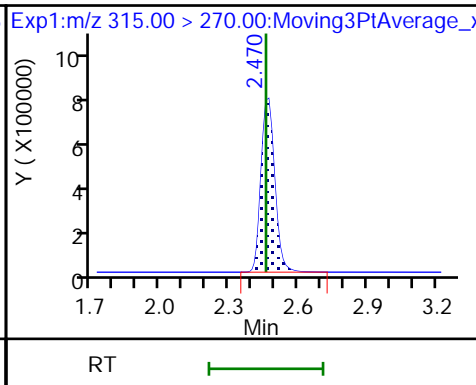
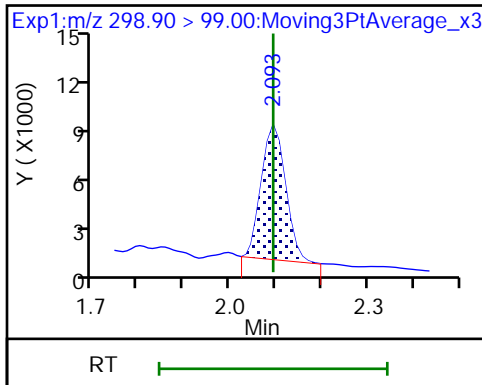
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

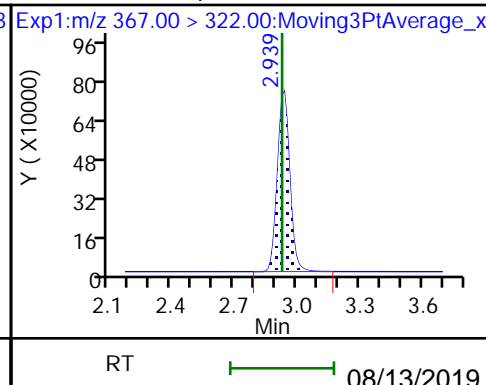
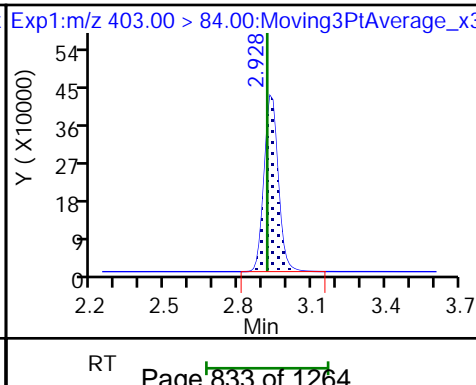
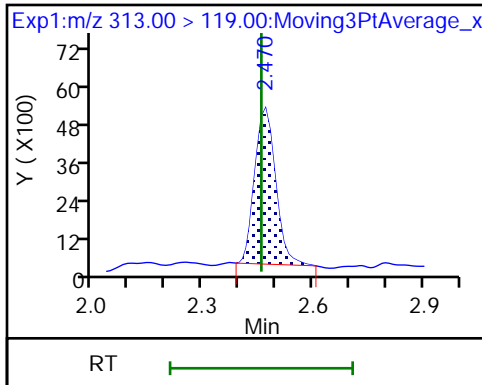
6 Perfluorohexanoic acid (M)

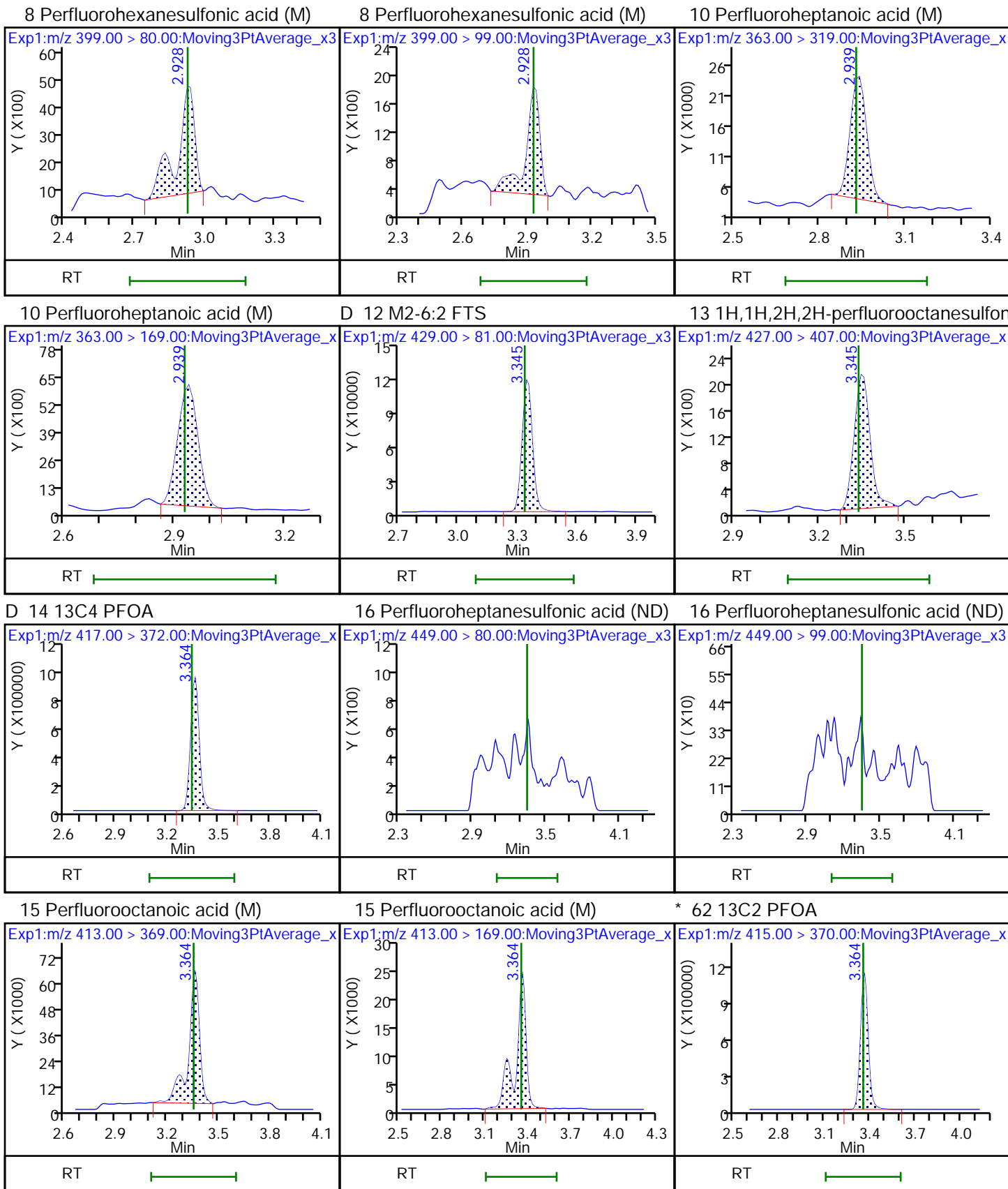


6 Perfluorohexanoic acid (M)

D 11 18O2 PFHxS

D 9 13C4 PFHpA

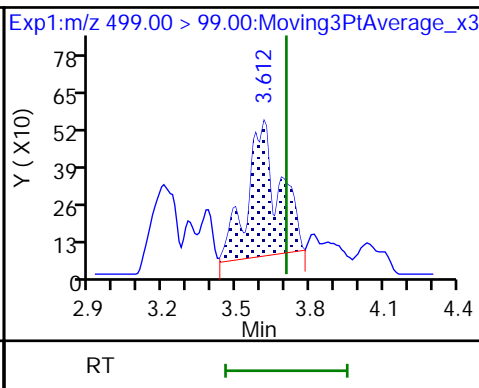
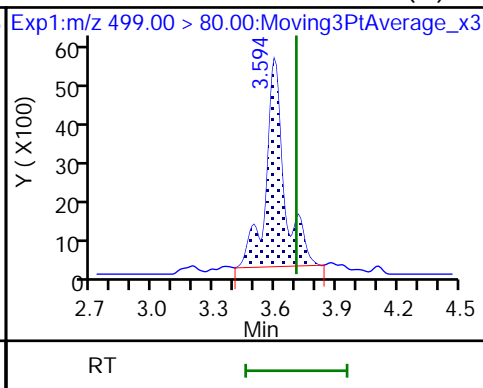
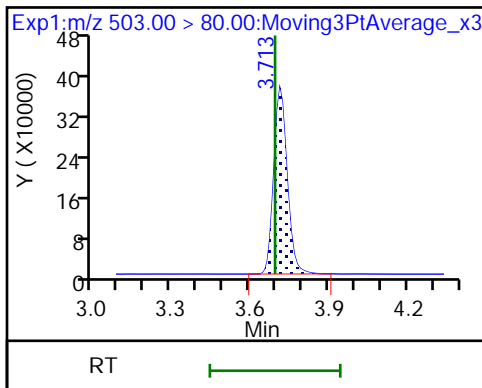




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

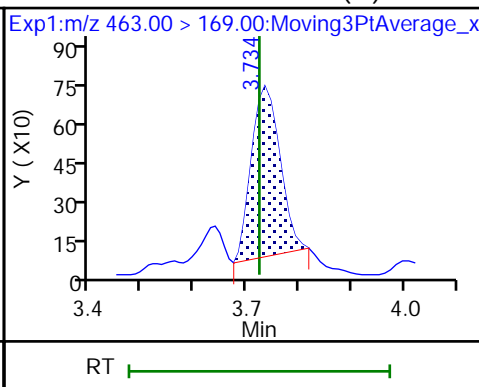
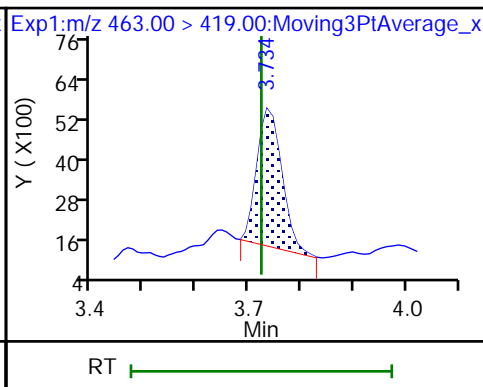
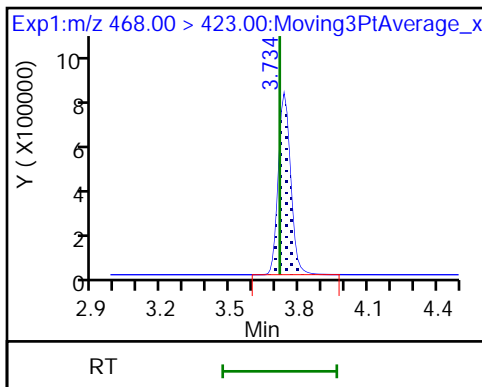
17 Perfluorooctanesulfonic acid



D 19 13C5 PFNA

20 Perfluorononanoic acid

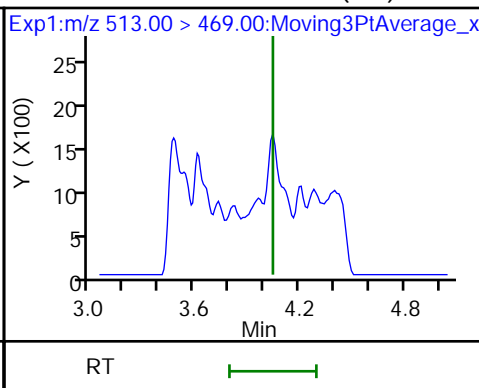
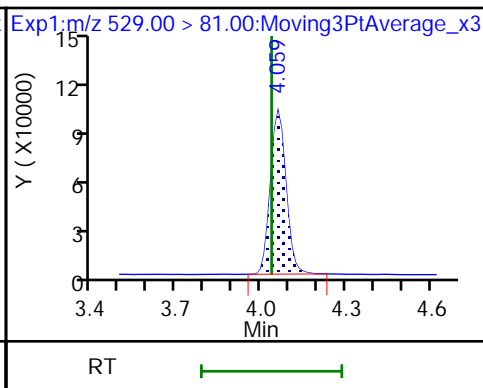
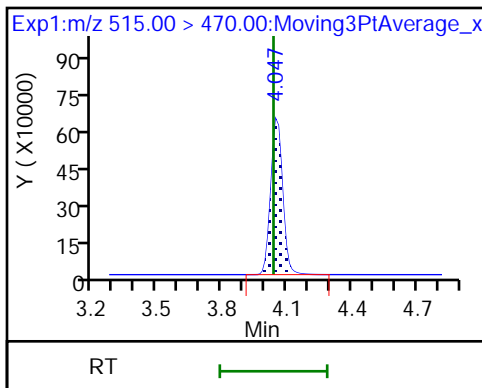
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

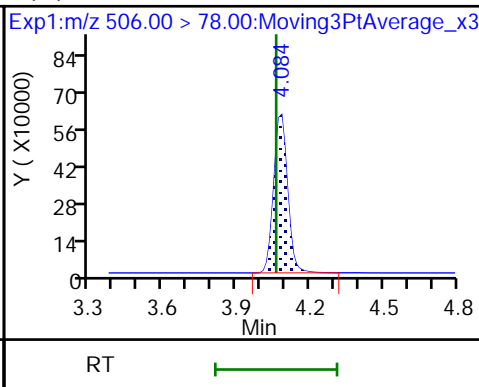
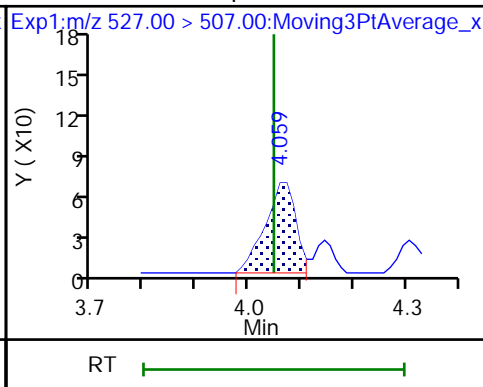
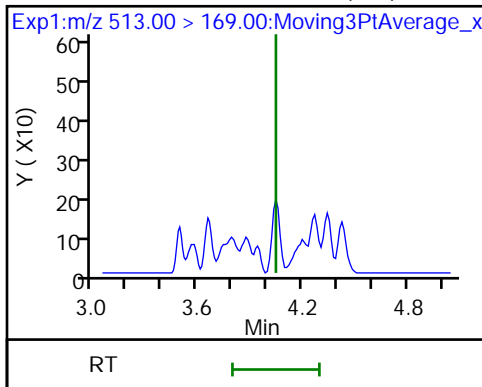
24 Perfluorodecanoic acid (ND)



24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

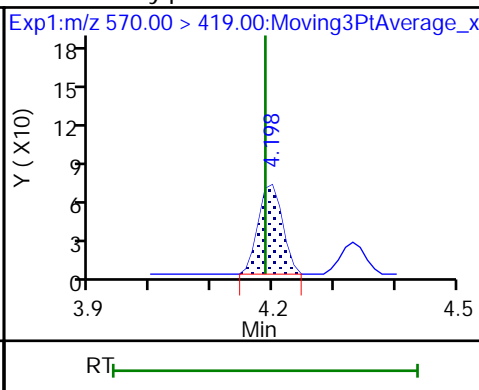
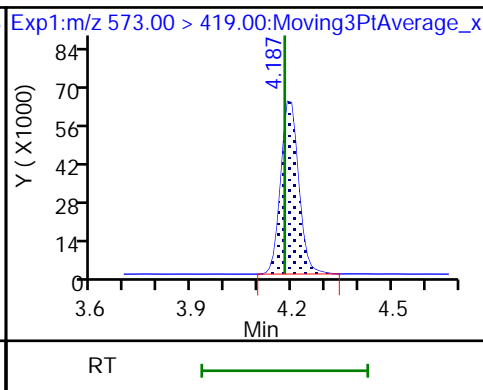
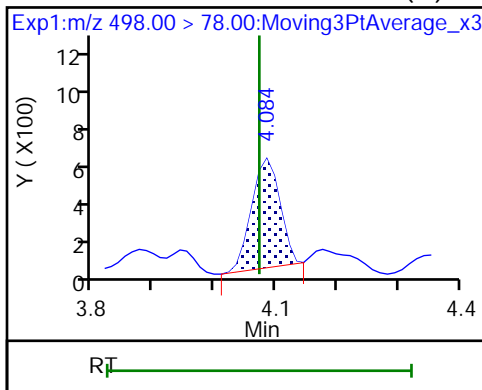
D 27 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

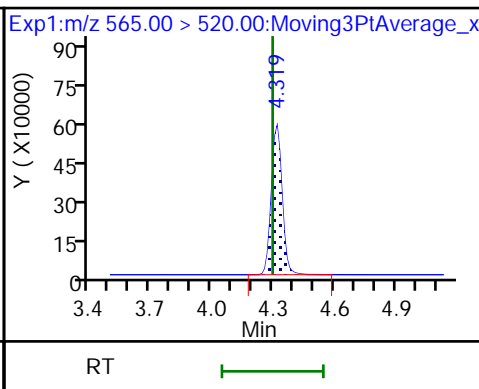
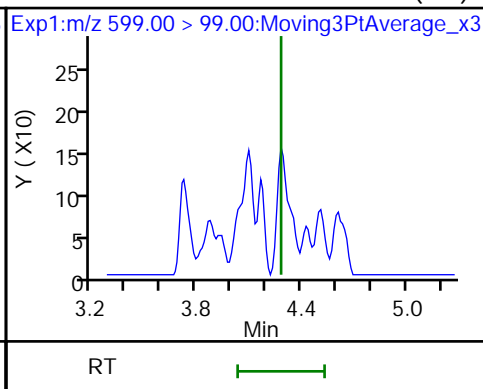
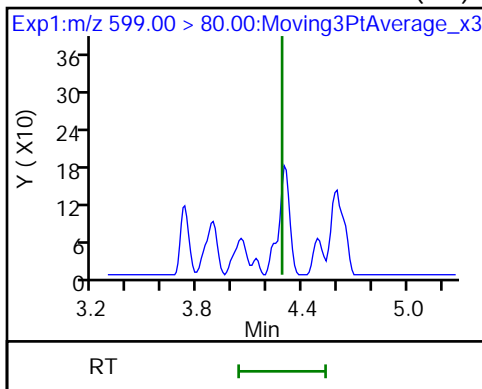
28 N-methylperfluorooctanesulfonamido (M)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

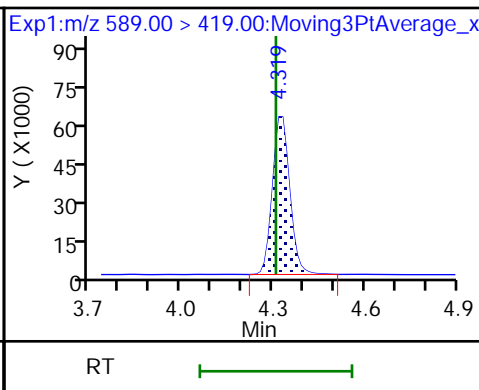
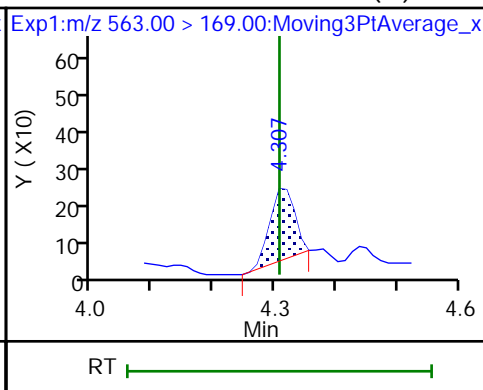
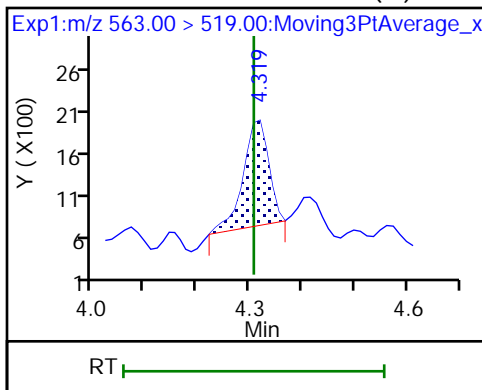
D 30 13C2 PFUa



31 Perfluoroundecanoic acid (M)

31 Perfluoroundecanoic acid (M)

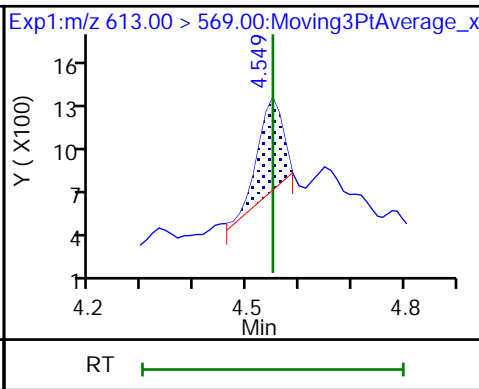
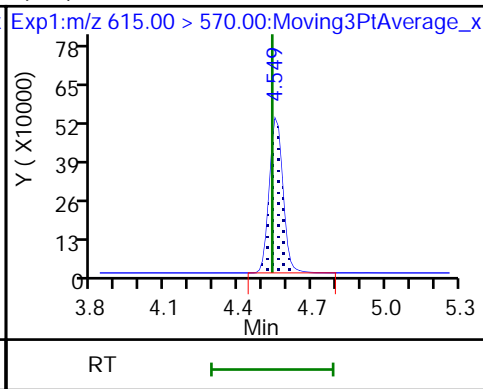
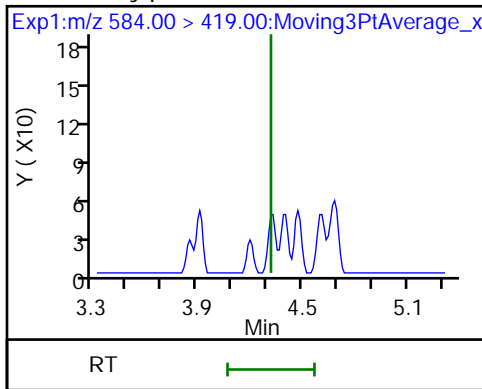
D 32 d5-NEtFOSAA

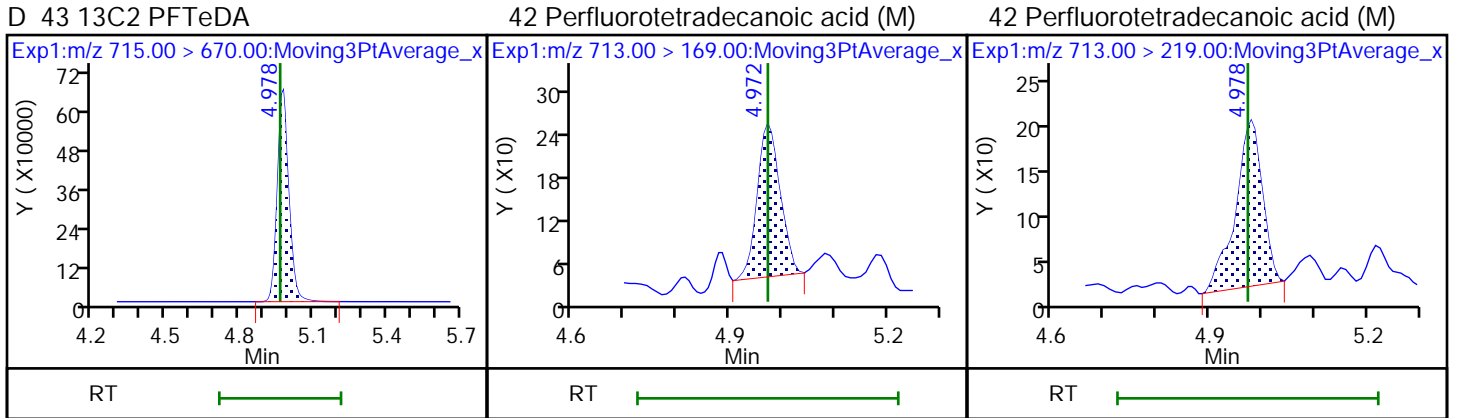
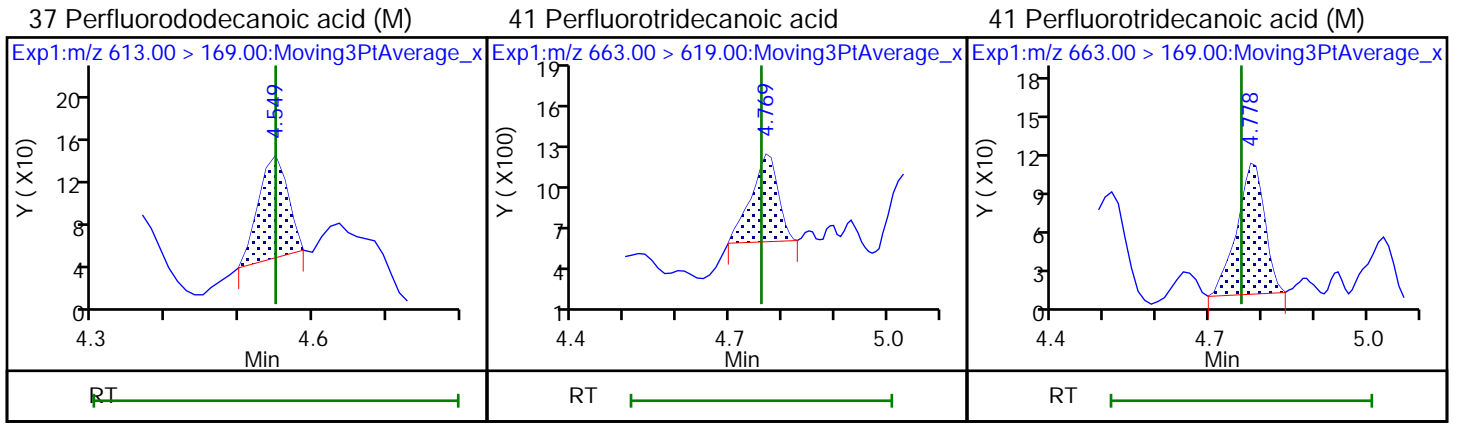


33 N-ethylperfluorooctanesulfonamido (M)

D 33 13C2 PFDoA

37 Perfluorododecanoic acid





Eurofins TestAmerica, Burlington

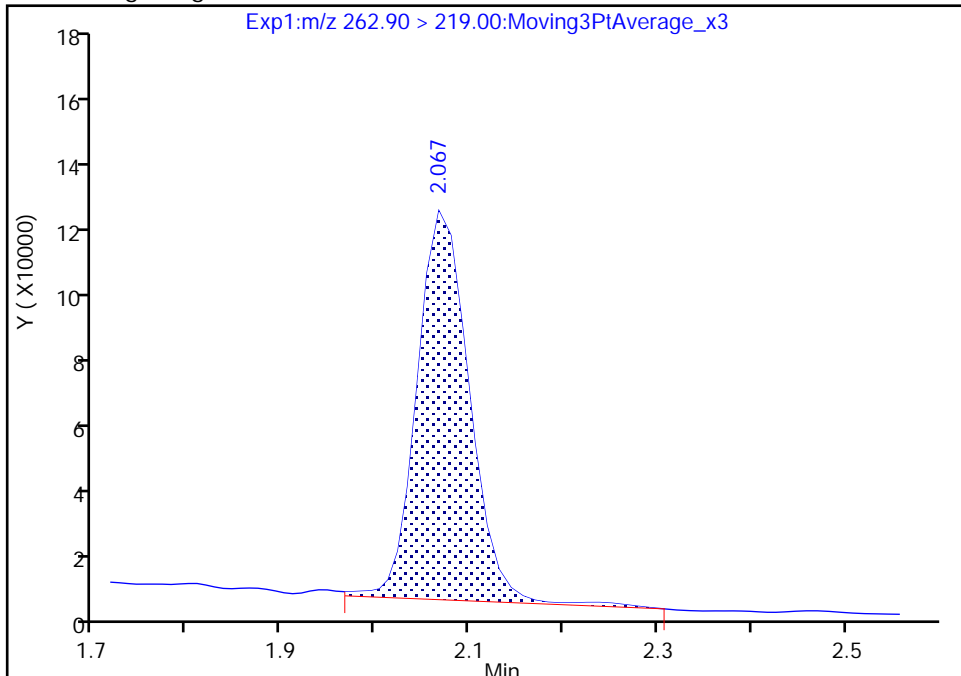
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

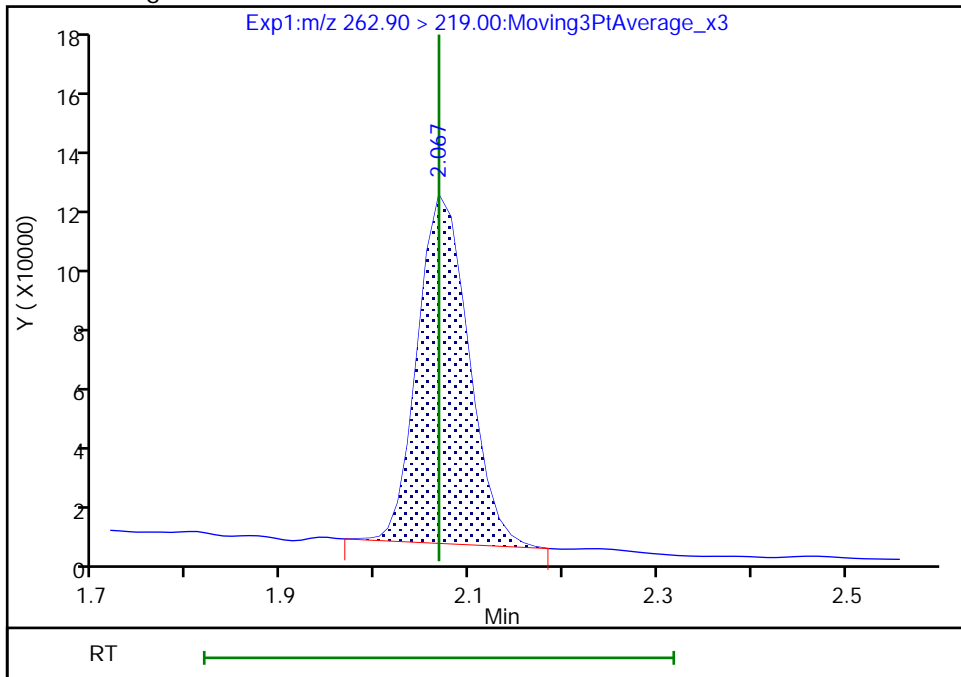
RT: 2.07
Area: 452018
Amount: 7.833348
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 435640
Amount: 7.549522
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:10:57
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

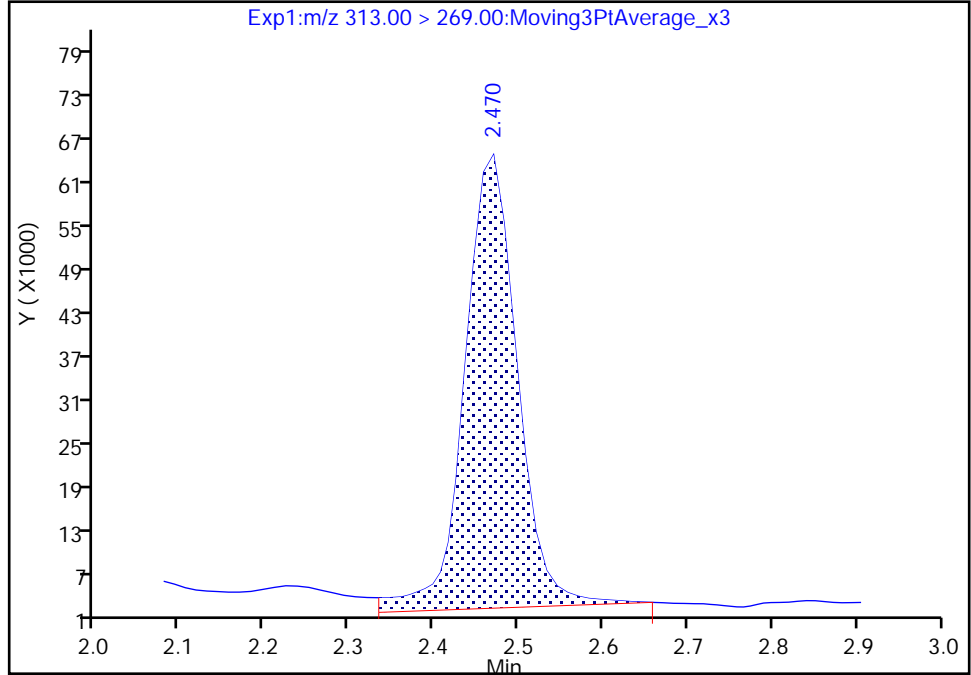
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

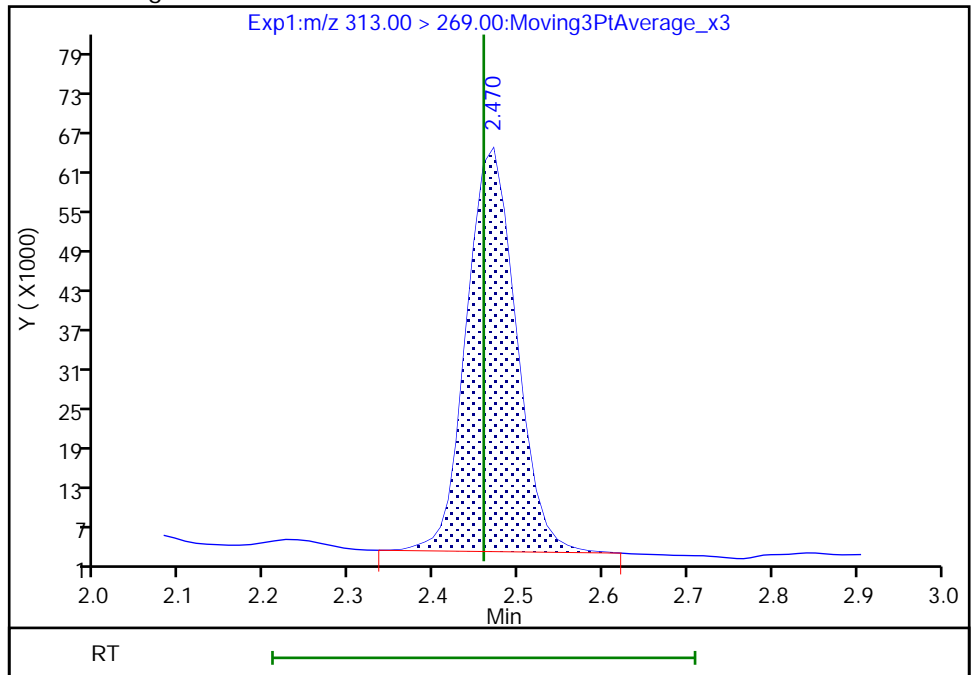
RT: 2.47
Area: 270811
Amount: 4.283891
Amount Units: ng/ml

Processing Integration Results



RT: 2.47
Area: 249872
Amount: 3.952663
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:11:10
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

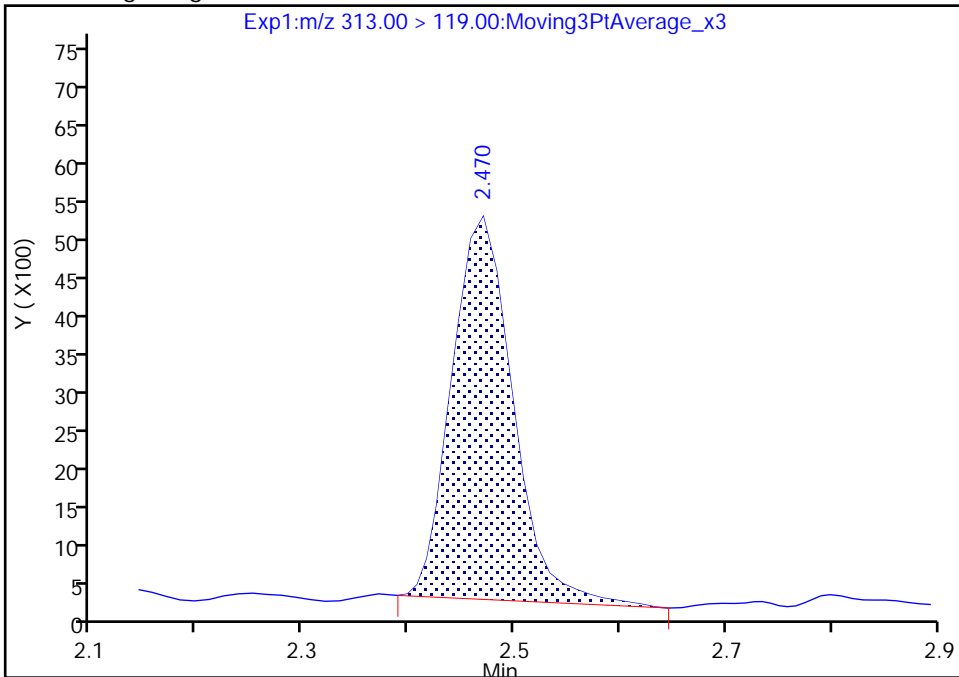
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

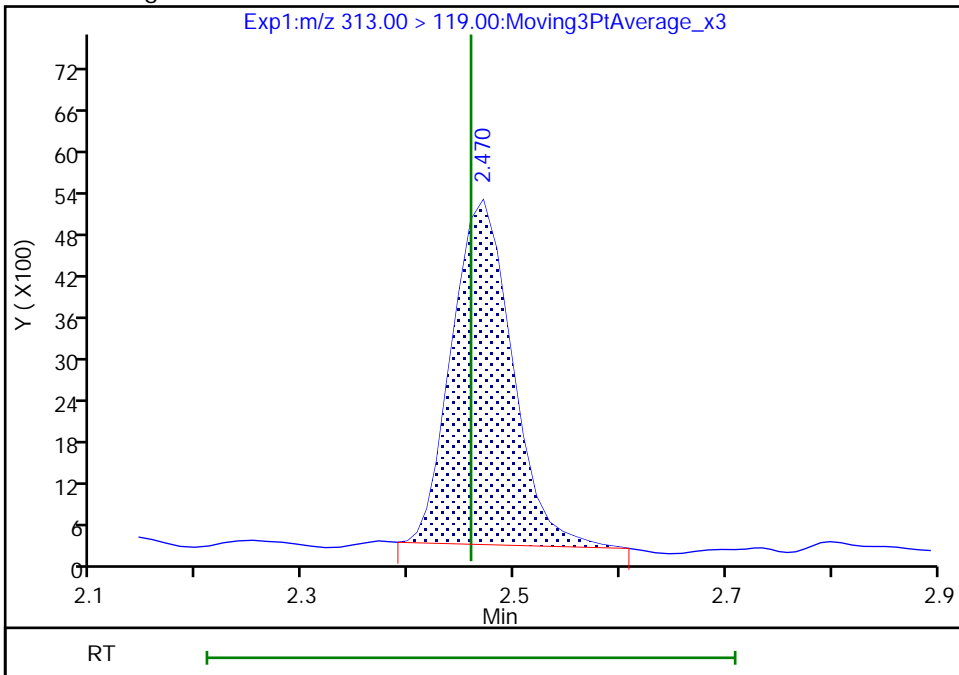
RT: 2.47
Area: 20264
Amount: 4.283891
Amount Units: ng/ml

Processing Integration Results



RT: 2.47
Area: 19870
Amount: 3.952663
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:11:13

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

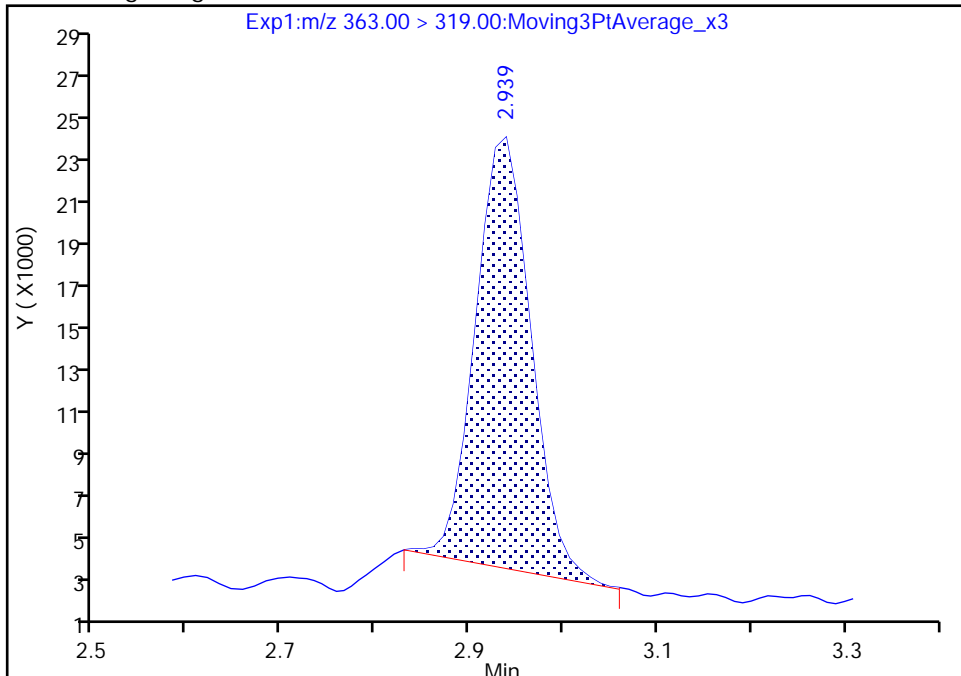
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

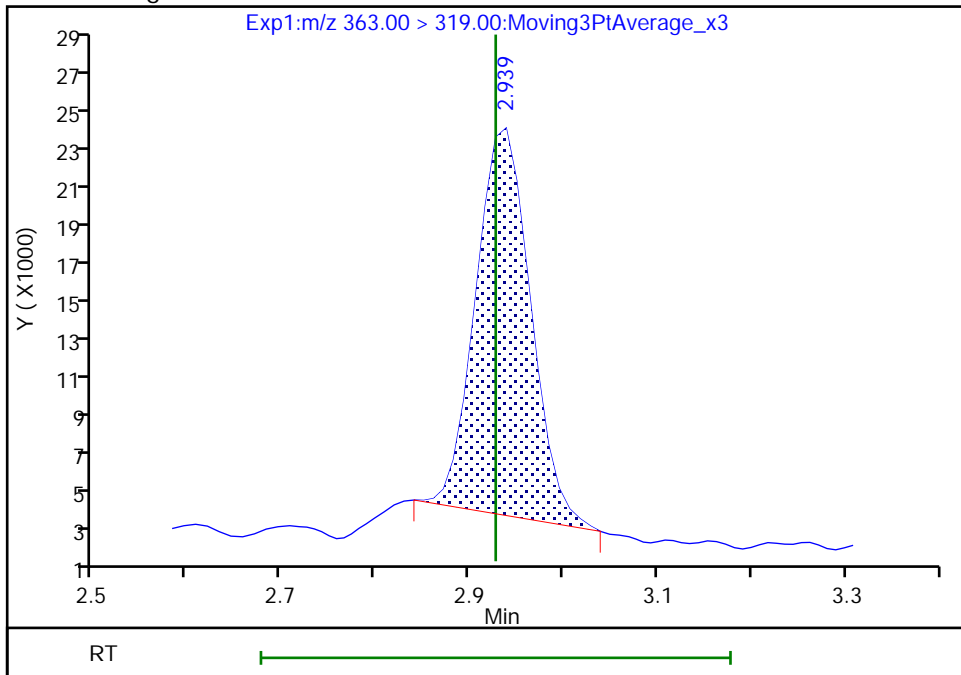
RT: 2.94
Area: 81468
Amount: 1.414678
Amount Units: ng/ml

Processing Integration Results



RT: 2.94
Area: 79838
Amount: 1.386373
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:11:49
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

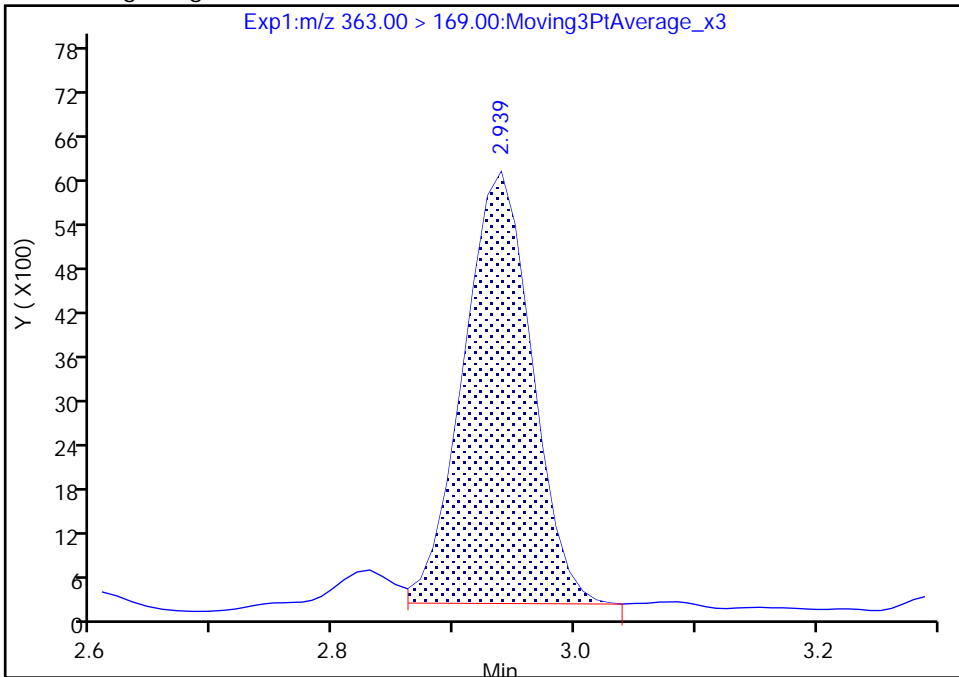
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

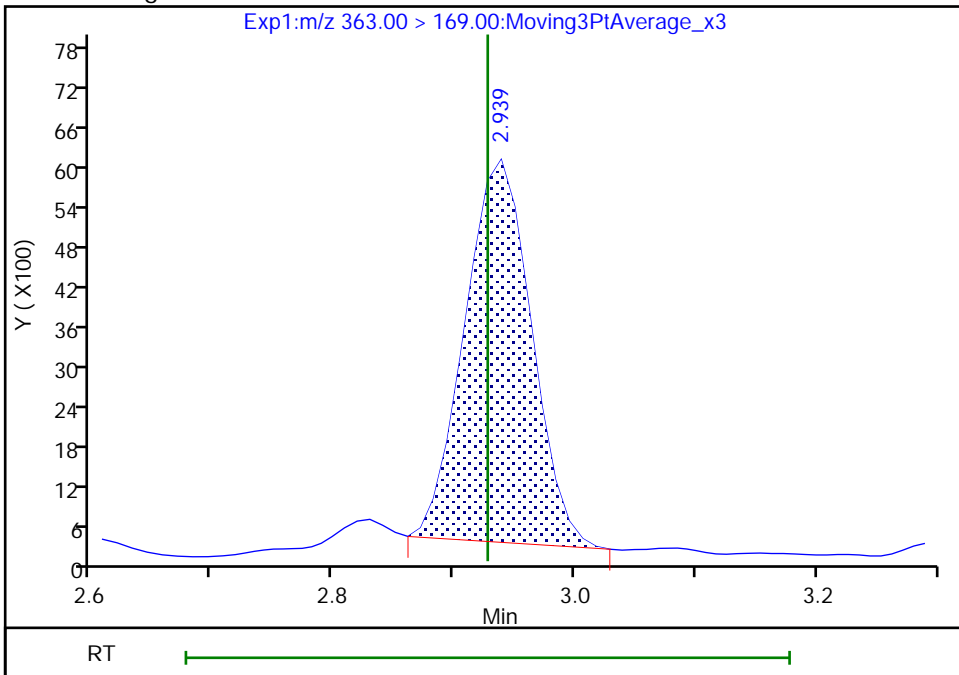
RT: 2.94
Area: 23208
Amount: 1.414678
Amount Units: ng/ml

Processing Integration Results



RT: 2.94
Area: 22170
Amount: 1.386373
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

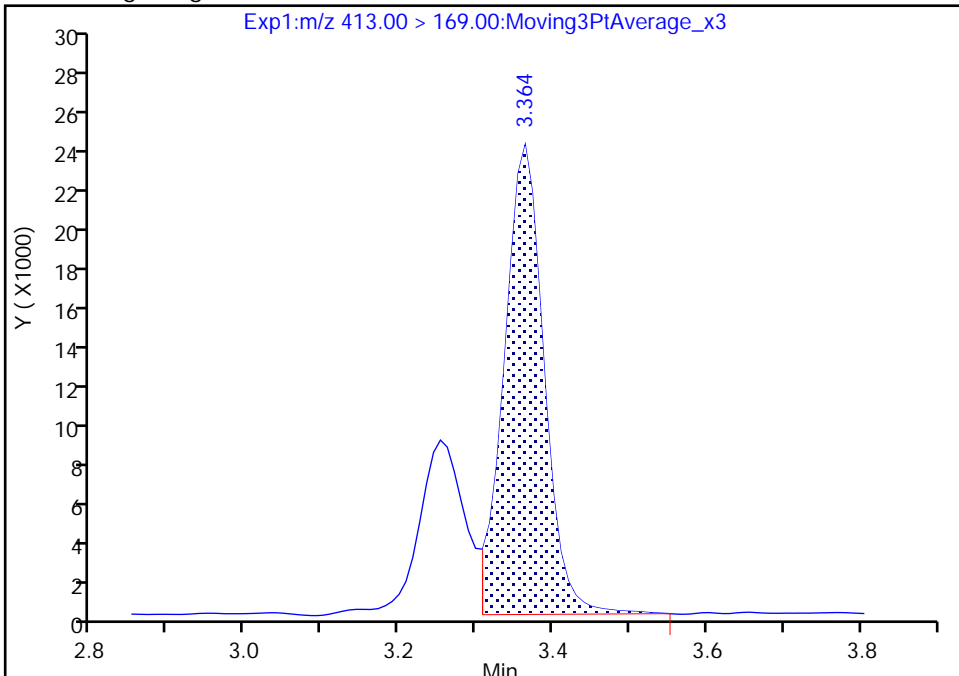
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

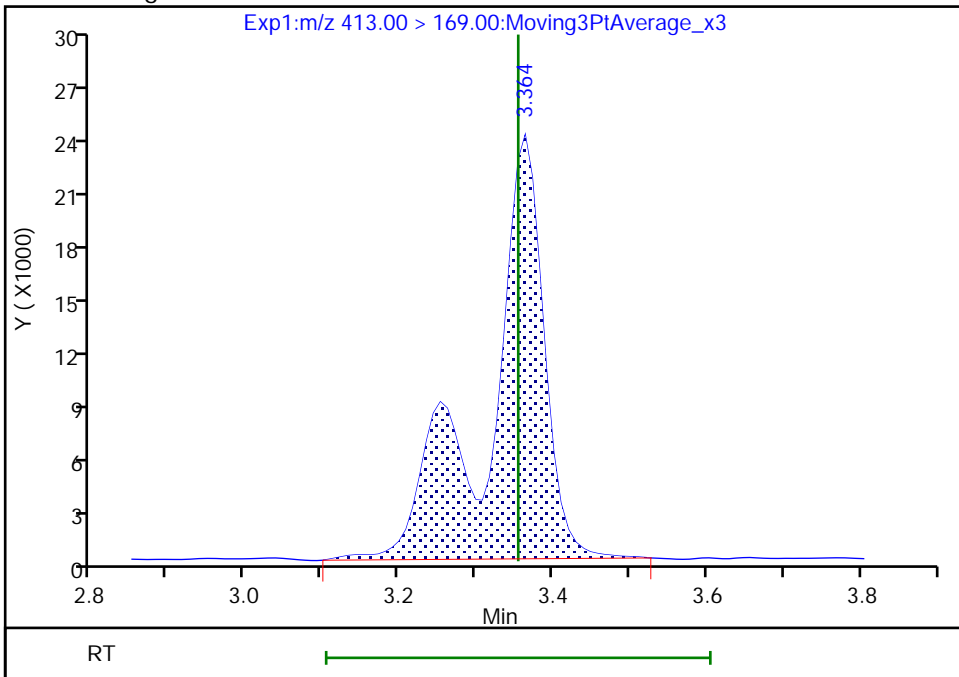
RT: 3.36
Area: 84391
Amount: 4.292411
Amount Units: ng/ml

Processing Integration Results



RT: 3.36
Area: 120143
Amount: 3.997094
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:12:12
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

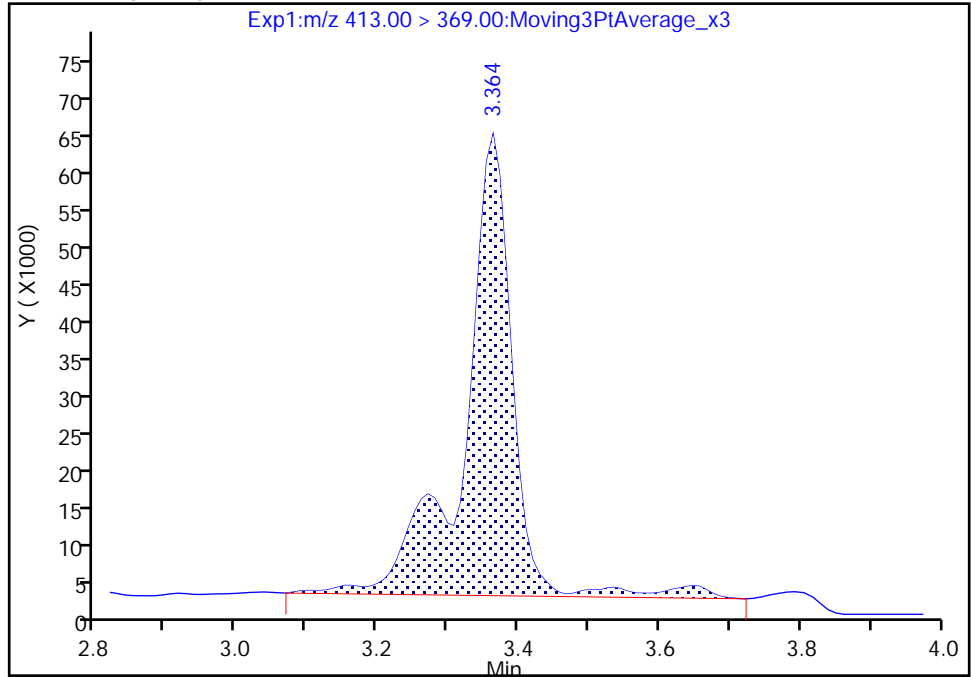
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

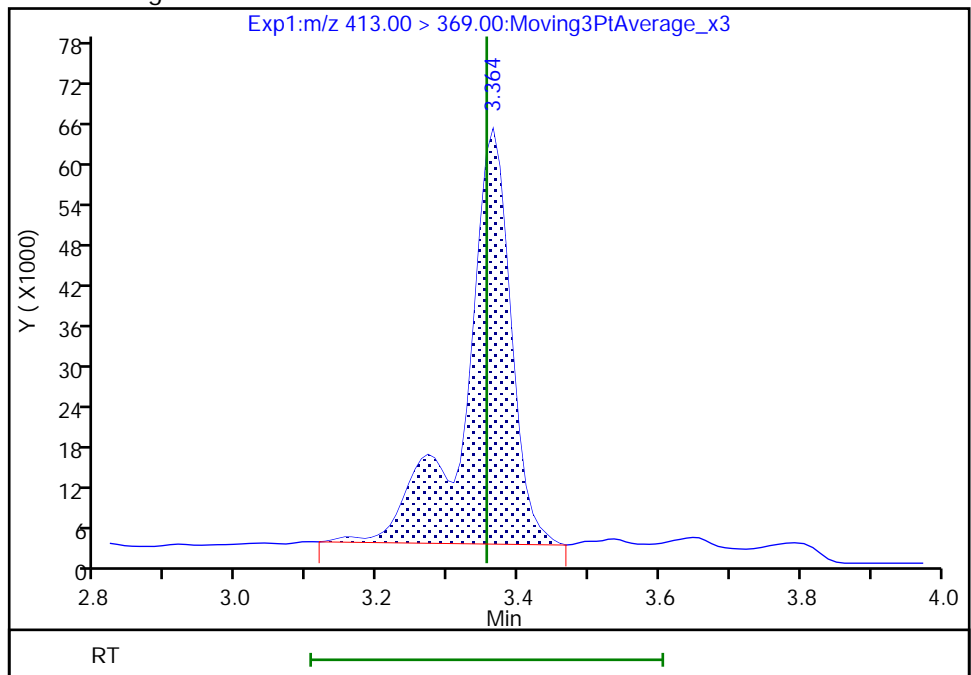
RT: 3.36
Area: 301571
Amount: 4.292411
Amount Units: ng/ml

Processing Integration Results



RT: 3.36
Area: 280823
Amount: 3.997094
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:12:16

Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

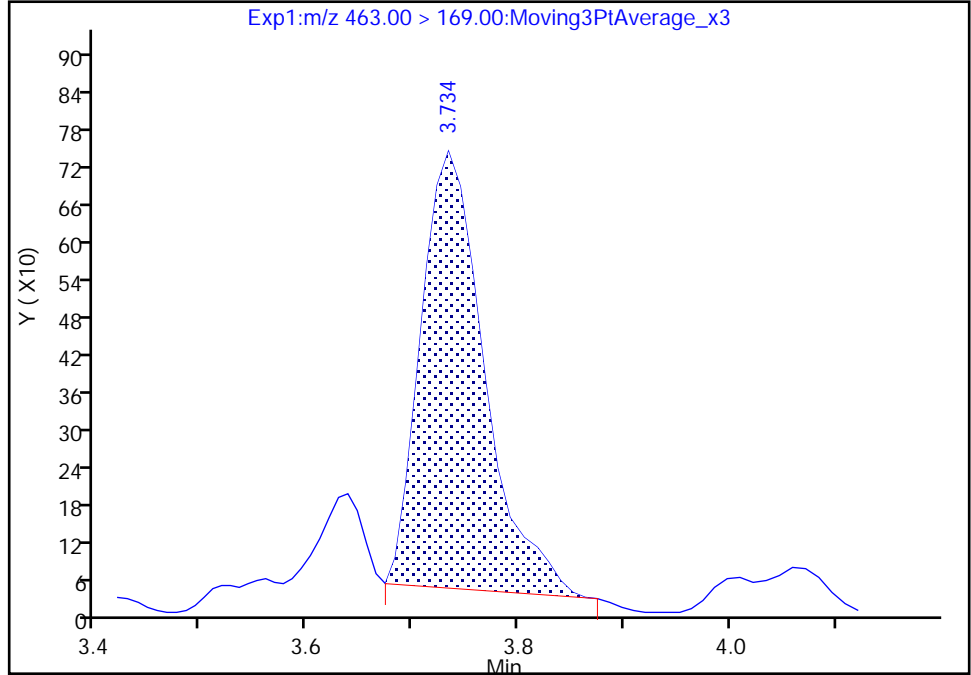
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

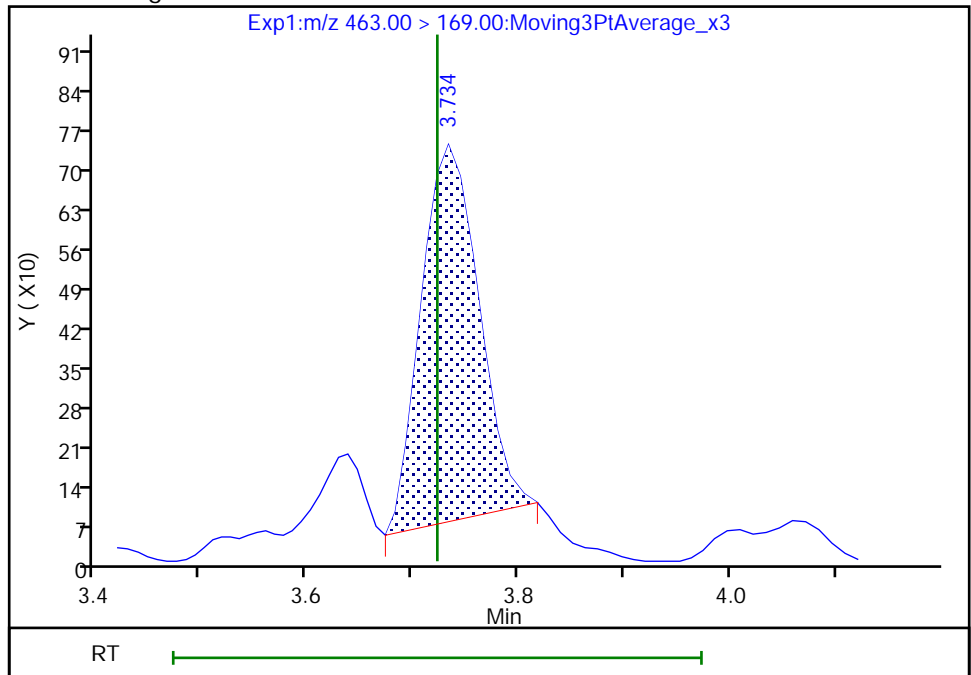
RT: 3.73
Area: 2932
Amount: 0.259105
Amount Units: ng/ml

Processing Integration Results



RT: 3.73
Area: 2526
Amount: 0.259105
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:12:41
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

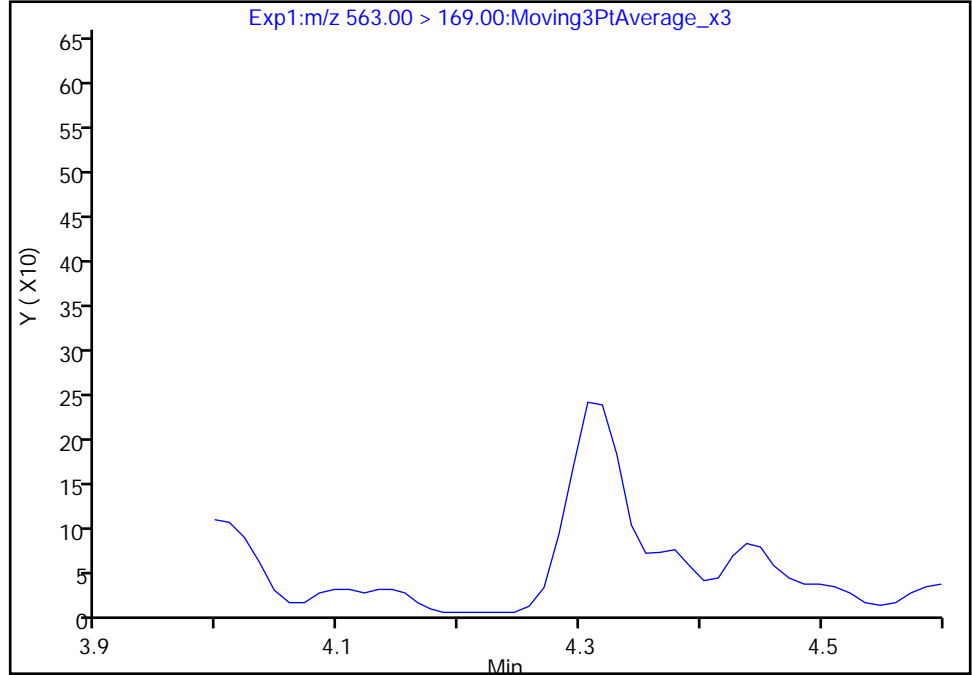
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

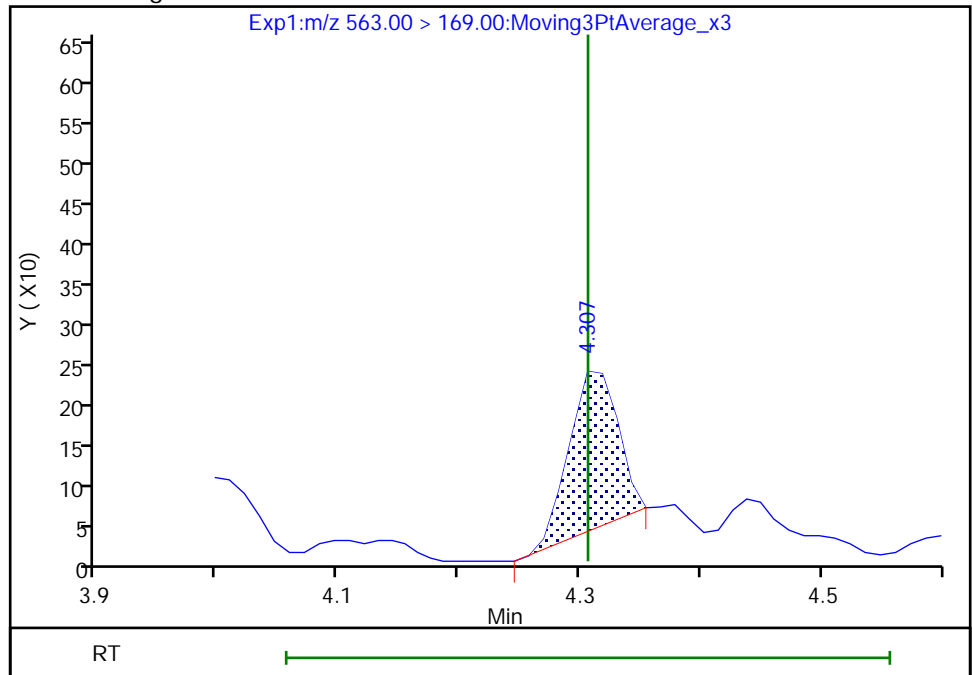
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 555
Amount: 0.112273
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:13:49
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

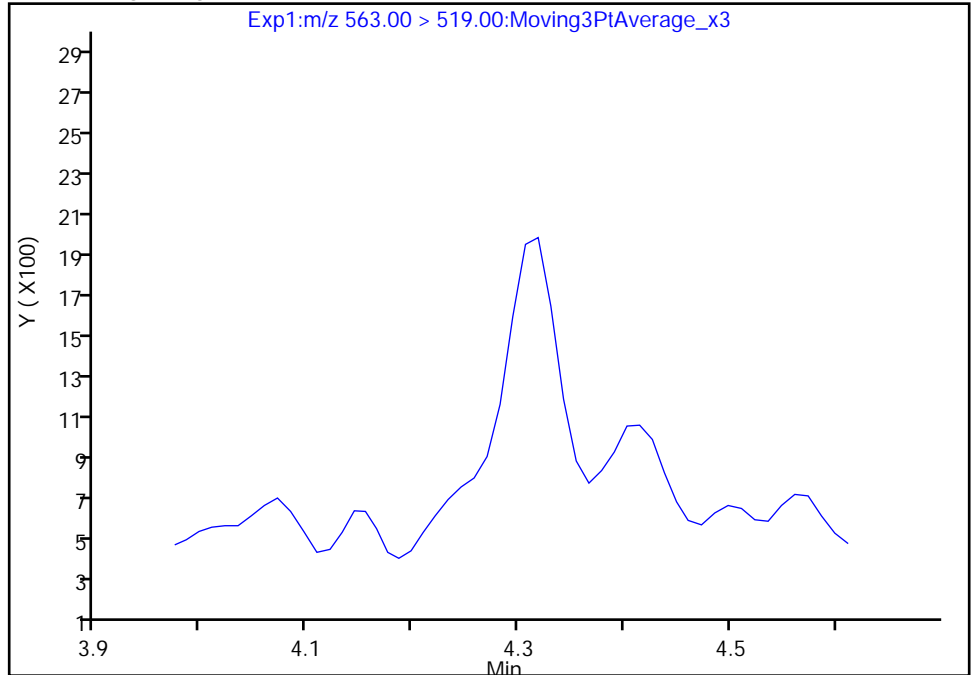
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

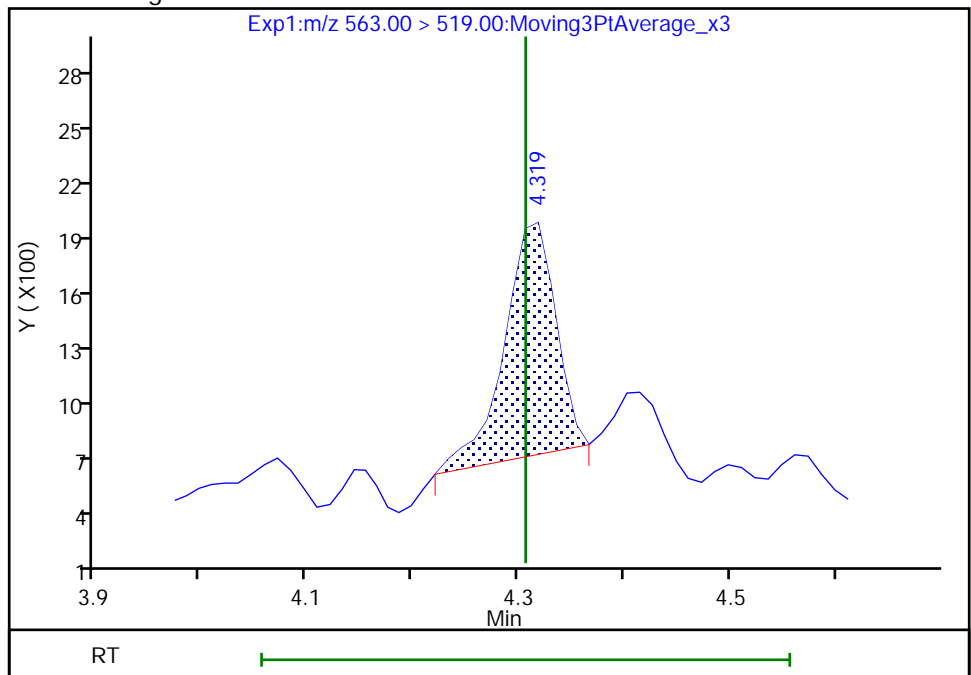
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 4085
Amount: 0.112273
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

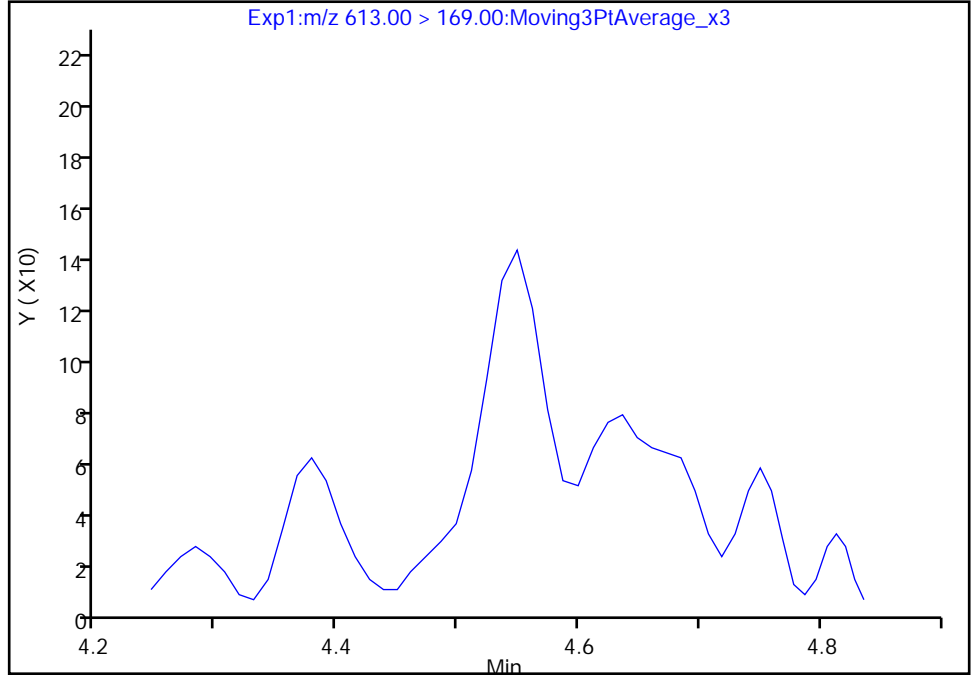
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

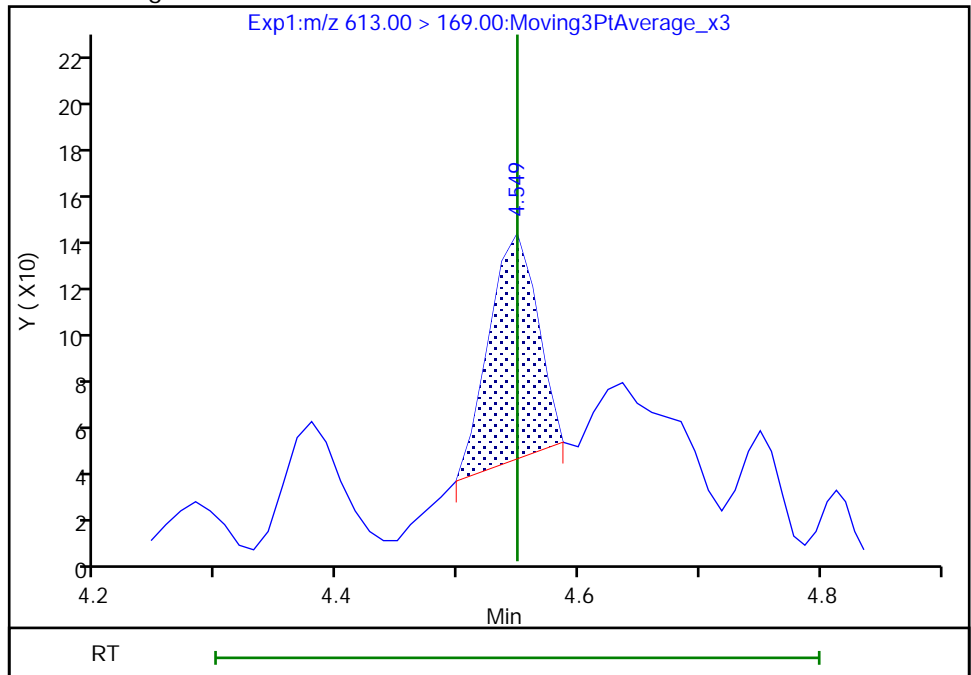
Not Detected
Expected RT: 4.55

Processing Integration Results



Manual Integration Results

RT: 4.55
Area: 273
Amount: 0.049368
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:14:02
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

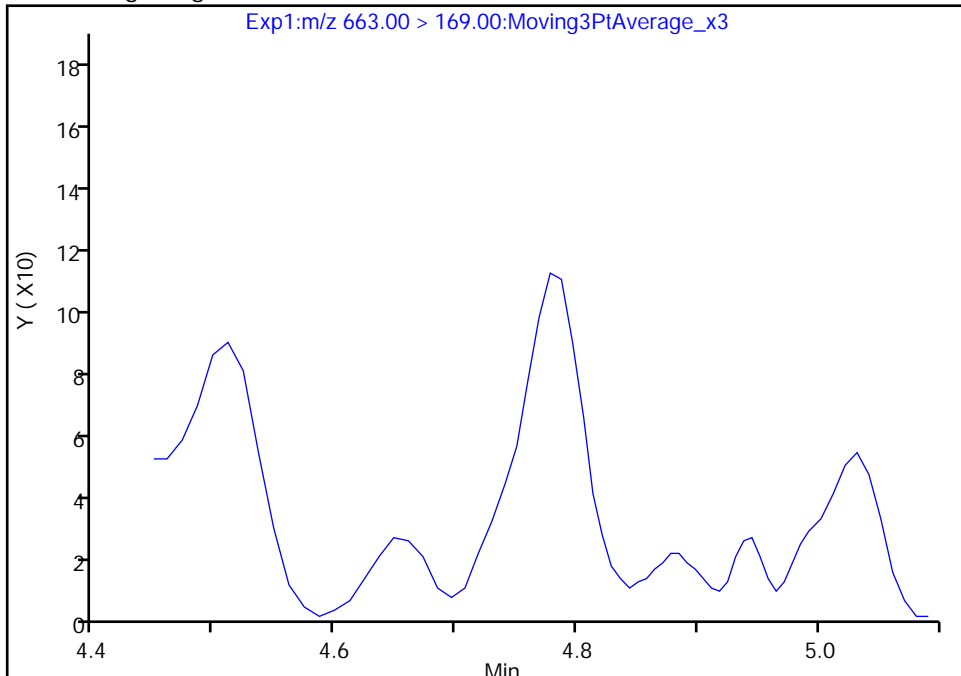
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

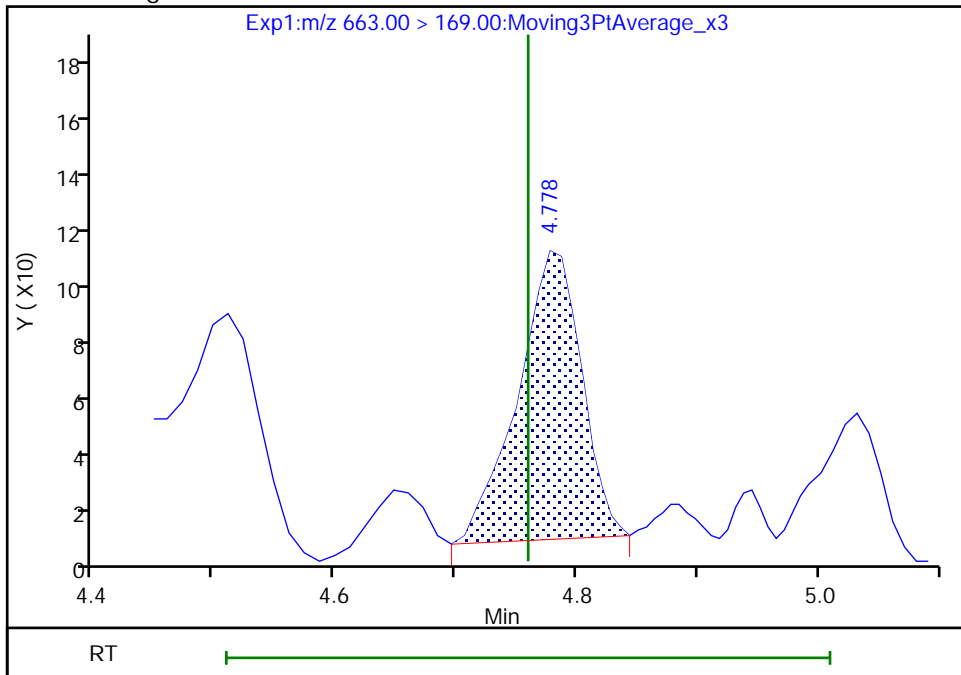
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.78
Area: 370
Amount: 0.058278
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:14:13
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

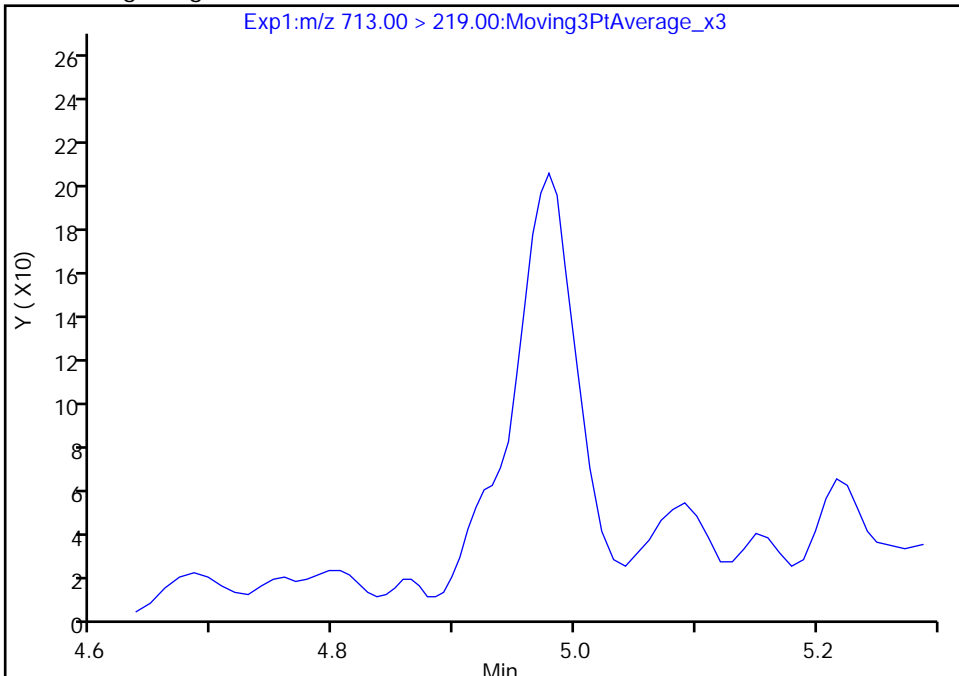
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

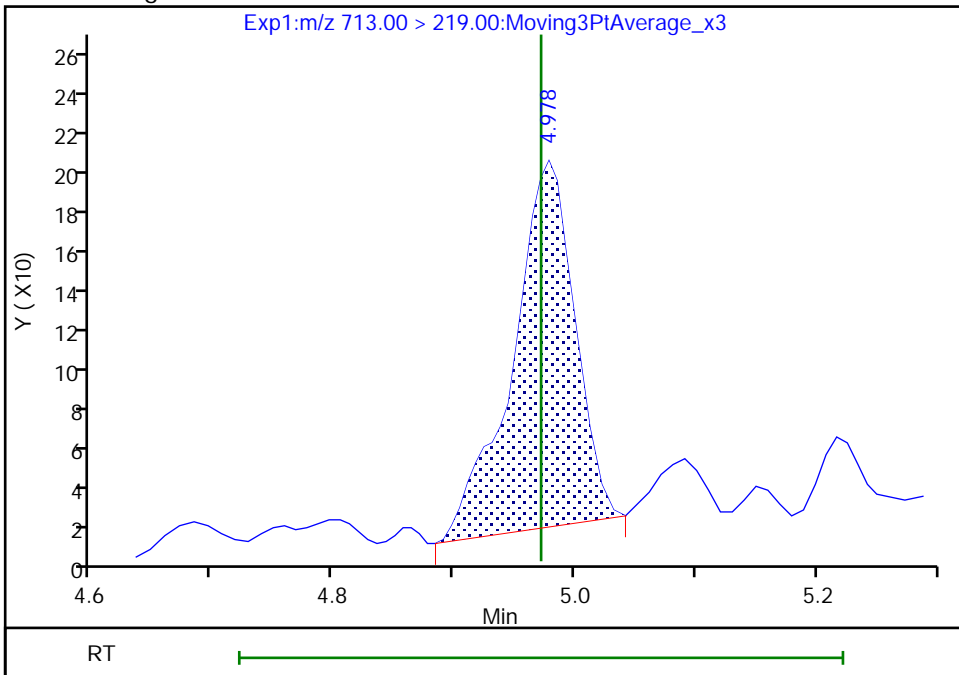
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 663
Amount: 0.114983
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:14:31
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

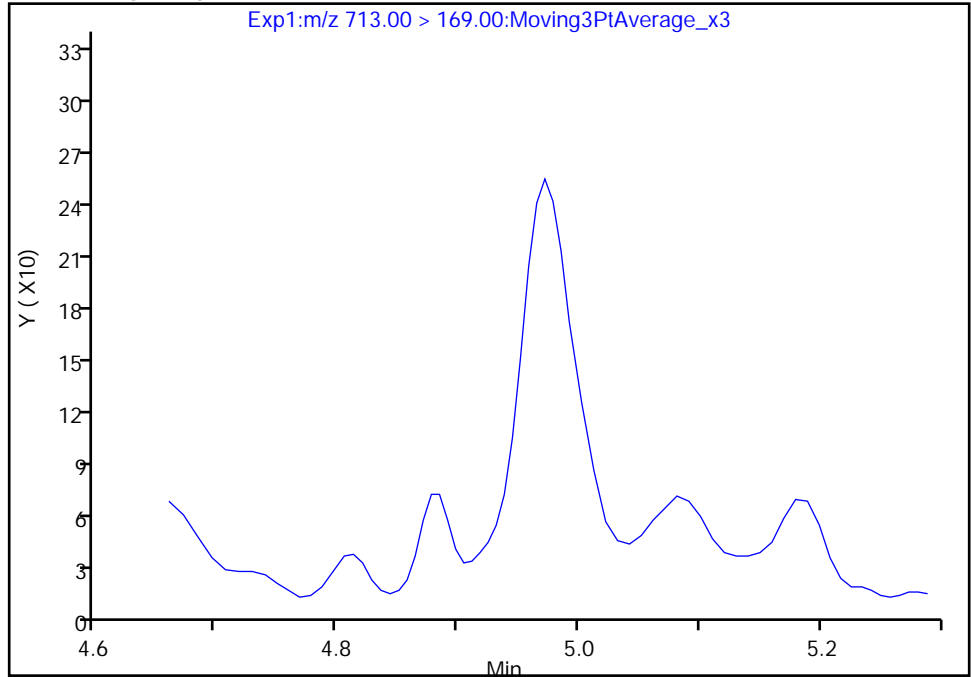
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

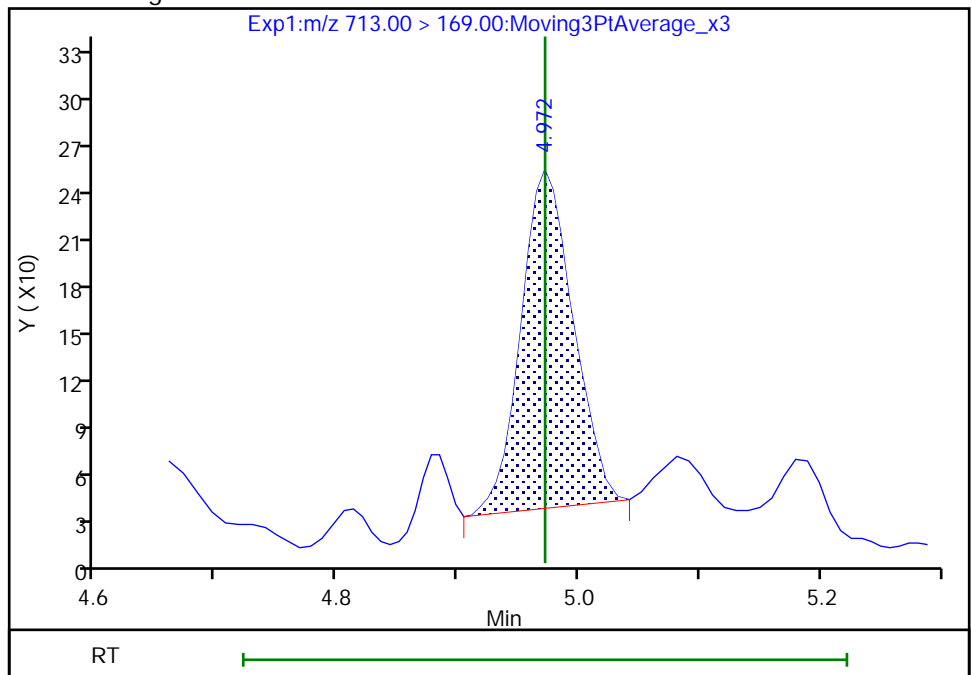
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 654
Amount: 0.114983
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

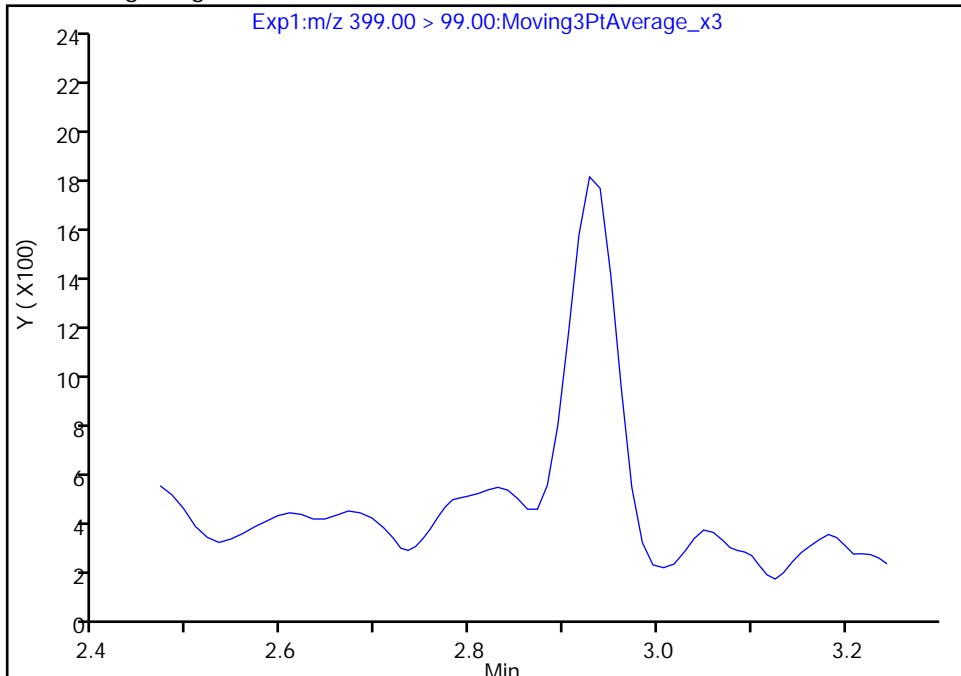
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

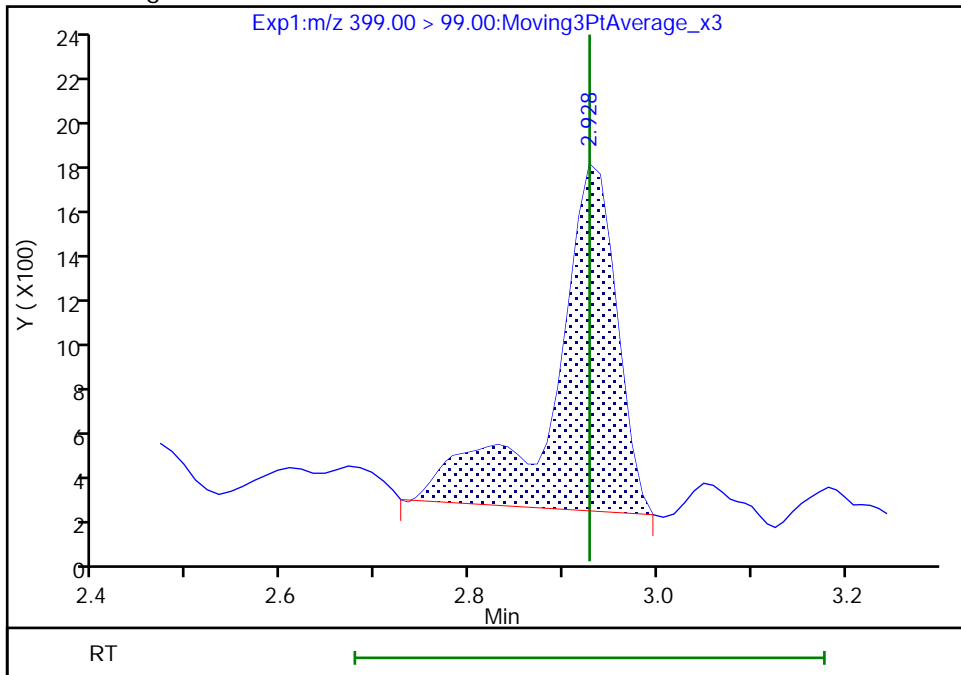
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 6959
Amount: 0.447797
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:11:35
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

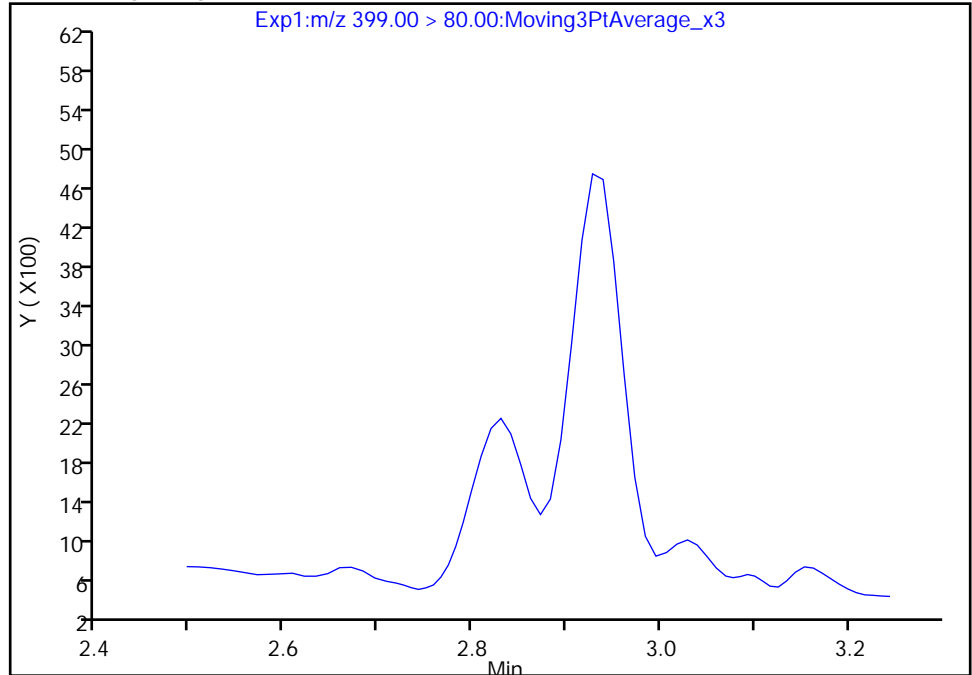
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

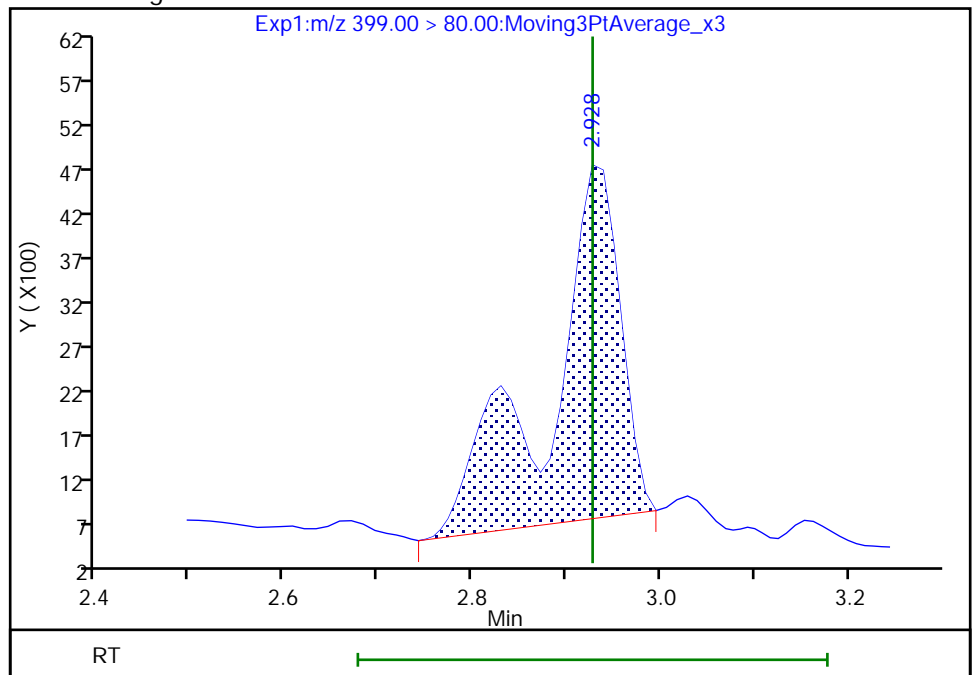
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 20853
Amount: 0.447797
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

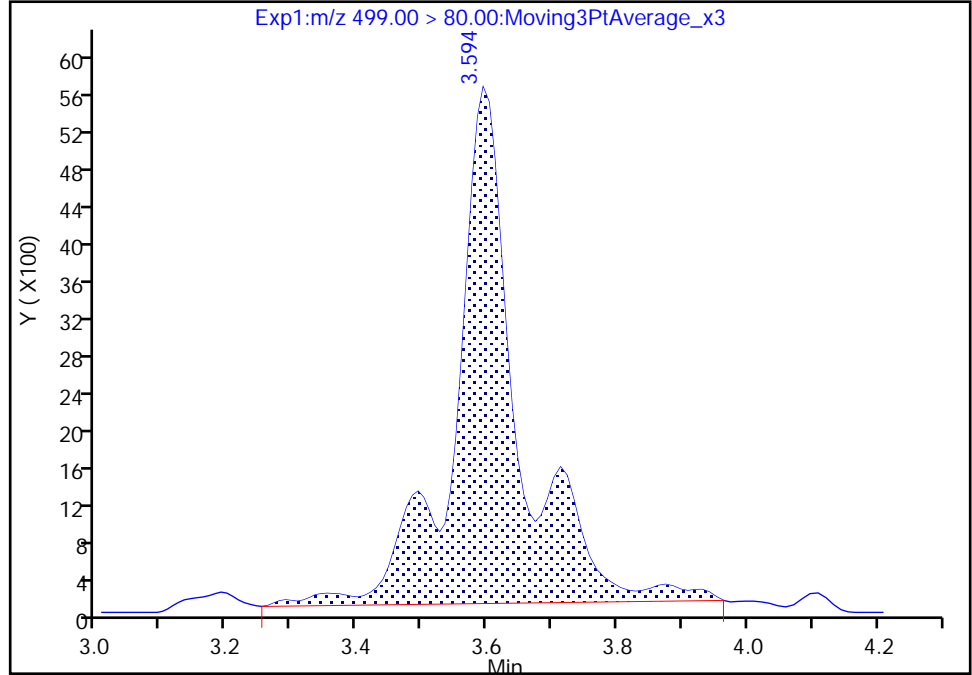
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

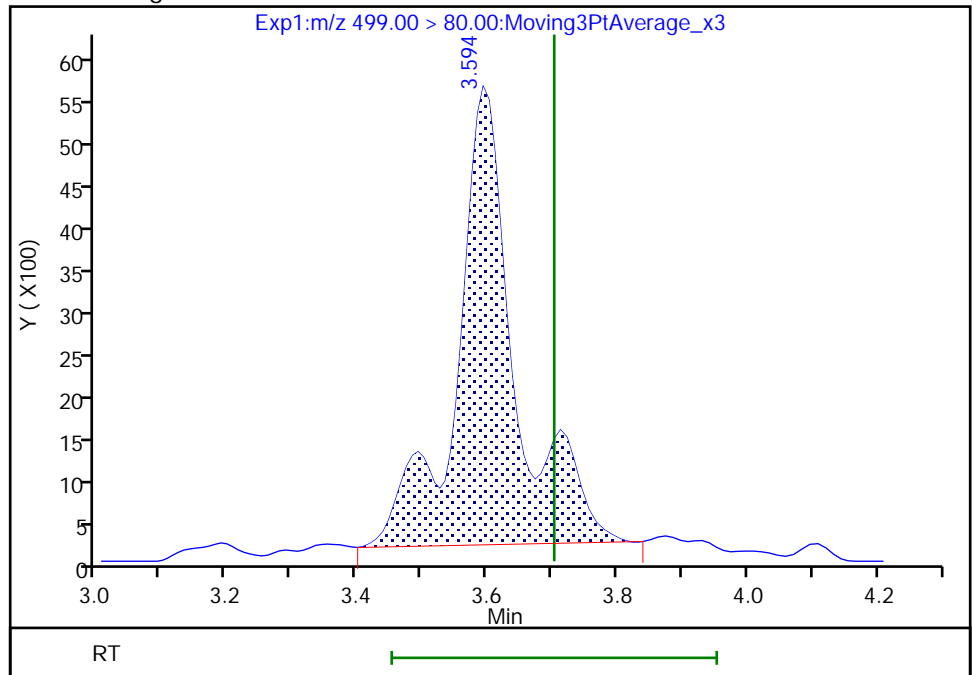
RT: 3.59
Area: 38531
Amount: 1.500375
Amount Units: ng/ml

Processing Integration Results



RT: 3.59
Area: 34219
Amount: 1.332468
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:12:27
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

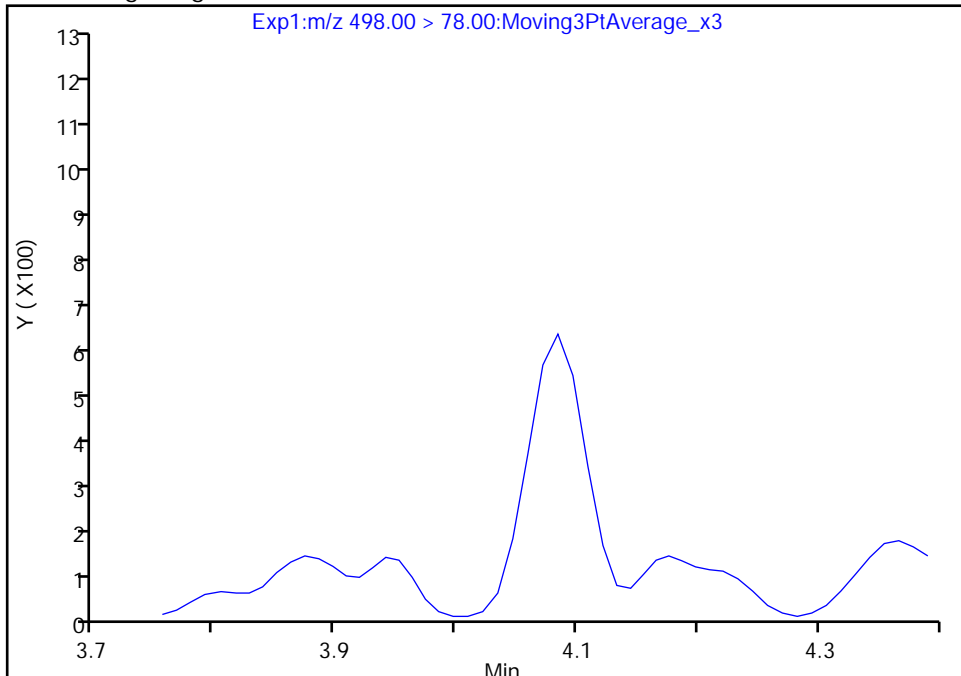
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

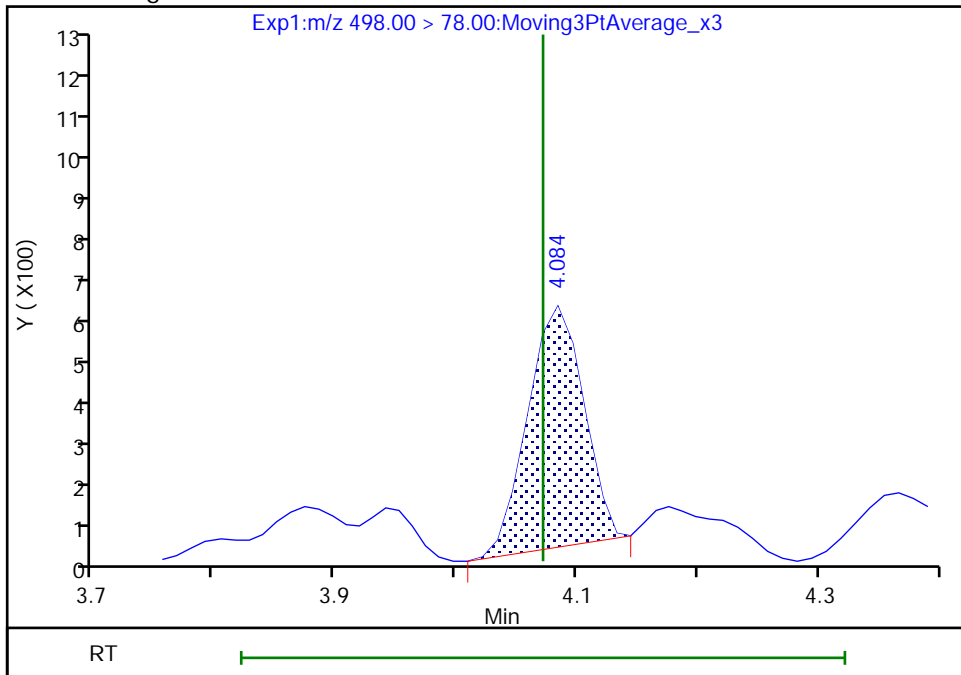
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.08
Area: 1802
Amount: 0.041493
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:13:27
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

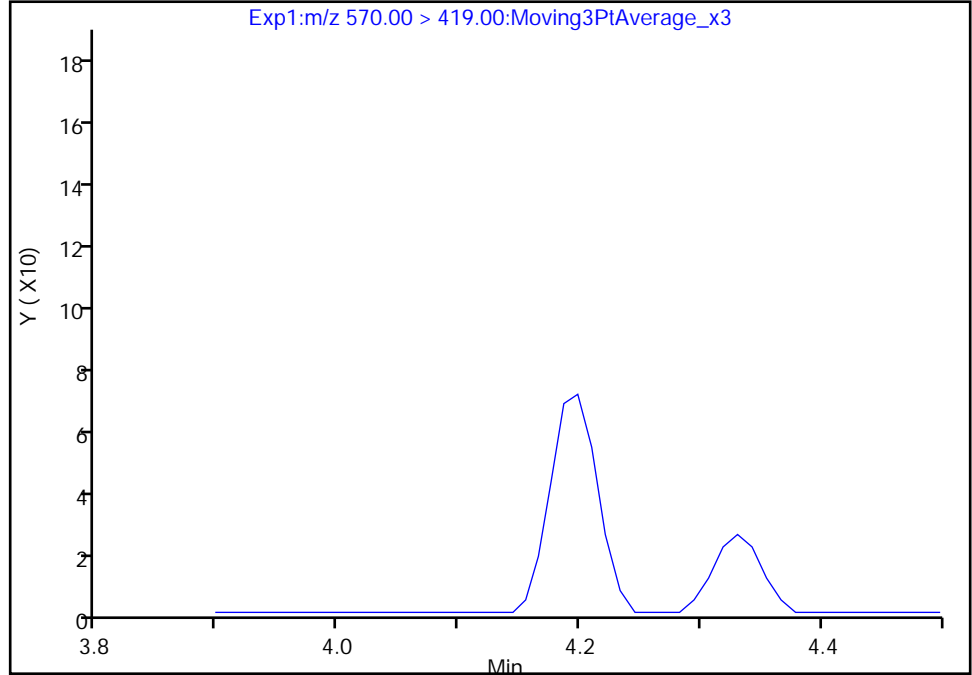
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

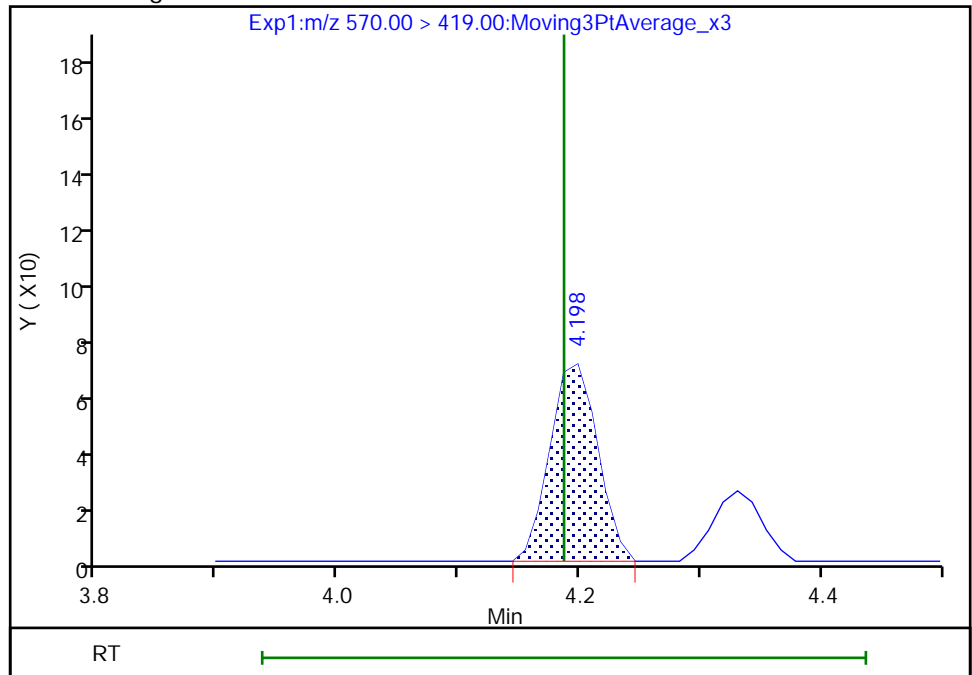
Not Detected
Expected RT: 4.19

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 192
Amount: 0.053623
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:13:34
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

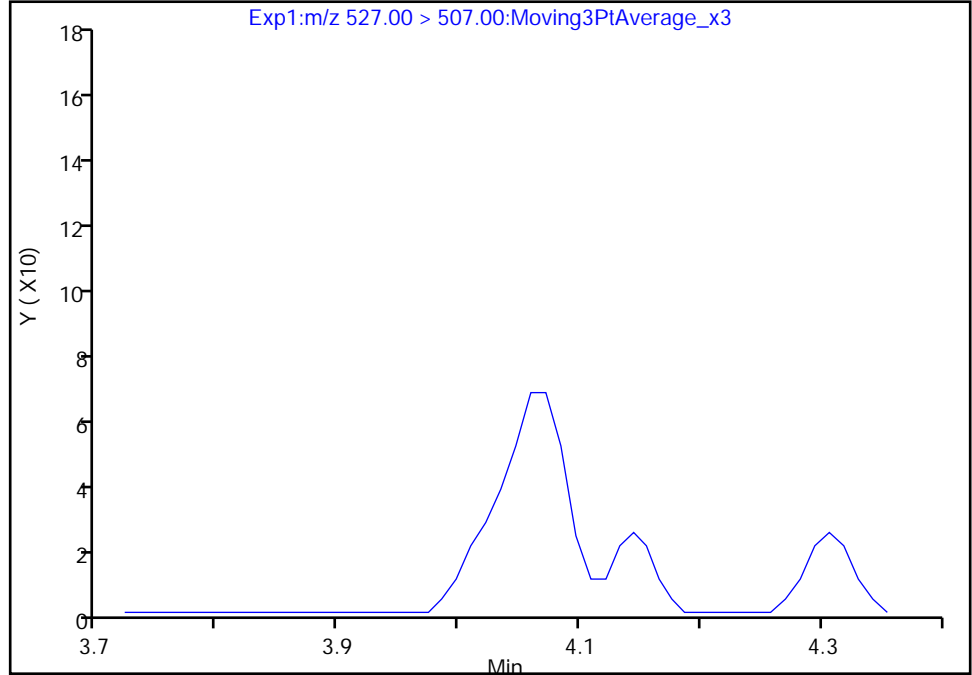
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E014.d
Injection Date: 02-Aug-2019 05:33:49 Instrument ID: LC812
Lims ID: 480-156213-F-13-A Lab Sample ID: 200-156213-13
Client ID: 356023-MW4
Operator ID: lc812tech ALS Bottle#: 7 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

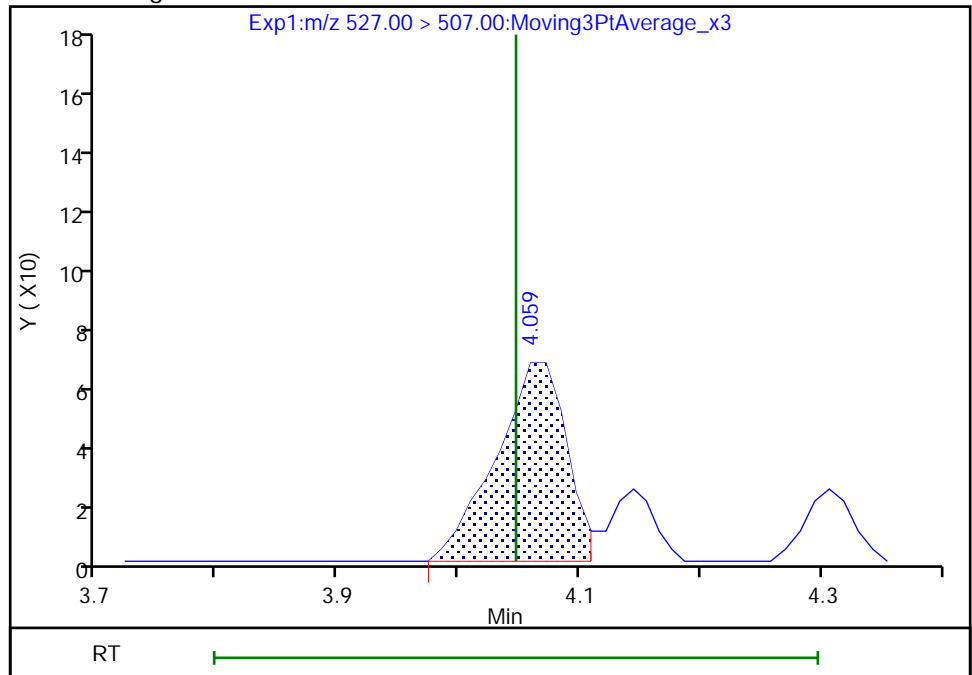
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.06
Area: 266
Amount: 0.024490
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:13:01
Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B Lab Sample ID: 480-156213-14
 Matrix: Water Lab File ID: SC080119E015.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 284.6(mL) Date Analyzed: 08/02/2019 05:41
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.6	J	1.8	0.88
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.0		1.8	0.55
307-24-4	Perfluorohexanoic acid (PFHxA)	1.5	J	1.8	0.67
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.80
335-67-1	Perfluorooctanoic acid (PFOA)	0.92	J	1.8	0.55
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.68
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.47
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.52
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.53
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.81
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.43
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.70
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.83
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.79
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.54
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.8	8.8
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	18	1.3
27619-97-2	6:2 FTS	ND		18	4.0
39108-34-4	8:2 FTS	ND		18	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B Lab Sample ID: 480-156213-14
 Matrix: Water Lab File ID: SC080119E015.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 284.6(mL) Date Analyzed: 08/02/2019 05:41
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	74		25-150
STL00992	13C4 PFBA	78		25-150
STL01893	13C5 PFPeA	86		25-150
STL00993	13C2 PFHxA	90		50-150
STL01892	13C4 PFHpA	87		50-150
STL00990	13C4 PFOA	82		50-150
STL00995	13C5 PFNA	80		50-150
STL00996	13C2 PFDA	89		50-150
STL00997	13C2 PFUnA	79		50-150
STL00998	13C2 PFDoA	77		50-150
STL02116	13C2 PFTeDA	61		50-150
STL02337	13C3 PFBS	84		50-150
STL00994	18O2 PFHxS	92		50-150
STL00991	13C4 PFOS	83		50-150
STL02118	d3-NMeFOSAA	61		50-150
STL02117	d5-NEtFOSAA	64		50-150
STL02279	M2-6:2 FTS	104		25-150
STL02280	M2-8:2 FTS	96		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
 Lims ID: 480-156213-F-14-A
 Client ID: 356023-MW6B
 Sample Type: Client
 Inject. Date: 02-Aug-2019 05:41:52 ALS Bottle#: 8 Worklist Smp#: 15
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-14-A
 Misc. Info.: 200-0037095-015 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:19:13
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.508	3258592	39.1	78.3	11509	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.717	1.699	0.018	1.005	56049	0.9331		9.7		M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	3371423	43.1	86.2	7903	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.067	2.067	0.0	1.000	73214	1.12		4.1		M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	3013736	39.2	84.4	602654	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.093	2.093	0.0	1.000	12333	0.1872	Target=1.90	3.8		
298.90 > 99.00	2.093	2.093	0.0	1.000	7642		1.61(0.95-2.85)	6.6		
D 60 M2-4:2 FTS	329.00 > 81.00	2.426	2.417	0.009	0.721	339342	45.7	97.8	200	
61 1H,1H,2H,2H-perfluorohexanesulfoni										M
327.00 > 307.00	2.417	2.417	0.0	0.996	551	0.0317		4.4		M
D 7 13C2 PFHxA	315.00 > 270.00	2.471	2.459	0.012	0.734	3500276	45.1	90.1	7503	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.471	2.459	0.012	1.000	61709	0.8560	Target=13.23	12.3		
313.00 > 119.00	2.471	2.459	0.012	1.000	5119		12.05(6.61-19.84)	6.3		
D 64 13C3 HFPO-DA	332.10 > 287.00	2.608	2.596	0.012	0.775	229553	46.1	92.1	1459	
D 11 18O2 PFHxS	403.00 > 84.00	2.939	2.916	0.023	0.874	1952783	43.4	91.8	7491	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.874	3322204	43.7	87.3	7755	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.939	2.928	0.011	1.000	8337	0.1532	Target=3.37	7.4		M
399.00 > 99.00	2.939	2.928	0.011	1.000	2784		2.99(1.69-5.06)	4.2		M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.939	2.928	0.011	1.000	10501	0.1687	Target=3.76	2.7		
363.00 > 169.00	2.939	2.928	0.011	1.000	2506		4.19(1.88-5.65)	12.3		
D 12 M2-6:2 FTS										
429.00 > 81.00	3.355	3.335	0.020	0.997	463358	49.5		104	825	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.355	3.336	0.019	1.000	8874	0.5304			21.9	
D 14 13C4 PFOA										
417.00 > 372.00	3.364	3.344	0.020	1.000	3299878	41.1		82.1	9338	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.364	3.355	0.009	1.000	37603	0.5236	Target=2.84	3.2		M
413.00 > 169.00	3.373	3.355	0.018	1.003	13661		2.75(1.42-4.25)	29.1		M
* 62 13C2 PFOA										
415.00 > 370.00	3.364	3.355	0.009		4417701	50.0			9314	
D 18 13C4 PFOS										
503.00 > 80.00	3.713	3.695	0.018	1.104	1484235	39.6		82.8	4234	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.723	3.703	0.020	1.003	4587	0.1561	Target=4.33	7.7		M
499.00 > 99.00	3.713	3.703	0.010	1.000	2065		2.22(2.16-6.49)	4.0		M
D 19 13C5 PFNA										
468.00 > 423.00	3.734	3.715	0.019	1.110	2934450	40.0		80.1	8300	
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.036	0.011	1.203	2616896	44.6		89.3	13393	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.036	0.023	1.207	398325	46.1		96.3	1065	
25 1H,1H,2H,2H-perfluorodecanesulfoni										M
527.00 > 507.00	4.035	4.047	-0.012	0.994	332	0.0299		5.1		M
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.214	2484867	36.9		73.8	11813	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.072	4.072	0.0	0.997	1828	0.0403		10.7		M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.198	4.178	0.020	1.248	229770	30.7		61.4	2793	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.210	4.187	0.023	1.003	266	0.0765		0.3		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.284	2099170	39.3		78.6	9110	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.319	4.307	0.012	1.000	4787	0.1329	Target=7.95	2.4		M
563.00 > 169.00	4.307	4.307	0.0	0.997	914		5.24(3.98-11.93)	9.3		M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.308	0.023	1.287	265510	31.8		63.6	1219	
66 11-Chloroeicosafuoro-3-oxaundecan										M
631.00 > 451.00	4.415	4.403	0.012	1.189	1225	0.0119		7.6		M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.537	0.012	1.352	2226382	38.7		77.4	8544	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.965	0.014	1.480	2409870	30.4		60.9	9016	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.972	0.007	1.000	433	0.0675	Target=1.02	3.9		M
713.00 > 219.00	4.972	4.972	0.0	0.999	386		1.12(0.51-1.54)	7.1		M
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.398	5.390	0.008	1.000	20229	0.0584	Target=5.23	5.9		M
813.00 > 169.00	5.398	5.390	0.008	1.000	4791		4.22(2.62-7.85)	84.5		M
D 44 13C2 PFHxDA										
815.00 > 770.00	5.398	5.390	0.008	1.605	2375019	33.7		67.4	6390	

QC Flag Legend

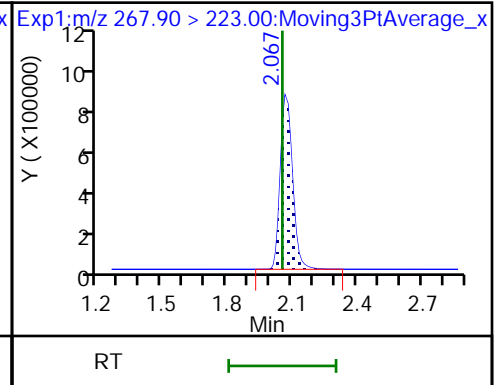
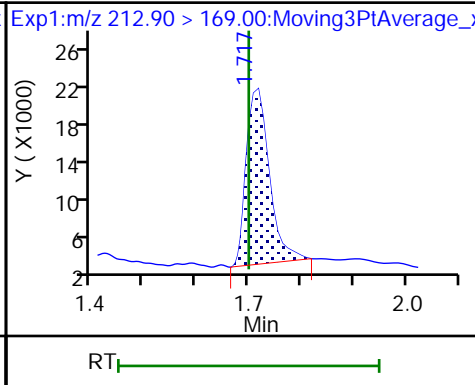
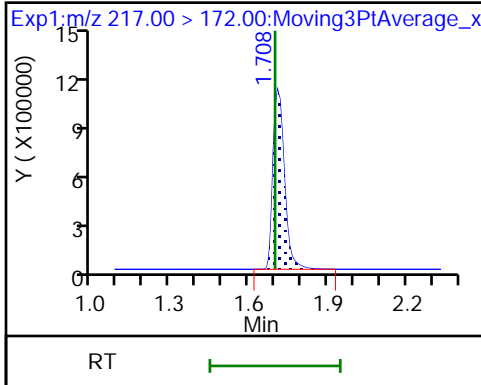
Review Flags

M - Manually Integrated

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

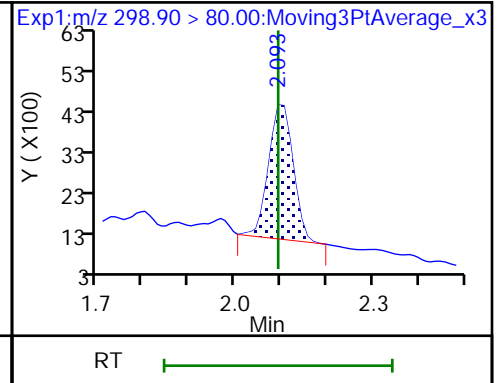
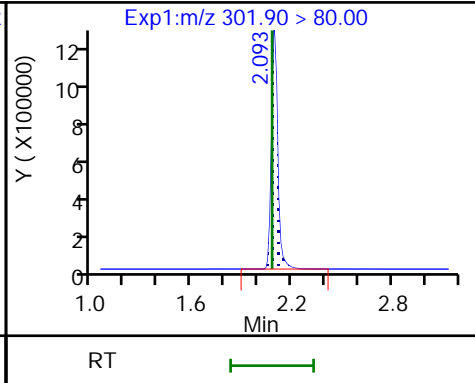
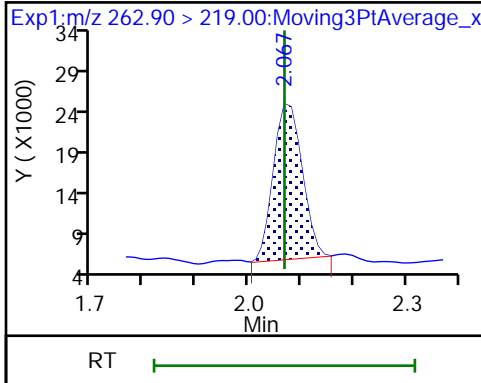
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

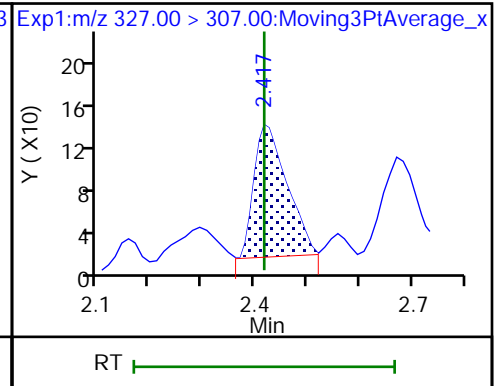
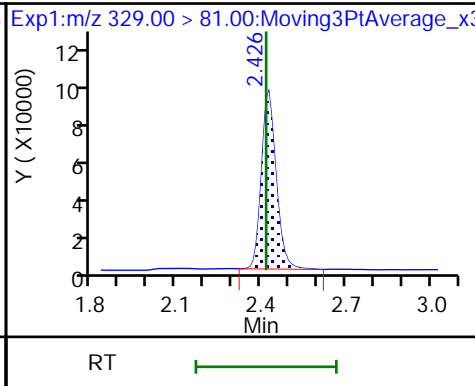
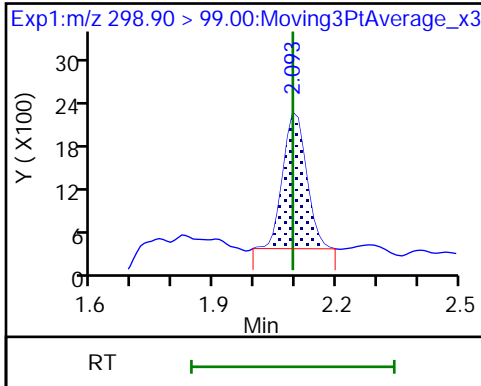
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

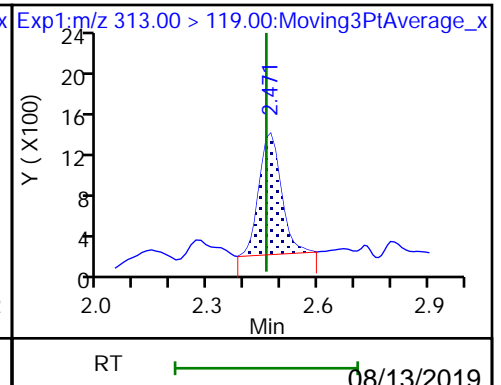
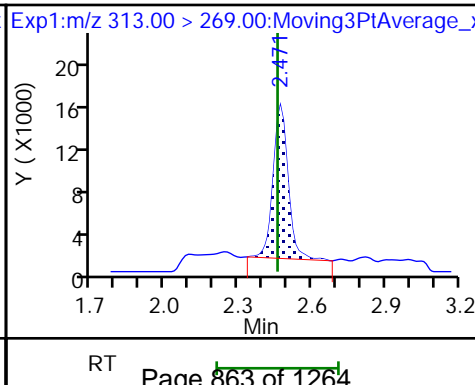
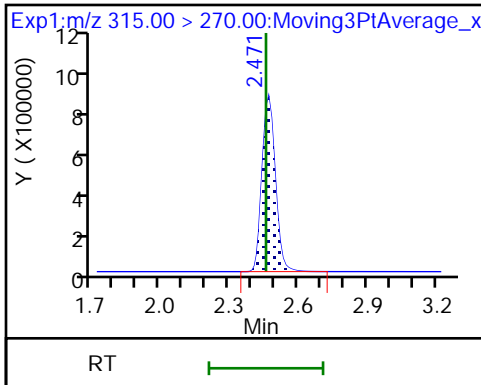
61 1H,1H,2H,2H-perfluorohexanesulfoni (M)



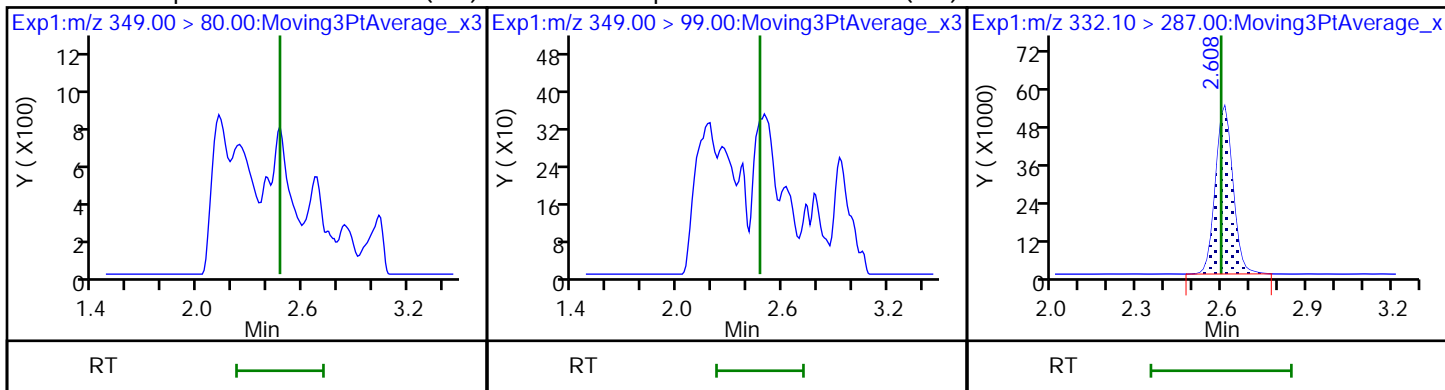
D 7 13C2 PFHxA

6 Perfluorohexanoic acid

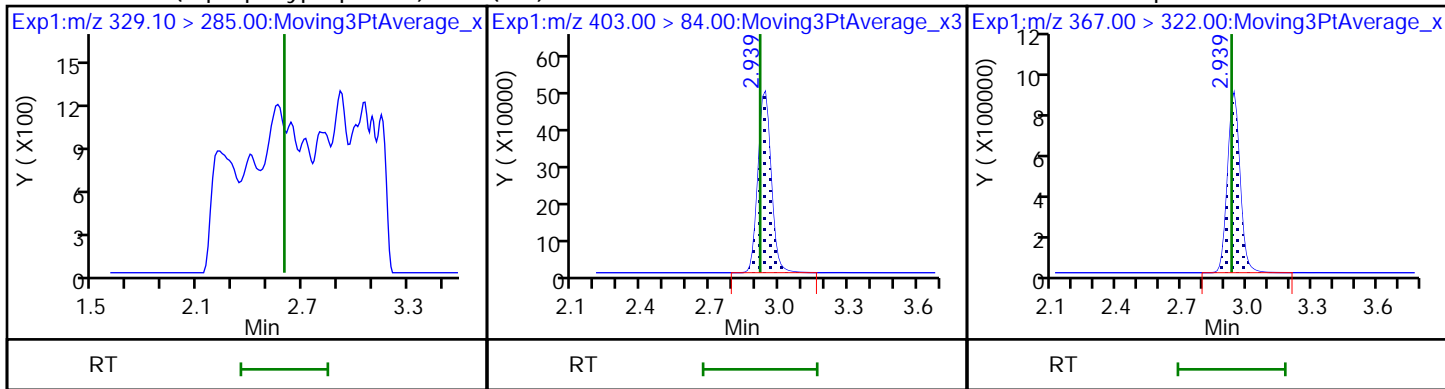
6 Perfluorohexanoic acid



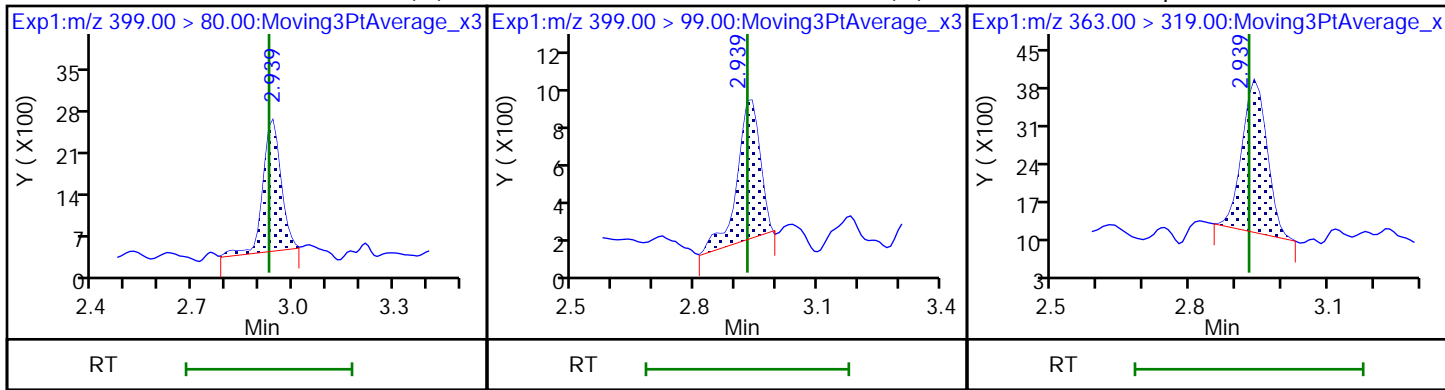
70 Perfluoropentanesulfonic acid (ND) 70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA



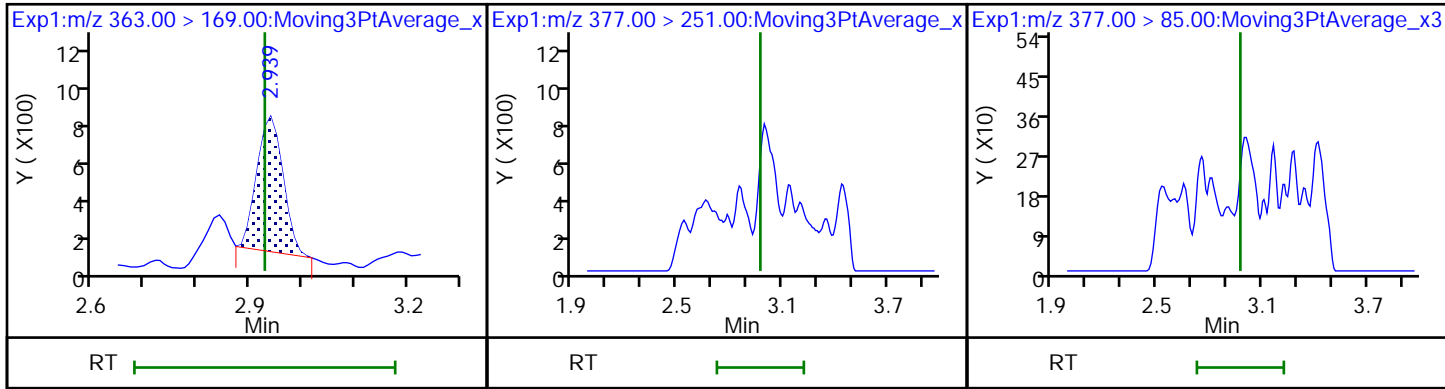
67 Perfluoro(2-propoxypropanoic) acid (ND) 18O2 PFHxS D 9 13C4 PFHpA



8 Perfluorohexanesulfonic acid (M) 8 Perfluorohexanesulfonic acid (M) 10 Perfluoroheptanoic acid

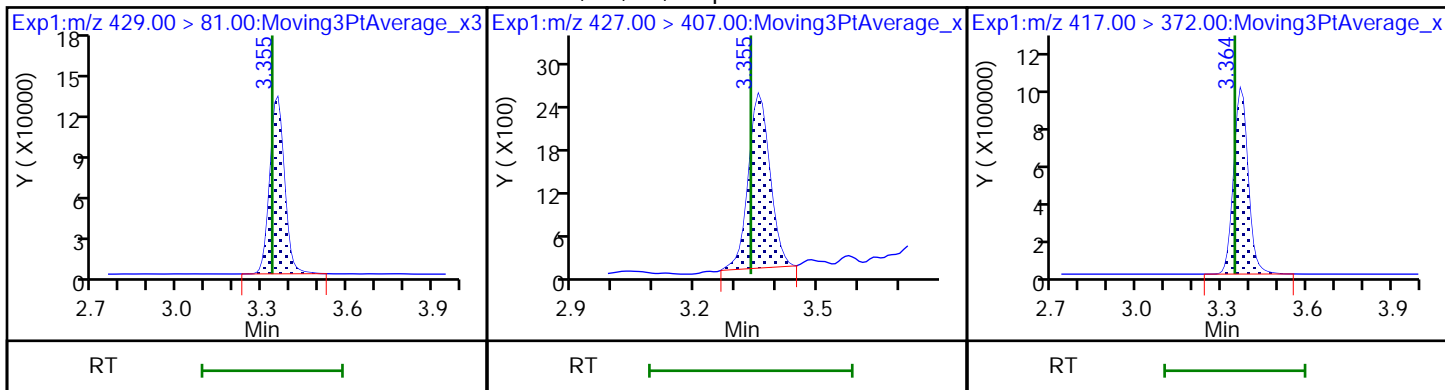


10 Perfluoroheptanoic acid 77 DONA (ND) 77 DONA (ND)

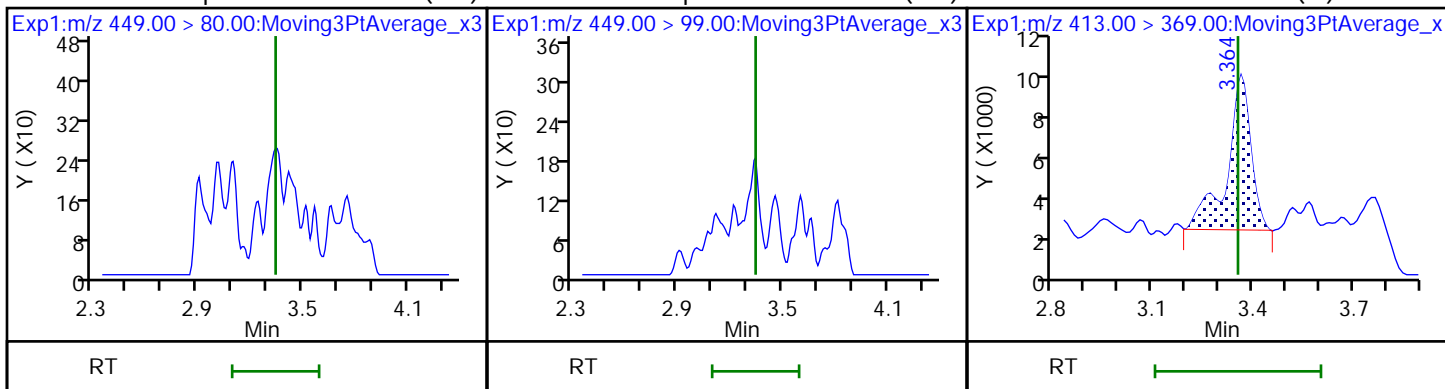


D 12 M2-6:2 FTS

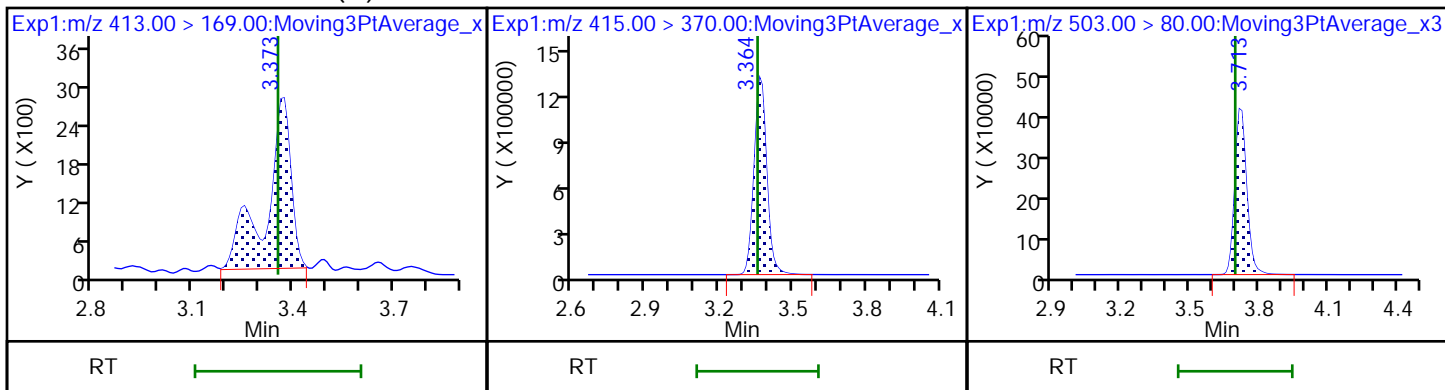
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



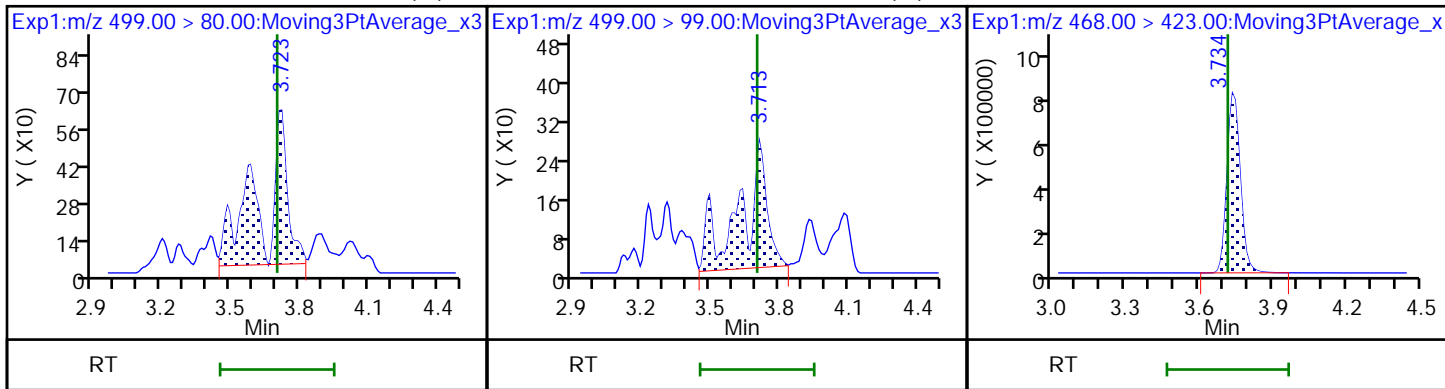
16 Perfluoroheptanesulfonic acid (ND) 16 Perfluoroheptanesulfonic acid (ND) 15 Perfluorooctanoic acid (M)

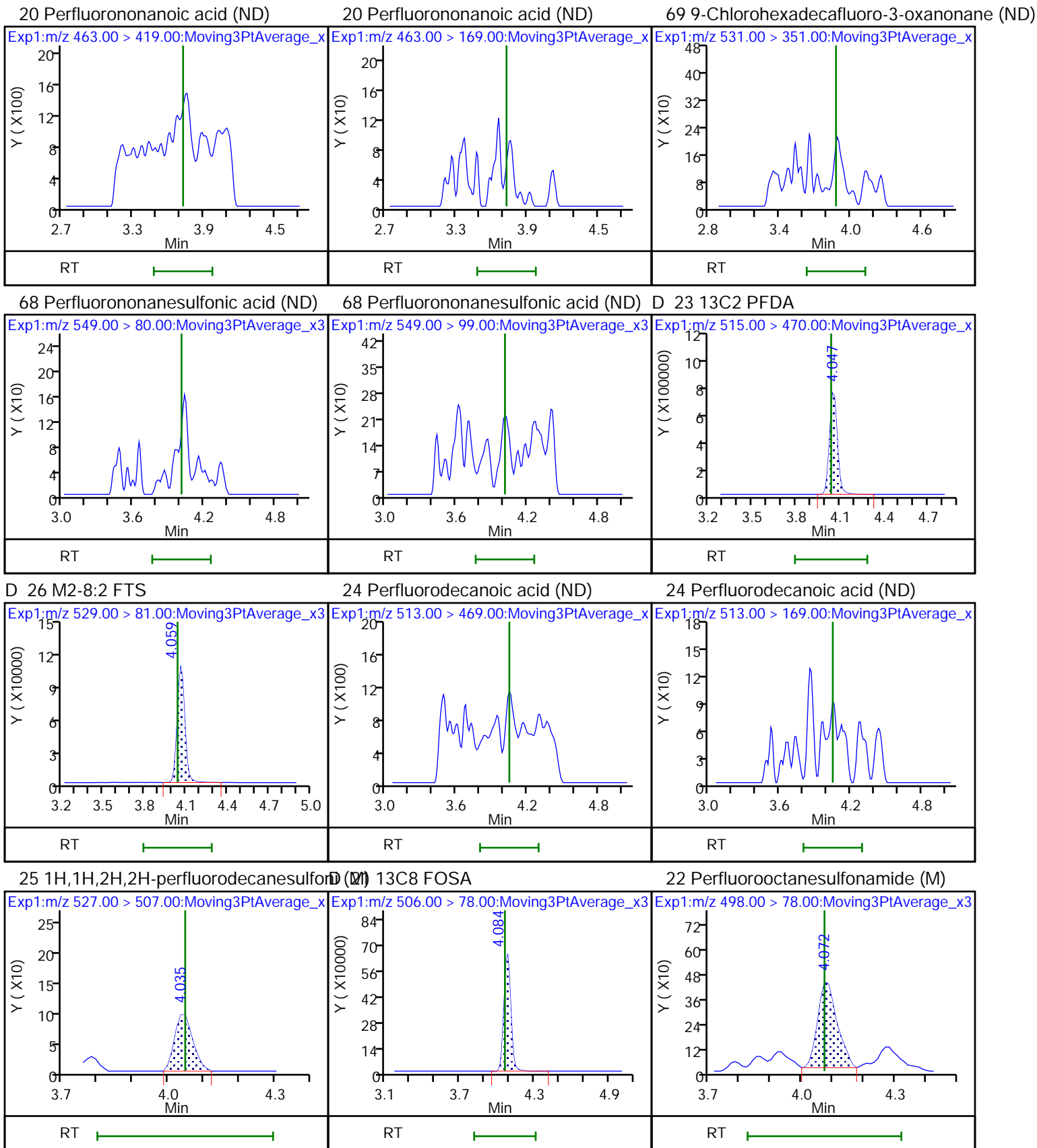


15 Perfluorooctanoic acid (M) * 62 13C2 PFOA D 18 13C4 PFOS



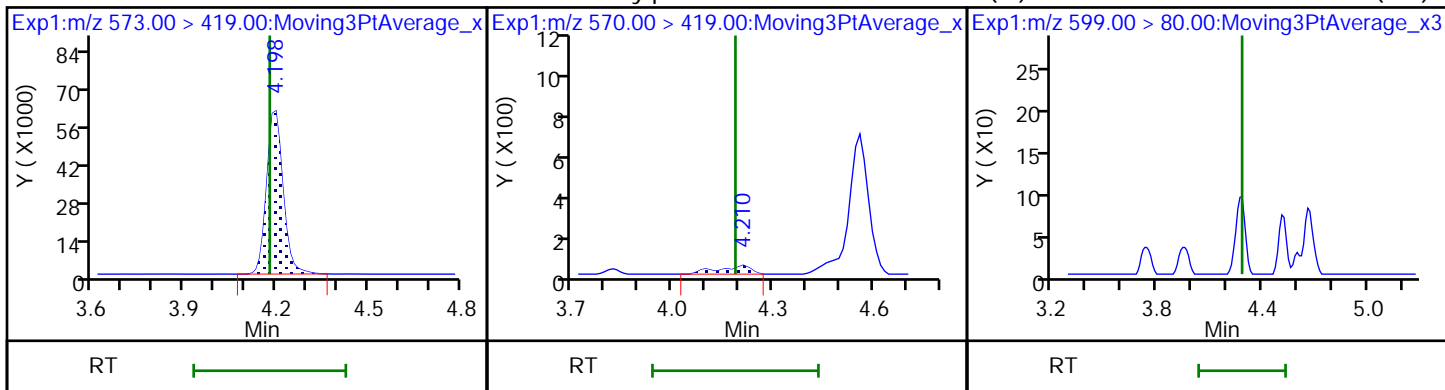
17 Perfluorooctanesulfonic acid (M) 17 Perfluorooctanesulfonic acid (M) D 19 13C5 PFNA





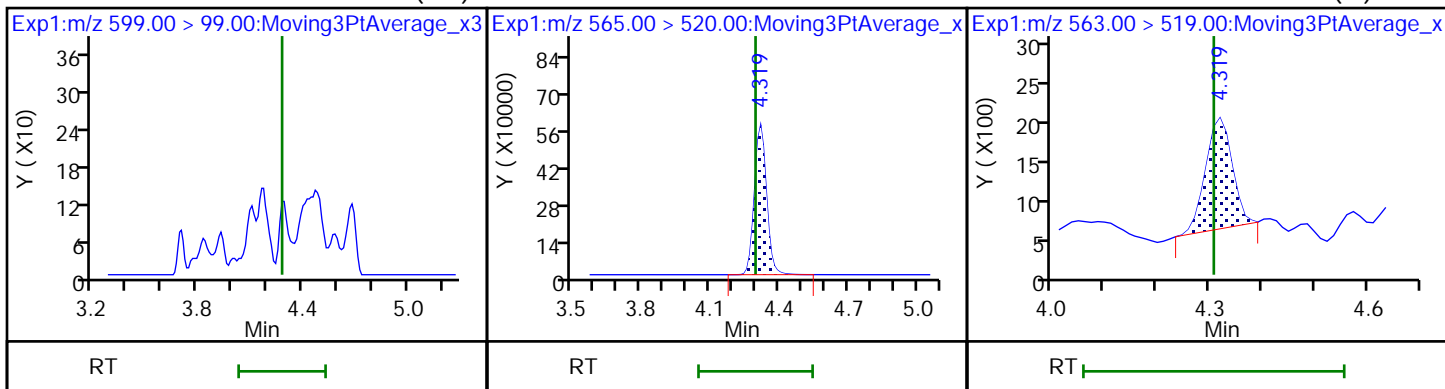
D 27 d3-NMeFOSAA

28 N-methylperfluorooctanesulfonamido (M) Perfluorodecanesulfonic acid (ND)



29 Perfluorodecanesulfonic acid (ND) D 30 13C2 PFUoA

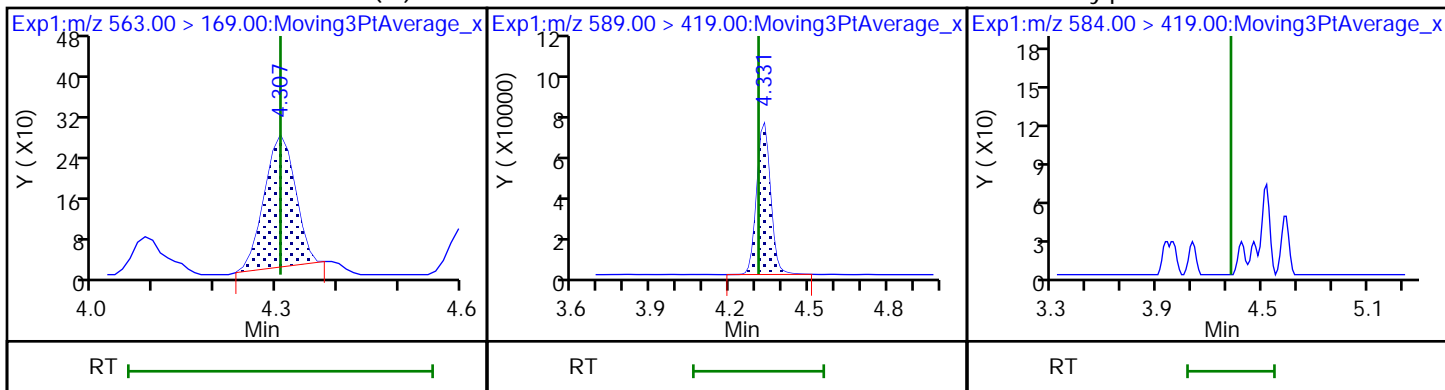
31 Perfluoroundecanoic acid (M)



31 Perfluoroundecanoic acid (M)

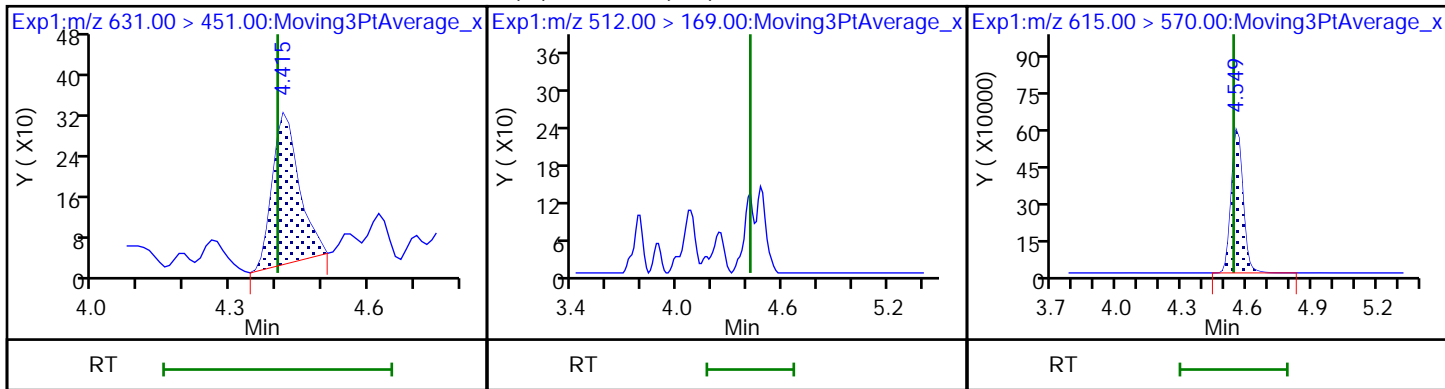
D 32 d5-NEtFOSAA

33 N-ethylperfluorooctanesulfonamidoa (ND)



66 11-Chloroeicosafuoro-3-oxaundecan (M) MeFOSA (ND)

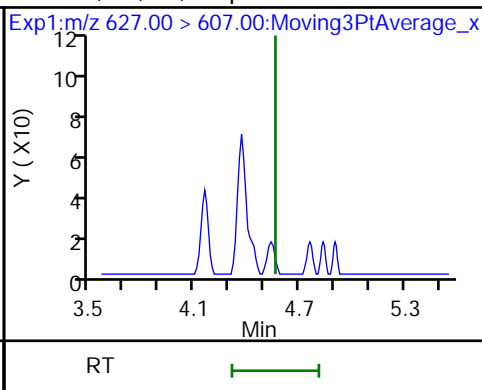
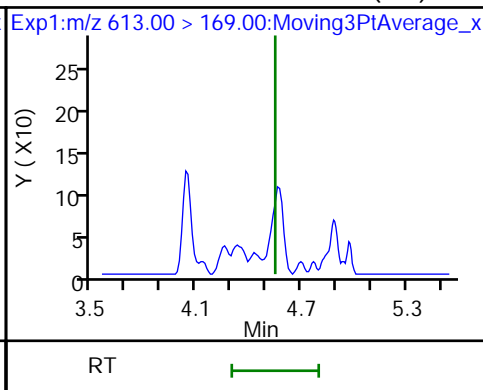
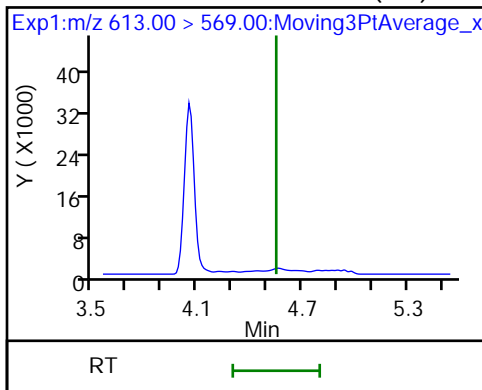
D 36 13C2 PFDoA



37 Perfluorododecanoic acid (ND)

37 Perfluorododecanoic acid (ND)

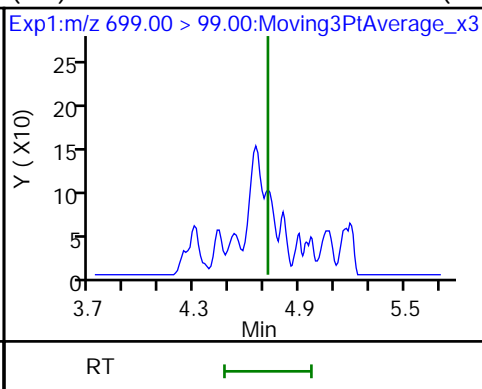
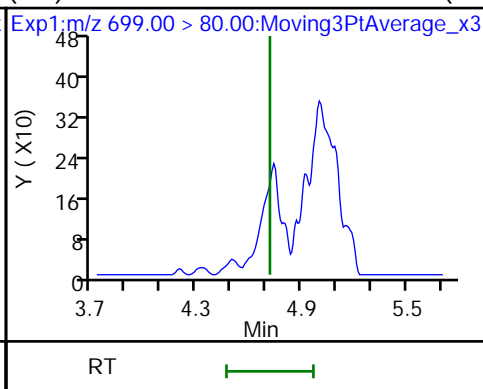
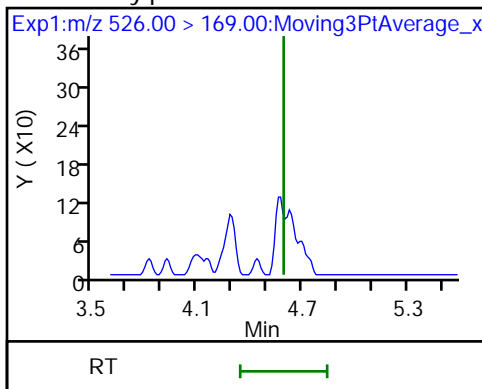
74 1H,1H,2H,2H-perfluorododecanesulfo (ND)



39 N-ethylperfluoro-1-octanesulfonami (ND)

Perfluorododecanesulfonic acid (PF (ND)

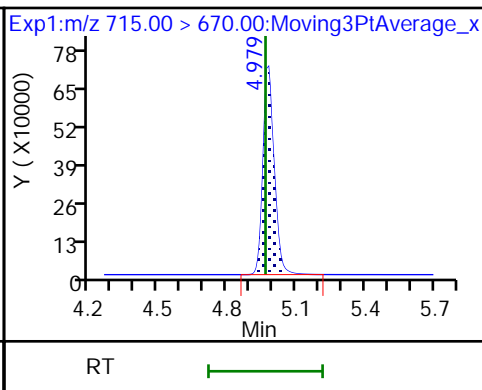
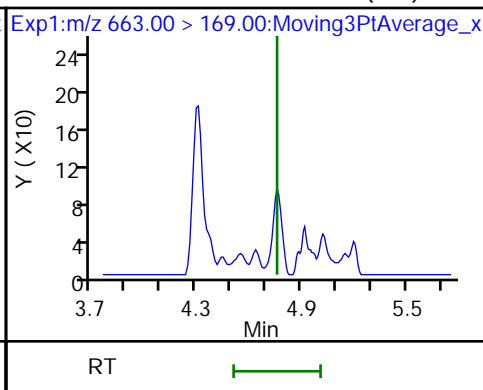
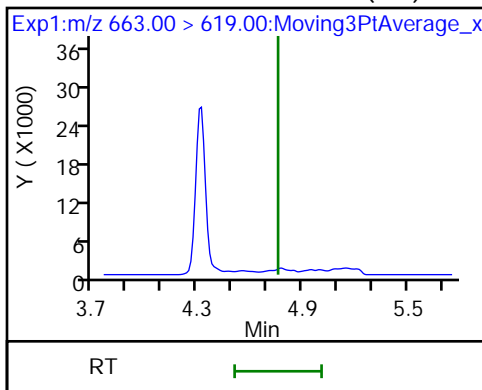
Perfluorododecanesulfonic acid (PF (ND)



41 Perfluorotridecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

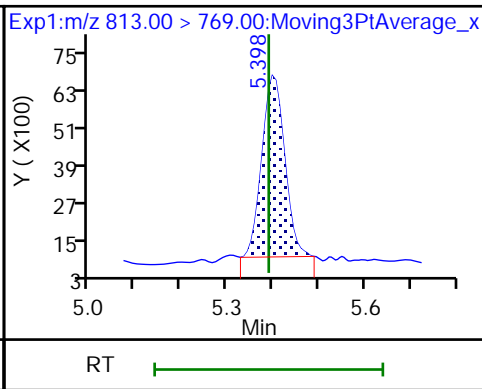
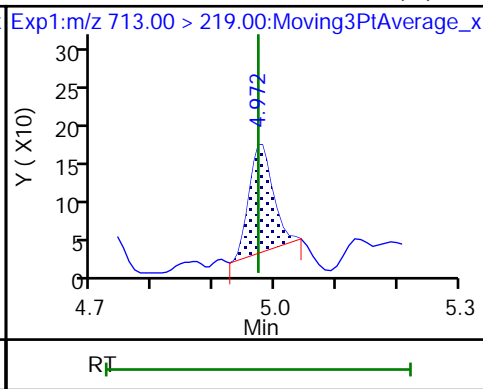
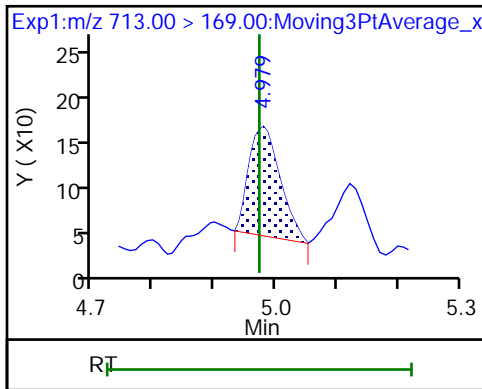
D 43 13C2 PFTeDA



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)

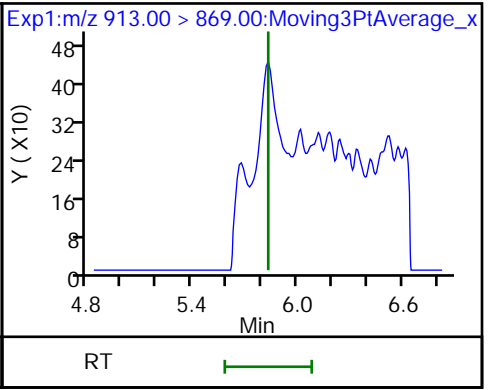
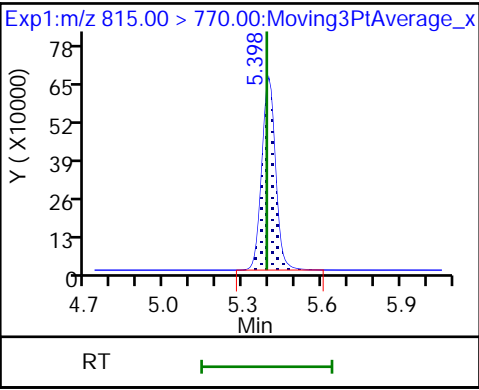
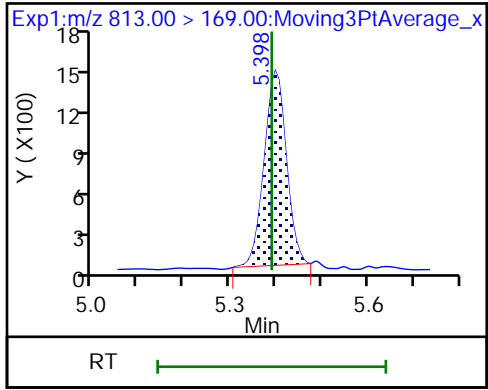
45 Perfluorohexadecanoic acid



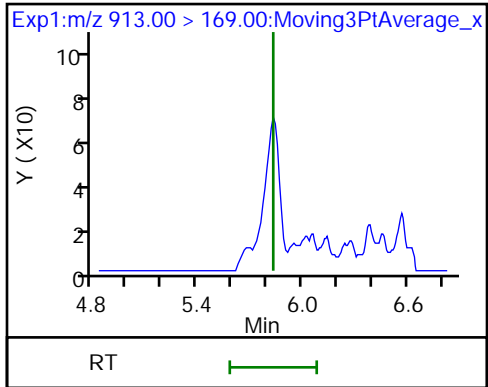
45 Perfluorohexadecanoic acid (M)

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



Eurofins TestAmerica, Burlington

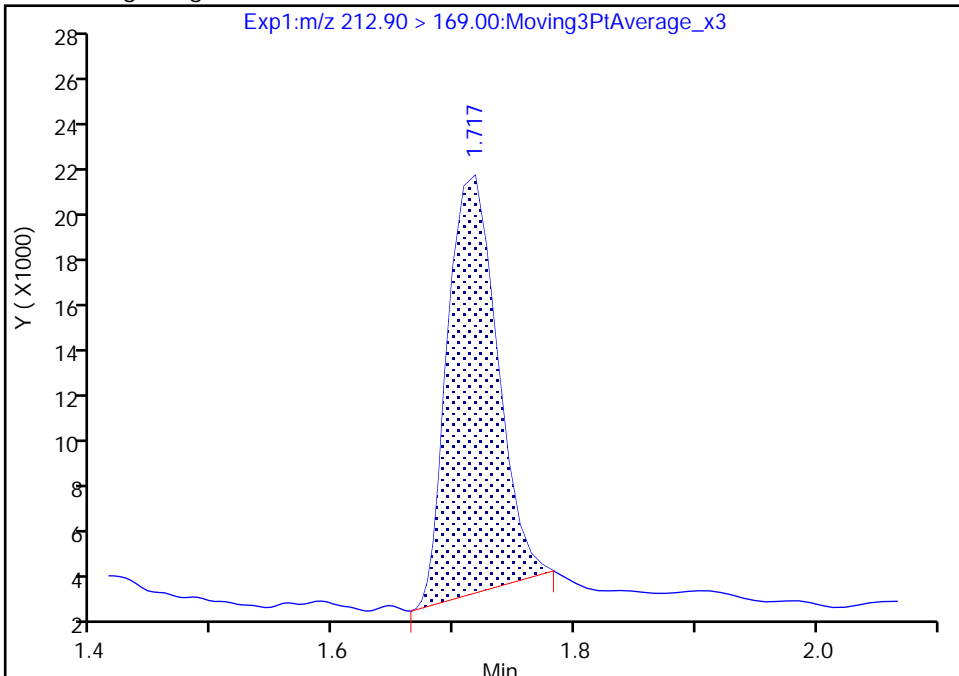
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

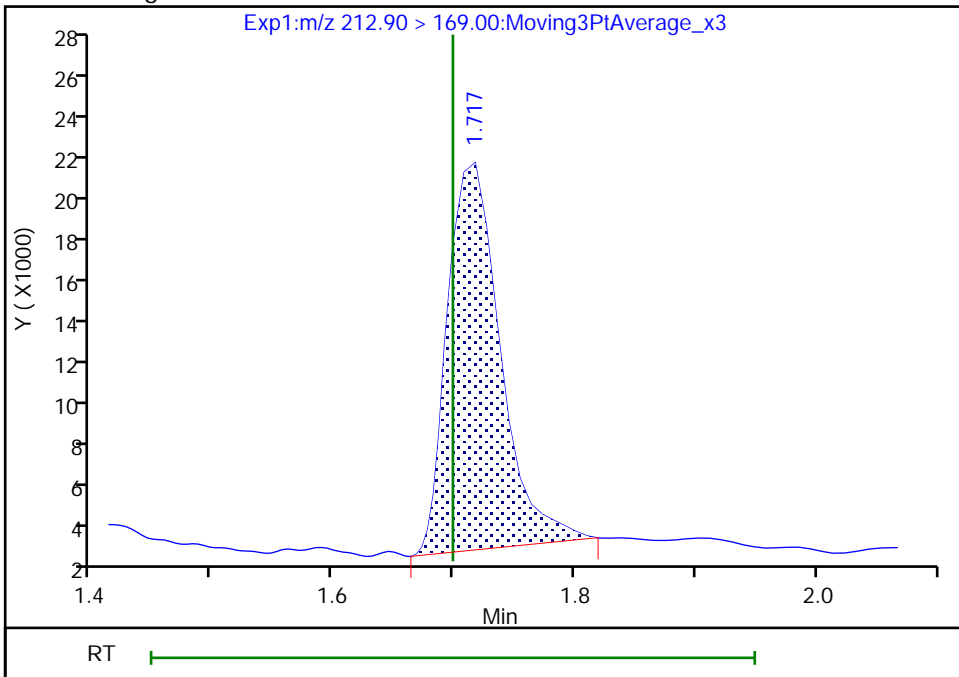
RT: 1.72
Area: 51412
Amount: 0.855929
Amount Units: ng/ml

Processing Integration Results



RT: 1.72
Area: 56049
Amount: 0.933127
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:15:08
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

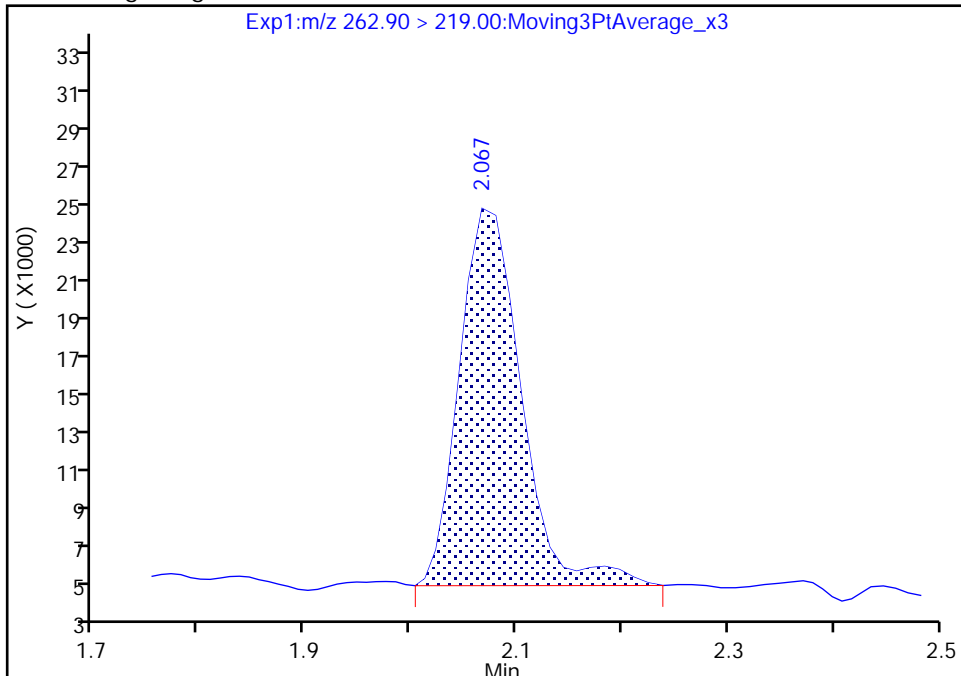
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

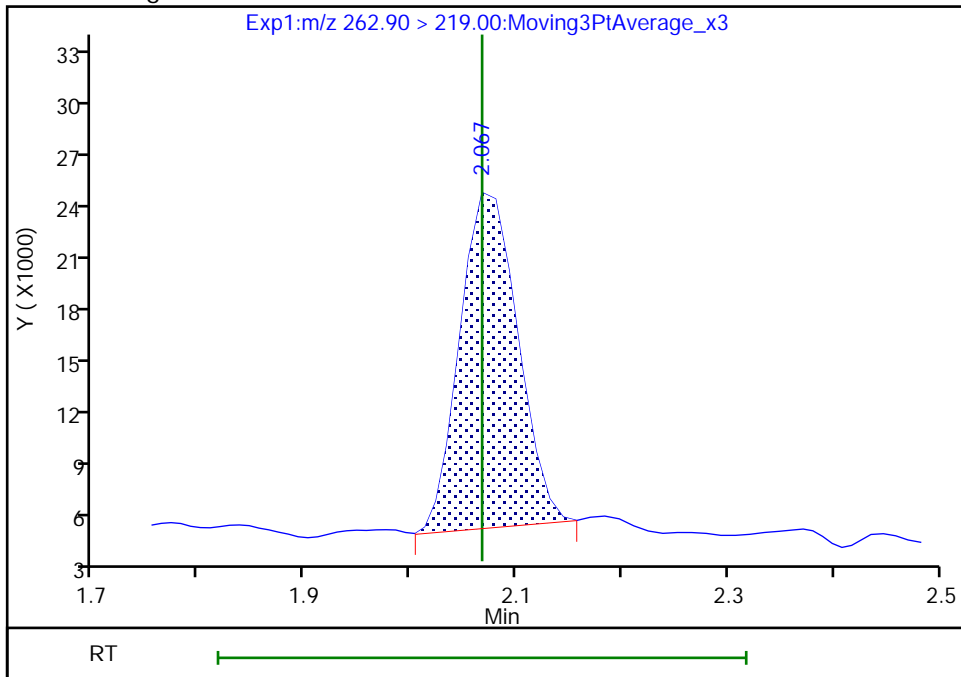
RT: 2.07
Area: 79371
Amount: 1.216448
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 73214
Amount: 1.122085
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:15:13
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

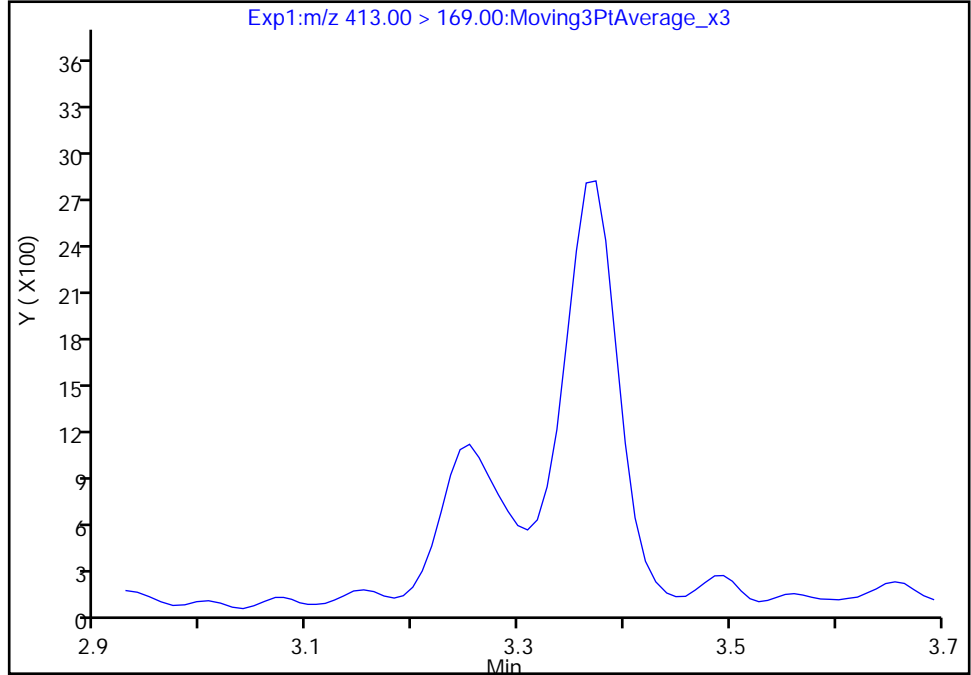
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

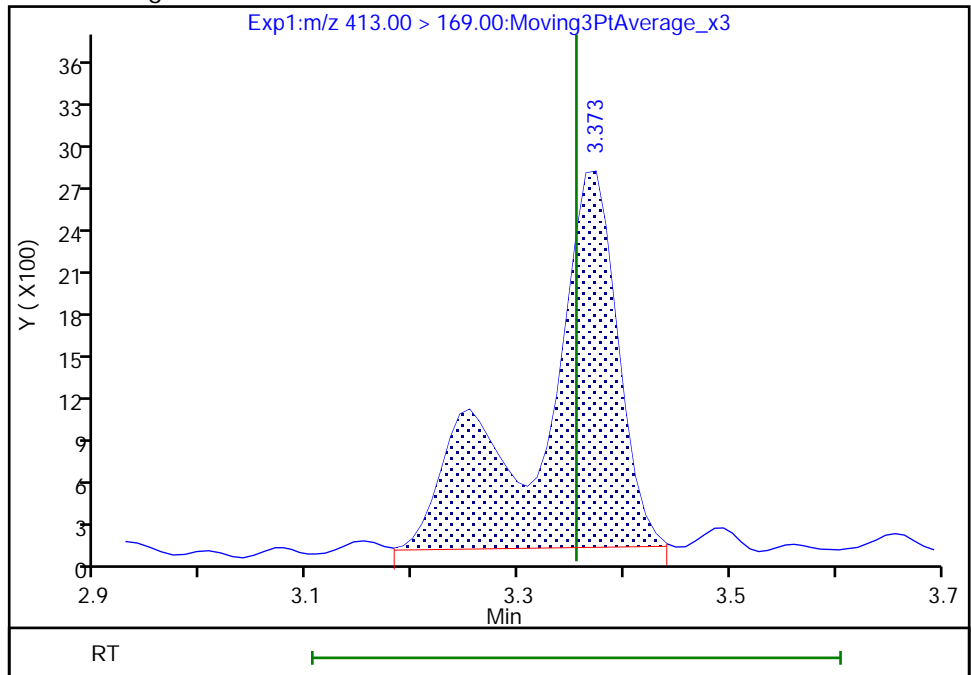
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 13661
Amount: 0.523619
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:16:09
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

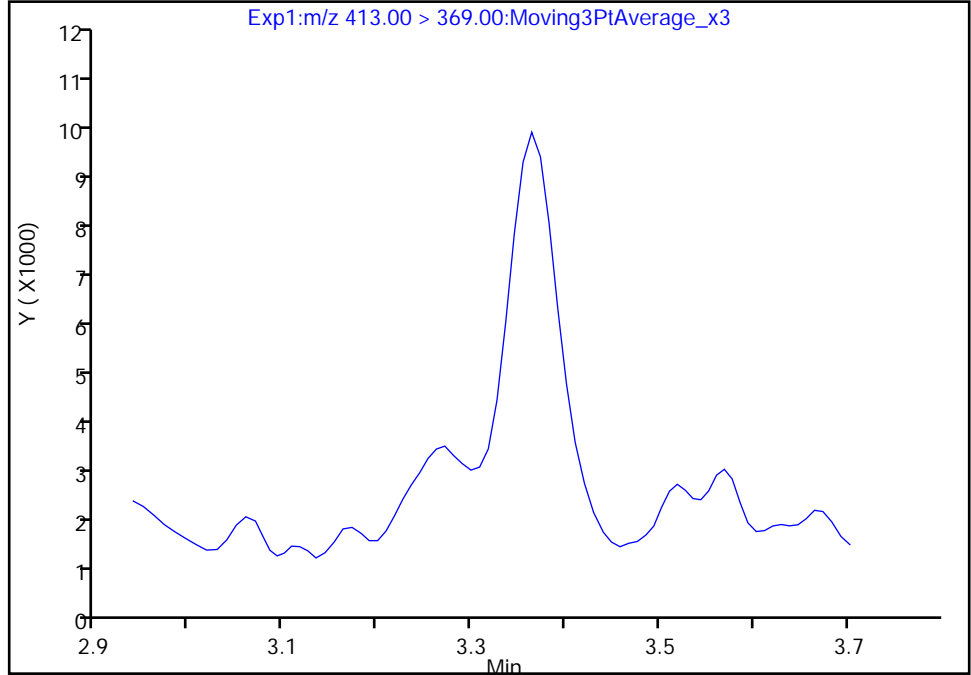
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

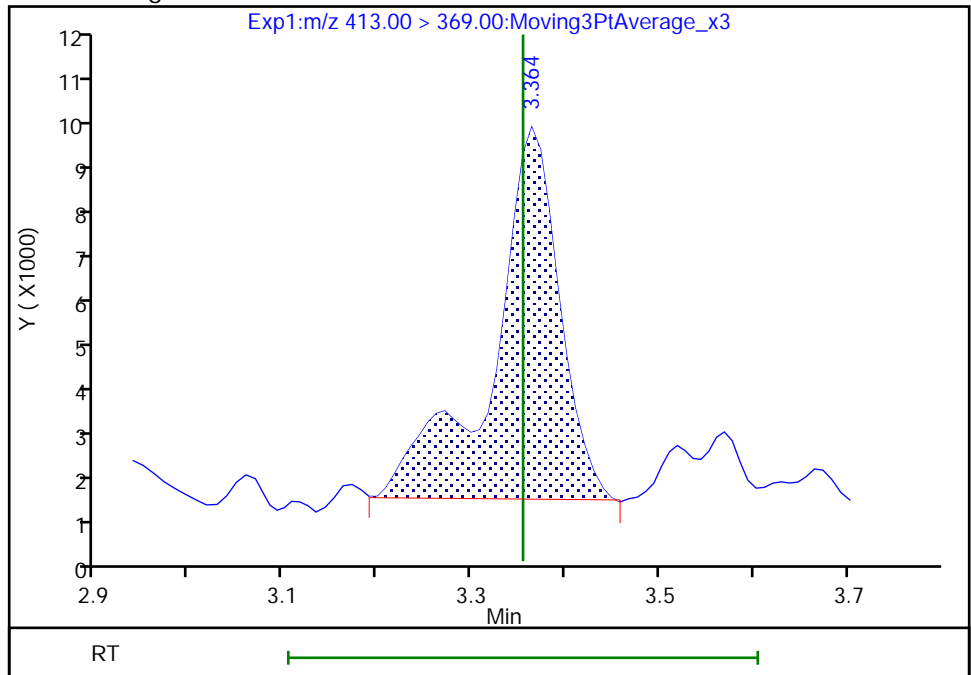
Not Detected
Expected RT: 3.35

Processing Integration Results



RT: 3.36
Area: 37603
Amount: 0.523619
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

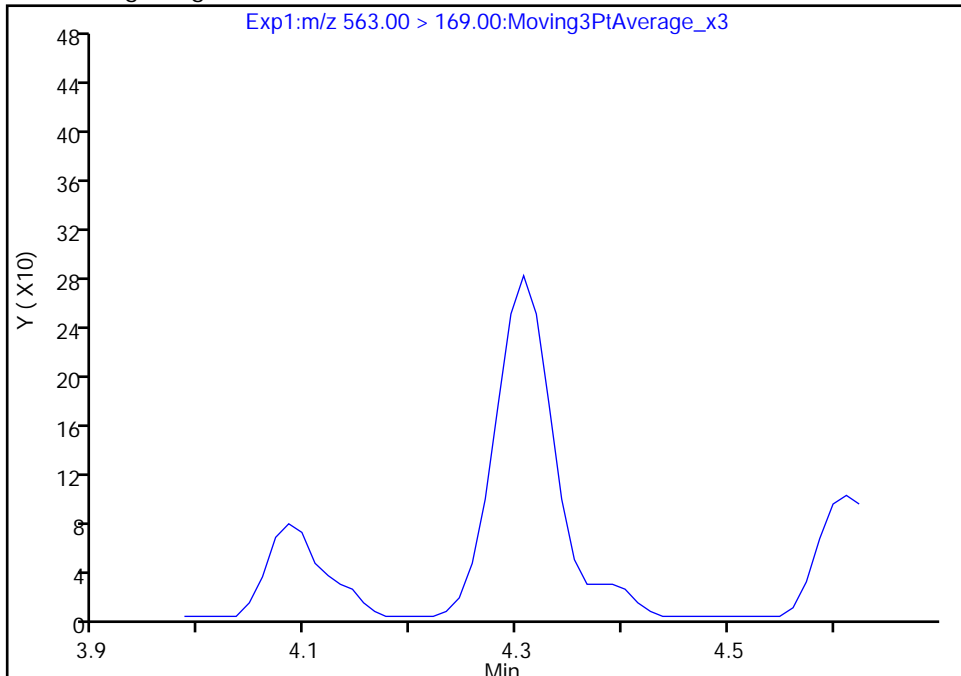
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

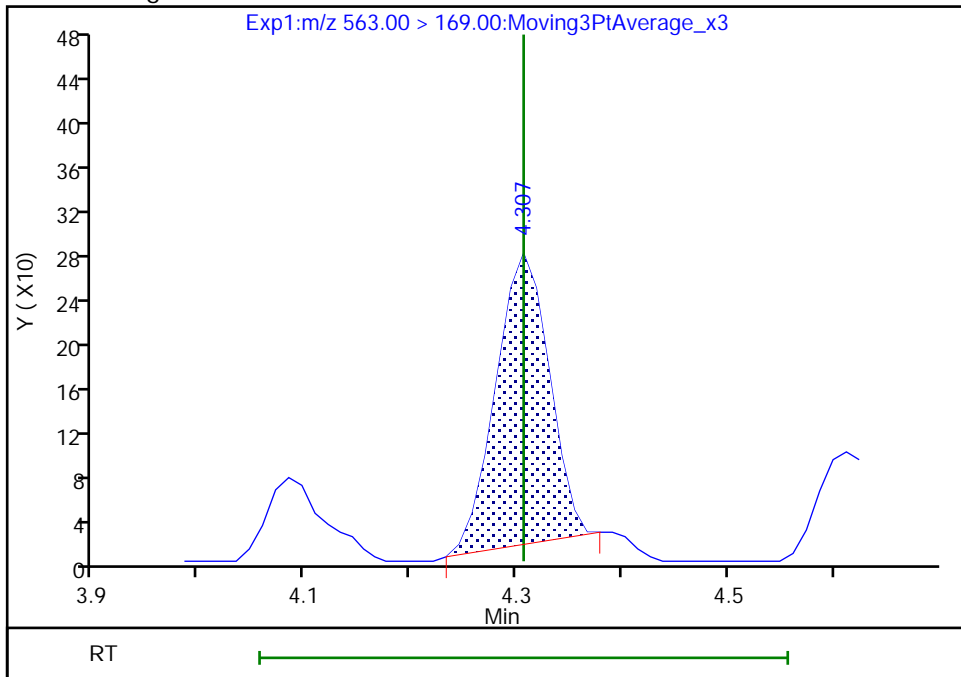
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 914
Amount: 0.132884
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:17:57
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

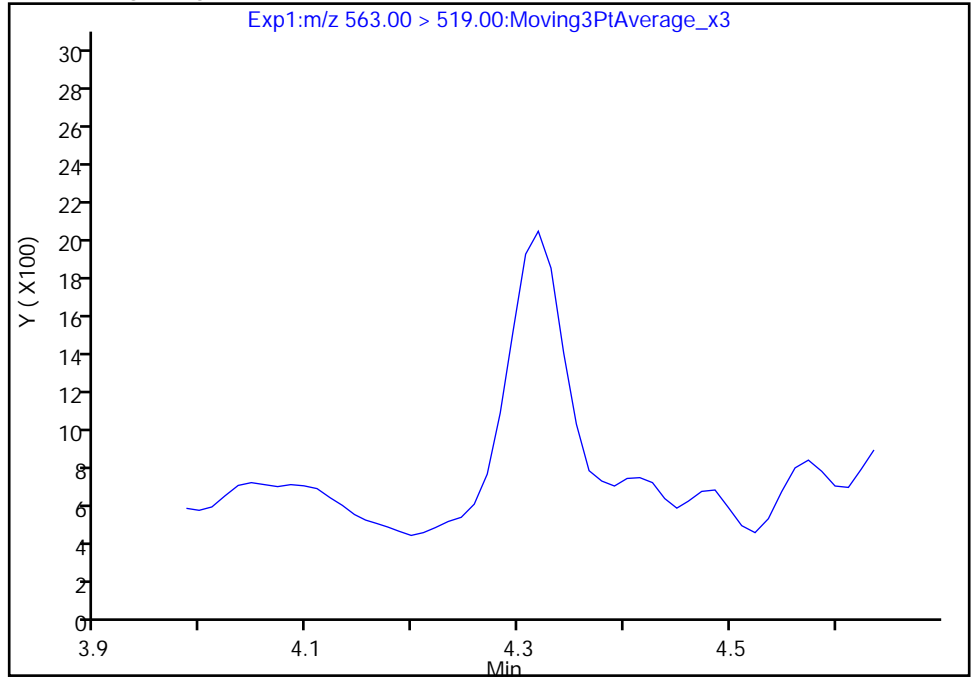
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

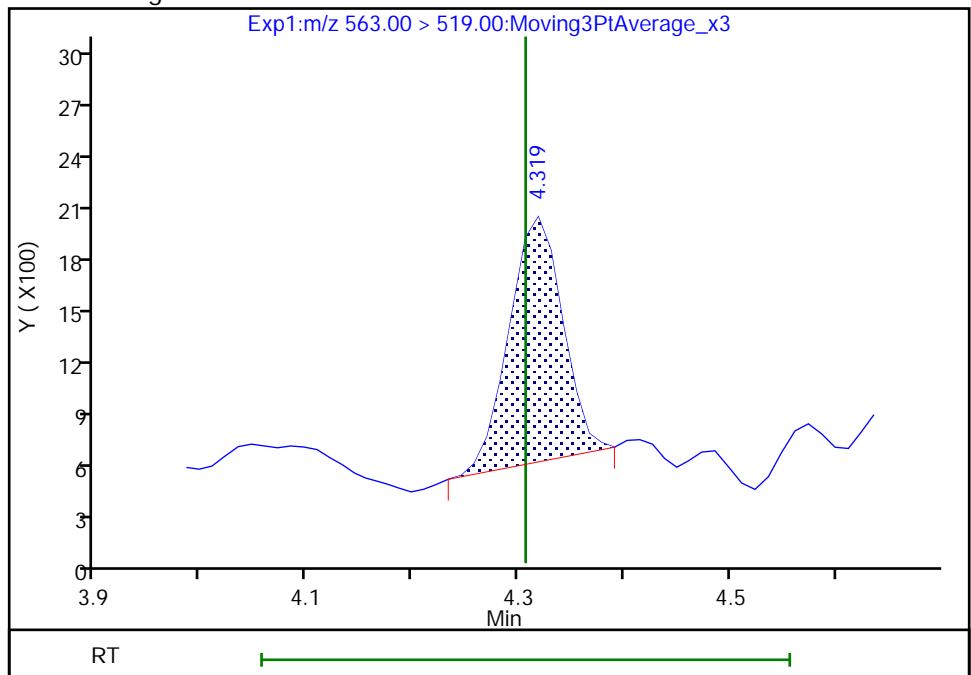
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 4787
Amount: 0.132884
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:17:57

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

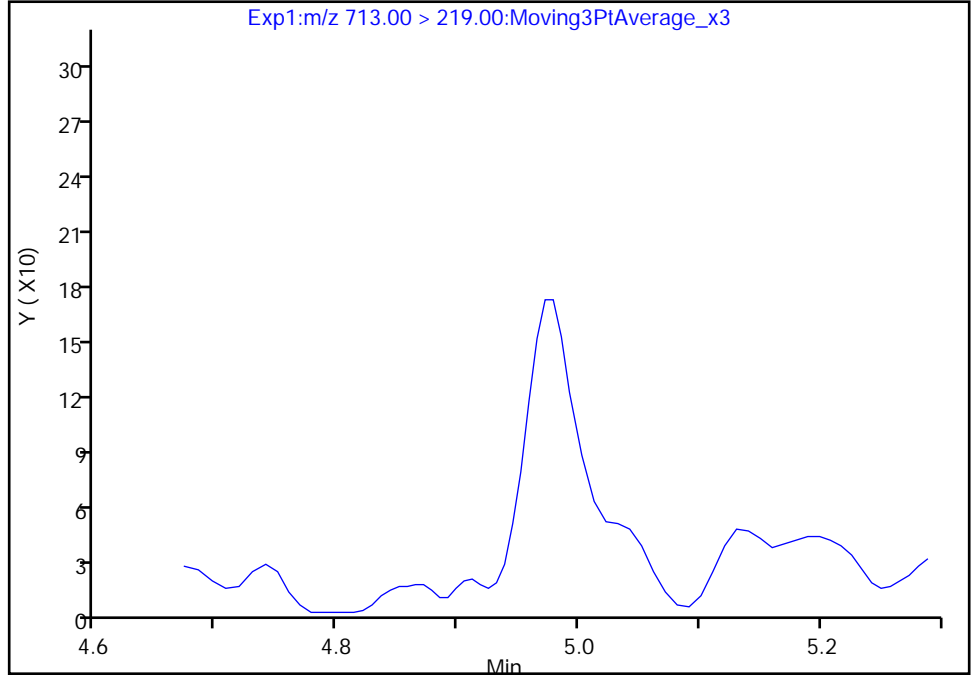
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

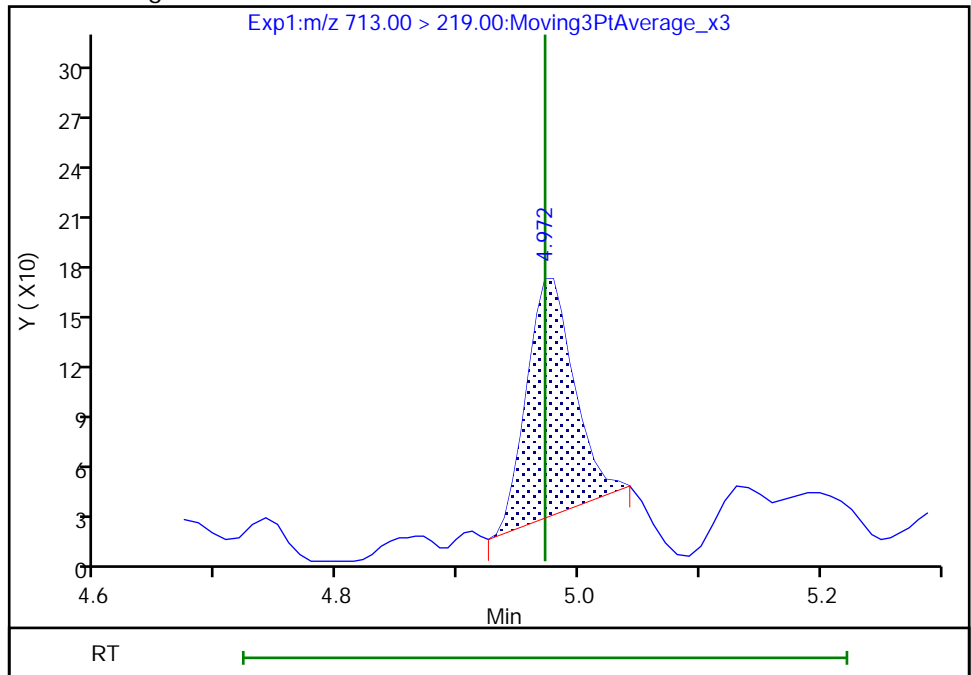
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 386
Amount: 0.067486
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:18:46
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

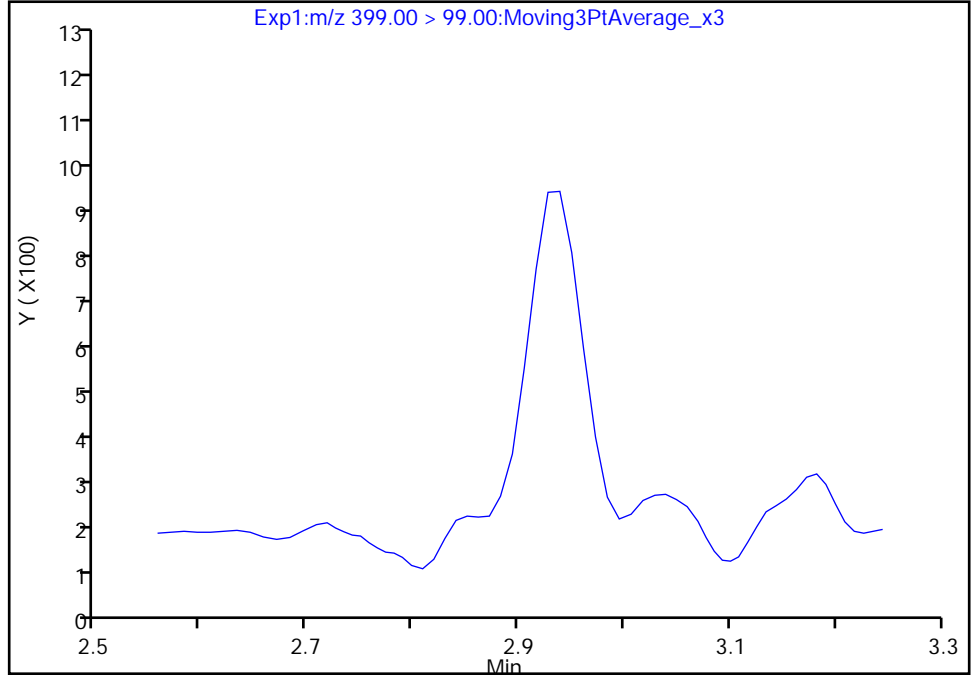
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

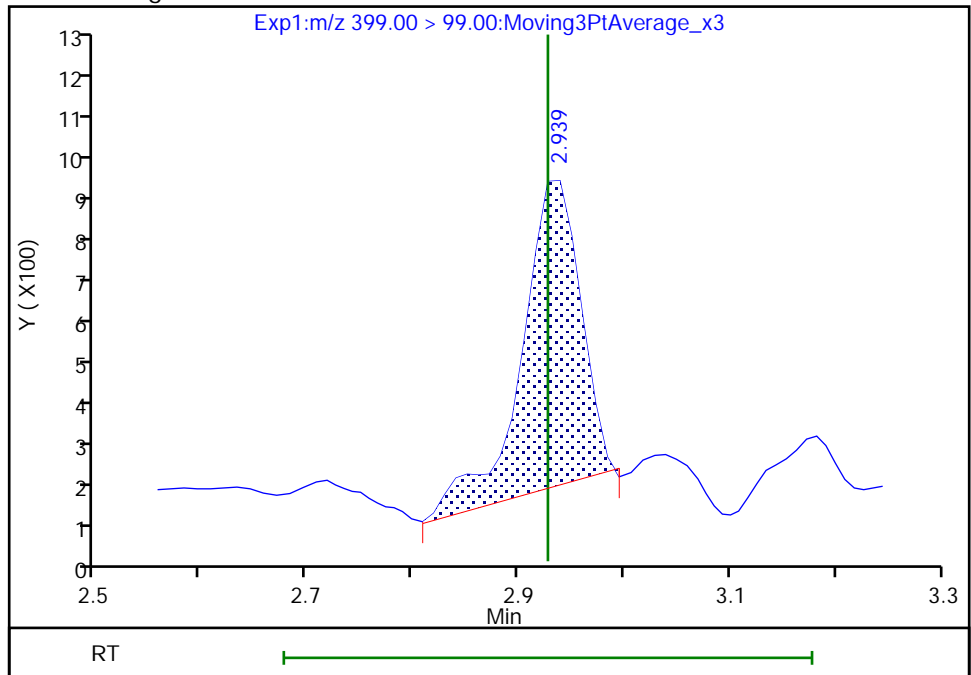
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 2784
Amount: 0.153239
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:15:48
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

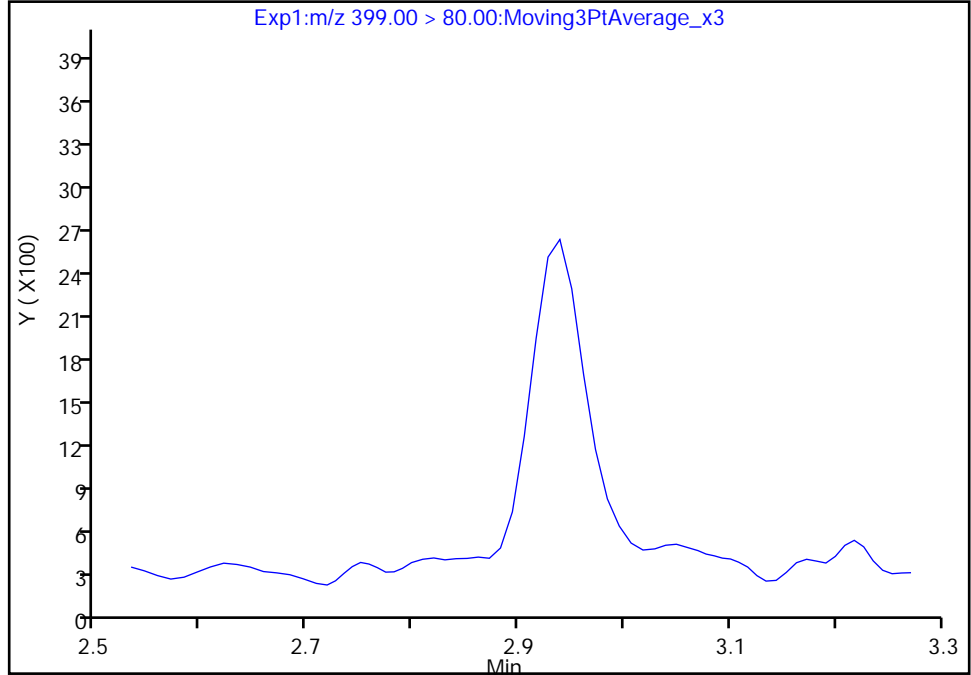
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

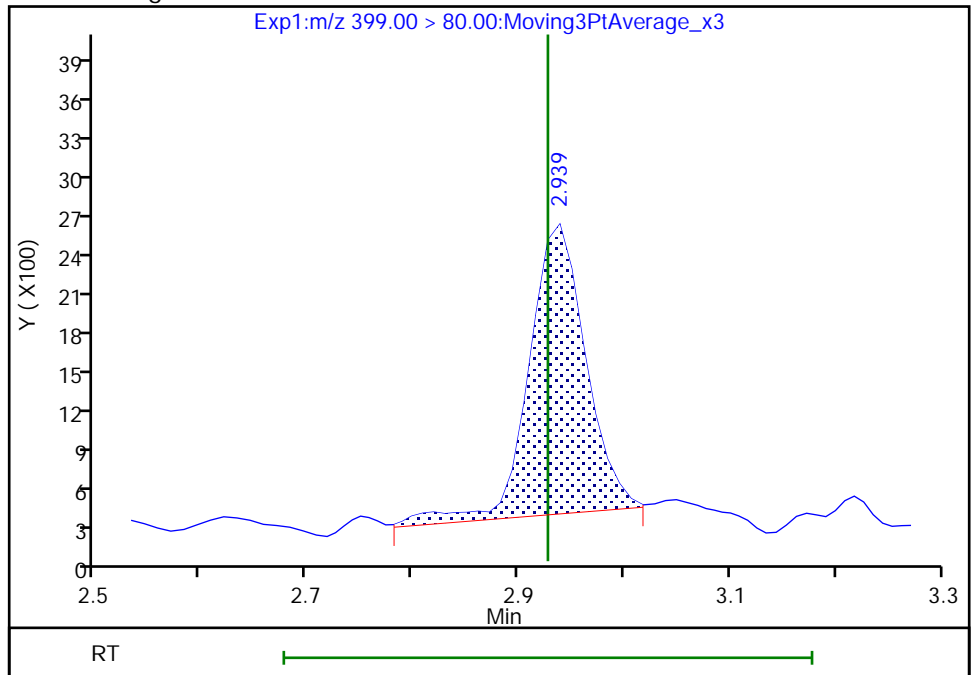
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 8337
Amount: 0.153239
Amount Units: ng/ml



Euofins TestAmerica, Burlington

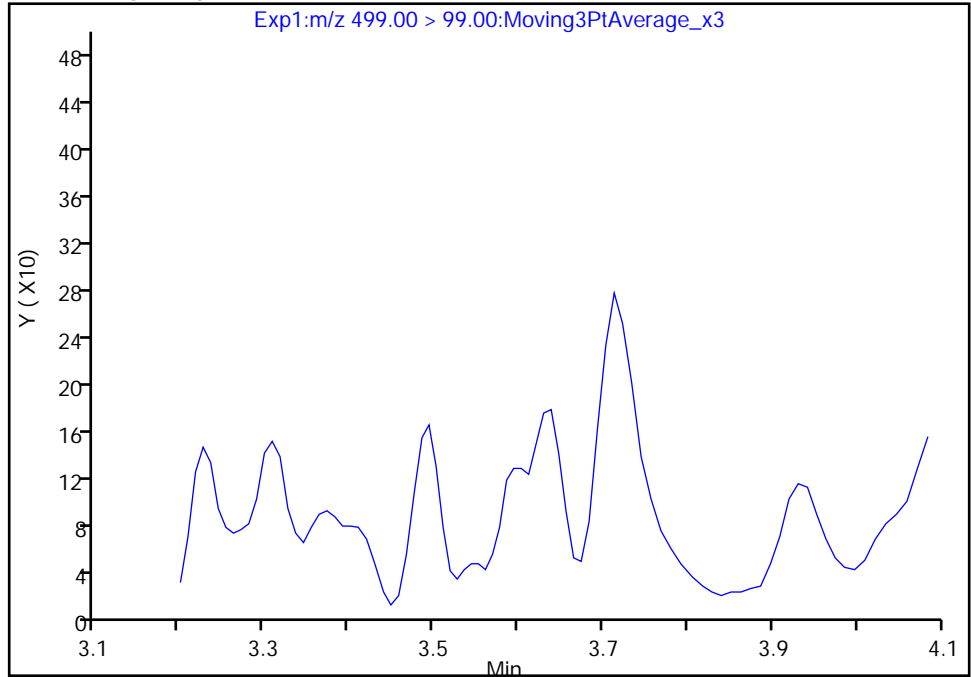
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

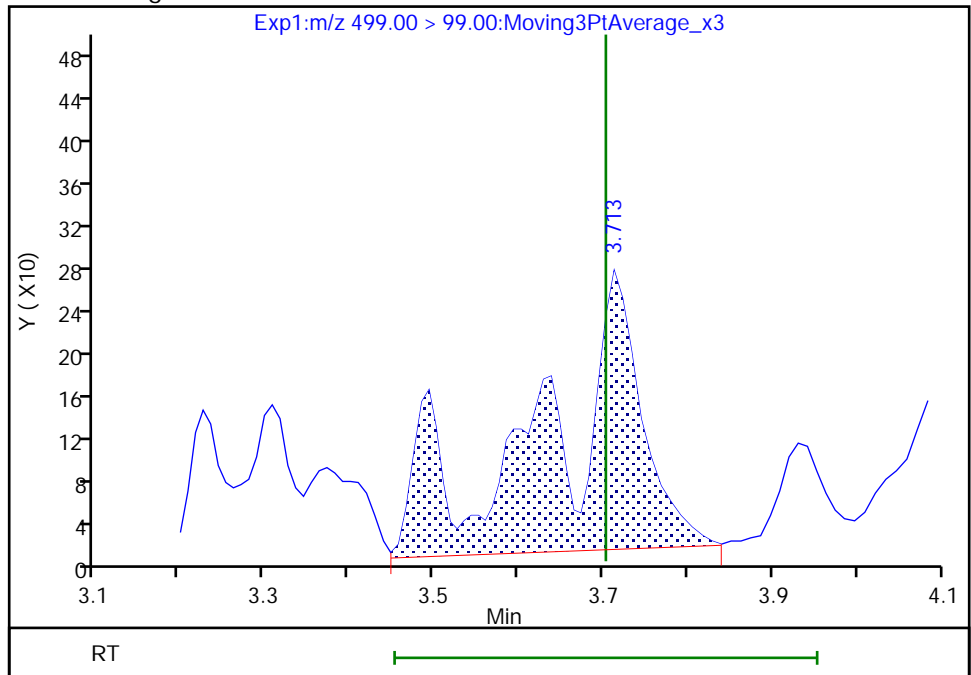
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.71
Area: 2065
Amount: 0.156072
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:16:23
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

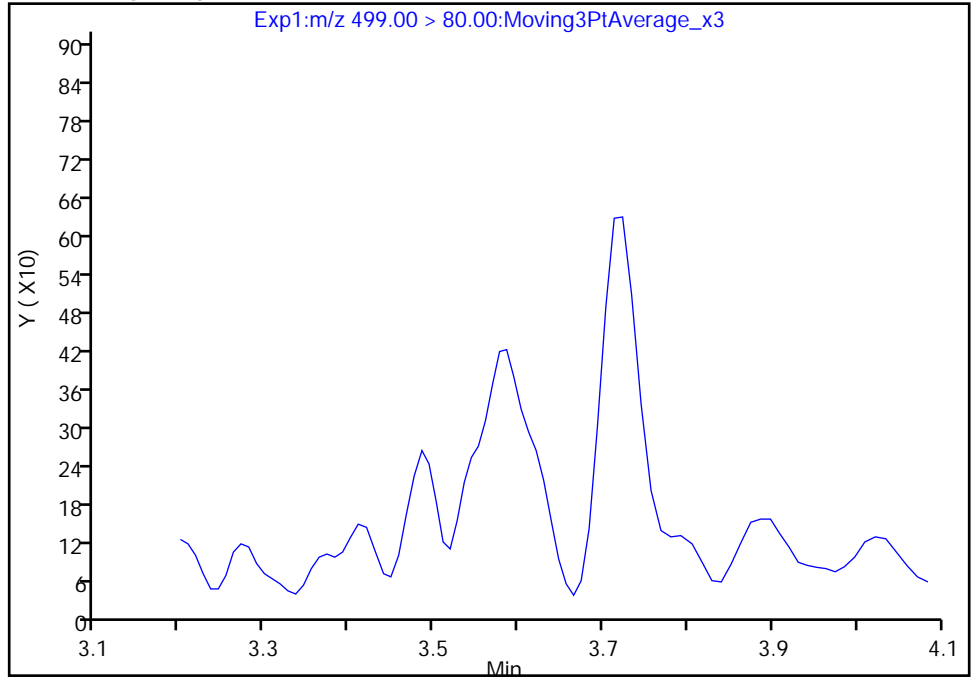
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

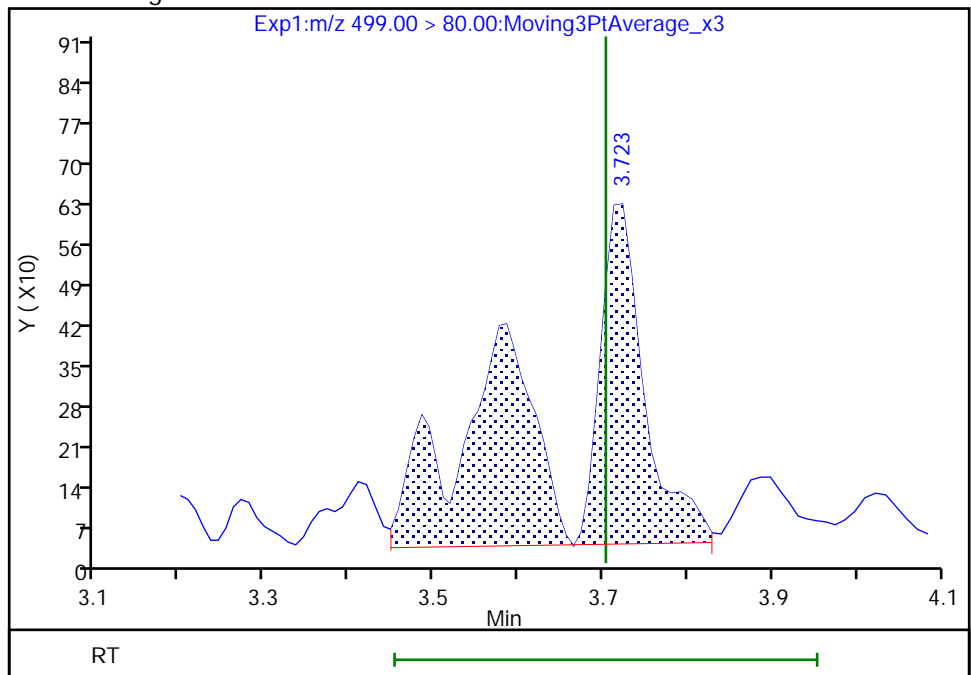
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.72
Area: 4587
Amount: 0.156072
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:16:56

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

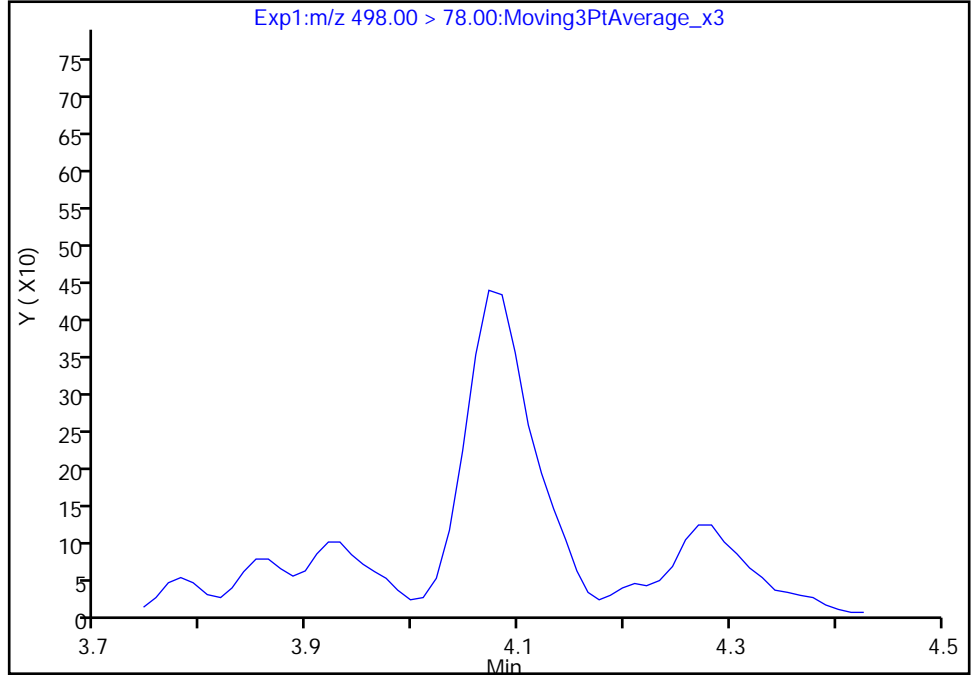
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

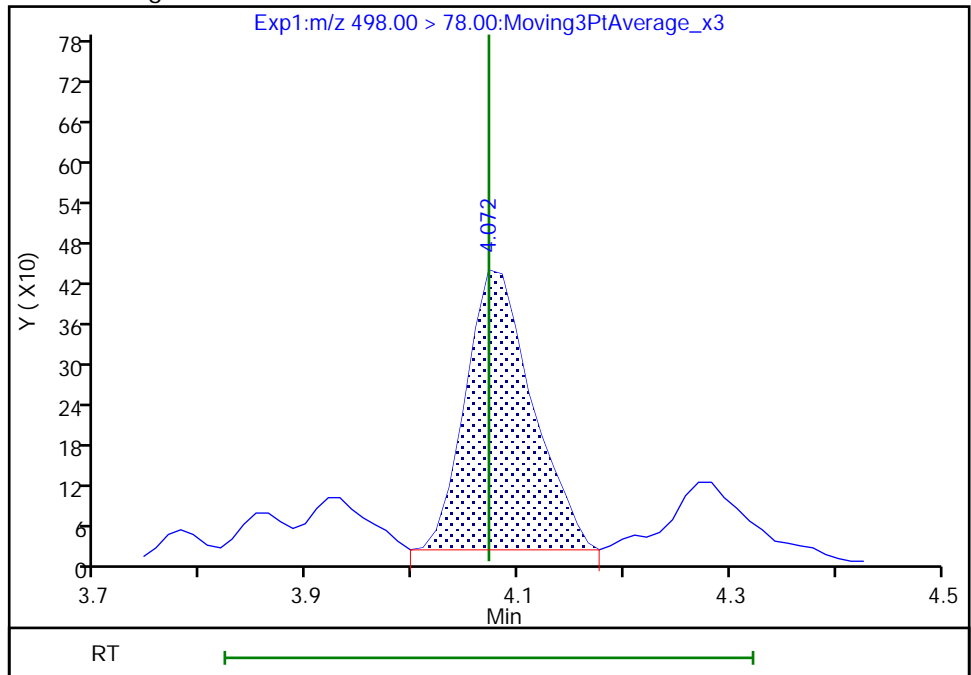
Signal: 1

Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results



RT: 4.07
Area: 1828
Amount: 0.040291
Amount Units: ng/ml

Eurofins TestAmerica, Burlington

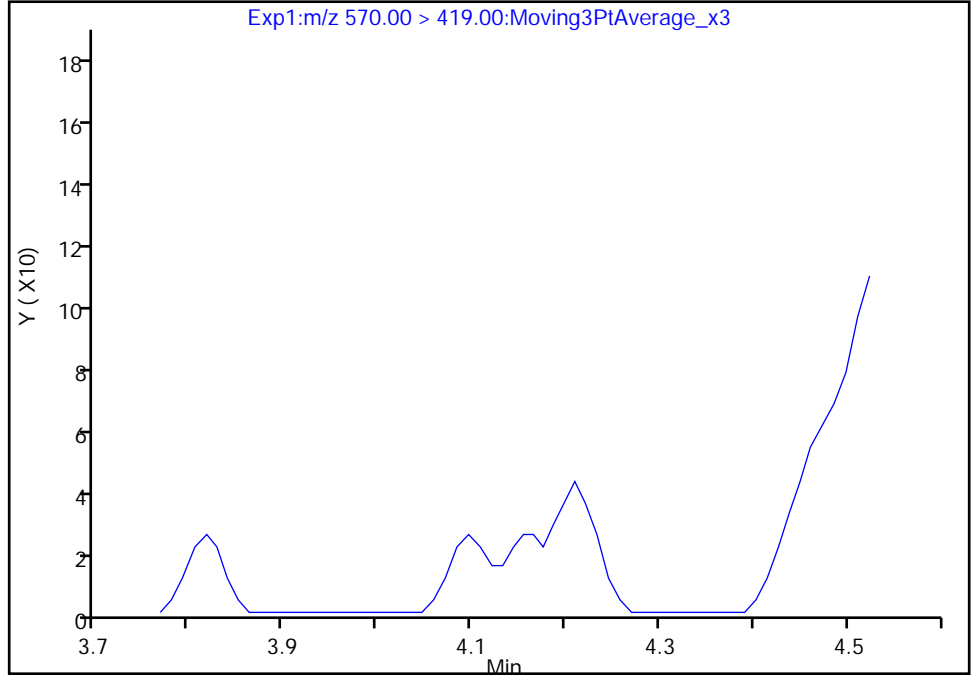
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

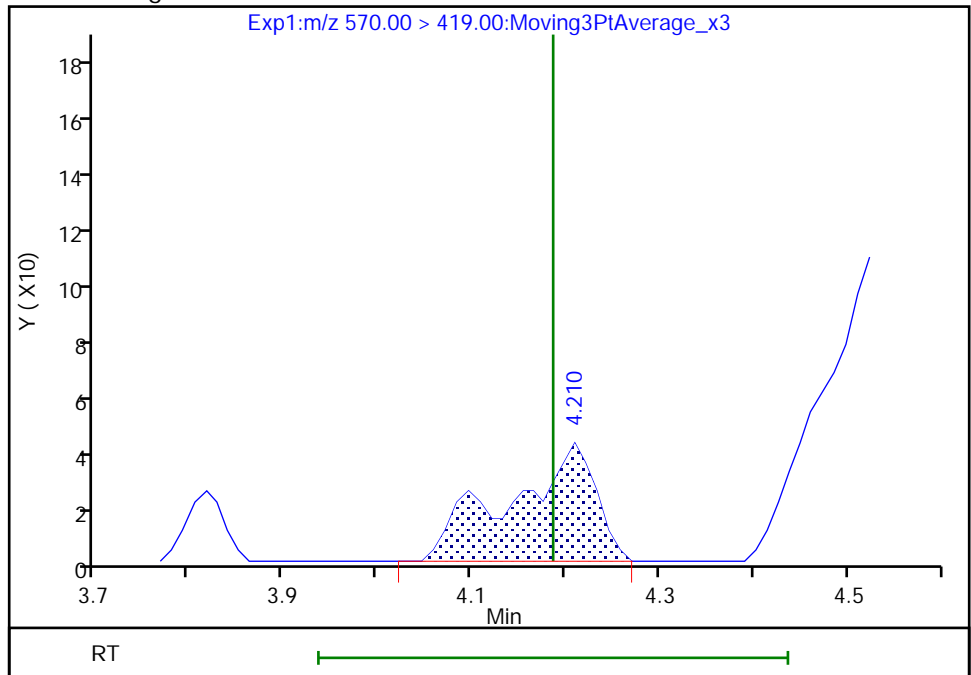
Not Detected
Expected RT: 4.19

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 266
Amount: 0.076496
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:17:42
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

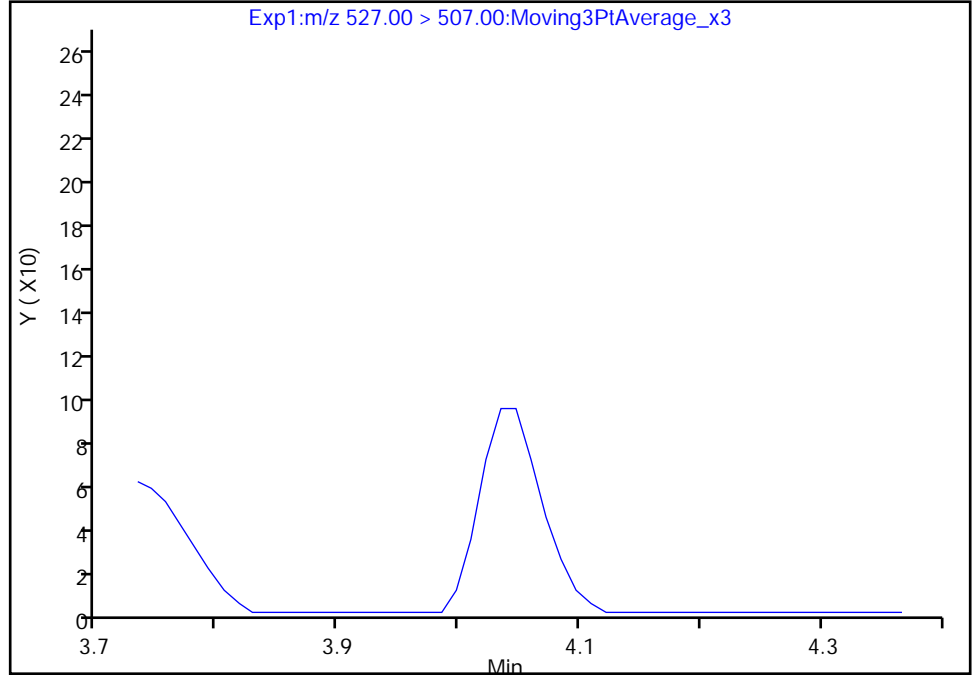
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E015.d
Injection Date: 02-Aug-2019 05:41:52 Instrument ID: LC812
Lims ID: 480-156213-F-14-A Lab Sample ID: 200-156213-14
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 8 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

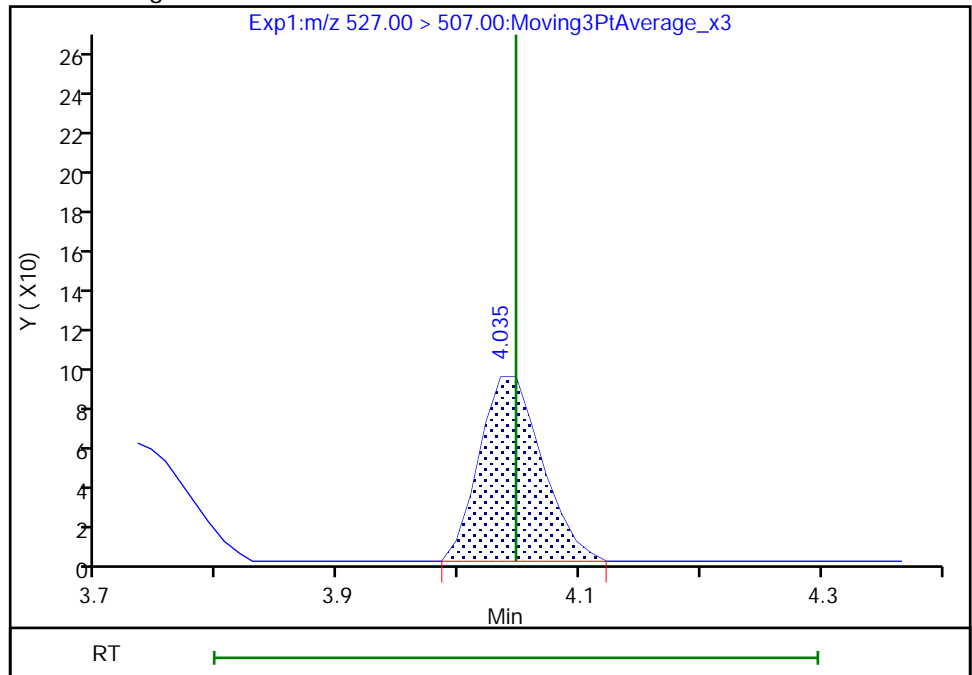
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.03
Area: 332
Amount: 0.029866
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:17:26
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW15B Lab Sample ID: 480-156213-15
 Matrix: Water Lab File ID: SC080119E018.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 09:30
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 283.6(mL) Date Analyzed: 08/02/2019 06:06
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.4	J	1.8	0.88
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.8	0.56
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.8	0.67
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.80
335-67-1	Perfluorooctanoic acid (PFOA)	0.89	J	1.8	0.56
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.8	0.24
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.8	0.68
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.47
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.8	0.52
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.53
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.81
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.72	J	1.8	0.43
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.71
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.84
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.79
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.54
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.8	8.8
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		18	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	18	1.3
27619-97-2	6:2 FTS	ND		18	4.1
39108-34-4	8:2 FTS	ND		18	2.6

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW15B Lab Sample ID: 480-156213-15
 Matrix: Water Lab File ID: SC080119E018.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 09:30
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 283.6(mL) Date Analyzed: 08/02/2019 06:06
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	69		25-150
STL00992	13C4 PFBA	81		25-150
STL01893	13C5 PFPeA	87		25-150
STL00993	13C2 PFHxA	88		50-150
STL01892	13C4 PFHpA	96		50-150
STL00990	13C4 PFOA	91		50-150
STL00995	13C5 PFNA	86		50-150
STL00996	13C2 PFDA	90		50-150
STL00997	13C2 PFUnA	85		50-150
STL00998	13C2 PFDoA	82		50-150
STL02116	13C2 PFTeDA	64		50-150
STL02337	13C3 PFBS	92		50-150
STL00994	18O2 PFHxS	94		50-150
STL00991	13C4 PFOS	86		50-150
STL02118	d3-NMeFOSAA	68		50-150
STL02117	d5-NEtFOSAA	68		50-150
STL02279	M2-6:2 FTS	105		25-150
STL02280	M2-8:2 FTS	101		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
 Lims ID: 480-156213-F-15-A
 Client ID: 356023-MW15B
 Sample Type: Client
 Inject. Date: 02-Aug-2019 06:06:01 ALS Bottle#: 11 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-15-A
 Misc. Info.: 200-0037095-018 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:27:55
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.507	3151356	40.7	81.4	10739	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.717	1.699	0.018	1.005	47247	0.8134		8.2		M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.613	3148183	43.3	86.5	7677	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	18063	0.2965		1.0	
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.621	3067845	42.9	92.3	601656	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	27394	0.4084	Target=1.90	31.0	
298.90 > 99.00	2.093	2.093	0.0	1.000	14610		1.88(0.95-2.85)	16.8		
D 7 13C2 PFHxA	315.00 > 270.00	2.471	2.459	0.012	0.733	3195109	44.2	88.4	7681	
6 Perfluorohexanoic acid	313.00 > 269.00	2.471	2.459	0.012	1.000	18333	0.2786	Target=13.23	5.2	
313.00 > 119.00	2.471	2.459	0.012	1.000	2261		8.11(6.61-19.84)	3.2		
D 11 18O2 PFHxS	403.00 > 84.00	2.939	2.916	0.023	0.872	1859296	44.4	93.9	8245	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.872	3413821	48.2	96.5	7627	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.939	2.928	0.011	1.000	12933	0.2497	Target=3.37	14.4	M
399.00 > 99.00	2.939	2.928	0.011	1.000	3047		4.24(1.69-5.06)	4.2		M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.000	9974	0.1560	Target=3.76	2.9	
363.00 > 169.00	2.939	2.928	0.011	1.000	2522		3.95(1.88-5.65)	12.8		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.354	3.335	0.019	0.995	434367	49.9		105	1077	
13 1H,1H,2H,2H-perfluorooctanesulfonyl										M
427.00 > 407.00	3.354	3.336	0.018	1.000	7749	0.4941		24.8		M
D 14 13C4 PFOA										
417.00 > 372.00	3.372	3.344	0.028	1.000	3384993	45.3		90.6	8864	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.354	3.345	0.009	0.900	2479	0.0683	Target=4.80	11.3		M
449.00 > 99.00	3.354	3.345	0.009	0.900	844		2.94(2.40-7.20)	4.0		M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.372	3.355	0.017	1.000	37136	0.5041	Target=2.84	3.6		M
413.00 > 169.00	3.363	3.355	0.008	0.997	14465		2.57(1.42-4.25)	43.1		M
* 62 13C2 PFOA										
415.00 > 370.00	3.372	3.355	0.017		4110045	50.0			13221	
D 18 13C4 PFOS										
503.00 > 80.00	3.725	3.695	0.030	1.104	1439356	41.3		86.4	5858	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.725	3.703	0.022	1.000	6780	0.2379	Target=4.33	15.3		M
499.00 > 99.00	3.715	3.703	0.012	0.997	1522		4.45(2.16-6.49)	2.7		M
D 19 13C5 PFNA										
468.00 > 423.00	3.747	3.715	0.032	1.111	2947686	43.2		86.5	20590	
20 Perfluorononanoic acid										RM
463.00 > 419.00	3.747	3.723	0.024	1.000	2901	0.0543	Target=8.15	1.4		RM
463.00 > 169.00	3.735	3.723	0.012	0.997	1072		2.71(4.08-12.23)	12.0		M
D 23 13C2 PFDA										
515.00 > 470.00	4.061	4.036	0.025	1.204	2465013	45.2		90.4	11401	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.061	4.036	0.025	1.204	389907	48.5		101	892	
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.074	4.047	0.027	1.003	5407	0.1133	Target=9.58	2.6		
513.00 > 169.00	4.049	4.047	0.002	0.997	406		13.32(4.79-14.37)	4.2		M
25 1H,1H,2H,2H-perfluorodecanesulfonyl										M
527.00 > 507.00	4.061	4.047	0.014	1.000	1034	0.0950		11.3		M
D 21 13C8 FOSA										
506.00 > 78.00	4.086	4.061	0.025	1.212	2146776	34.3		68.5	4827	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.086	4.072	0.014	1.000	3552	0.0906		19.3		M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.200	4.178	0.022	1.246	237936	34.2		68.3	2665	
28 N-methylperfluorooctanesulfonamide										M
570.00 > 419.00	4.212	4.187	0.025	1.003	704	0.1955		3.9		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.320	4.296	0.024	1.281	2122880	42.7		85.4	8862	
31 Perfluoroundecanoic acid										RM
563.00 > 519.00	4.320	4.307	0.013	1.000	5834	0.1601	Target=7.95	2.7		RM
563.00 > 169.00	4.332	4.307	0.025	1.003	1576		3.70(3.98-11.93)	10.5		

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.332	4.308	0.024	1.285	264230	34.0		68.1	1295	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.344	4.319	0.025	1.003	553	0.1635		3.5		M
D 36 13C2 PFDoA										
615.00 > 570.00	4.562	4.537	0.025	1.353	2193149	41.0		82.0	8461	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.760	0.018	1.047	4702	0.1168	Target=5.71	0.6		M
663.00 > 169.00	4.769	4.760	0.009	1.045	1042		4.51(2.85-8.56)	11.6		
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.965	0.014	1.476	2364494	32.1		64.2	7662	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.986	4.972	0.014	1.001	1117	0.1774	Target=1.02	12.6		
713.00 > 219.00	4.979	4.972	0.007	1.000	915		1.22(0.51-1.54)	16.1		M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d

Injection Date: 02-Aug-2019 06:06:01

Instrument ID: LC812

Lims ID: 480-156213-F-15-A

Lab Sample ID: 200-156213-15

Client ID: 356023-MW15B

Operator ID: lc812tech

ALS Bottle#: 11

Worklist Smp#: 18

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

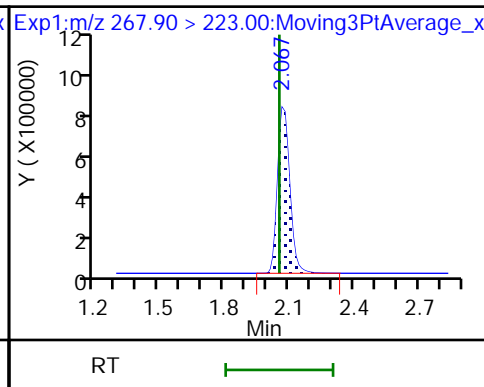
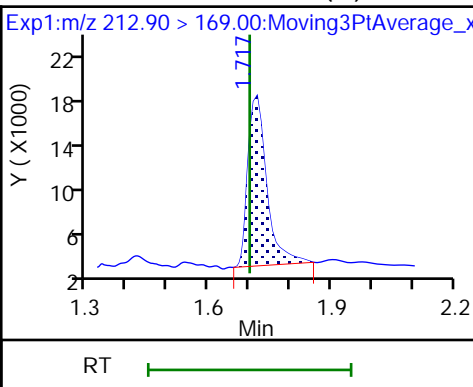
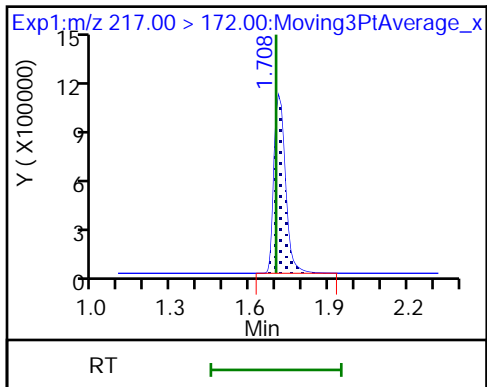
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

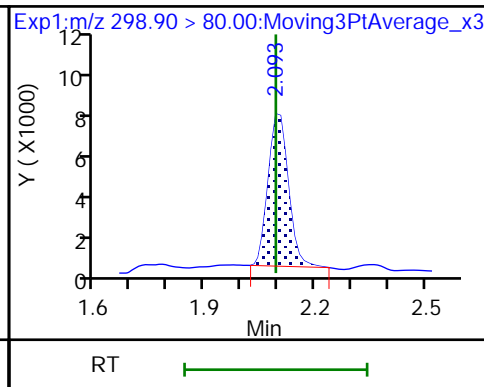
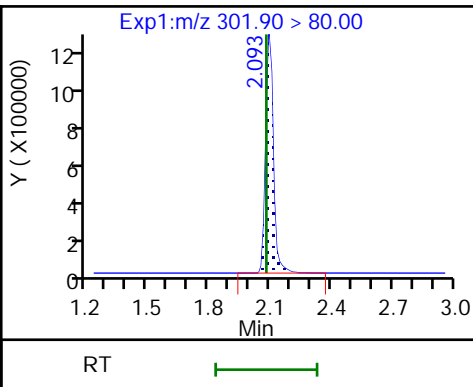
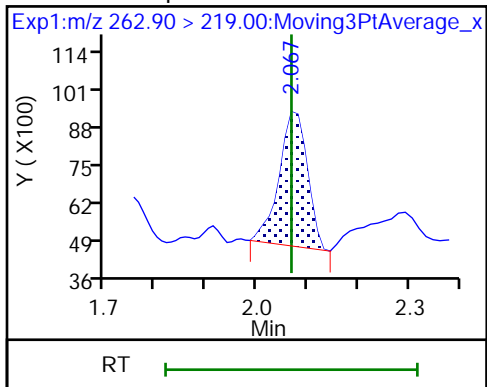
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

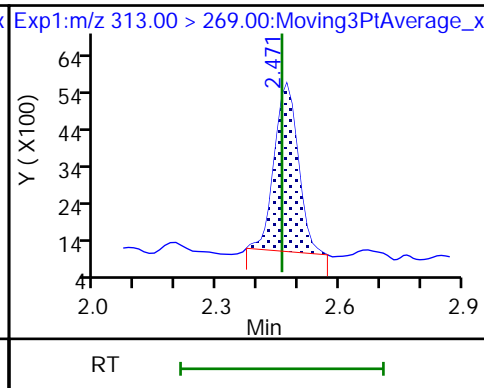
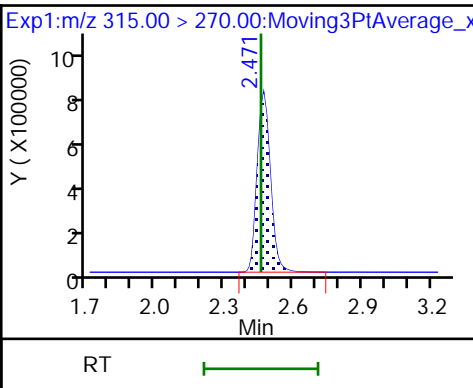
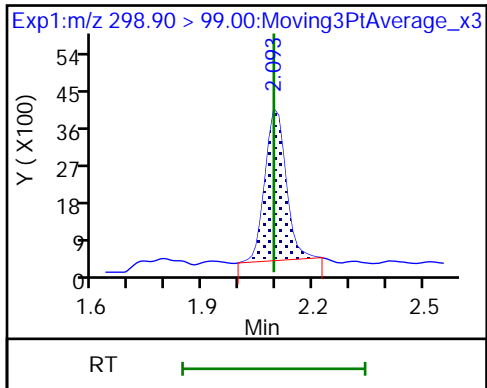
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

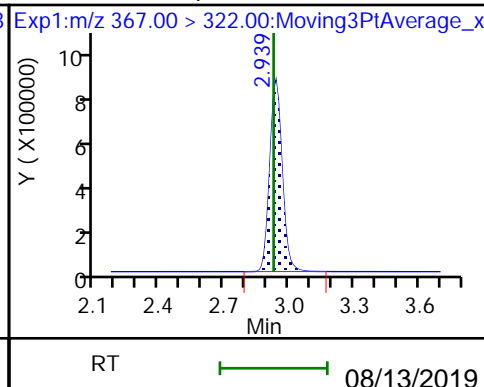
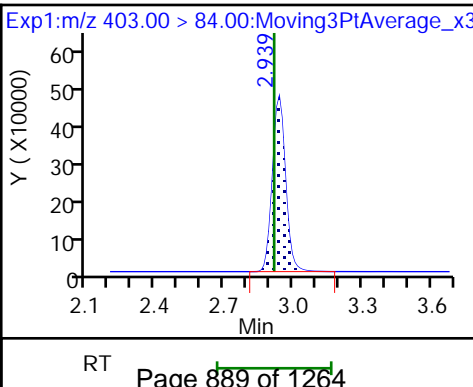
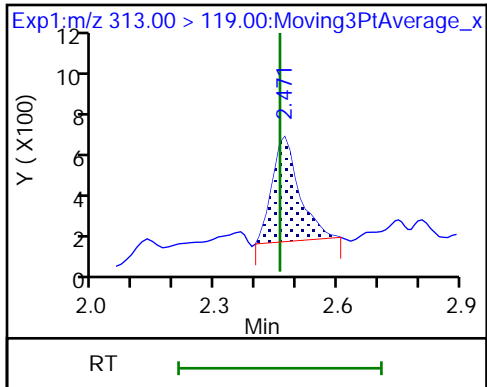
6 Perfluorohexanoic acid

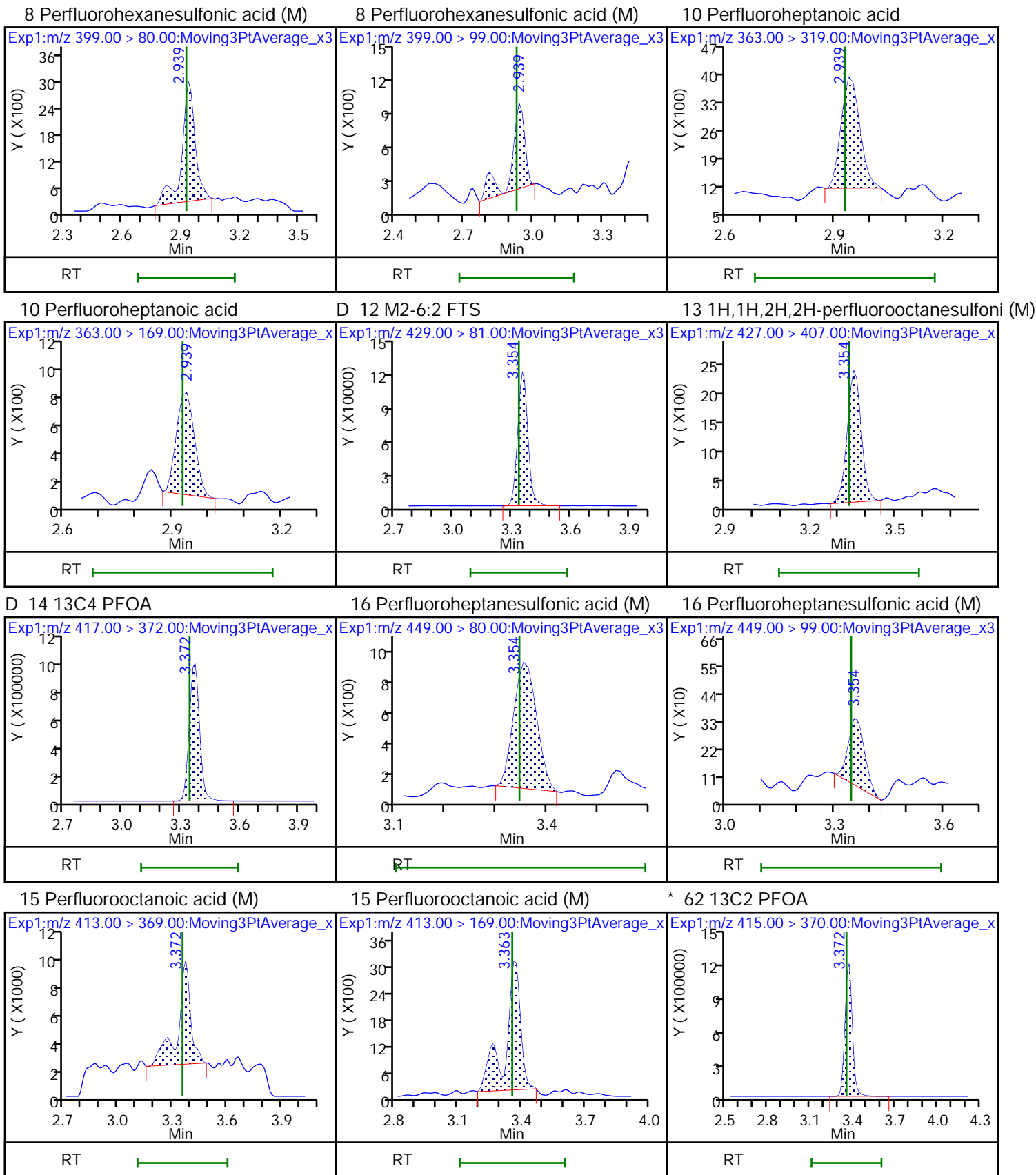


6 Perfluorohexanoic acid

D 11 18O2 PFHxS

D 9 13C4 PFHpA

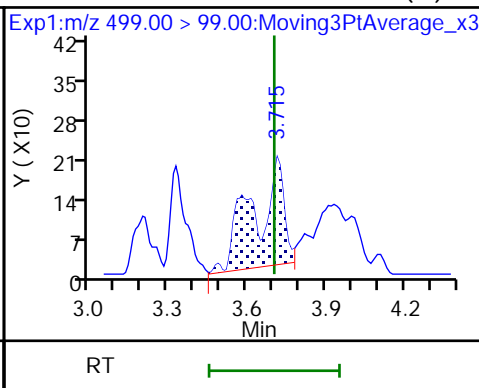
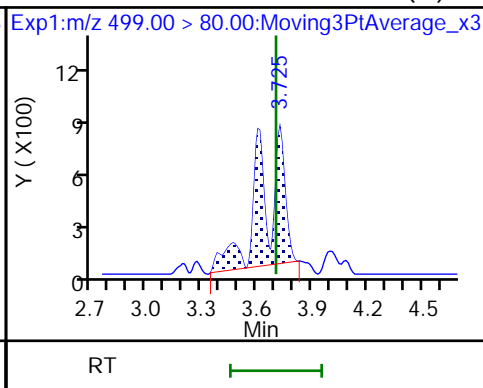
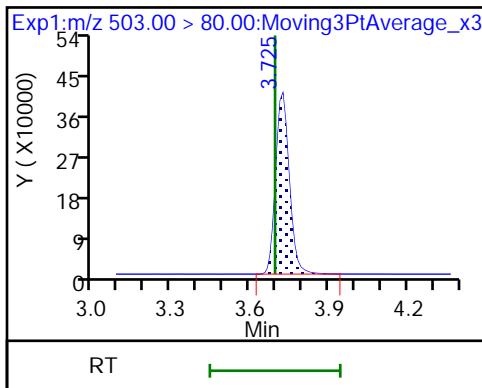




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

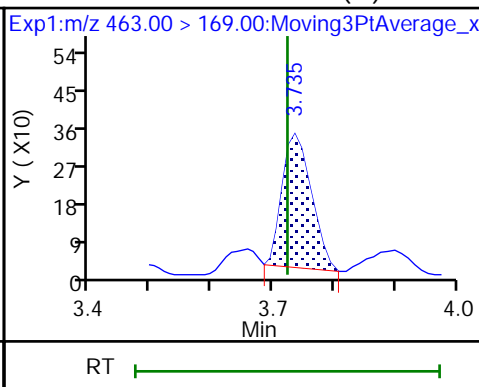
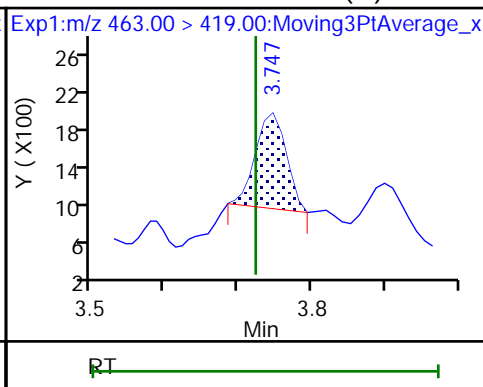
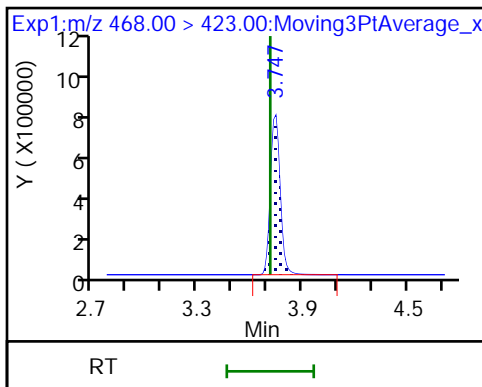
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (M)

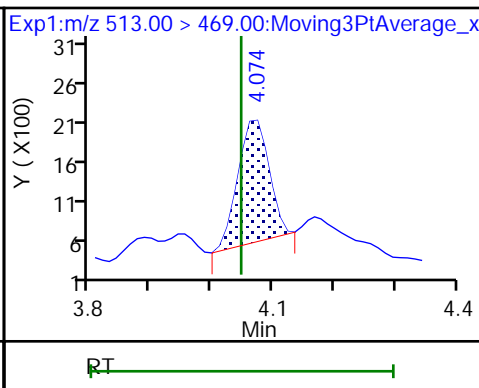
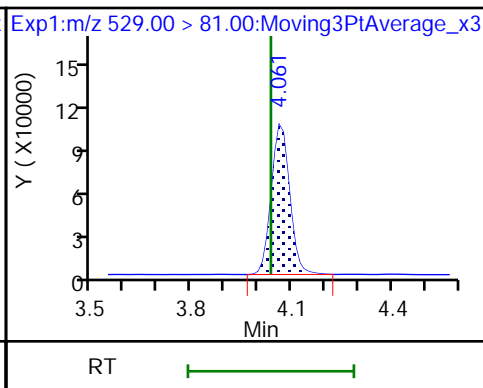
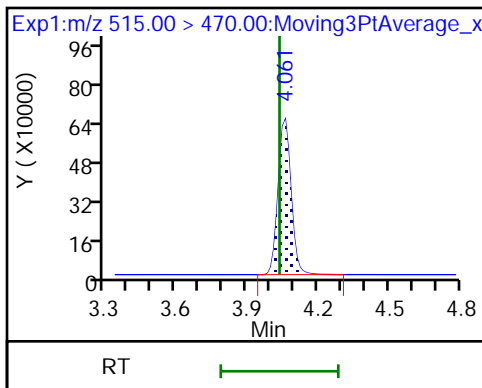
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

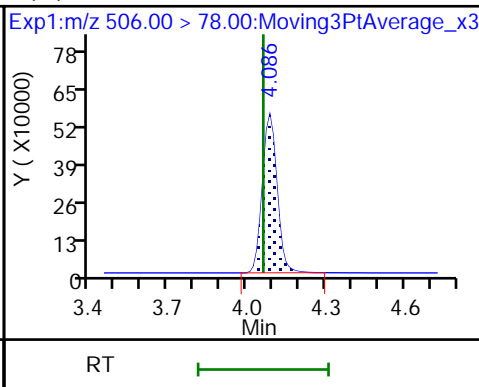
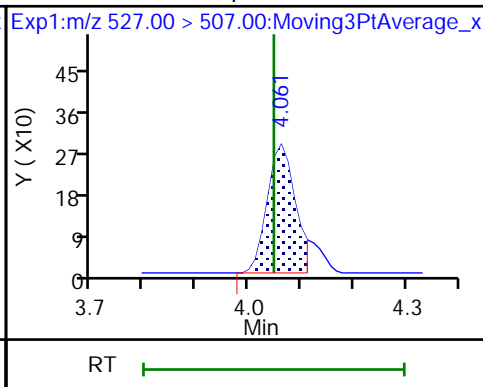
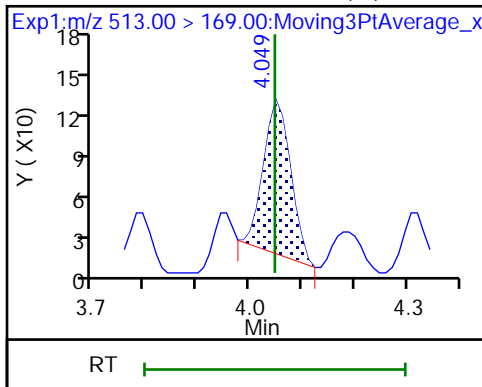
24 Perfluorodecanoic acid



24 Perfluorodecanoic acid (M)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

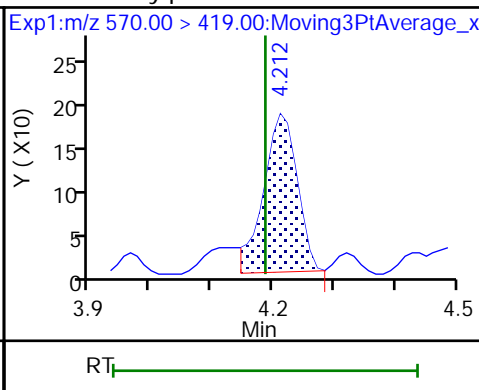
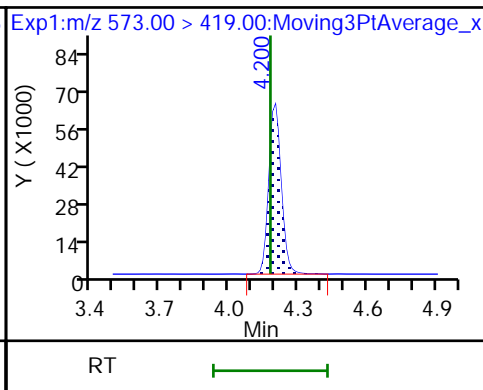
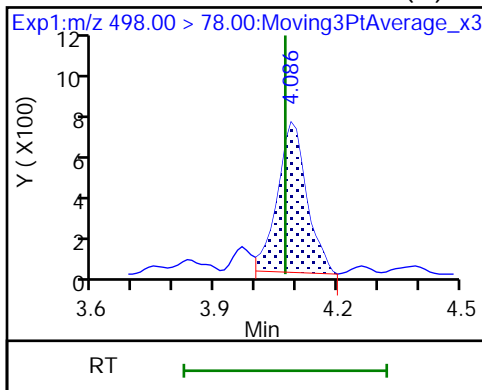
D 27 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

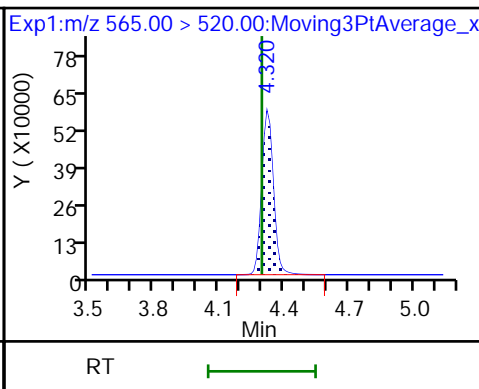
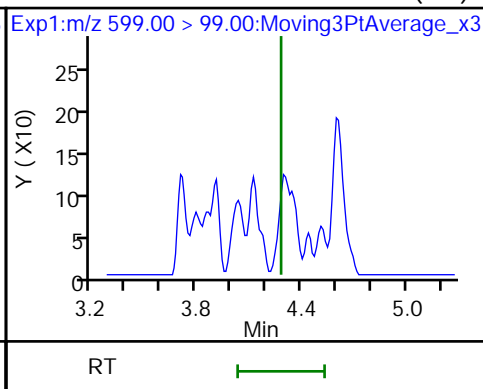
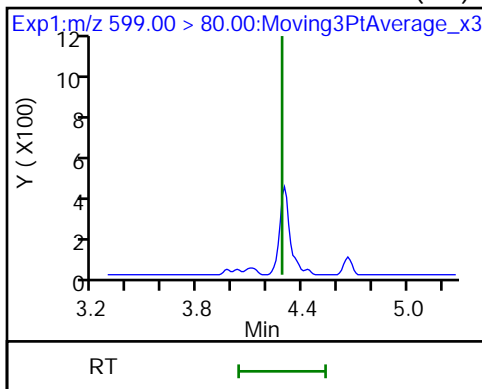
28 N-methylperfluorooctanesulfonamido (M)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

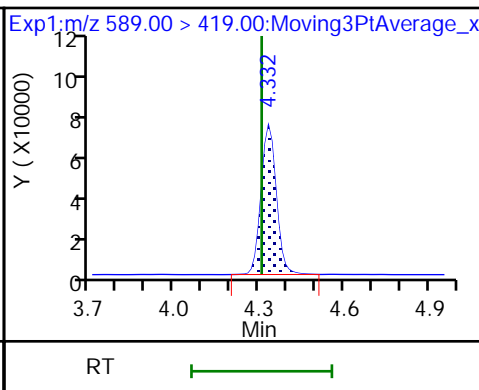
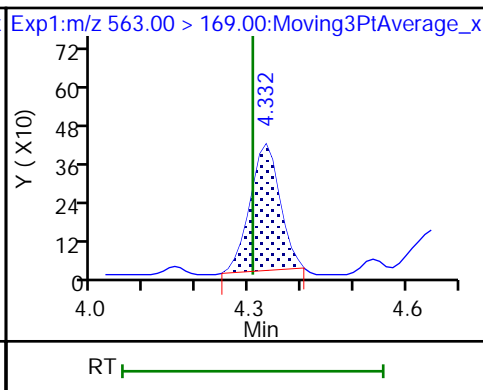
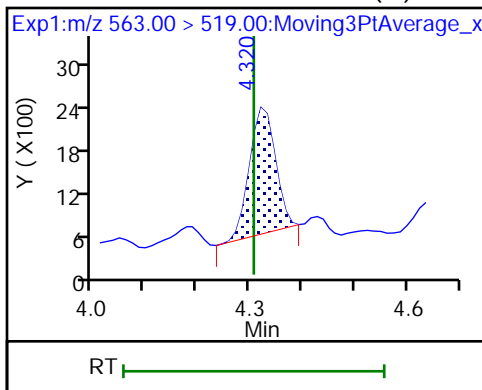
D 30 13C2 PFUa



31 Perfluoroundecanoic acid (M)

31 Perfluoroundecanoic acid

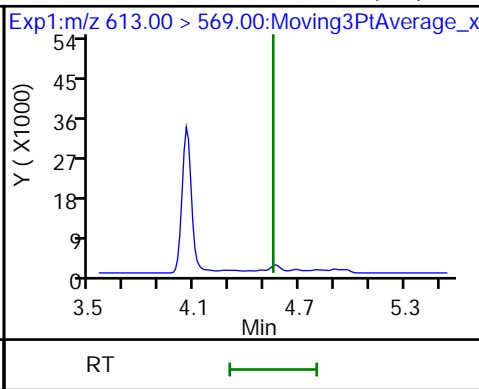
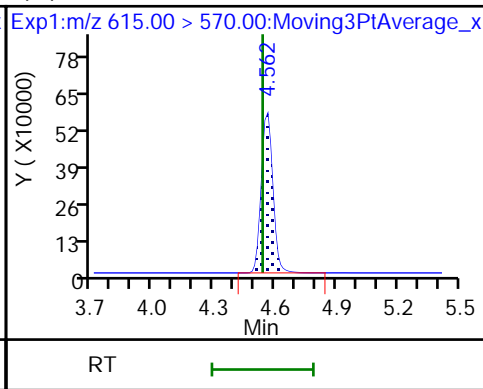
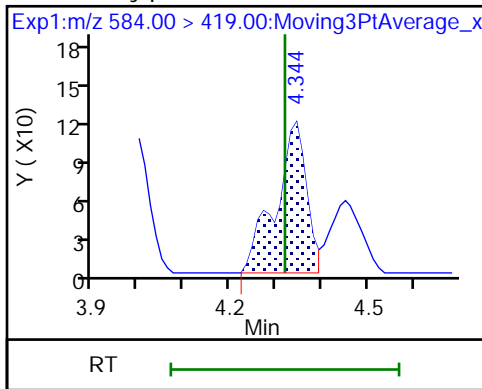
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 36 13C2 PFDoA

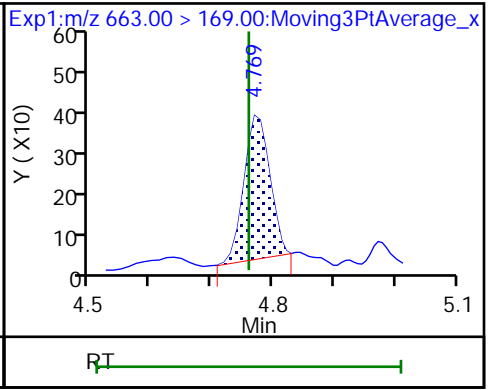
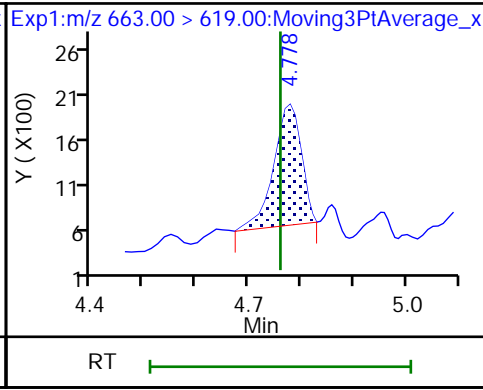
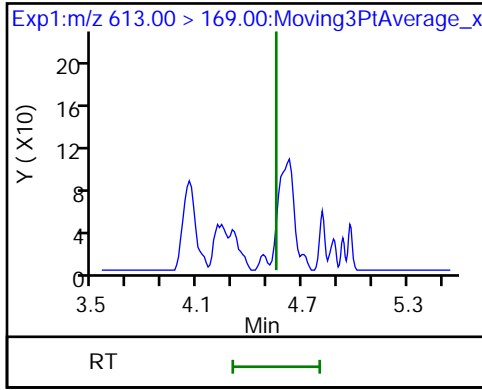
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (M)

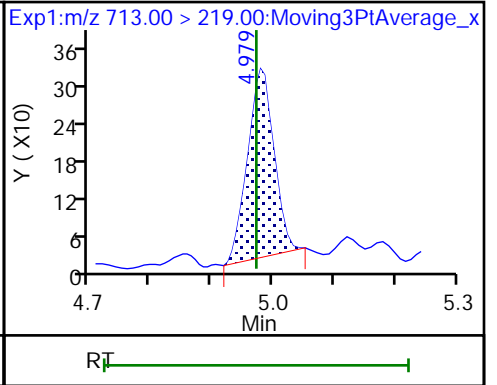
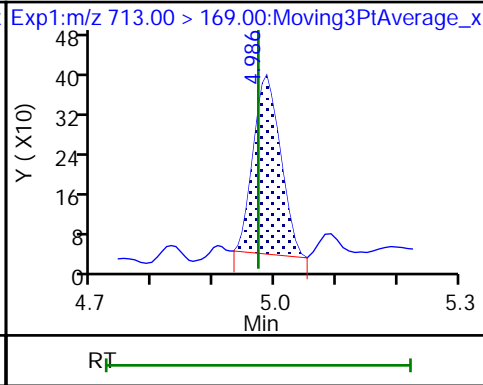
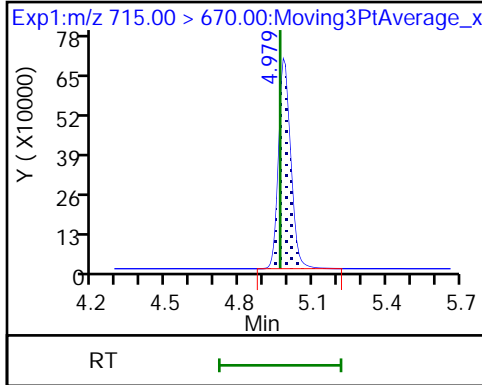
41 Perfluorotridecanoic acid



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)



Eurofins TestAmerica, Burlington

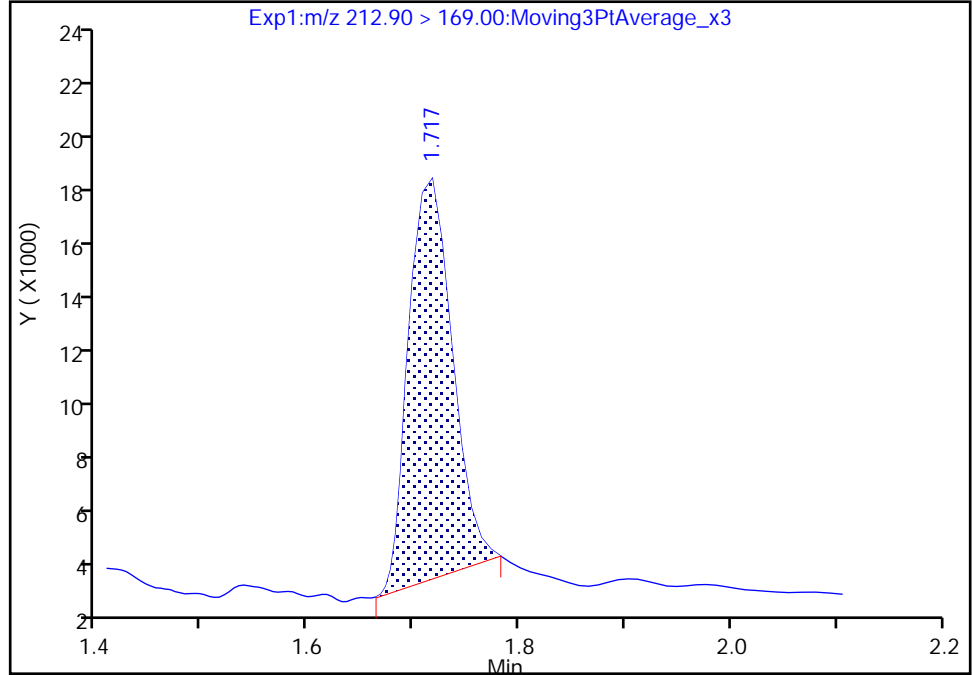
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

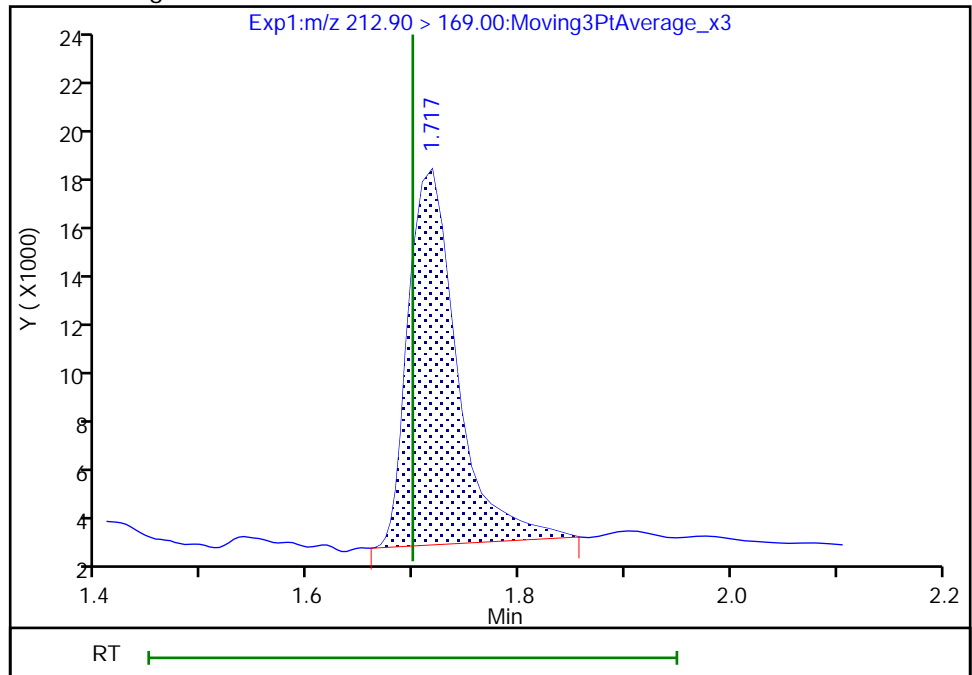
RT: 1.72
Area: 40717
Amount: 0.700941
Amount Units: ng/ml

Processing Integration Results



RT: 1.72
Area: 47247
Amount: 0.813354
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:22:38

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

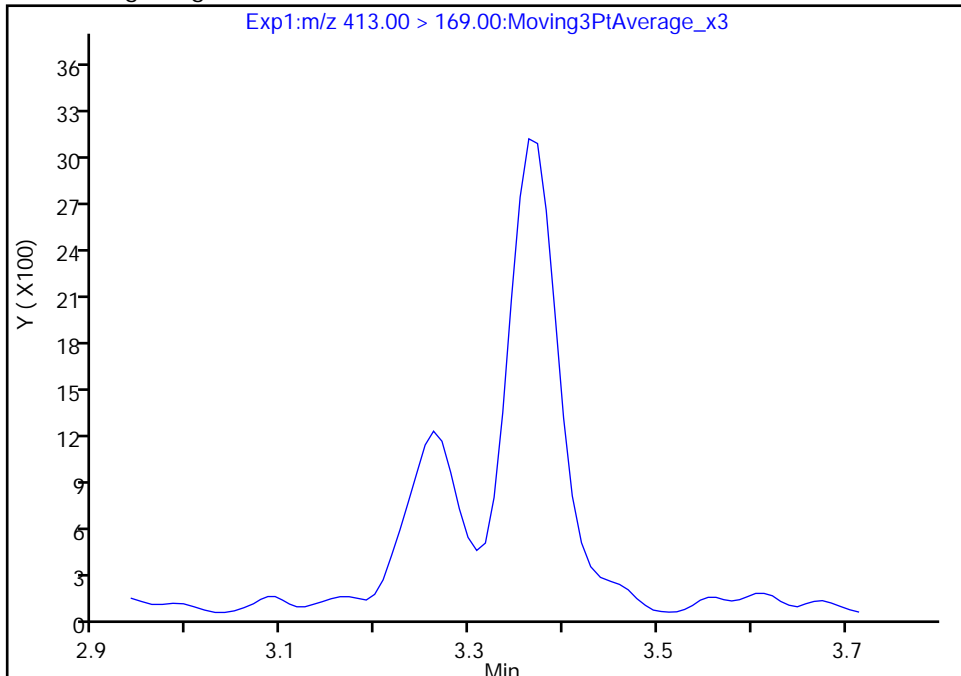
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

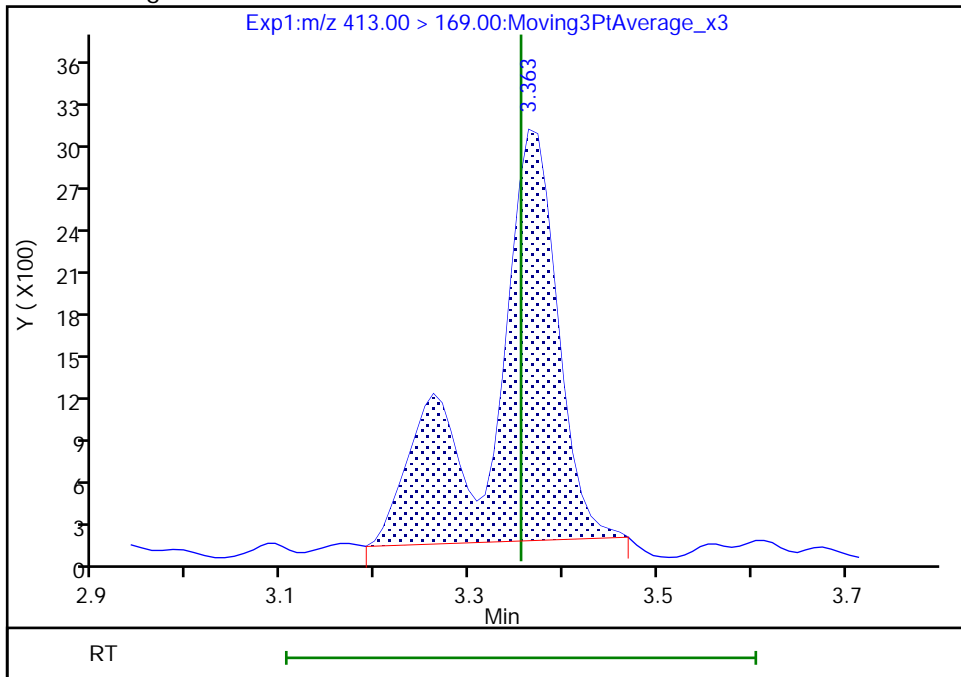
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 14465
Amount: 0.504113
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:23:53
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

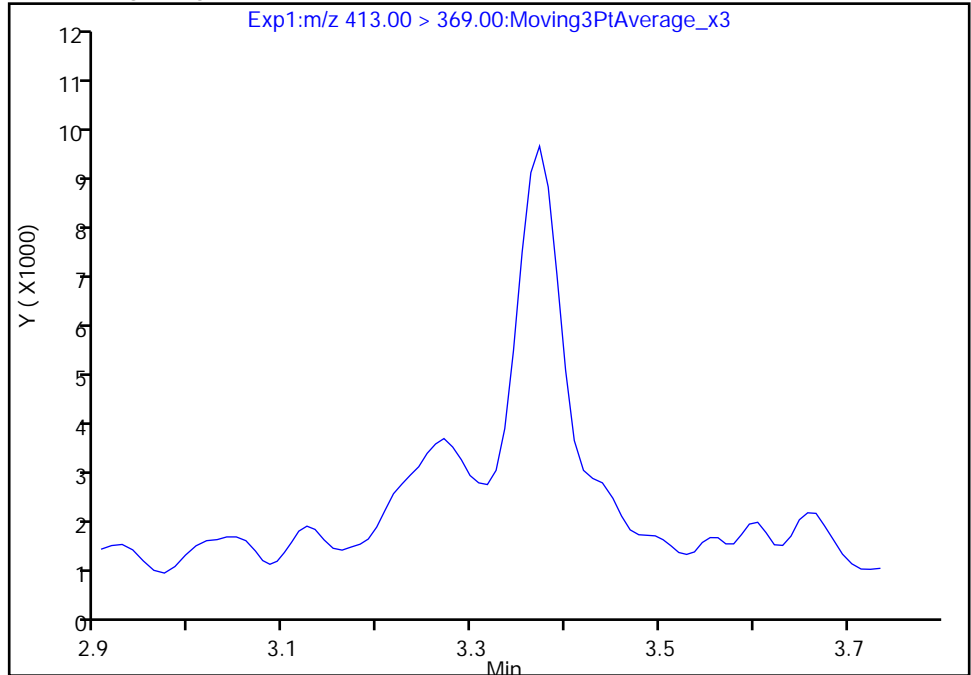
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

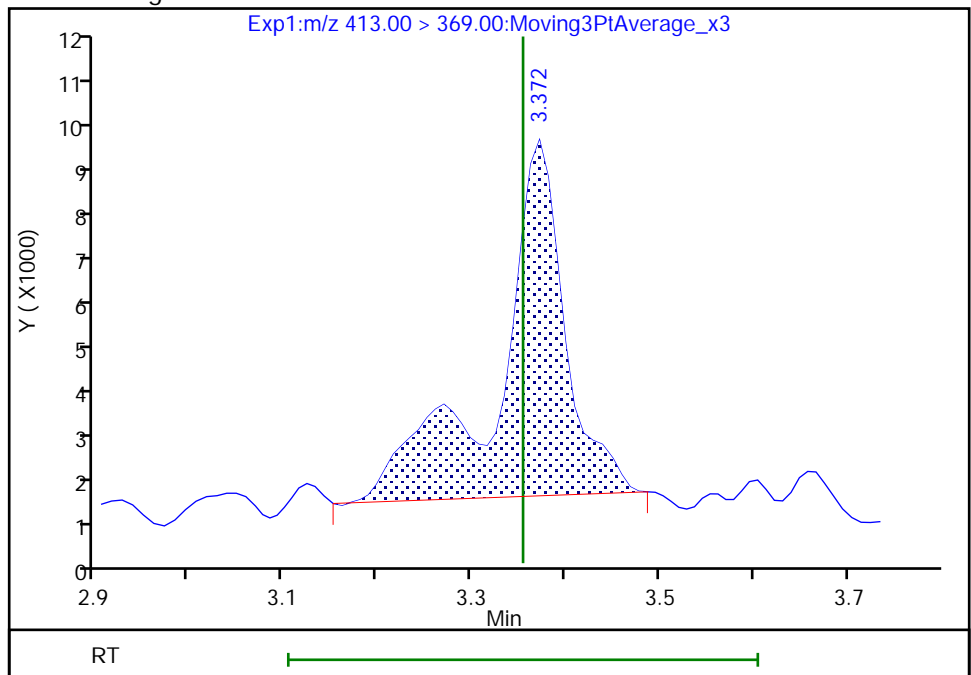
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 37136
Amount: 0.504113
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

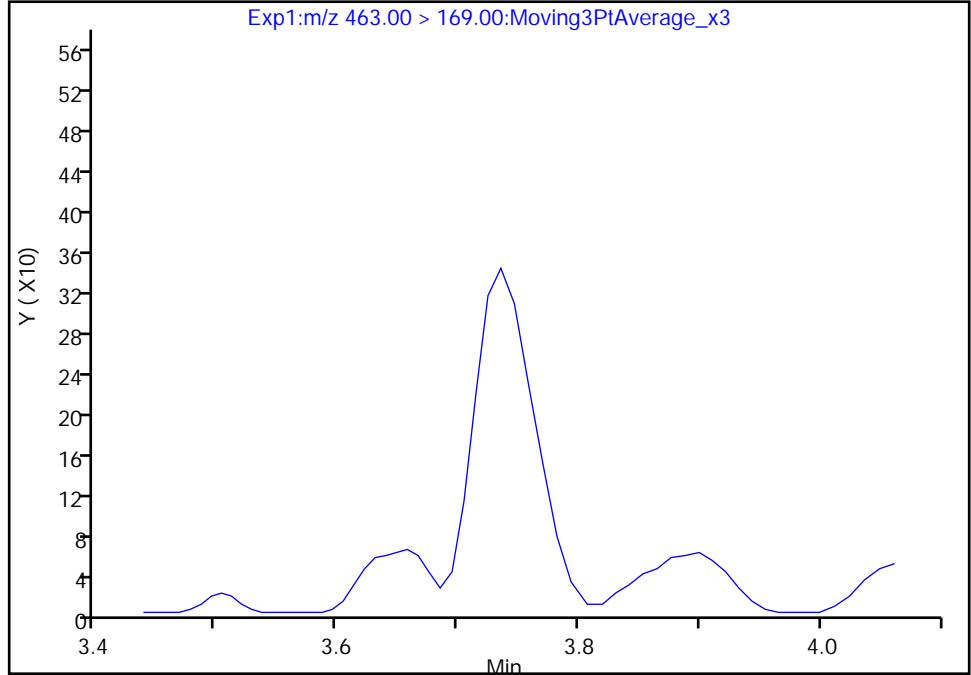
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

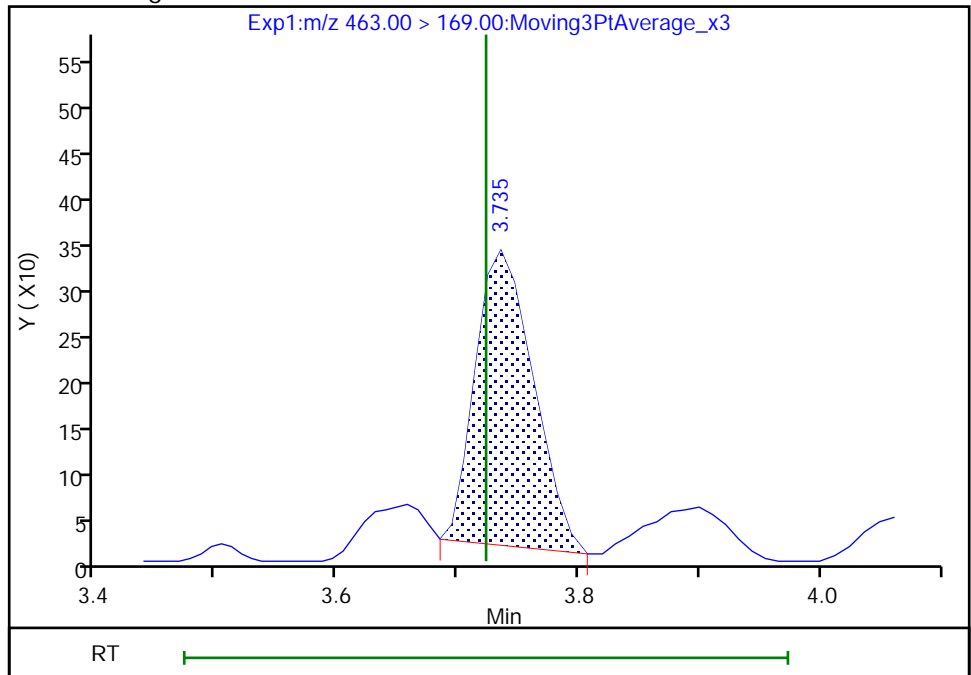
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.74
Area: 1072
Amount: 0.054320
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:25:03
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

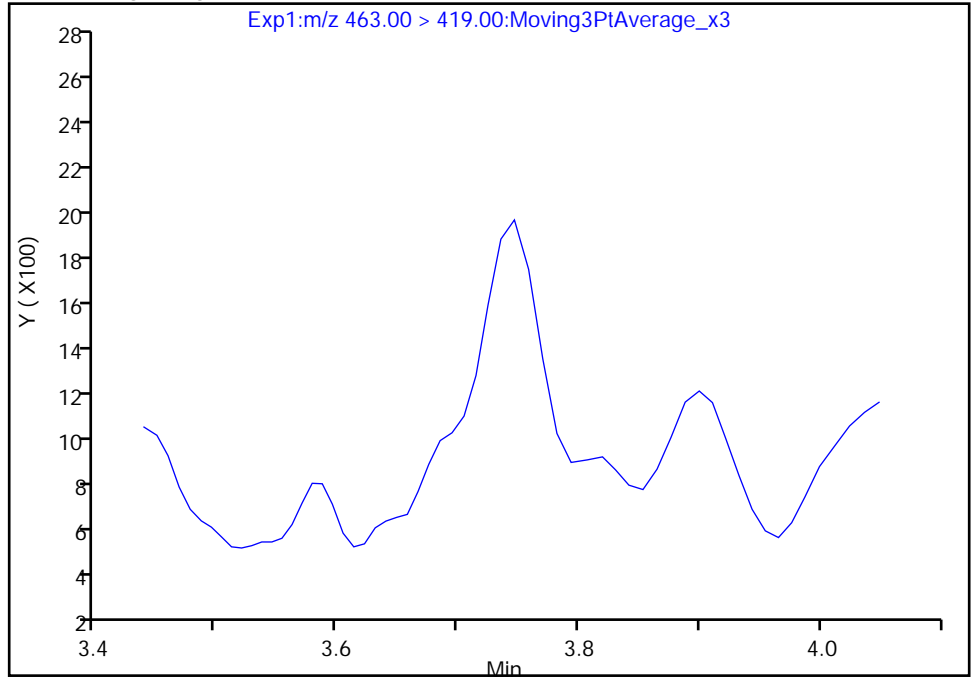
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

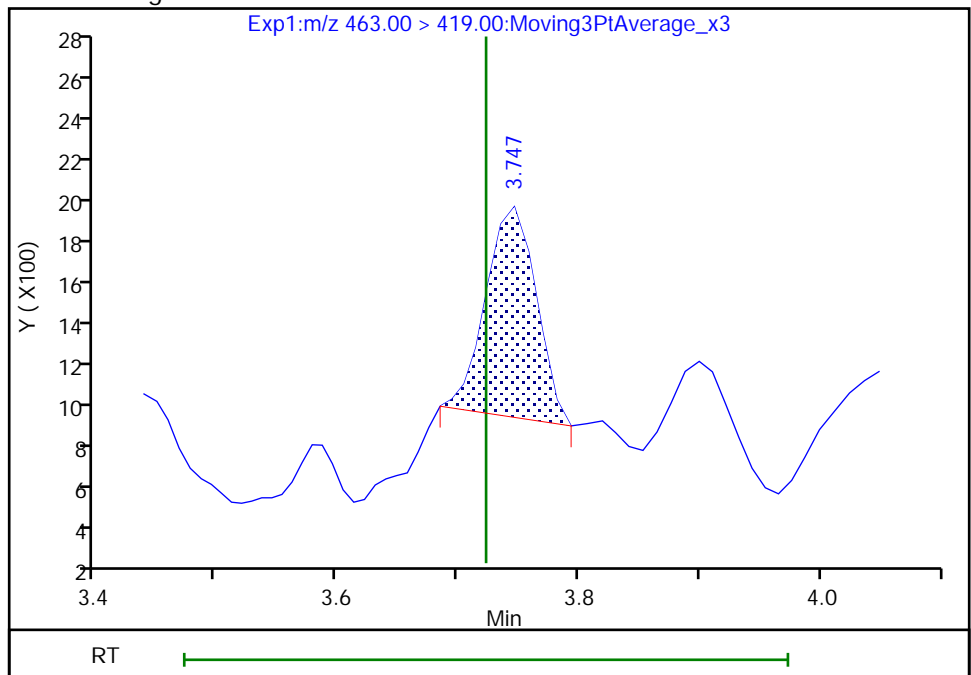
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.75
Area: 2901
Amount: 0.054320
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

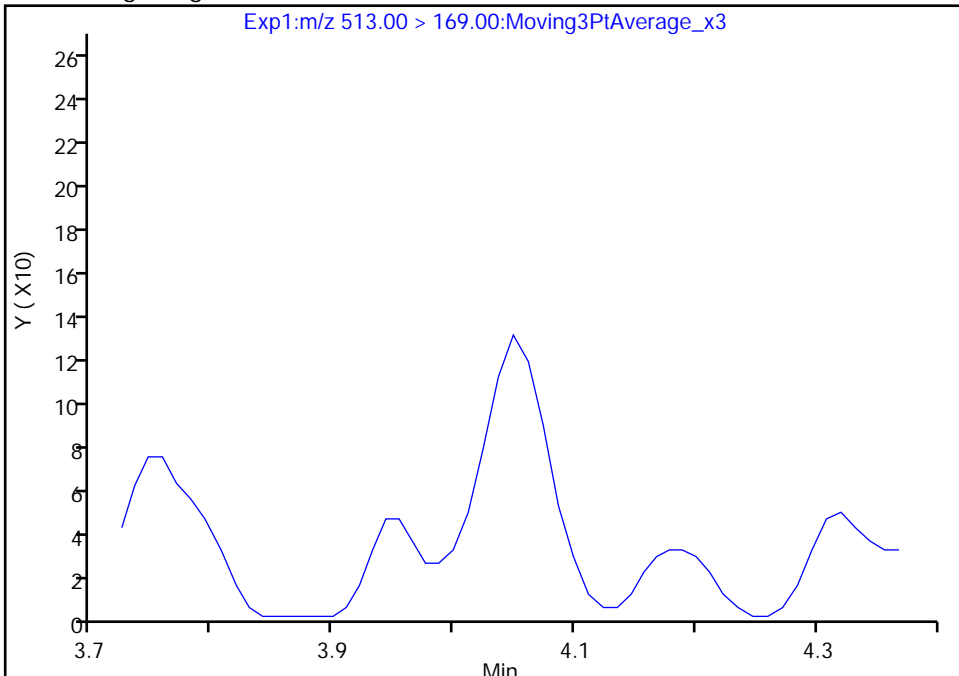
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

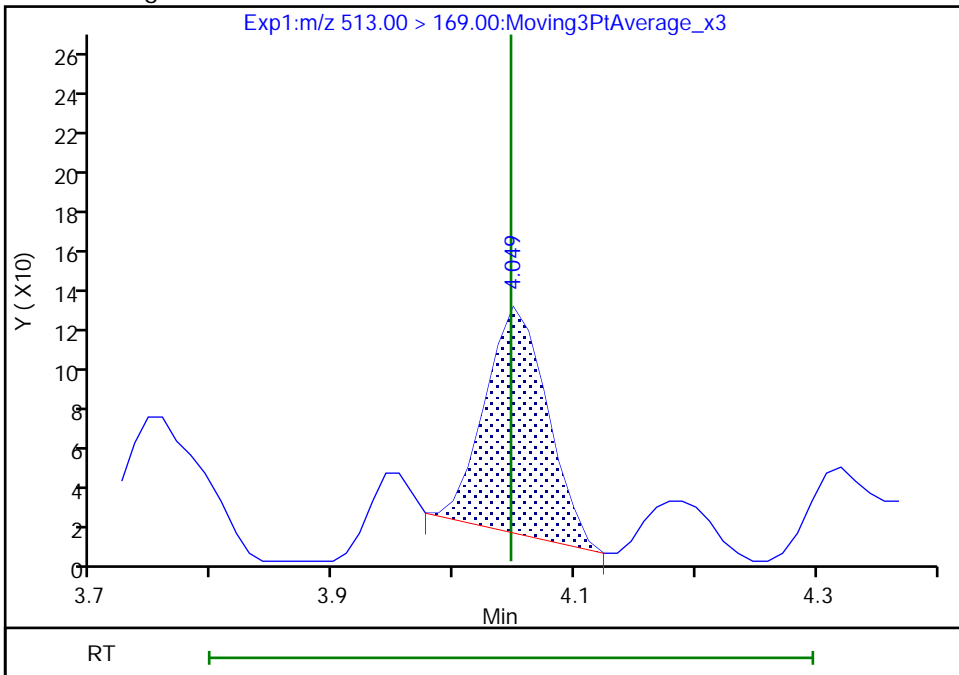
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 406
Amount: 0.113278
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:25:14
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

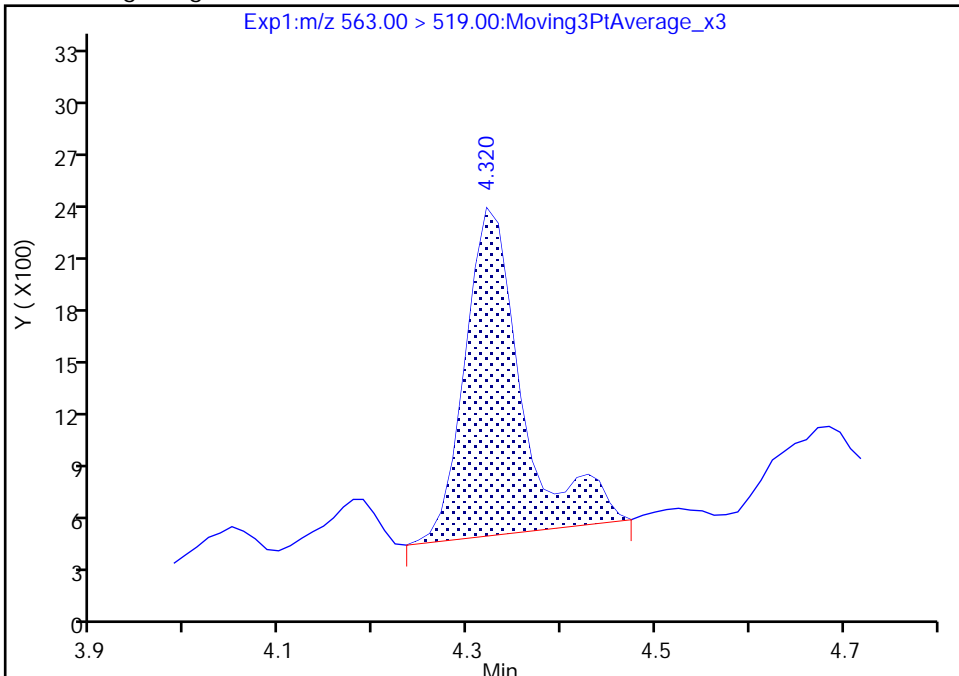
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

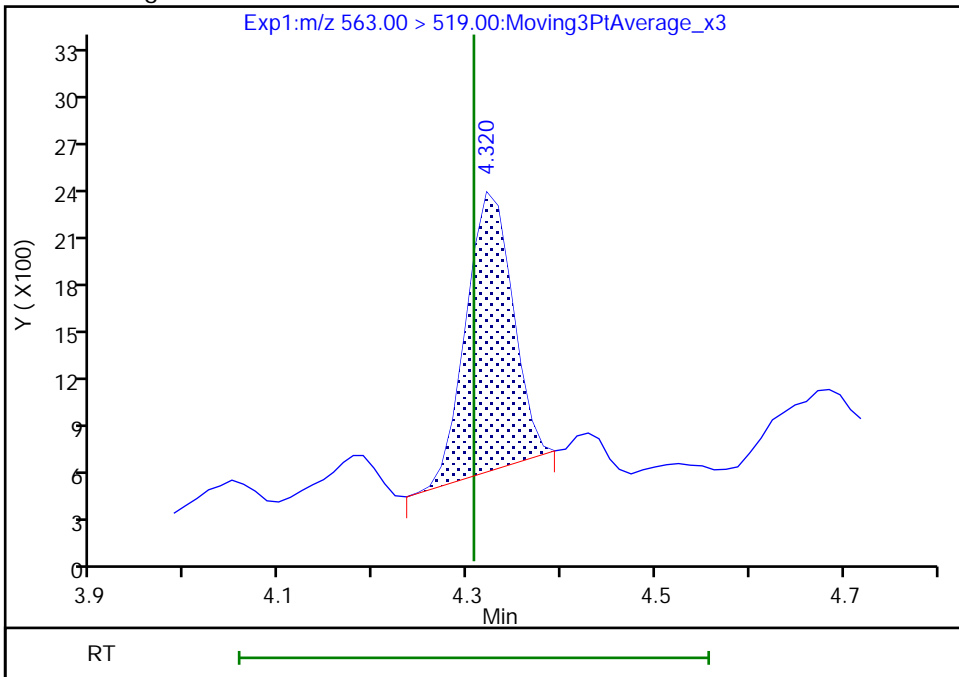
RT: 4.32
Area: 7565
Amount: 0.207654
Amount Units: ng/ml

Processing Integration Results



RT: 4.32
Area: 5834
Amount: 0.160139
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:26:43
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

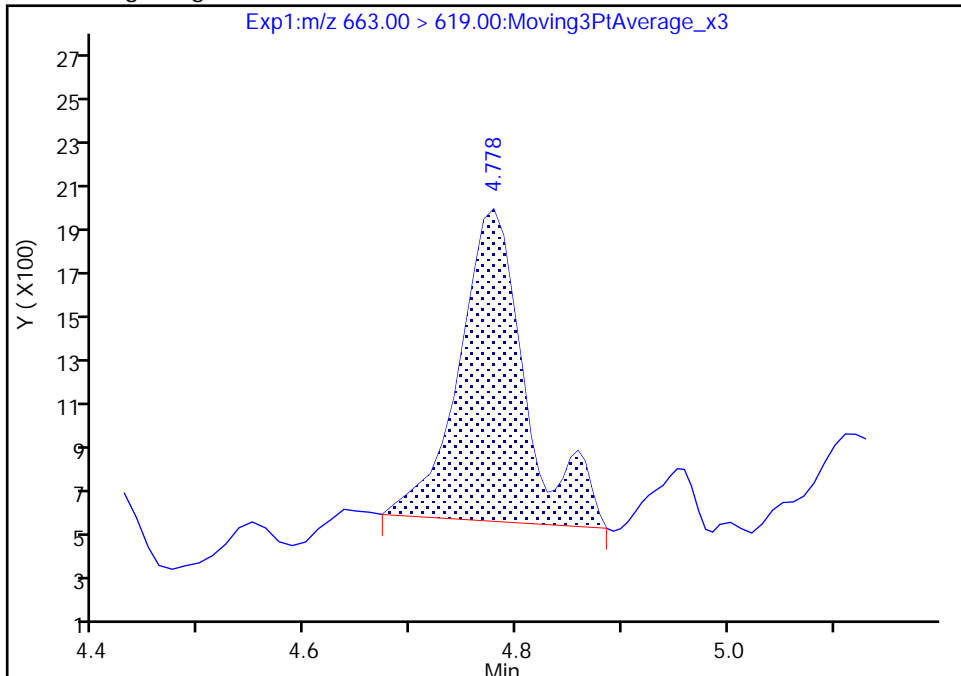
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

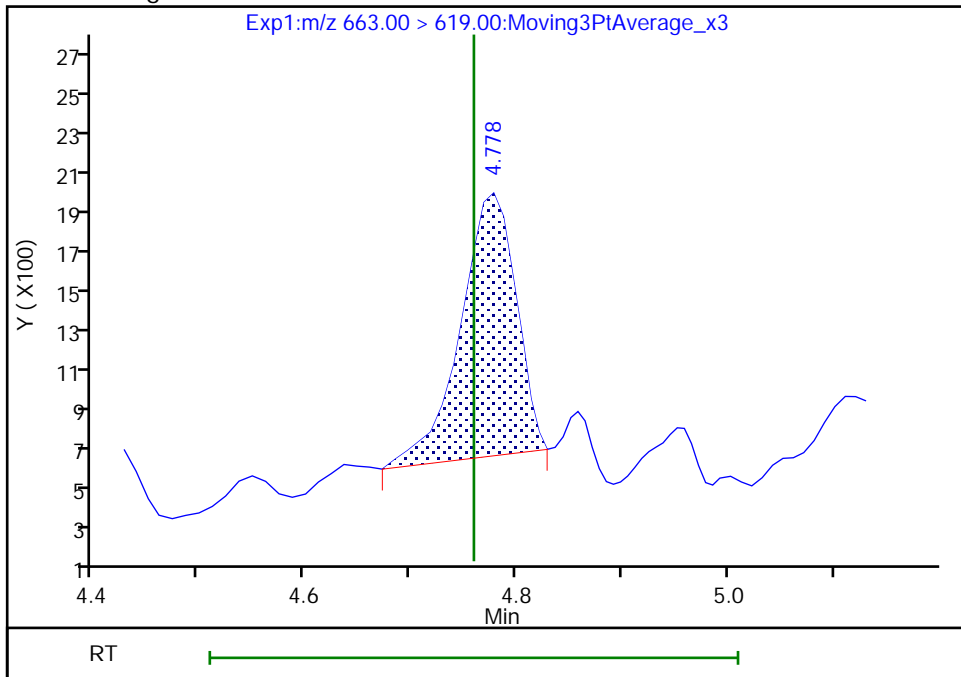
RT: 4.78
Area: 6034
Amount: 0.149917
Amount Units: ng/ml

Processing Integration Results



RT: 4.78
Area: 4702
Amount: 0.116823
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:27:22
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

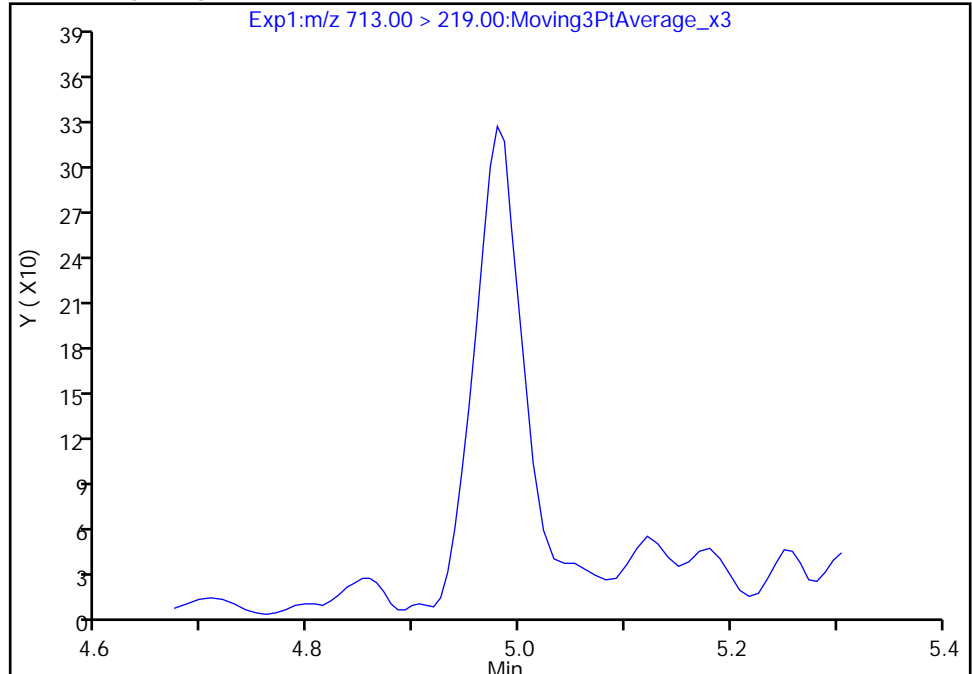
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

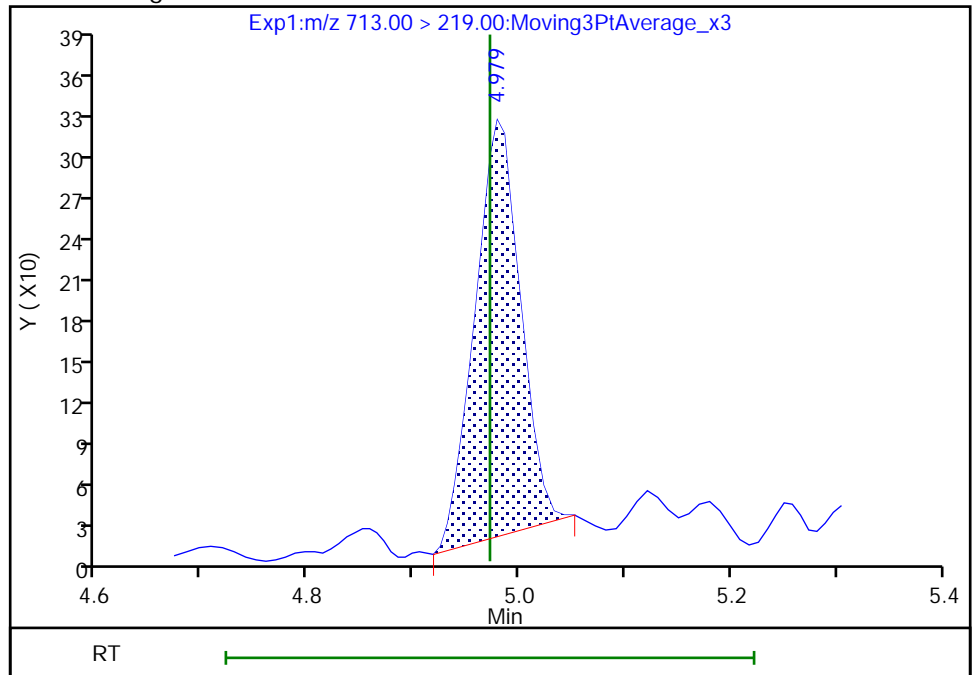
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 915
Amount: 0.177433
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:27:38
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

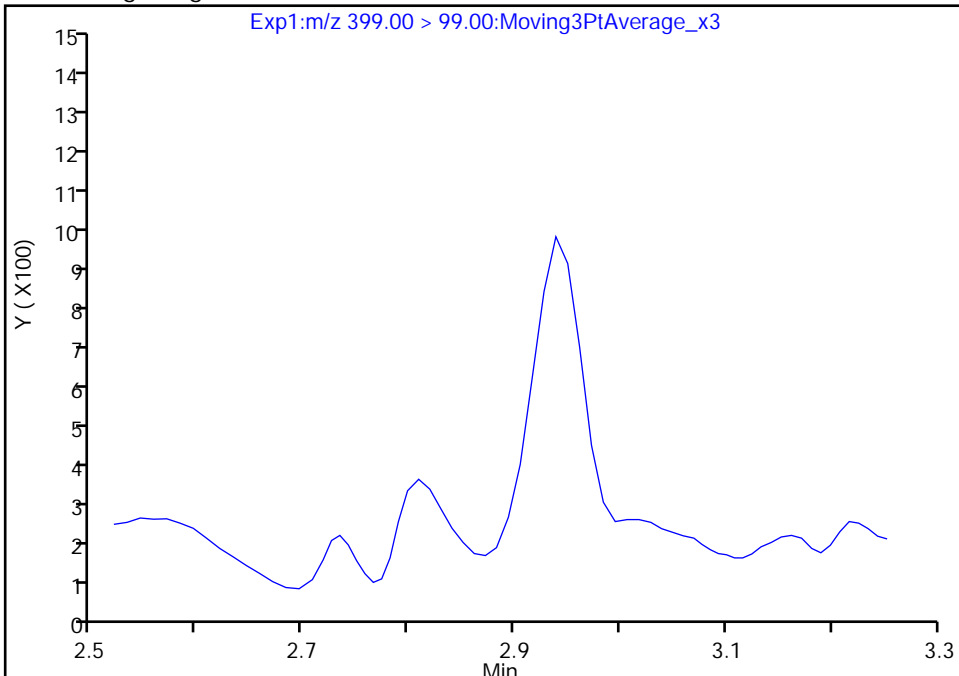
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

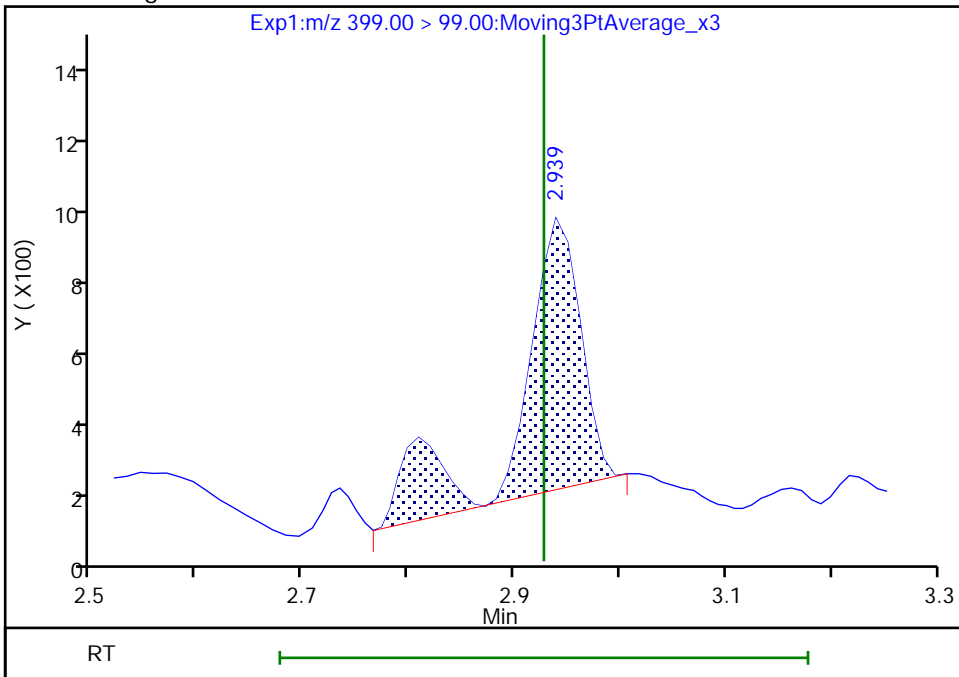
Not Detected
Expected RT: 2.93

Processing Integration Results



RT: 2.94
Area: 3047
Amount: 0.249669
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:23:01
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

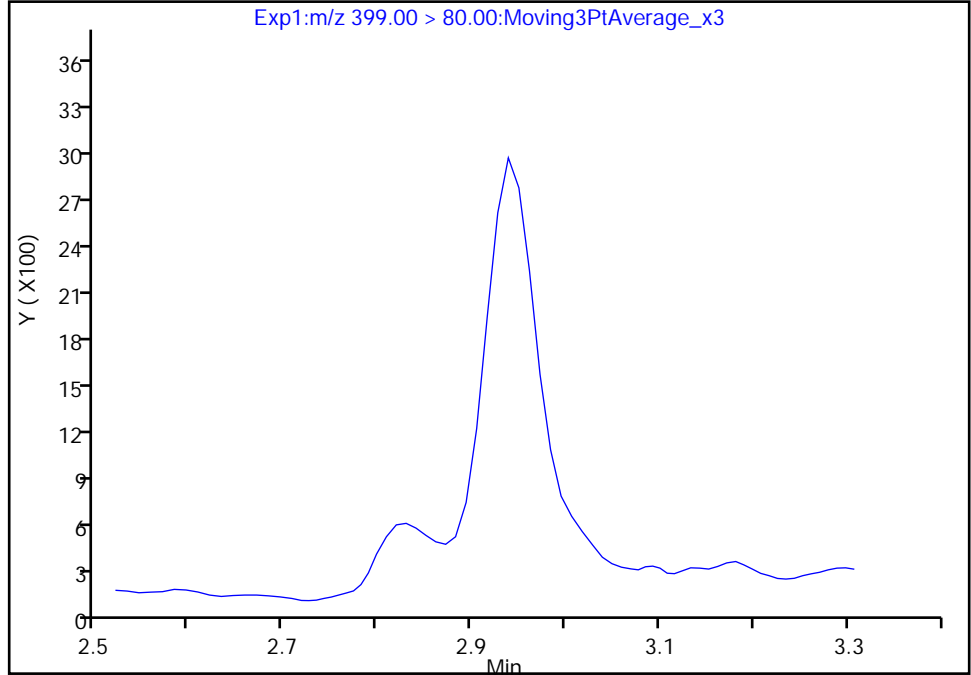
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

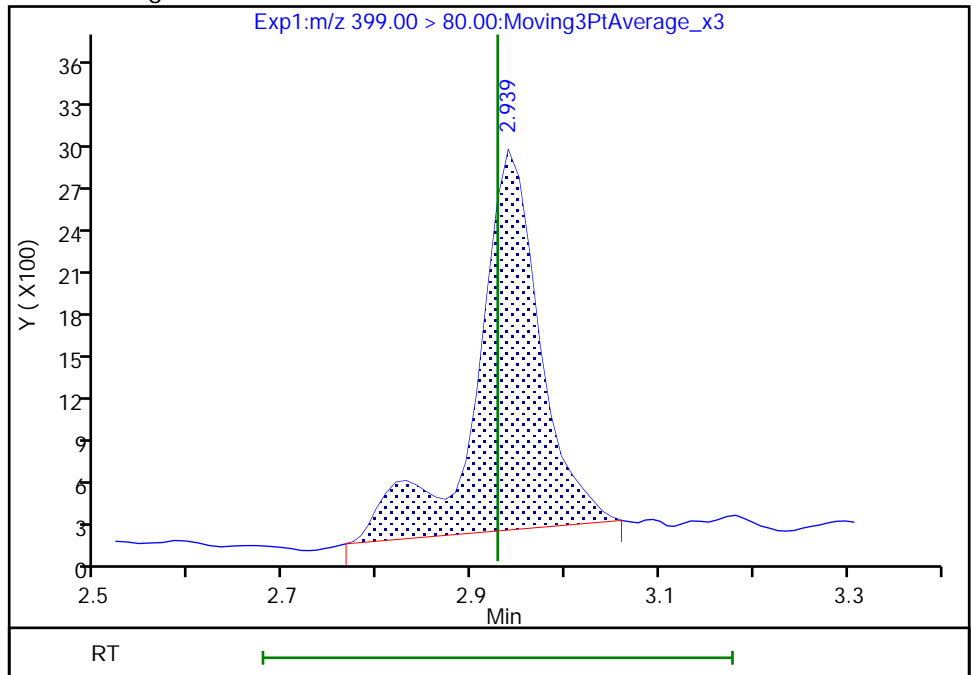
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 12933
Amount: 0.249669
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:23:04

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

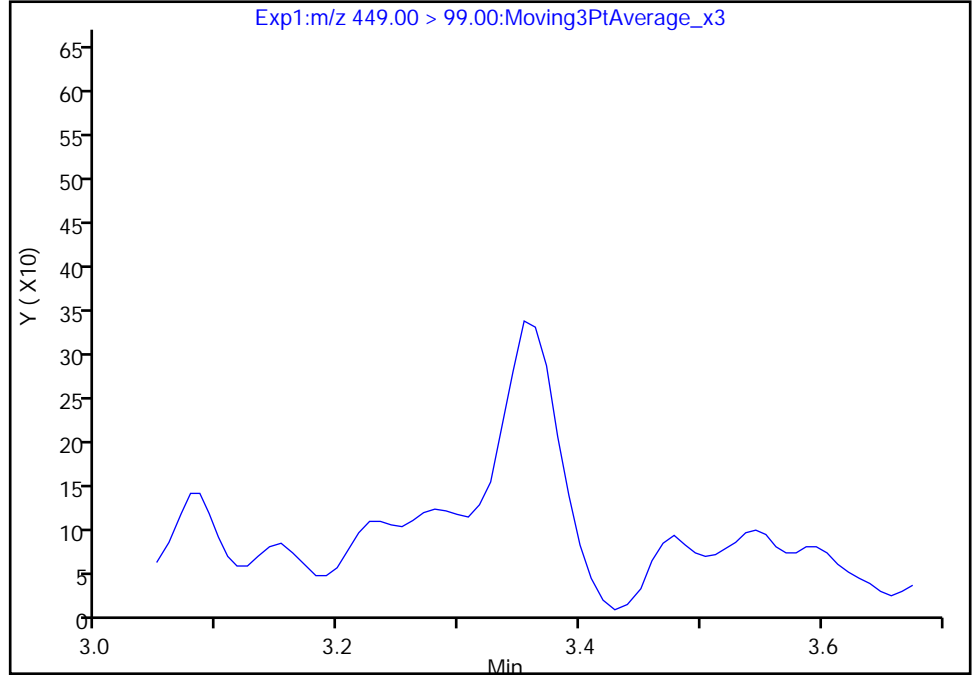
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

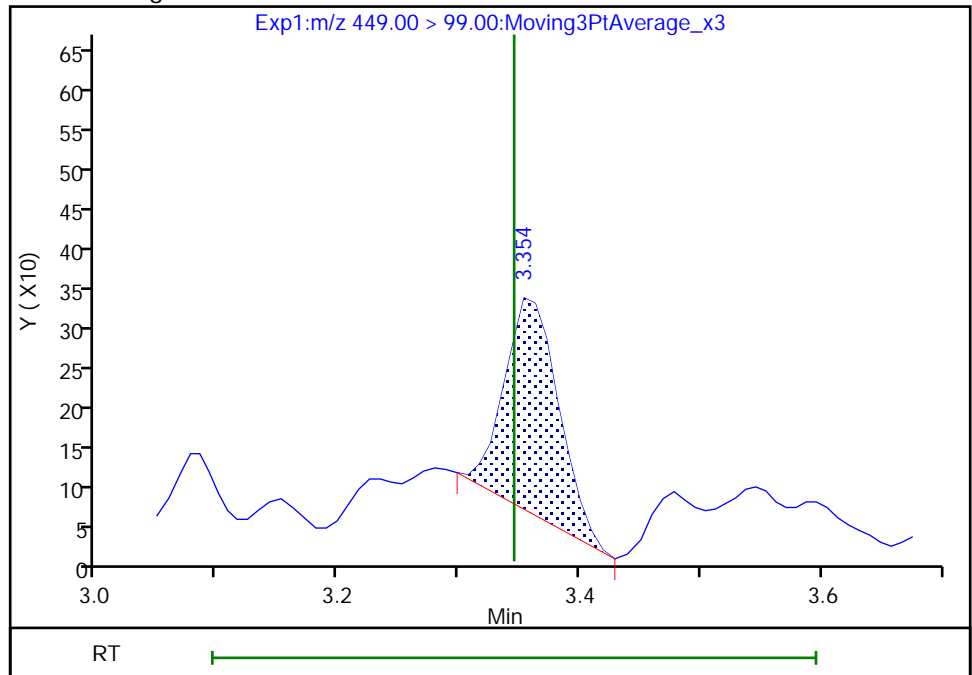
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.35
Area: 844
Amount: 0.068345
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:23:41
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

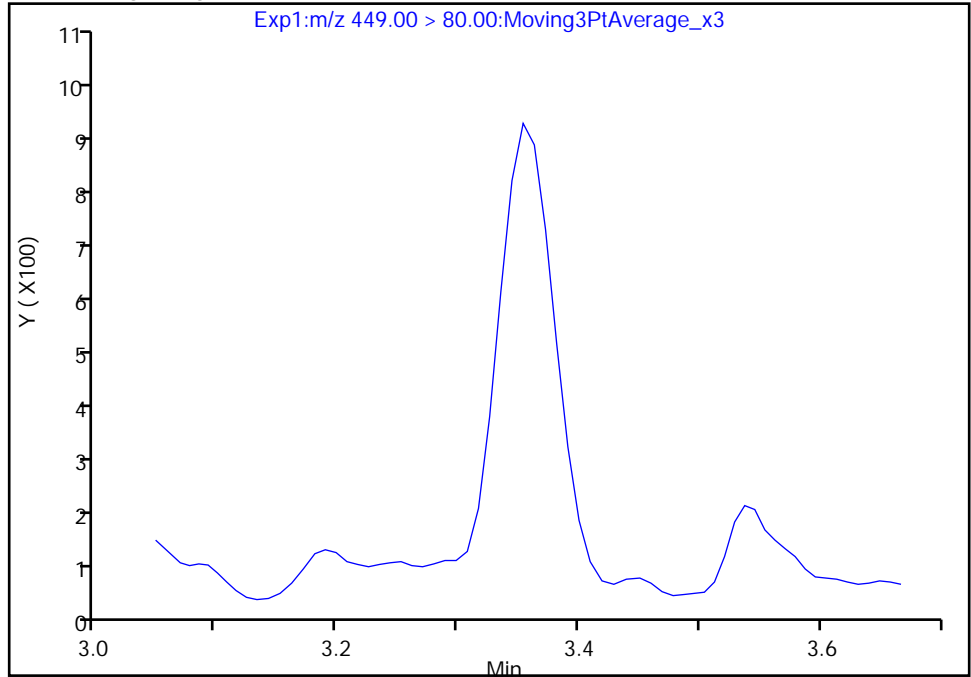
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

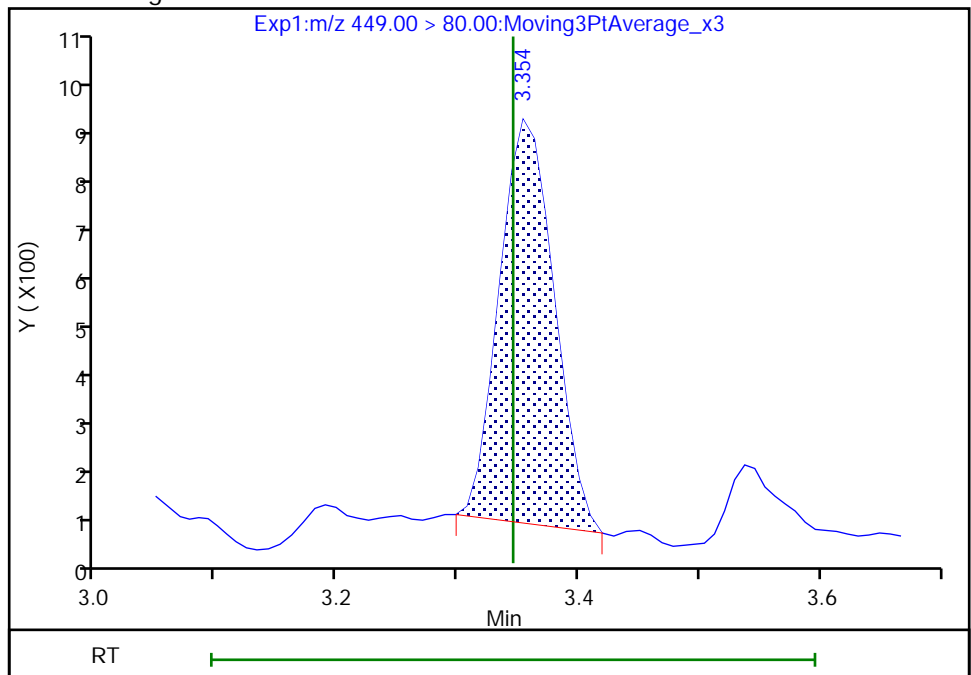
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.35
Area: 2479
Amount: 0.068345
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

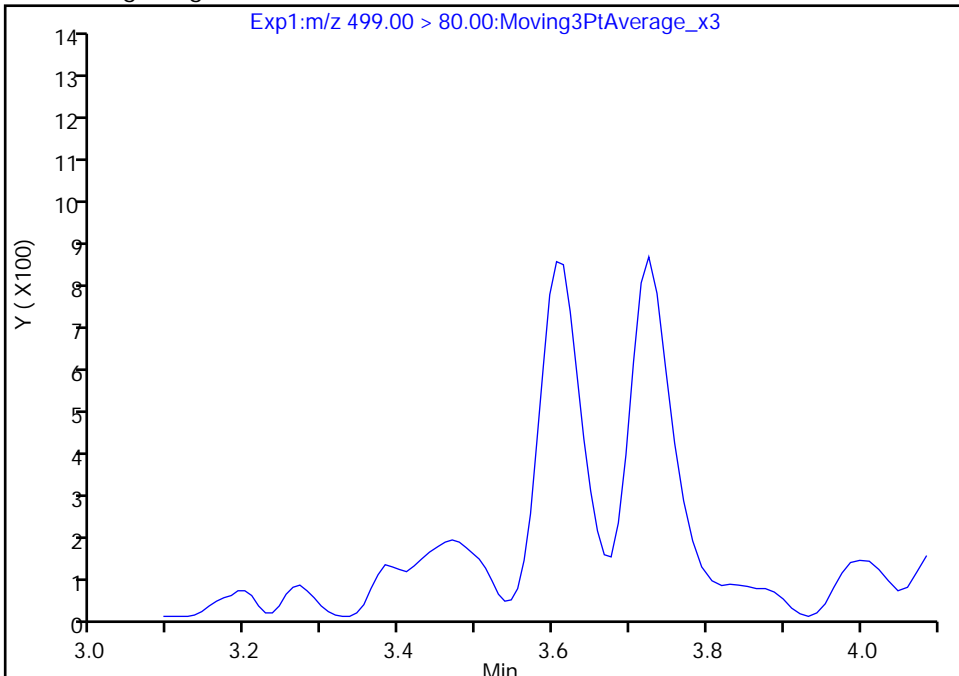
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

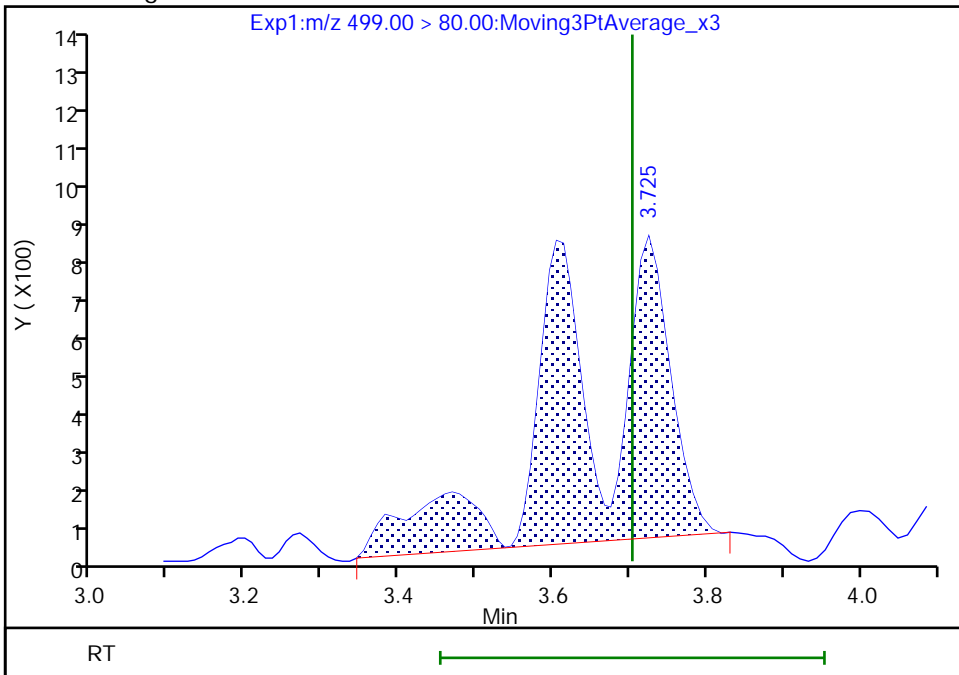
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.72
Area: 6780
Amount: 0.237882
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:24:17
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

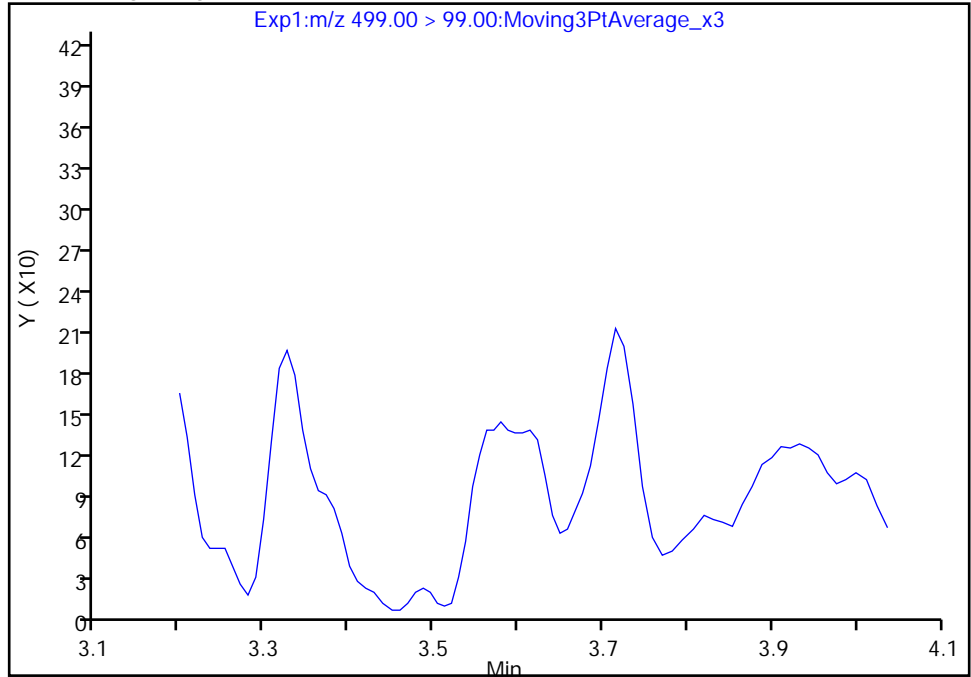
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

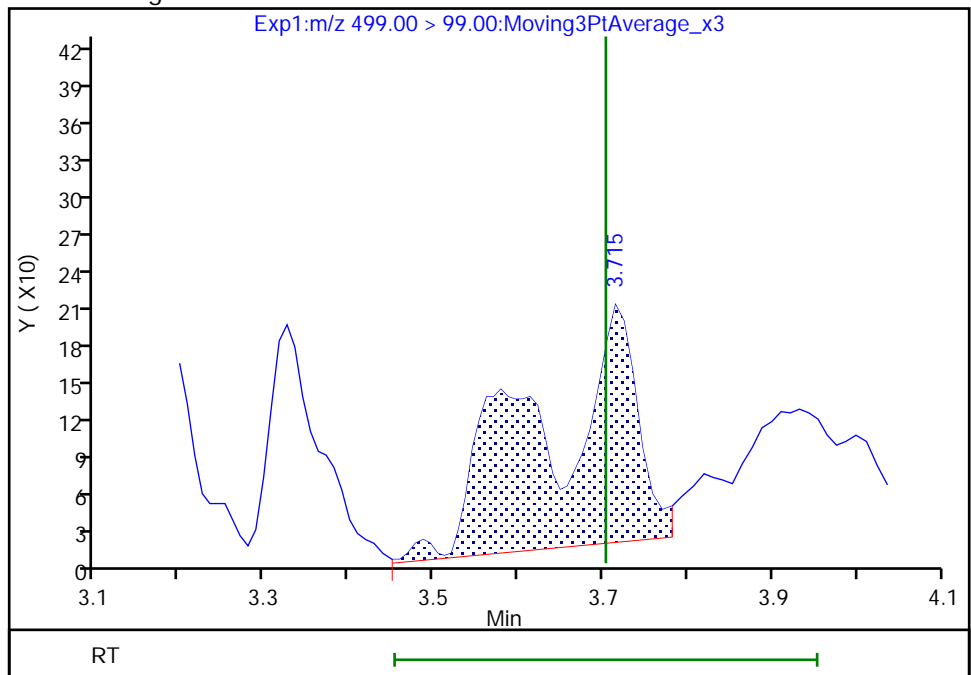
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.71
Area: 1522
Amount: 0.237882
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

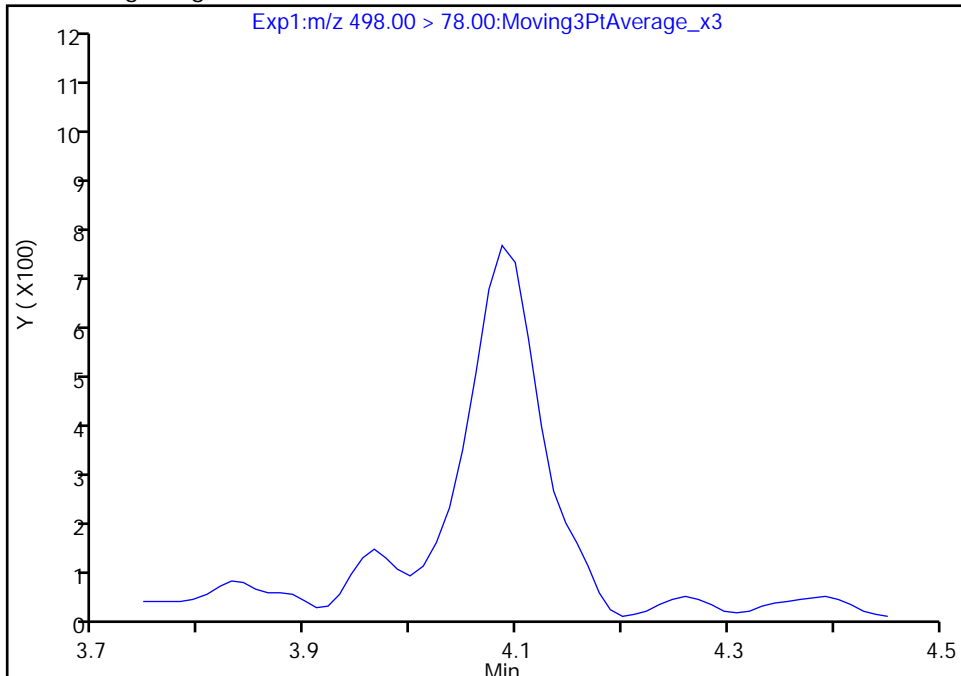
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

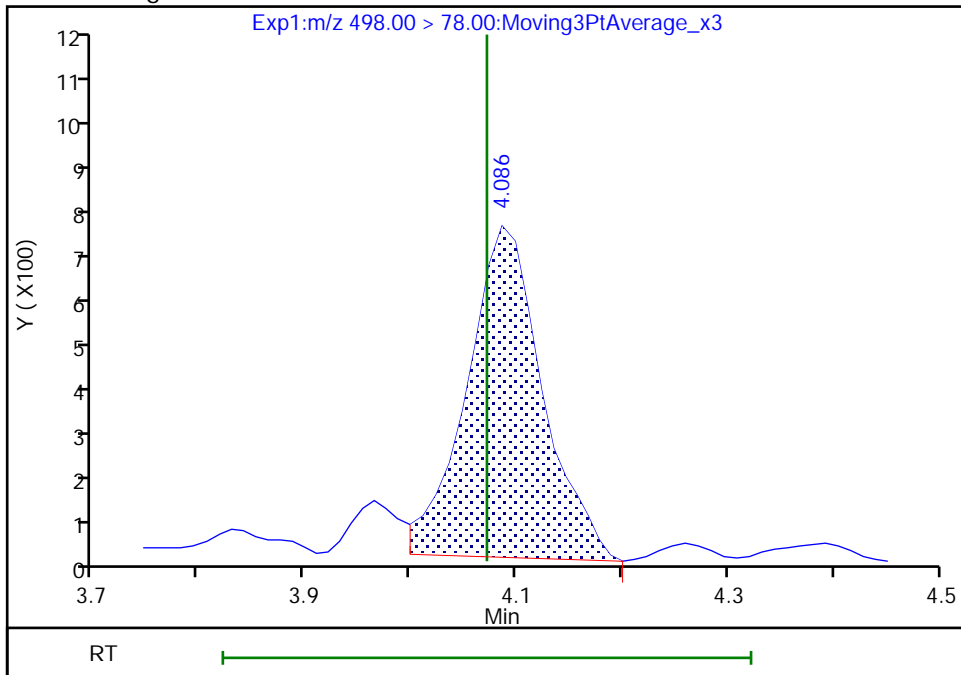
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.09
Area: 3552
Amount: 0.090619
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:25:55
Audit Action: Manually Integrated

Audit Reason: Split Peak

Eurofins TestAmerica, Burlington

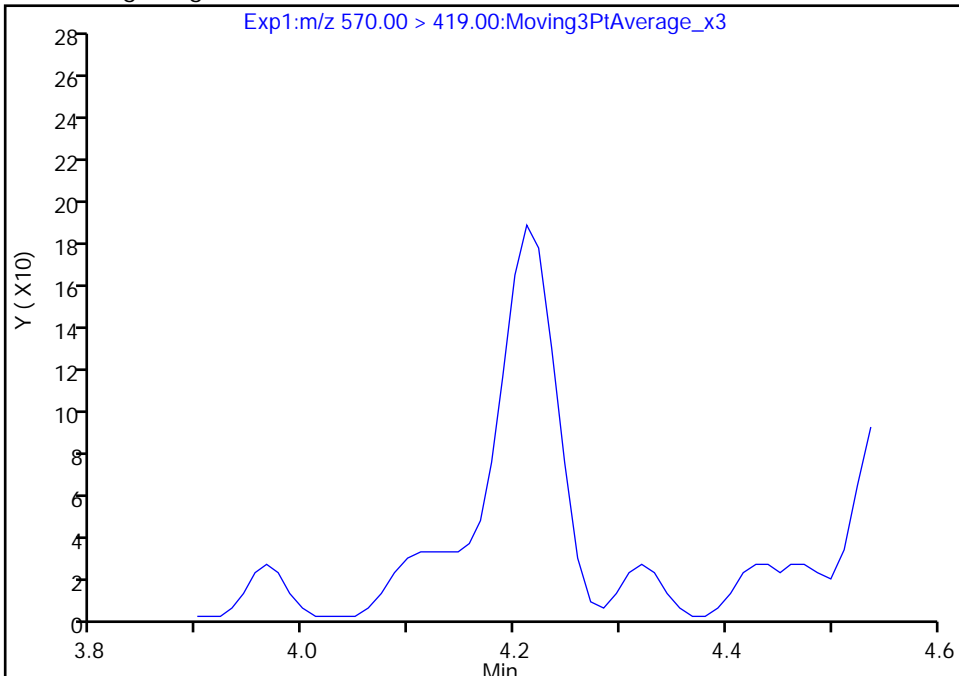
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

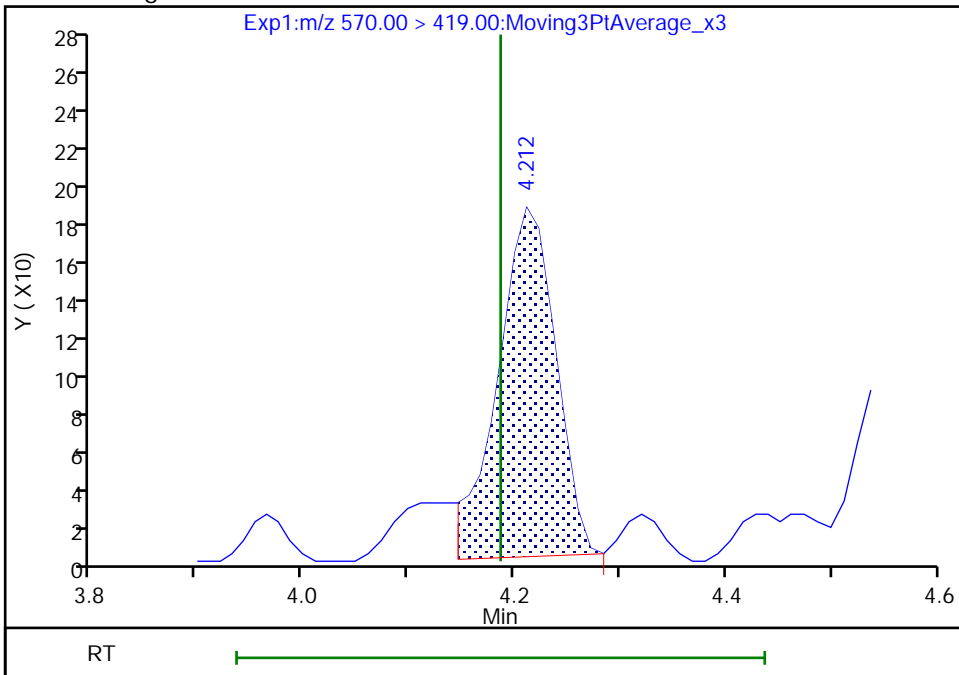
Not Detected
Expected RT: 4.19

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 704
Amount: 0.195507
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:26:25
Audit Action: Manually Integrated

Audit Reason: Split Peak

Eurofins TestAmerica, Burlington

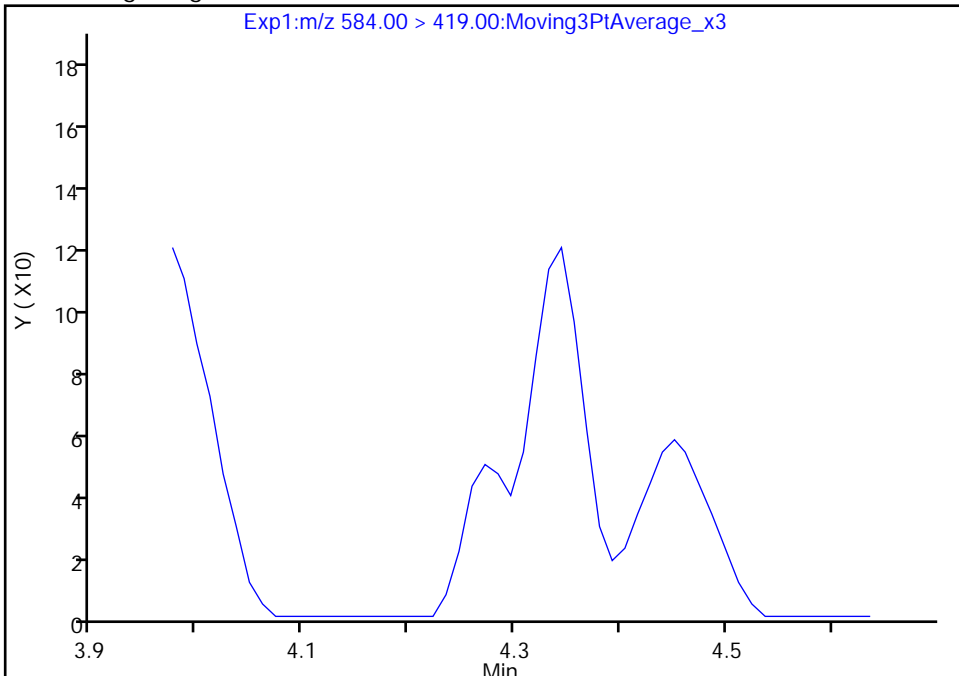
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

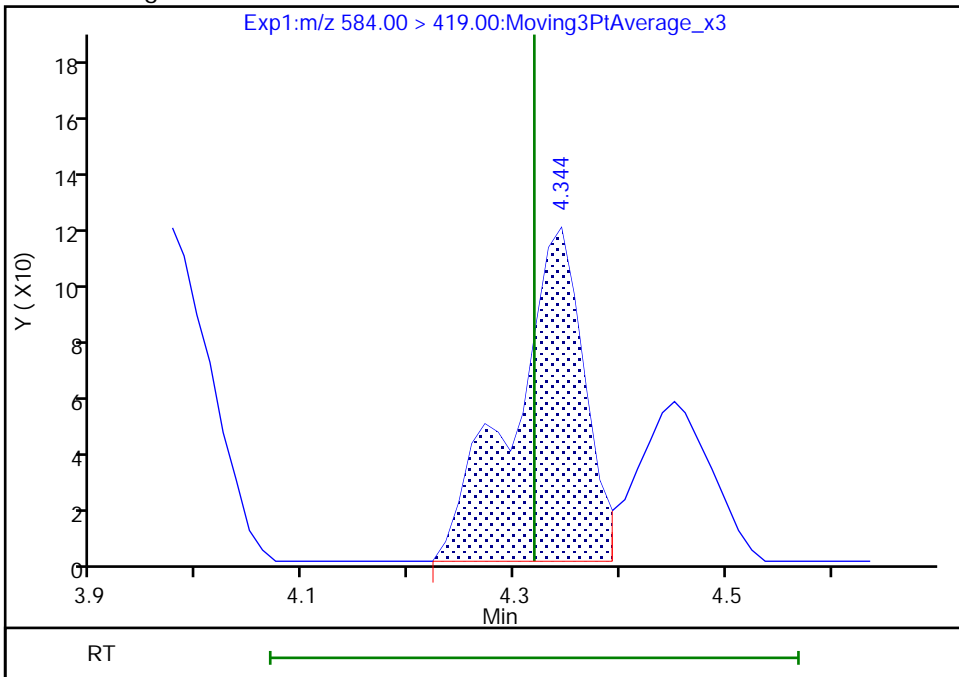
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.34
Area: 553
Amount: 0.163514
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:26:58
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

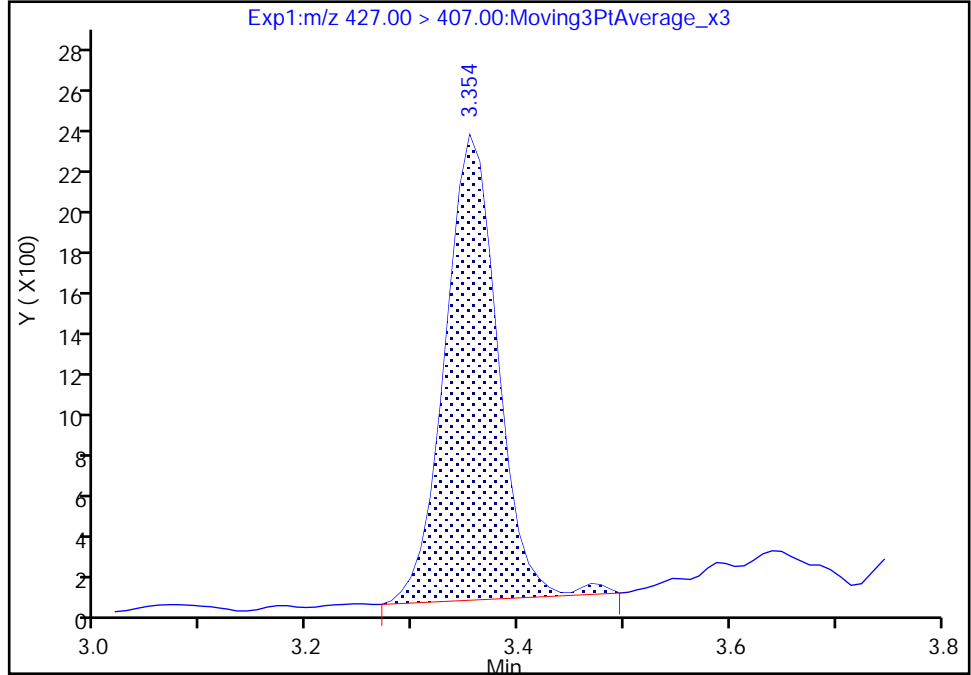
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

13 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:, CAS: 27619-97-2

Signal: 1

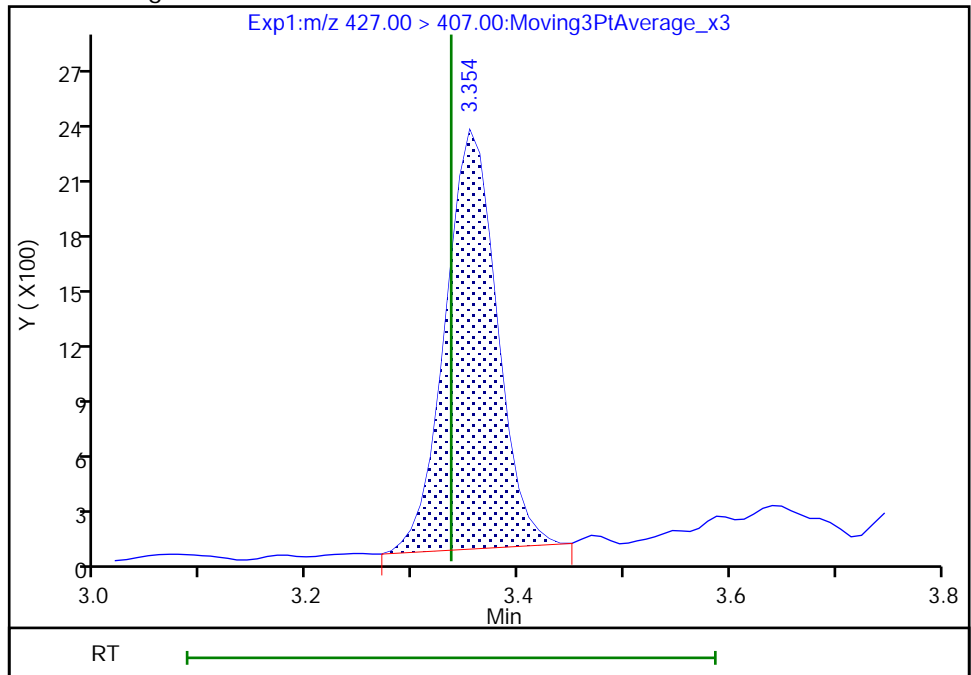
RT: 3.35
Area: 7906
Amount: 0.504098
Amount Units: ng/ml

Processing Integration Results



RT: 3.35
Area: 7749
Amount: 0.494088
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:23:25
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

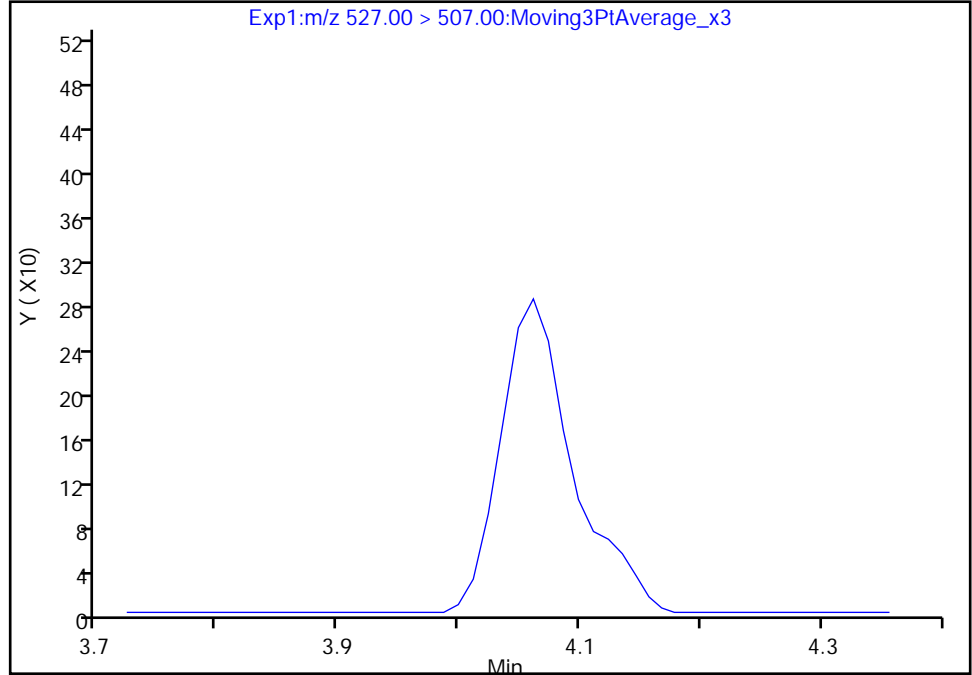
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E018.d
Injection Date: 02-Aug-2019 06:06:01 Instrument ID: LC812
Lims ID: 480-156213-F-15-A Lab Sample ID: 200-156213-15
Client ID: 356023-MW15B
Operator ID: lc812tech ALS Bottle#: 11 Worklist Smp#: 18
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

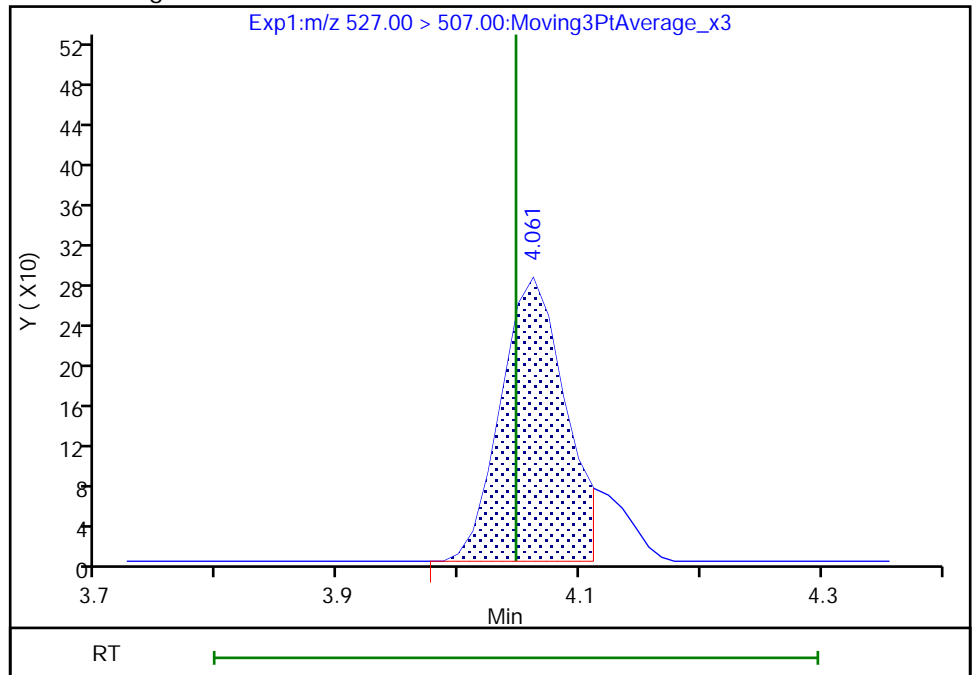
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.06
Area: 1034
Amount: 0.095026
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:25:26
Audit Action: Manually Integrated

Audit Reason: Split Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-EB1 Lab Sample ID: 480-156213-16
 Matrix: Water Lab File ID: SC080119E019.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 09:45
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 304.8 (mL) Date Analyzed: 08/02/2019 06:14
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		1.6	0.82
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		1.6	0.52
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.6	0.62
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.75
335-67-1	Perfluorooctanoic acid (PFOA)	ND		1.6	0.52
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.63
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.40
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.66
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.78
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.74
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.50
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.2	8.2
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.8
39108-34-4	8:2 FTS	ND		16	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-EB1 Lab Sample ID: 480-156213-16
 Matrix: Water Lab File ID: SC080119E019.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 09:45
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 304.8 (mL) Date Analyzed: 08/02/2019 06:14
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	67		25-150
STL00992	13C4 PFBA	97		25-150
STL01893	13C5 PFPeA	94		25-150
STL00993	13C2 PFHxA	94		50-150
STL01892	13C4 PFHpA	95		50-150
STL00990	13C4 PFOA	90		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	101		50-150
STL00997	13C2 PFUnA	91		50-150
STL00998	13C2 PFDoA	76		50-150
STL02116	13C2 PFTeDA	61		50-150
STL02337	13C3 PFBS	89		50-150
STL00994	18O2 PFHxS	89		50-150
STL00991	13C4 PFOS	90		50-150
STL02118	d3-NMeFOSAA	72		50-150
STL02117	d5-NEtFOSAA	68		50-150
STL02279	M2-6:2 FTS	99		25-150
STL02280	M2-8:2 FTS	109		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
 Lims ID: 480-156213-F-16-A
 Client ID: 356023-EB1
 Sample Type: Client
 Inject. Date: 02-Aug-2019 06:14:04 ALS Bottle#: 12 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-16-A
 Misc. Info.: 200-0037095-019 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:32:00
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.707	1.699	0.008	0.507	3711217	48.4	96.8	11897	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.707	1.699	0.008	1.000	11986	0.1752		2.0		M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.613	3377567	46.9	93.8	7771	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	6820	0.1043		0.3	
D 47 13C3 PFBS	301.90 > 80.00	2.092	2.080	0.012	0.621	2911361	41.2	88.5	1136597	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.092	2.093	-0.001	1.000	8215	0.1291	Target=1.90	32.5	
298.90 > 99.00	2.092	2.093	-0.001	1.000	3561		2.31(0.95-2.85)	4.6		
D 7 13C2 PFHxA	315.00 > 270.00	2.470	2.459	0.011	0.733	3374060	47.2	94.4	6455	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.000	5334	0.0768	Target=13.23	1.7	RM
313.00 > 119.00	2.482	2.459	0.023	1.005	871		6.12(6.61-19.84)	1.2		M
D 11 18O2 PFHxS	403.00 > 84.00	2.936	2.916	0.020	0.871	1749314	42.2	89.3	8905	
D 9 13C4 PFHpA	367.00 > 322.00	2.936	2.928	0.008	0.871	3320785	47.4	94.8	6889	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.936	2.928	0.008	1.000	9321	0.1913	Target=3.37	14.5	M
399.00 > 99.00	2.936	2.928	0.008	1.000	2416		3.86(1.69-5.06)	2.8		M
D 12 M2-6:2 FTS	429.00 > 81.00	3.352	3.335	0.017	0.995	406930	47.2	99.4	1045	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfoni	427.00 > 407.00	3.352	3.336	0.016	1.000	5259	0.3579		13.9	
D 14 13C4 PFOA	417.00 > 372.00	3.361	3.344	0.017	0.997	3329534	45.0	90.0	12494	
15 Perfluorooctanoic acid	413.00 > 369.00	3.370	3.355	0.015	1.003	15526	0.2143	Target=2.84	1.8	M
	413.00 > 169.00	3.361	3.355	0.006	1.000	6170		2.52(1.42-4.25)	23.4	M
* 62 13C2 PFOA	415.00 > 370.00	3.370	3.355	0.015		4067662	50.0		12903	
D 18 13C4 PFOS	503.00 > 80.00	3.720	3.695	0.025	1.104	1488898	43.1	90.3	8077	
17 Perfluorooctanesulfonic acid	499.00 > 80.00	3.731	3.703	0.028	1.003	3045	0.1033	Target=4.33	11.8	M
	499.00 > 99.00	3.574	3.703	-0.129	0.961	977		3.12(2.16-6.49)	2.0	M
D 19 13C5 PFNA	468.00 > 423.00	3.742	3.715	0.027	1.110	3186929	47.2	94.4	12962	
D 23 13C2 PFDA	515.00 > 470.00	4.056	4.036	0.020	1.203	2724166	50.5	101	13657	
D 26 M2-8:2 FTS	529.00 > 81.00	4.056	4.036	0.020	1.203	414638	52.1	109	1392	
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	4.056	4.047	0.009	1.000	397	0.0343		9.5	M
D 21 13C8 FOSA	506.00 > 78.00	4.081	4.061	0.020	1.211	2064783	33.3	66.6	6311	
22 Perfluorooctanesulfonamide	498.00 > 78.00	4.081	4.072	0.009	1.000	5952	0.1579		48.8	
D 27 d3-NMeFOSAA	573.00 > 419.00	4.196	4.178	0.018	1.245	248801	36.1	72.2	3209	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	4.196	4.187	0.009	1.000	262	0.0696		0.8	M
D 30 13C2 PFUnA	565.00 > 520.00	4.316	4.296	0.020	1.281	2244675	45.6	91.3	9750	
31 Perfluoroundecanoic acid	563.00 > 519.00	4.316	4.307	0.009	1.000	4671	0.1213	Target=7.95	2.4	M
	563.00 > 169.00	4.316	4.307	0.009	1.000	745		6.27(3.98-11.93)	11.9	M
D 32 d5-NEtFOSAA	589.00 > 419.00	4.328	4.308	0.020	1.284	260463	33.9	67.8	1085	
D 36 13C2 PFDoA	615.00 > 570.00	4.557	4.537	0.020	1.352	2008322	37.9	75.9	5198	
D 43 13C2 PFTeDA	715.00 > 670.00	4.976	4.965	0.011	1.476	2211140	30.3	60.7	8367	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d

Injection Date: 02-Aug-2019 06:14:04

Instrument ID: LC812

Lims ID: 480-156213-F-16-A

Lab Sample ID: 200-156213-16

Client ID: 356023-EB1

Operator ID: lc812tech

ALS Bottle#: 12

Worklist Smp#: 19

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

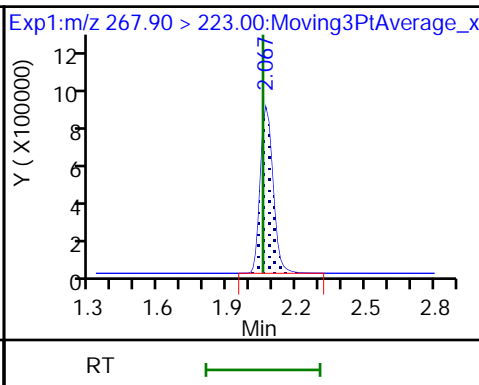
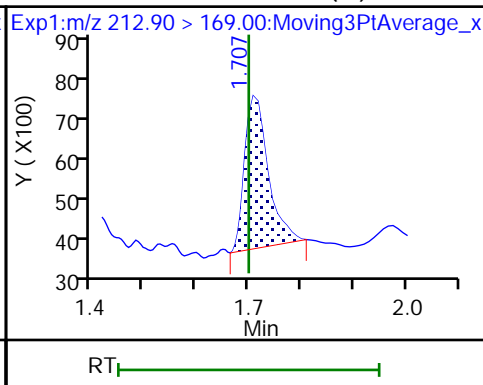
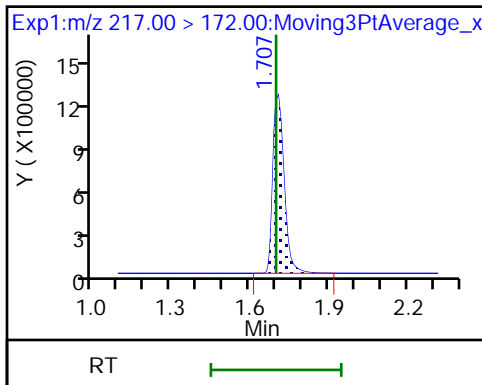
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

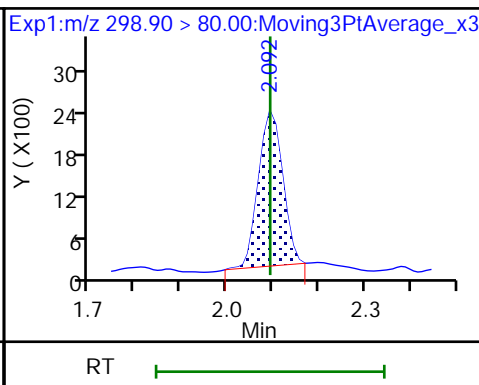
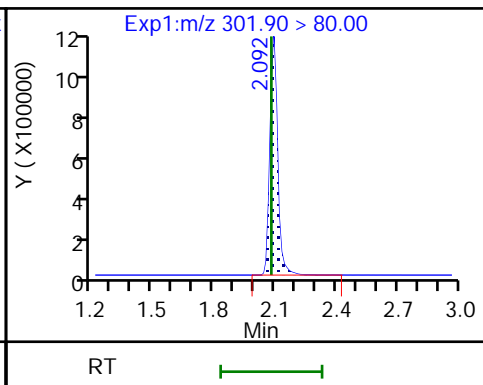
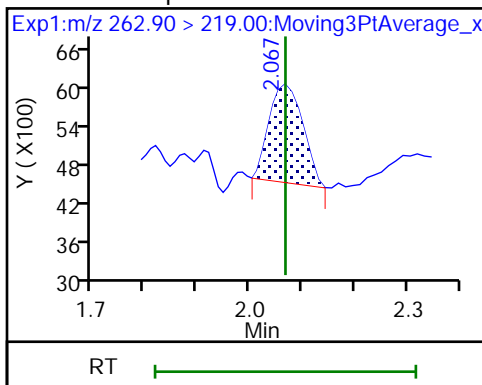
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

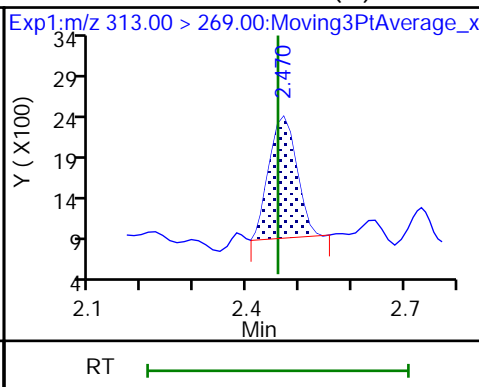
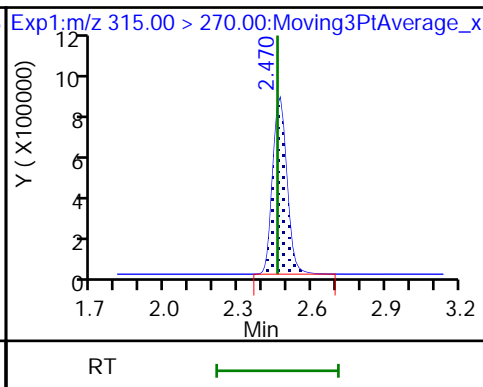
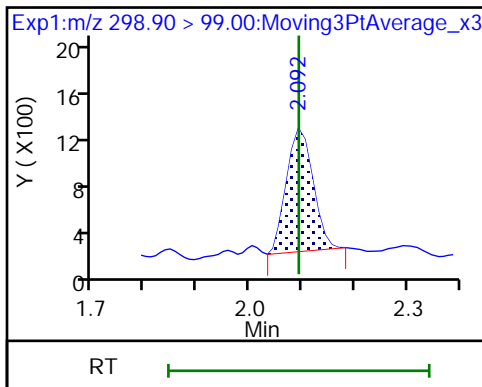
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

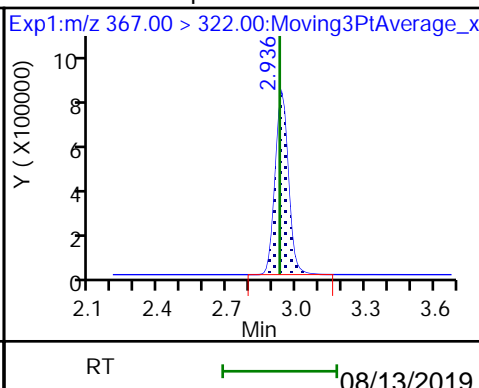
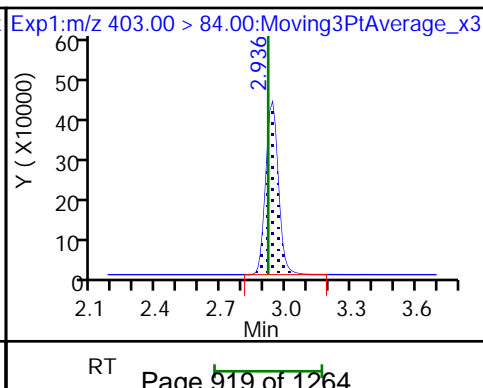
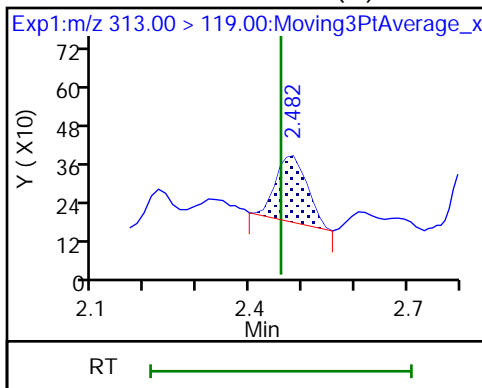
6 Perfluorohexanoic acid (M)

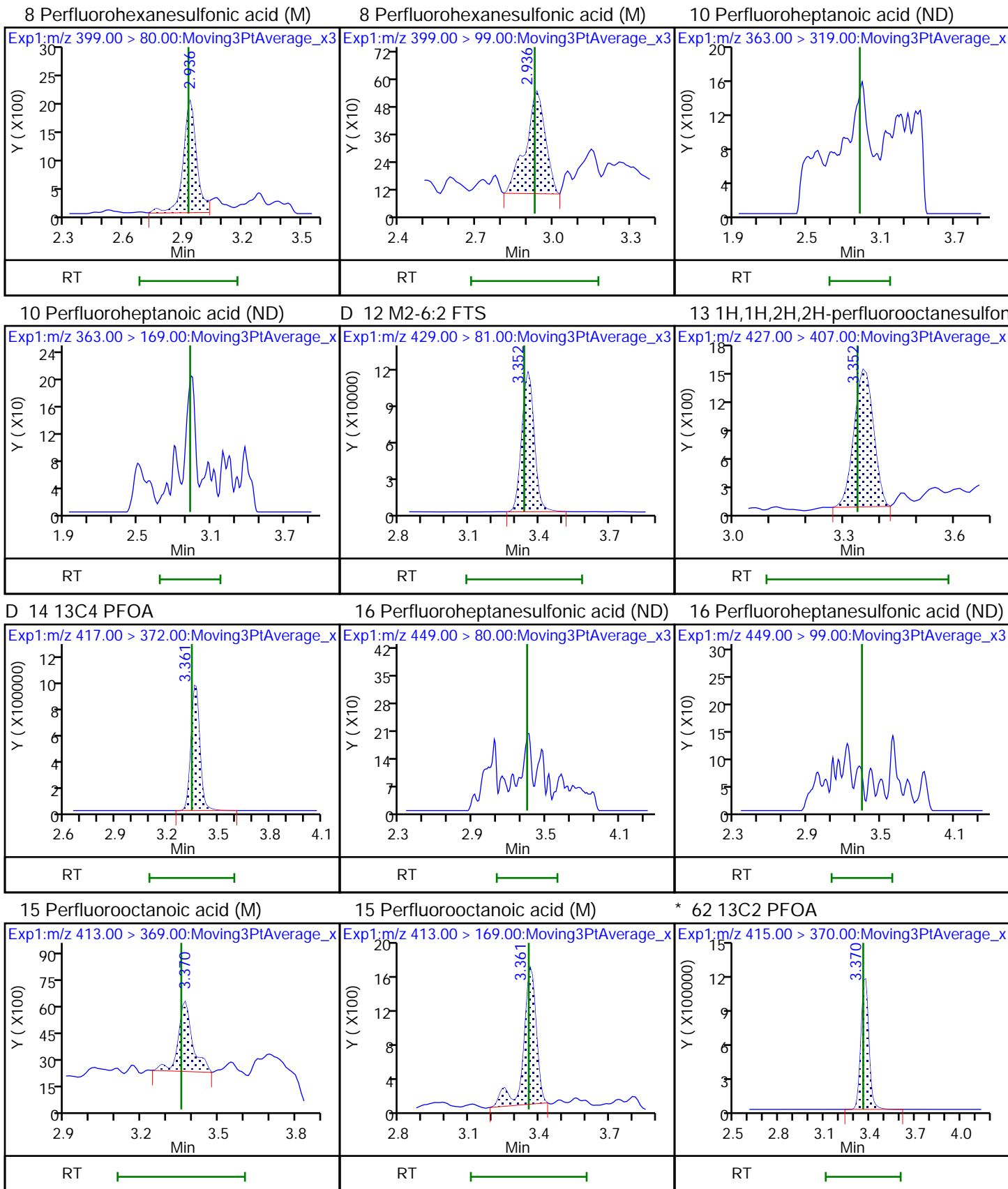


6 Perfluorohexanoic acid (M)

D 11 18O2 PFHxS

D 9 13C4 PFHpA

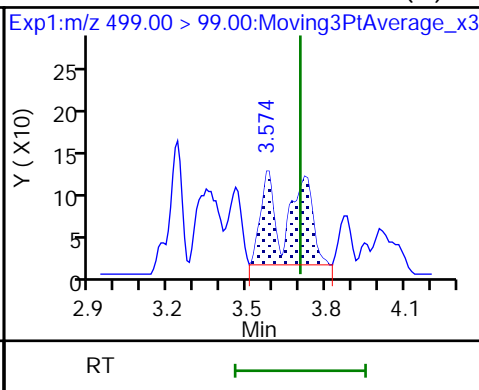
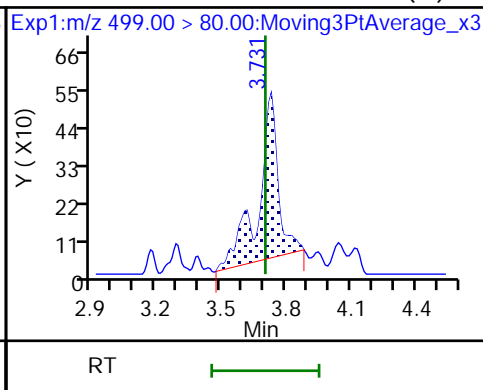
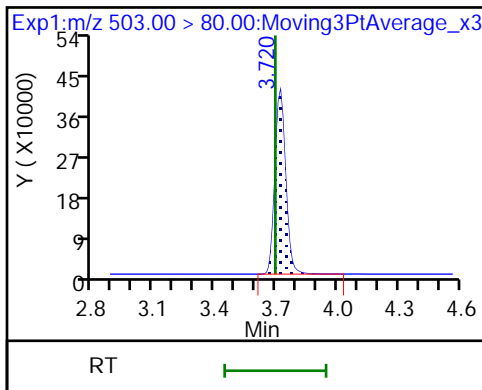




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

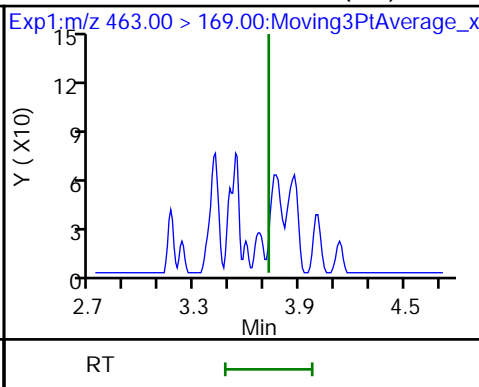
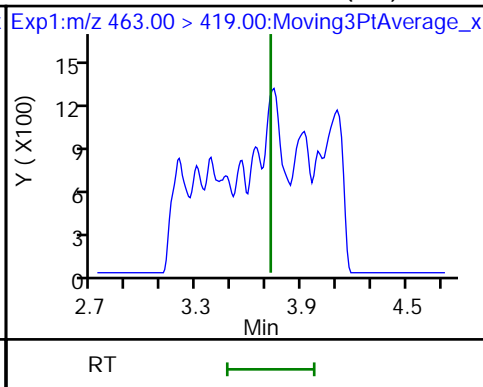
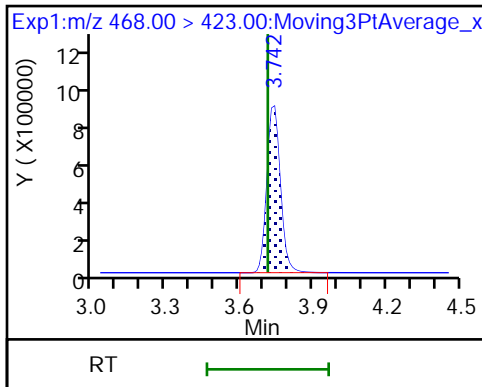
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (ND)

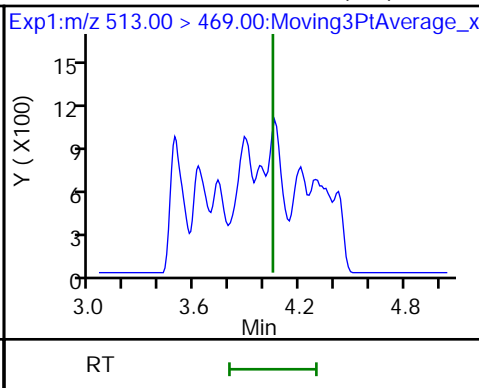
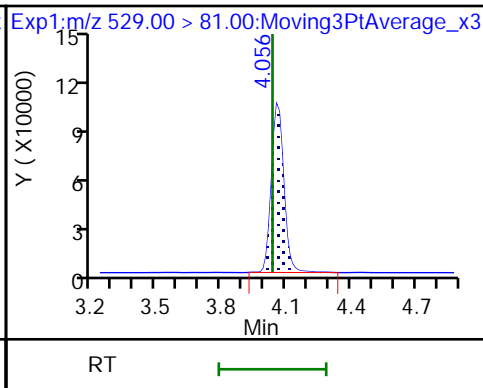
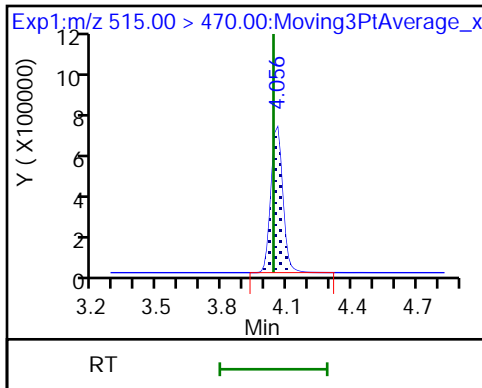
20 Perfluorononanoic acid (ND)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

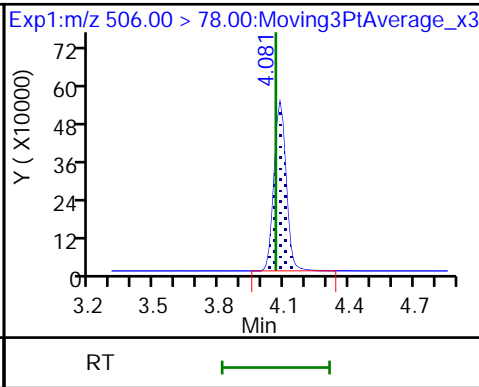
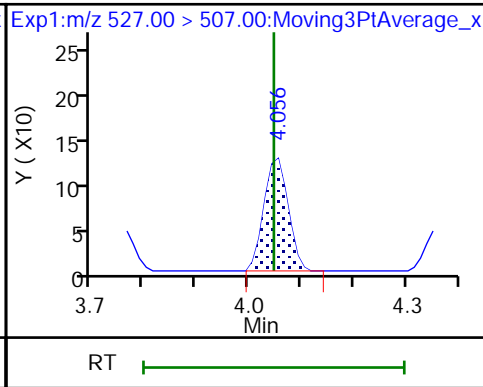
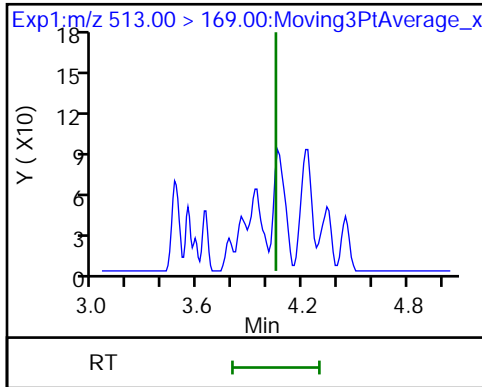
24 Perfluorodecanoic acid (ND)

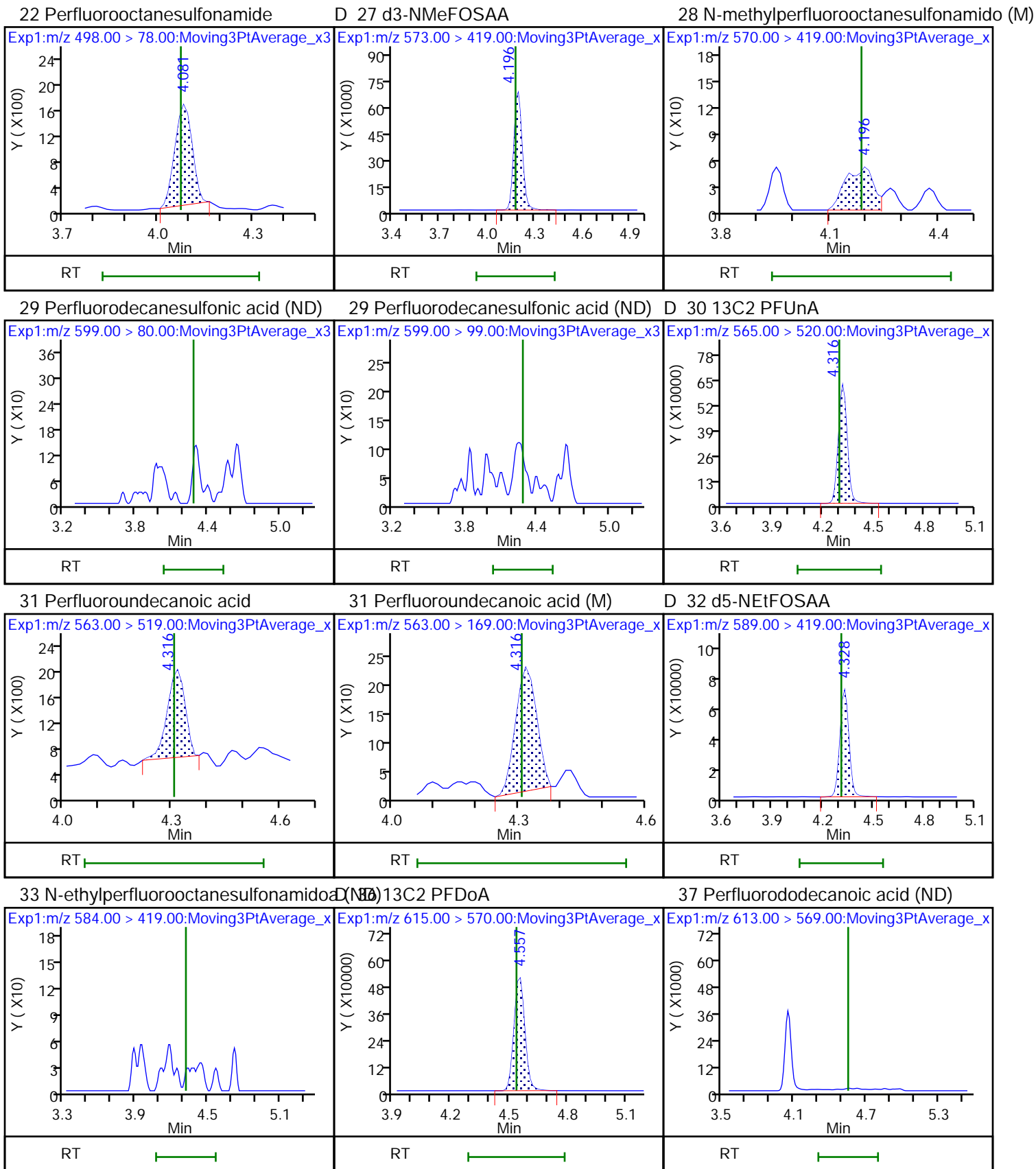


24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (M)

D 27 13C8 FOSA

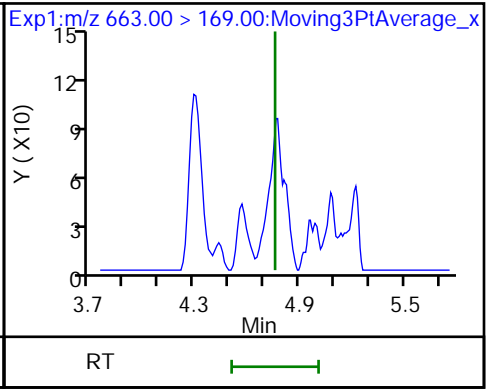
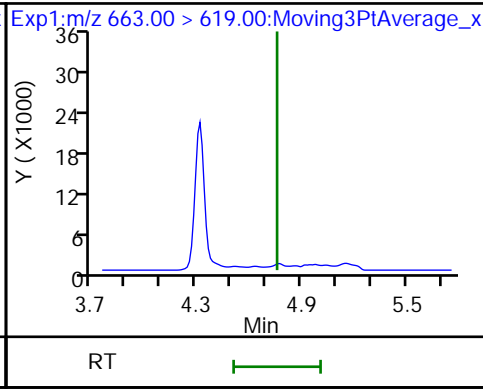
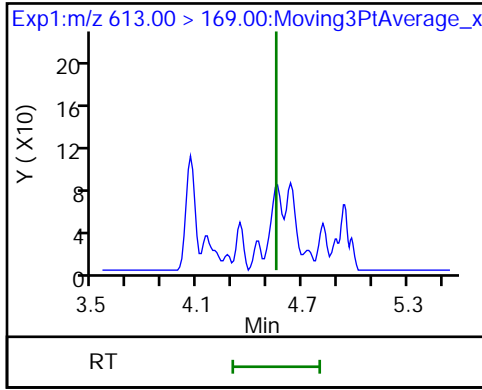




37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

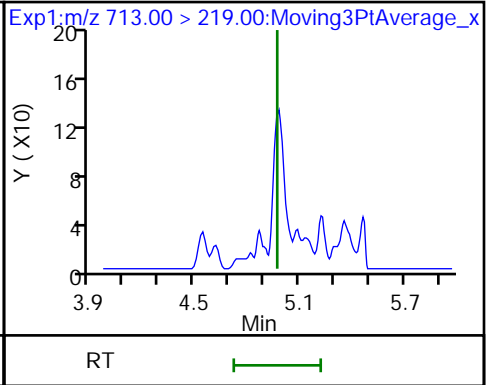
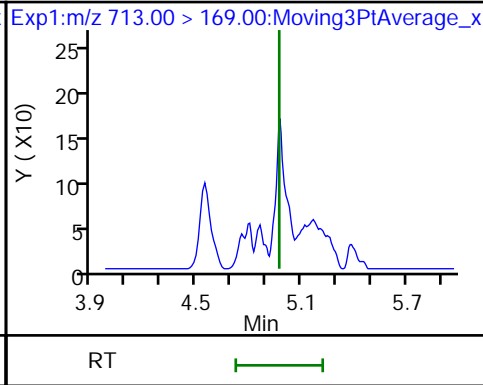
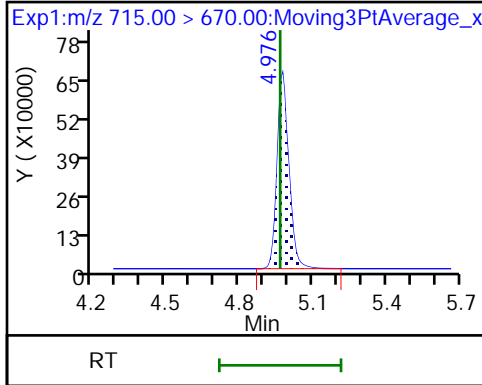
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (ND)

42 Perfluorotetradecanoic acid (ND)



Eurofins TestAmerica, Burlington

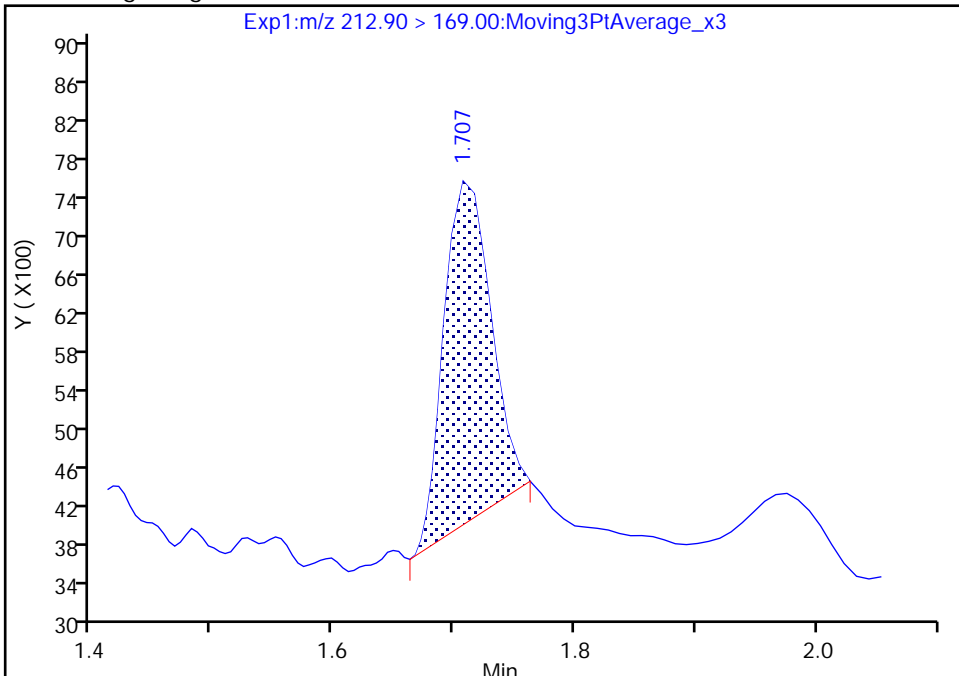
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

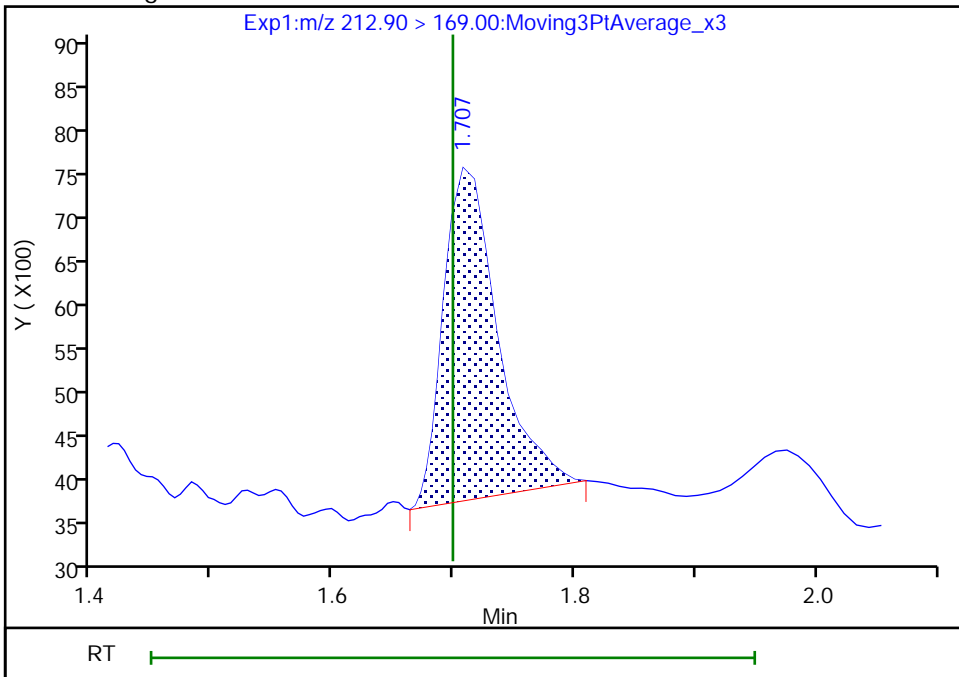
RT: 1.71
Area: 9600
Amount: 0.140332
Amount Units: ng/ml

Processing Integration Results



RT: 1.71
Area: 11986
Amount: 0.175211
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:28:22
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

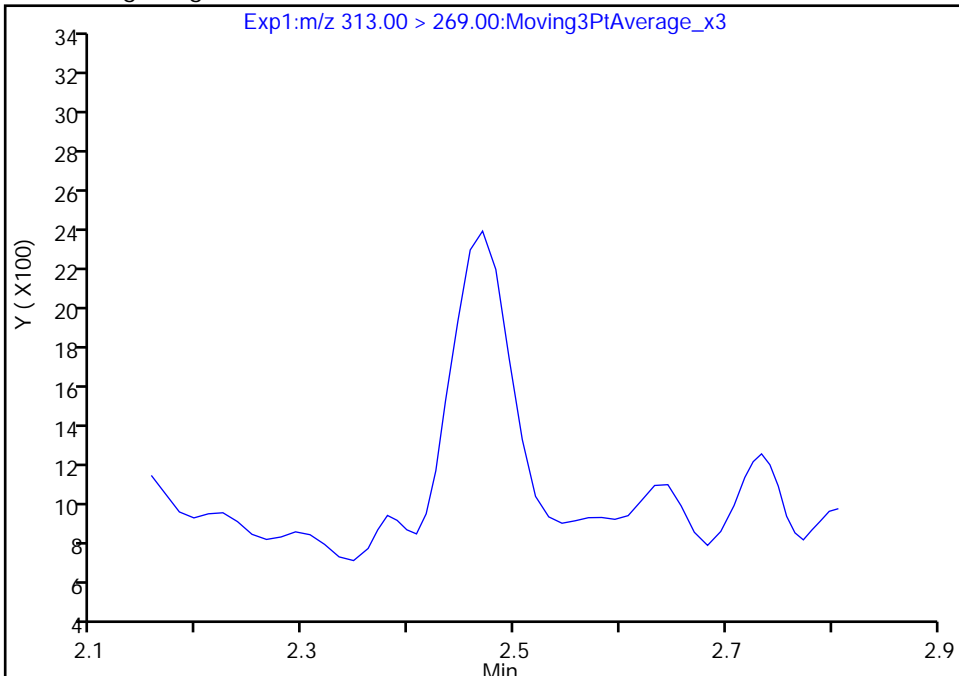
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

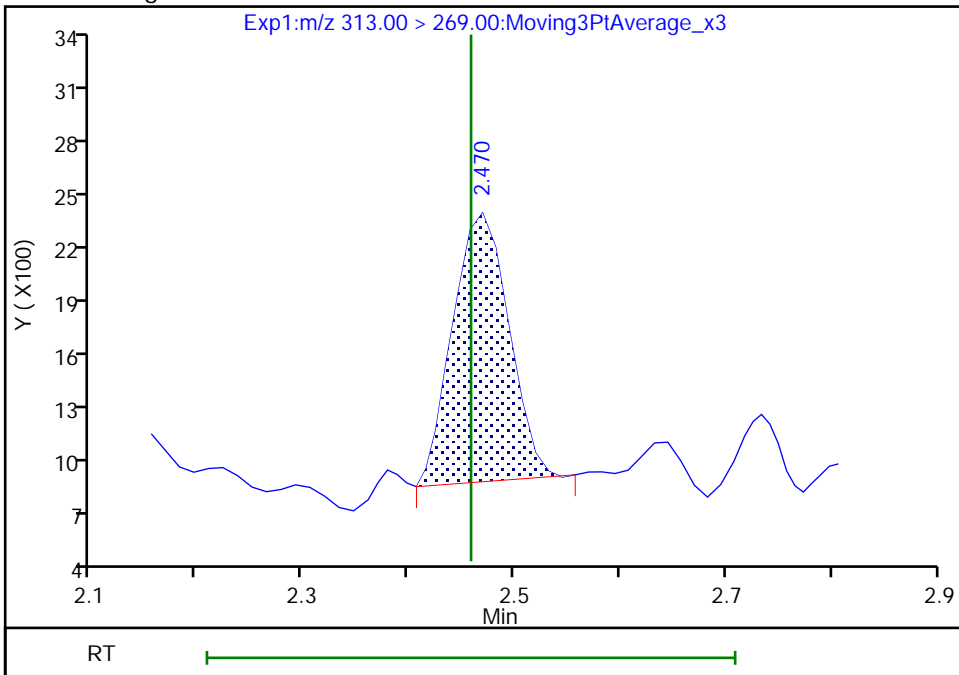
Not Detected
Expected RT: 2.46

Processing Integration Results



Manual Integration Results

RT: 2.47
Area: 5334
Amount: 0.076758
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:28:37
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

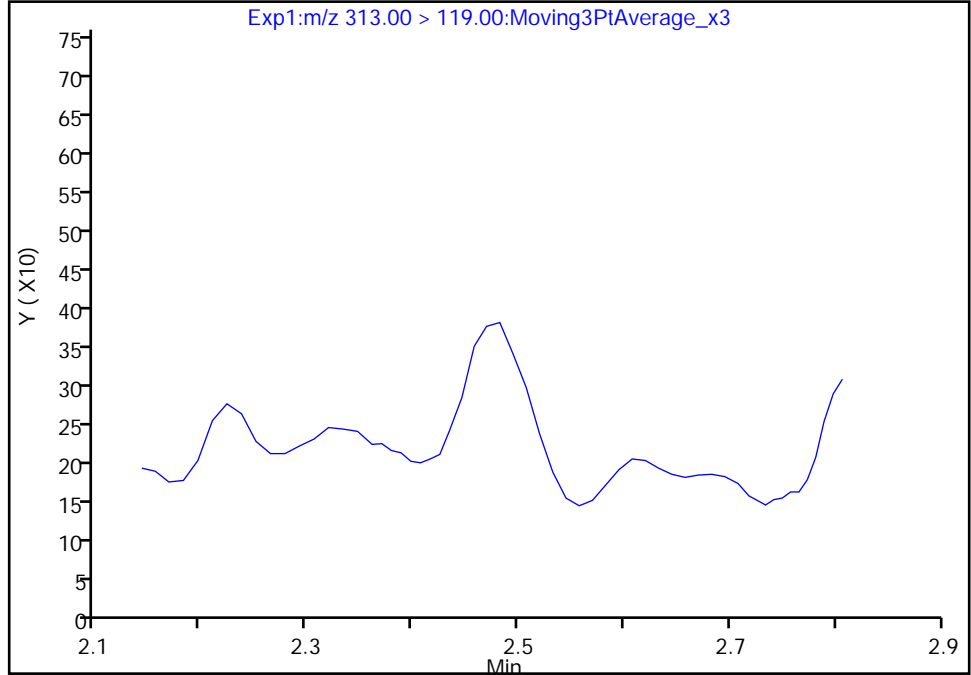
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

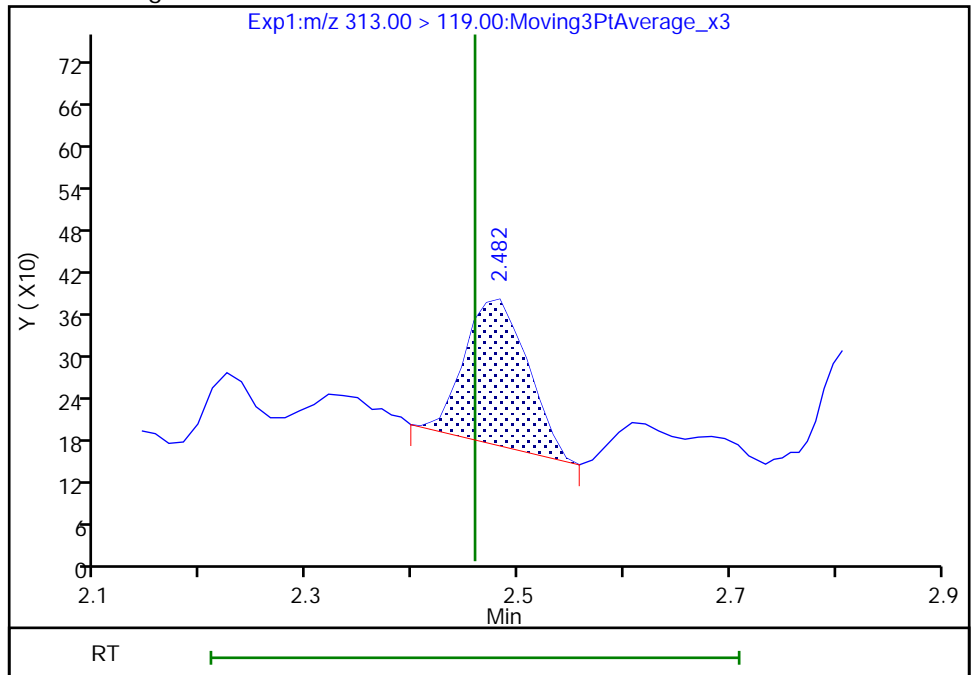
Not Detected
Expected RT: 2.46

Processing Integration Results



RT: 2.48
Area: 871
Amount: 0.076758
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

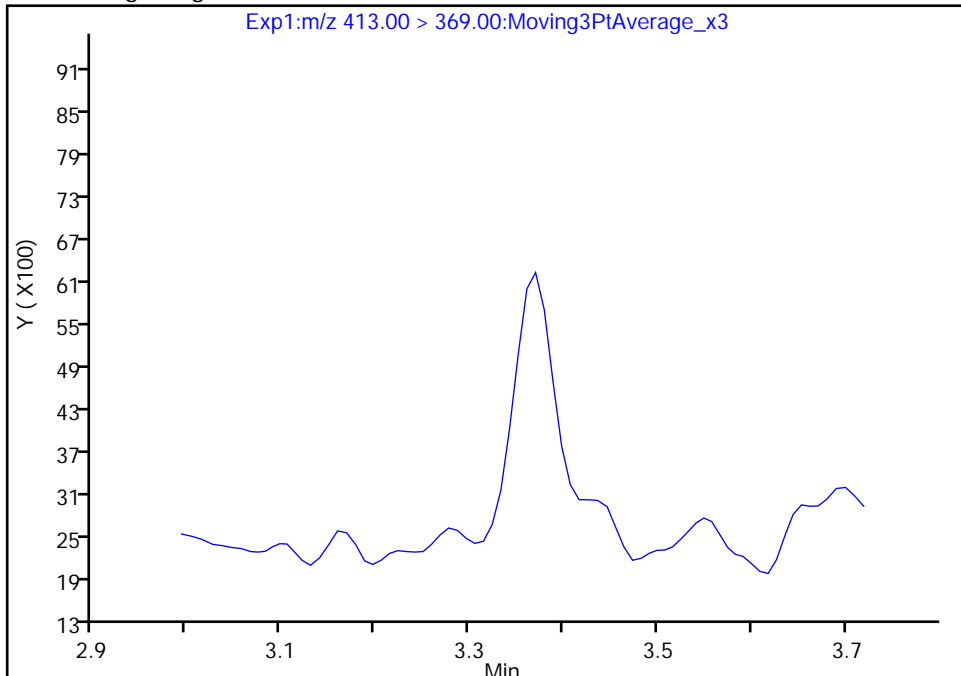
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

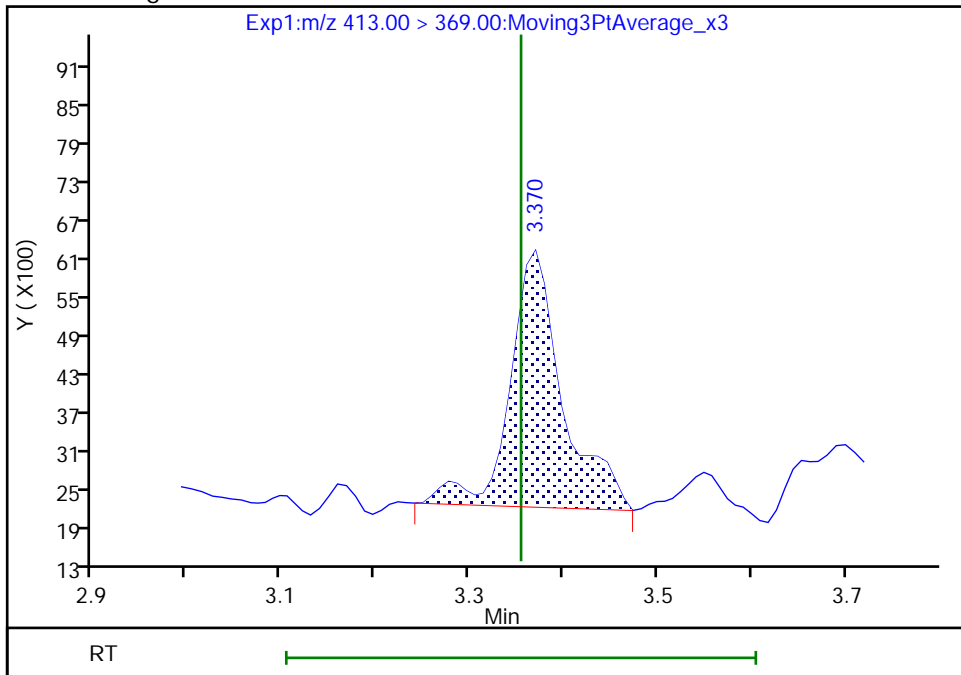
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 15526
Amount: 0.214273
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:29:59
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

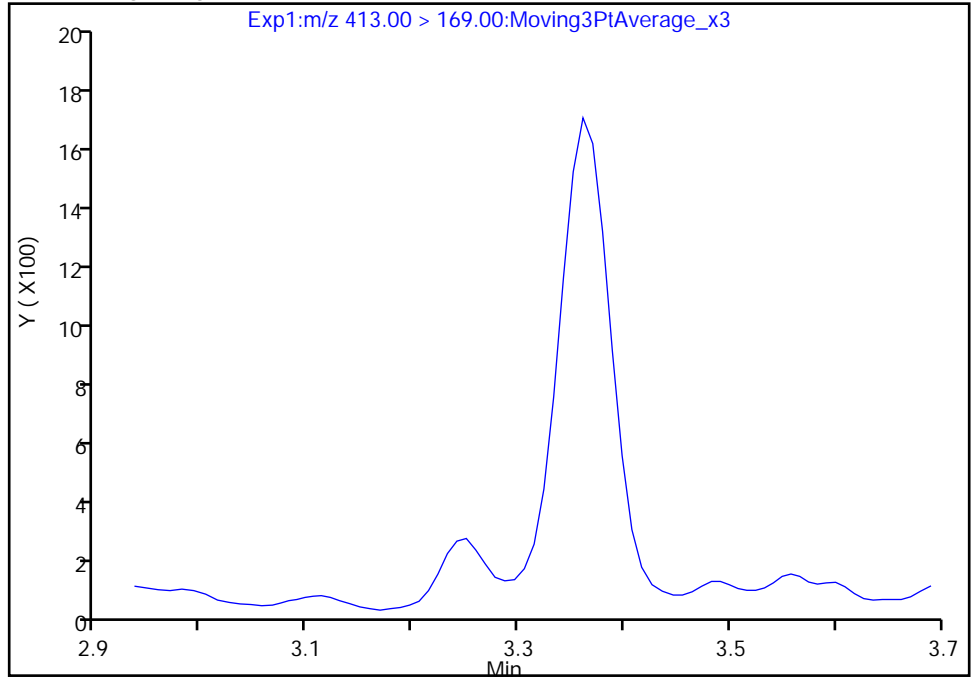
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

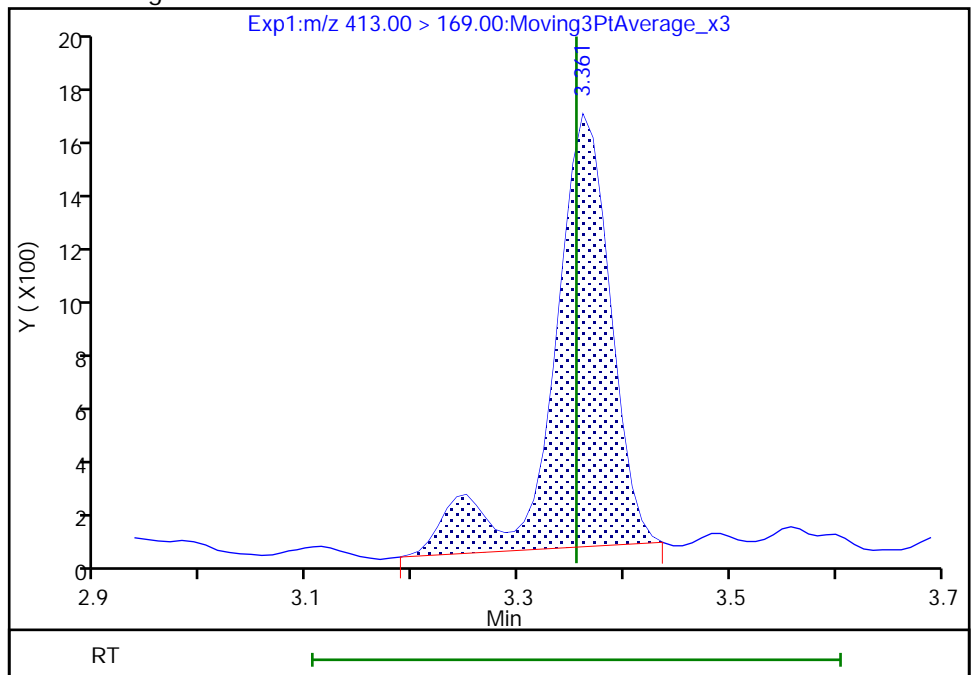
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 6170
Amount: 0.214273
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

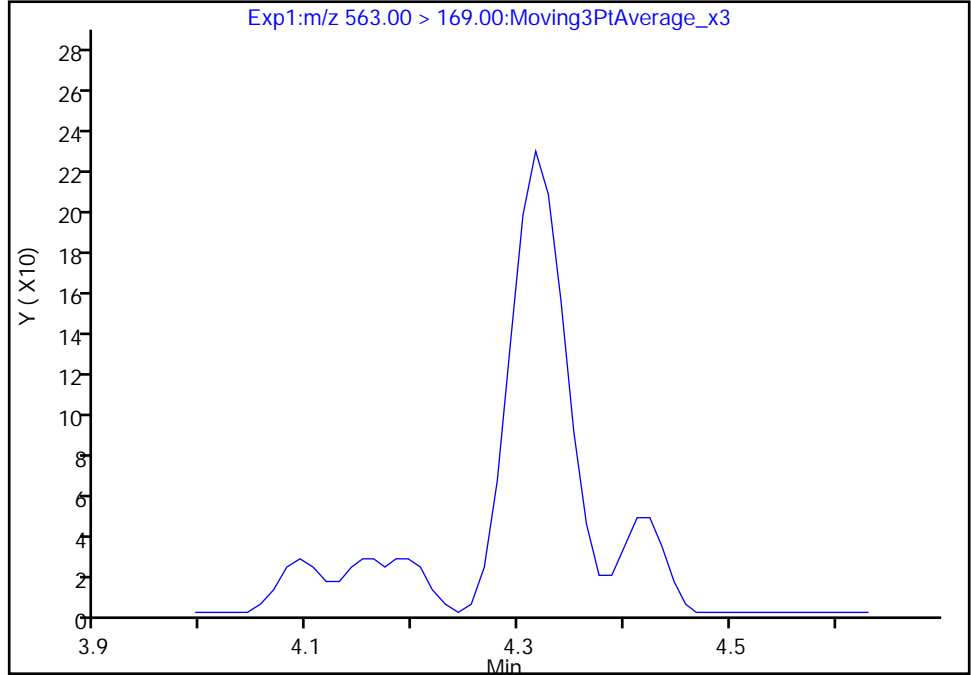
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

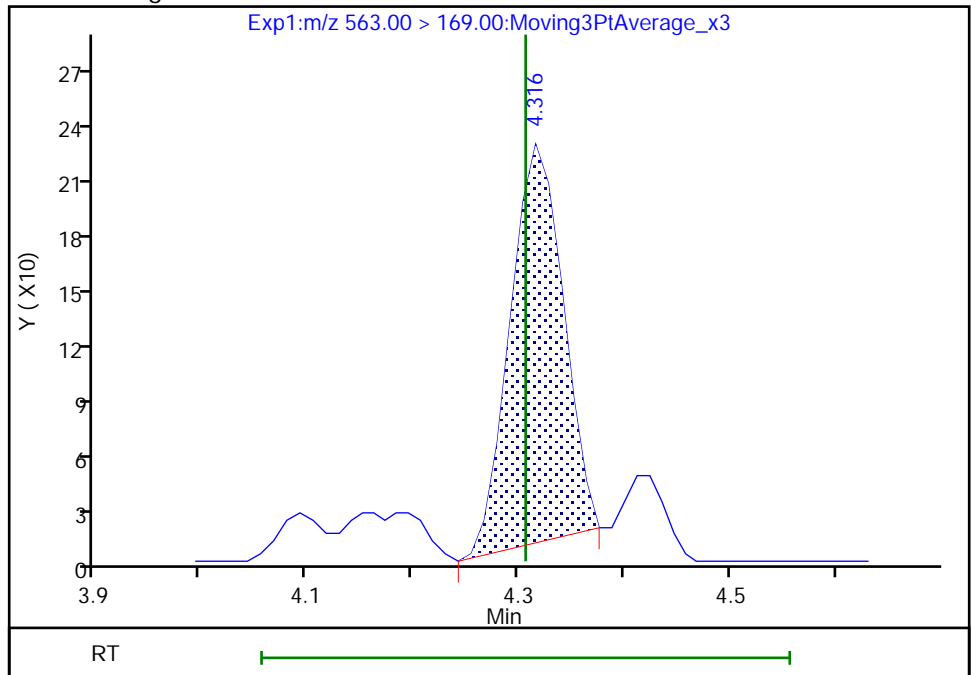
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 745
Amount: 0.121259
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:31:36
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

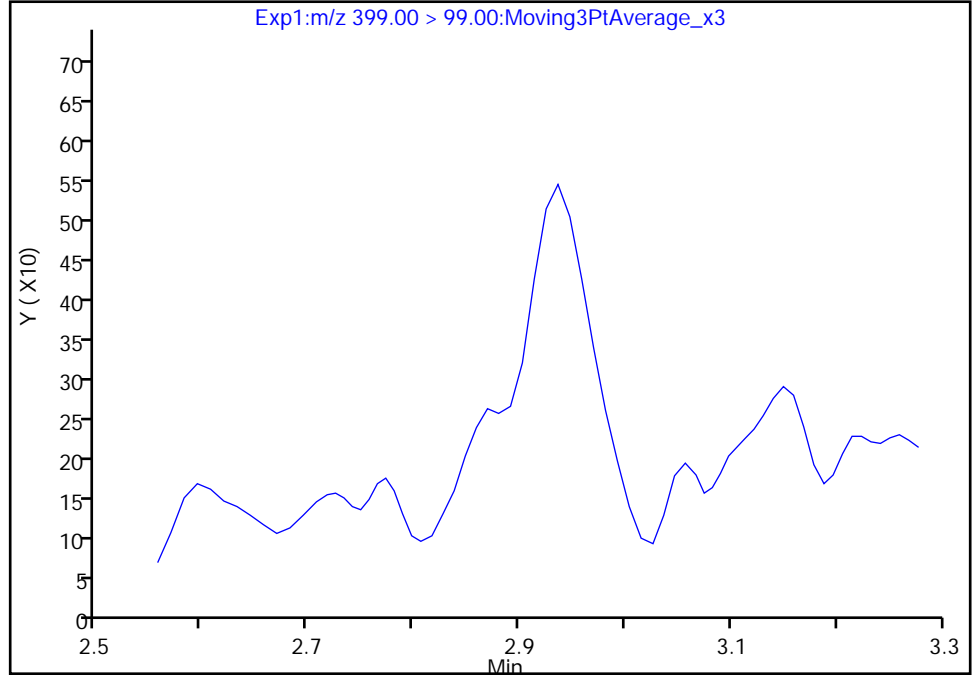
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

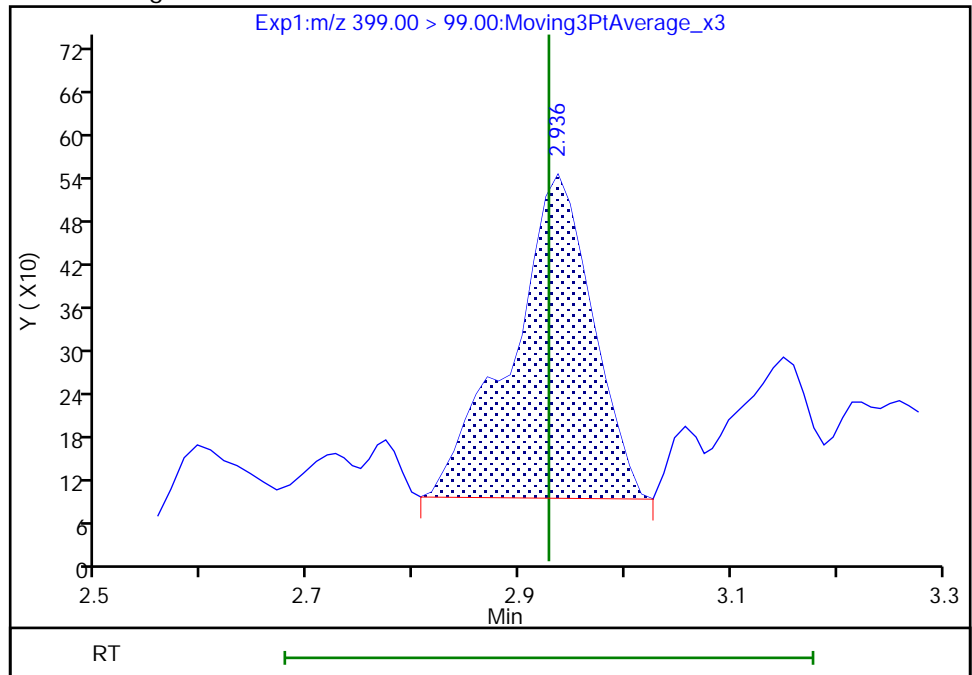
Not Detected
Expected RT: 2.93

Processing Integration Results



RT: 2.94
Area: 2416
Amount: 0.191253
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:29:10
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

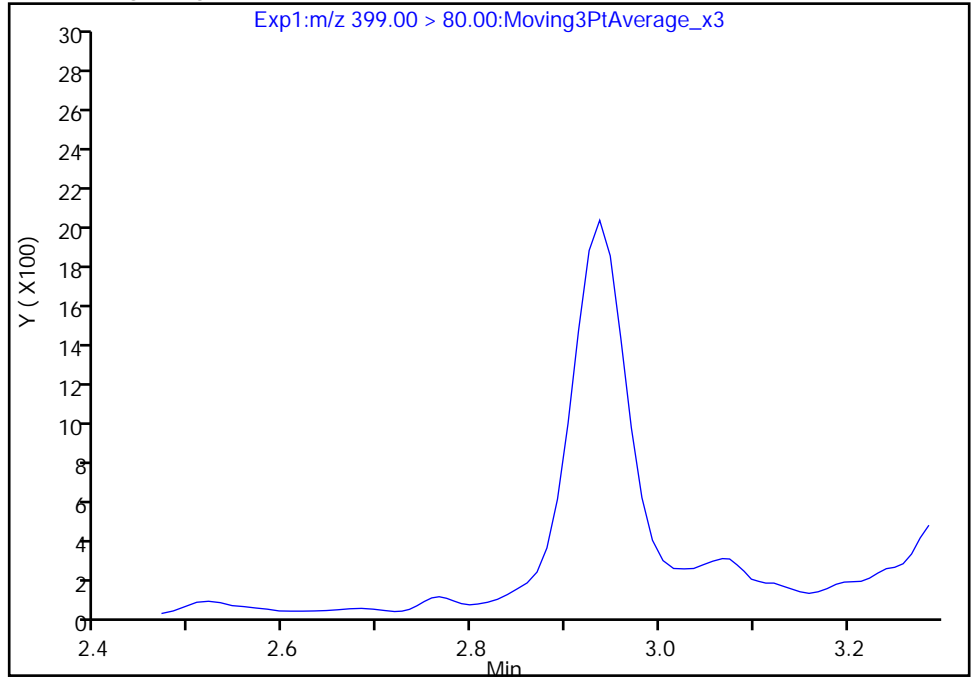
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

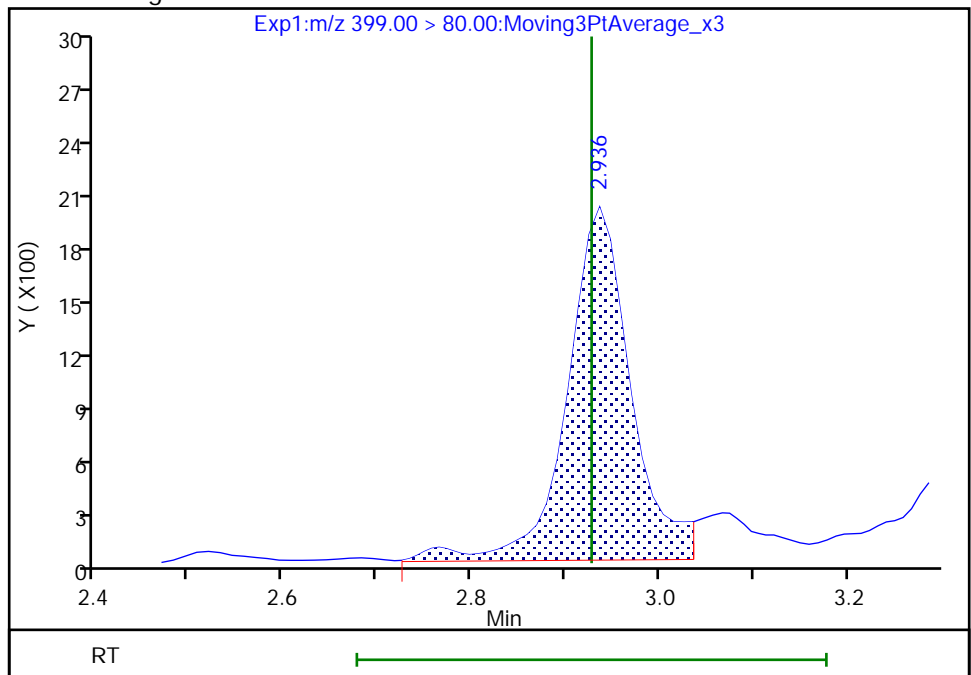
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 9321
Amount: 0.191253
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

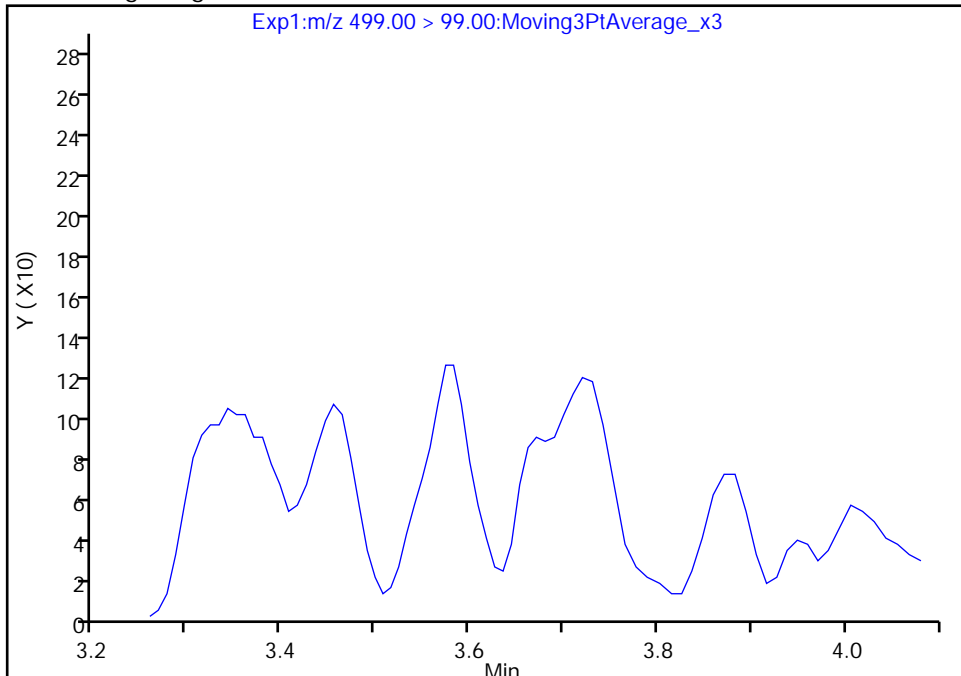
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

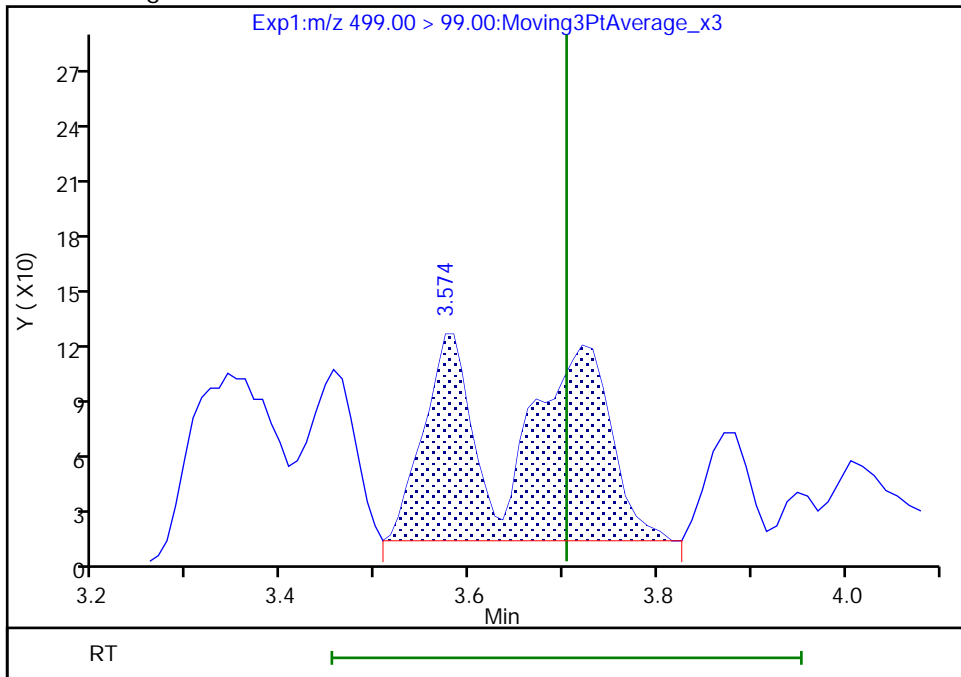
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.57
Area: 977
Amount: 0.103281
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:30:27
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

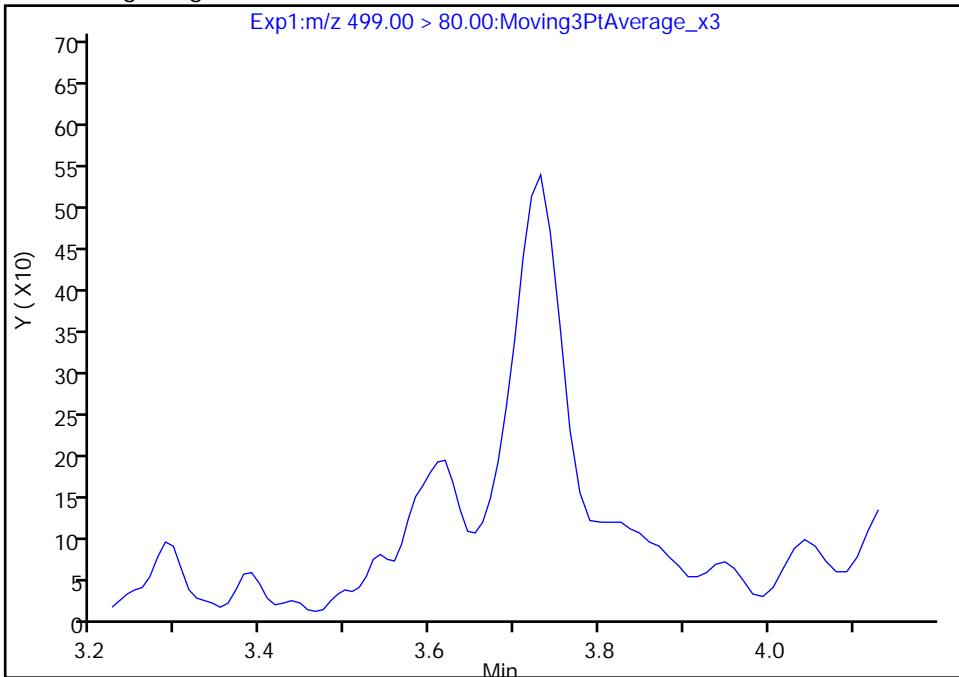
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

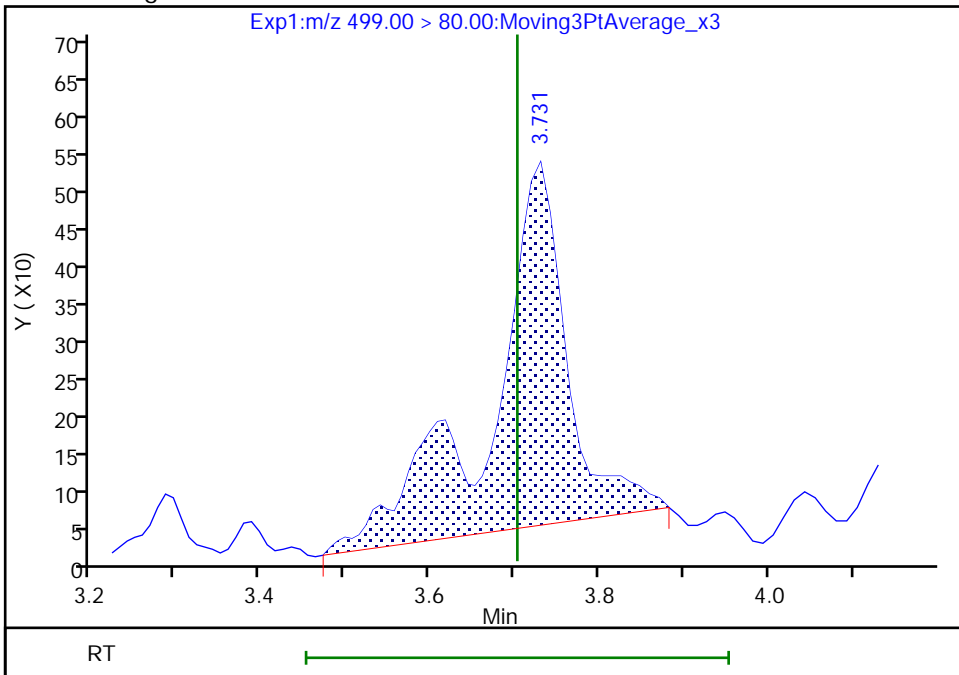
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.73
Area: 3045
Amount: 0.103281
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

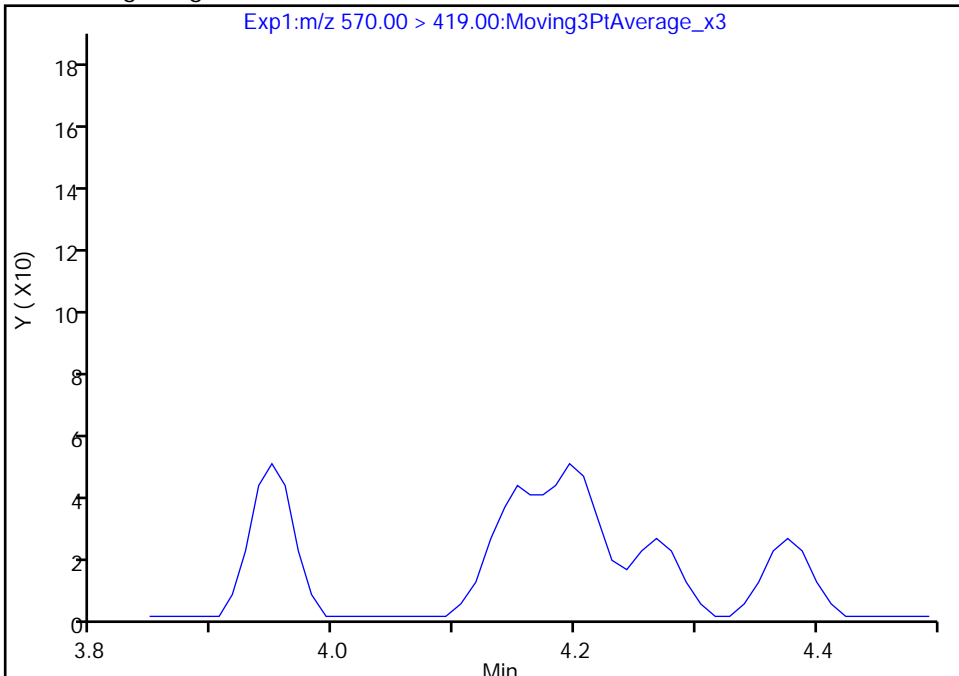
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

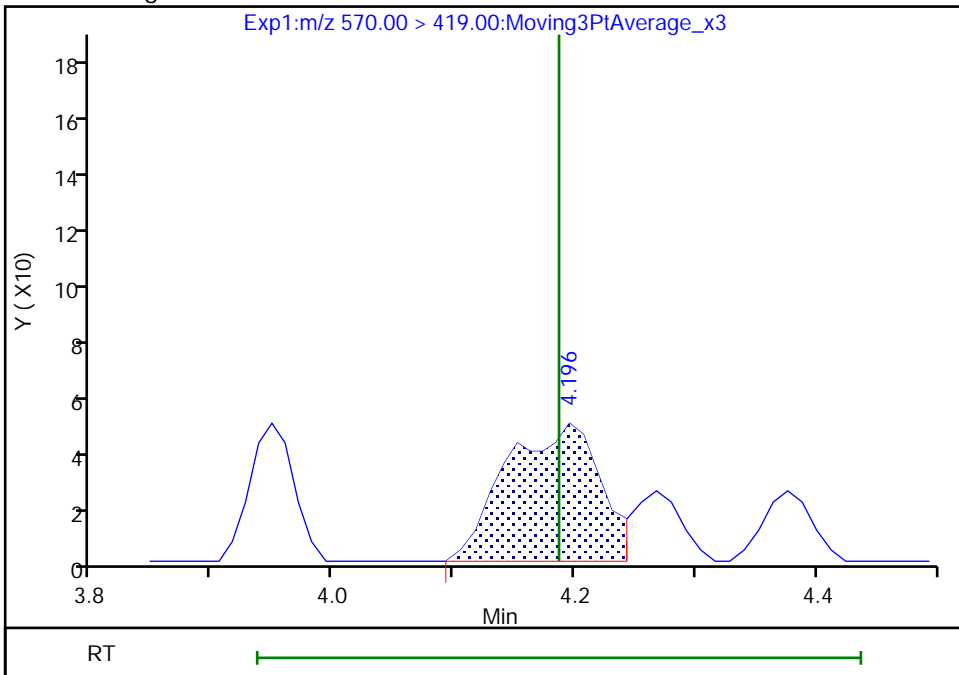
Not Detected
Expected RT: 4.19

Processing Integration Results



RT: 4.20
Area: 262
Amount: 0.069582
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:31:18
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

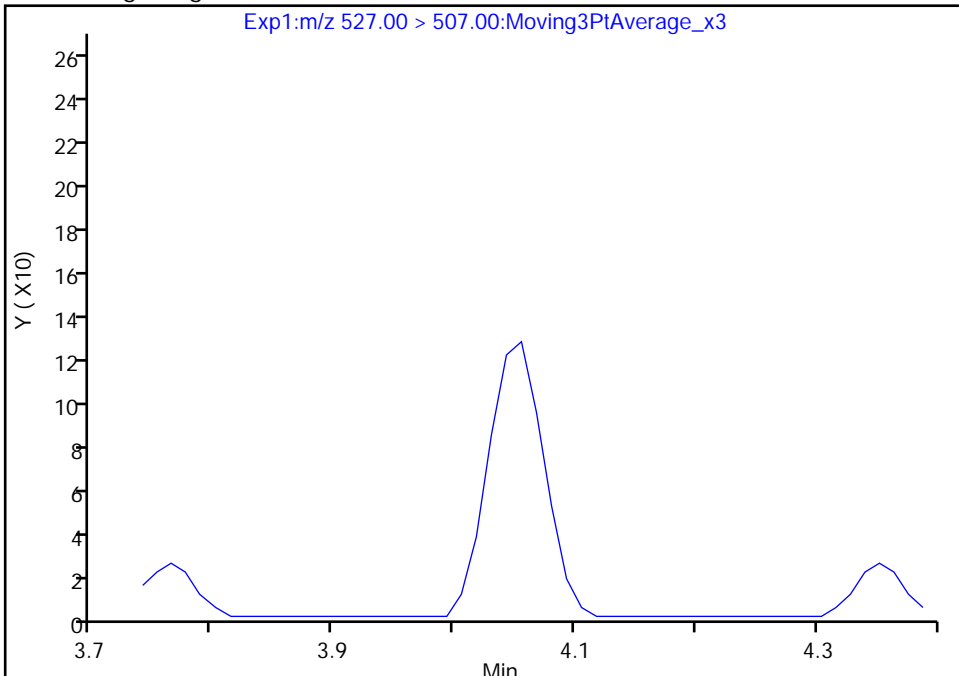
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E019.d
Injection Date: 02-Aug-2019 06:14:04 Instrument ID: LC812
Lims ID: 480-156213-F-16-A Lab Sample ID: 200-156213-16
Client ID: 356023-EB1
Operator ID: lc812tech ALS Bottle#: 12 Worklist Smp#: 19
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

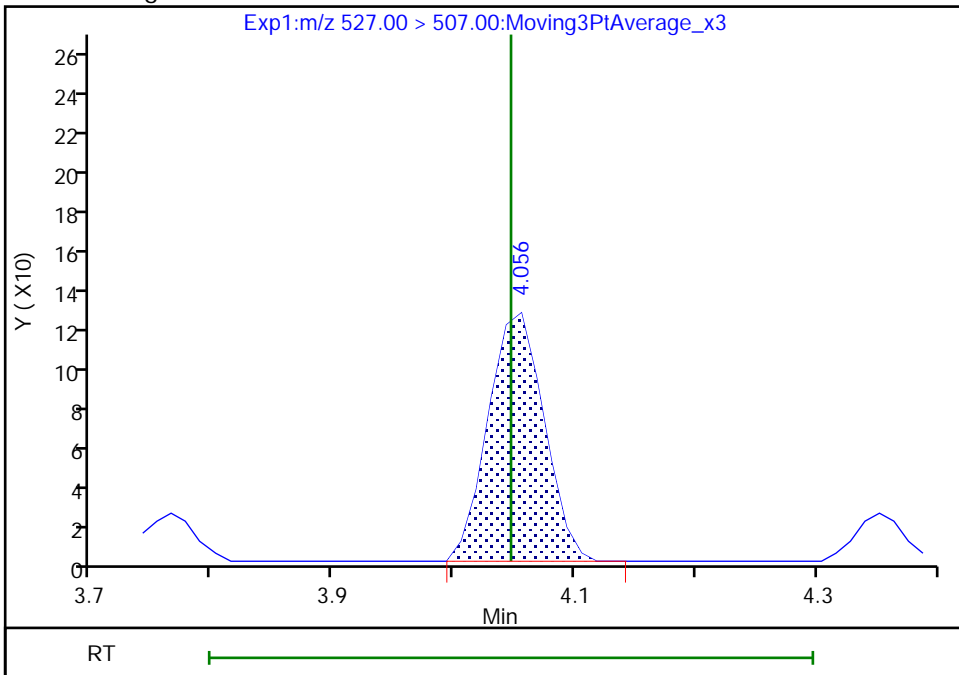
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.06
Area: 397
Amount: 0.034309
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:30:42
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1B Lab Sample ID: 480-156213-17
 Matrix: Water Lab File ID: SC080119E020.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 11:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 313.2 (mL) Date Analyzed: 08/02/2019 06:22
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.1		1.6	0.80
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.0	J	1.6	0.50
307-24-4	Perfluorohexanoic acid (PFHxA)	0.76	J	1.6	0.61
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.73
335-67-1	Perfluorooctanoic acid (PFOA)	2.0		1.6	0.50
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.61
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.42
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.47
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.48
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.73
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.67	J	1.6	0.39
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.64
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.76
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.72
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.60	J	1.6	0.49
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.0	8.0
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.7
39108-34-4	8:2 FTS	ND		16	2.3

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW1B Lab Sample ID: 480-156213-17
 Matrix: Water Lab File ID: SC080119E020.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 11:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 313.2 (mL) Date Analyzed: 08/02/2019 06:22
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	77		25-150
STL00992	13C4 PFBA	58		25-150
STL01893	13C5 PFPeA	81		25-150
STL00993	13C2 PFHxA	85		50-150
STL01892	13C4 PFHpA	92		50-150
STL00990	13C4 PFOA	87		50-150
STL00995	13C5 PFNA	85		50-150
STL00996	13C2 PFDA	92		50-150
STL00997	13C2 PFUnA	87		50-150
STL00998	13C2 PFDoA	79		50-150
STL02116	13C2 PFTeDA	64		50-150
STL02337	13C3 PFBS	86		50-150
STL00994	18O2 PFHxS	85		50-150
STL00991	13C4 PFOS	81		50-150
STL02118	d3-NMeFOSAA	69		50-150
STL02117	d5-NEtFOSAA	69		50-150
STL02279	M2-6:2 FTS	107		25-150
STL02280	M2-8:2 FTS	109		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
 Lims ID: 480-156213-F-17-A
 Client ID: 356023-MW1B
 Sample Type: Client
 Inject. Date: 02-Aug-2019 06:22:07 ALS Bottle#: 13 Worklist Smp#: 20
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-17-A
 Misc. Info.: 200-0037095-020 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:35:38
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.506	2208047	29.1	58.3	7338	
2 Perfluorobutanoic acid	212.90 > 169.00	1.717	1.699	0.018	1.005	79932	1.96		12.3	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.613	2874235	40.4	80.8	4593	
4 Perfluoropentanoic acid	262.90 > 219.00	2.080	2.067	0.013	1.006	35412	0.6366		1.1	M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.620	2808042	40.2	86.4	182691	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.106	2.093	0.013	1.006	25782	0.4200	Target=1.90	4.9	M
	298.90 > 99.00	2.093	2.093	0.0	1.000	11499		2.24(0.95-2.85)	3.2	
D 7 13C2 PFHxA	315.00 > 270.00	2.470	2.459	0.011	0.732	2988515	42.3	84.6	6524	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.000	29183	0.4741	Target=13.23	2.9	M
	313.00 > 119.00	2.470	2.459	0.011	1.000	2075		14.06(6.61-19.84)	2.6	
D 11 18O2 PFHxS	403.00 > 84.00	2.939	2.916	0.023	0.871	1654519	40.4	85.4	5688	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.871	3174792	45.9	91.7	9239	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.950	2.928	0.022	1.004	10206	0.2214	Target=3.37	3.9	M
	399.00 > 99.00	2.939	2.928	0.011	1.000	2966		3.44(1.69-5.06)	2.5	M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.000	15759	0.2650	Target=3.76	1.9	
	363.00 > 169.00	2.939	2.928	0.011	1.000	4445		3.55(1.88-5.65)	11.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.355	3.335	0.020	0.995	433903	50.9		107	398	
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.364	3.336	0.028	1.003	9555	0.6099		27.6		M
D 14 13C4 PFOA										
417.00 > 372.00	3.373	3.344	0.029	1.000	3182189	43.5		87.0	13228	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.373	3.355	0.018	1.000	87080	1.26	Target=2.84	7.4		M
413.00 > 169.00	3.373	3.355	0.018	1.000	39295		2.22(1.42-4.25)	76.8		M
* 62 13C2 PFOA										
415.00 > 370.00	3.373	3.355	0.018		4020529	50.0			9949	
D 18 13C4 PFOS										
503.00 > 80.00	3.723	3.695	0.028	1.104	1320752	38.7		81.0	1981	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.594	3.703	-0.109	0.965	9804	0.3749	Target=4.33	6.8		M
499.00 > 99.00	3.713	3.703	0.010	0.997	3045		3.22(2.16-6.49)	3.5		M
D 19 13C5 PFNA										
468.00 > 423.00	3.745	3.715	0.030	1.110	2839214	42.6		85.1	11335	
D 23 13C2 PFDA										
515.00 > 470.00	4.059	4.036	0.023	1.203	2443747	45.8		91.6	7652	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.072	4.036	0.036	1.207	410087	52.2		109	573	
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.211	2349749	38.4		76.7	8325	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.084	4.072	0.012	1.000	2594	0.0605		26.0		M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.198	4.178	0.020	1.245	234277	34.4		68.7	2003	
28 N-methylperfluorooctanesulfonamido										M
570.00 > 419.00	4.122	4.187	-0.065	0.982	134	0.0378		0.3		M
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.280	2123485	43.7		87.4	8255	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.319	4.307	0.012	1.000	8779	0.2409	Target=7.95	3.4		
563.00 > 169.00	4.331	4.307	0.024	1.003	764		11.49(3.98-11.93)	7.1		M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.308	0.023	1.284	260283	34.3		68.5	858	
D 36 13C2 PFDoA										
615.00 > 570.00	4.562	4.537	0.025	1.352	2055164	39.3		78.6	8629	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.778	4.760	0.018	1.047	3487	0.0925	Target=5.71	0.7		M
663.00 > 169.00	4.769	4.760	0.009	1.045	898		3.88(2.85-8.56)	8.9		M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.979	4.965	0.014	1.476	2323246	32.2		64.5	7605	
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.979	4.972	0.007	1.000	418	0.0676	Target=1.02	4.5		
713.00 > 219.00	4.965	4.972	-0.007	0.997	367		1.14(0.51-1.54)	5.9		M

QC Flag Legend

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d

Injection Date: 02-Aug-2019 06:22:07

Instrument ID: LC812

Lims ID: 480-156213-F-17-A

Lab Sample ID: 200-156213-17

Client ID: 356023-MW1B

Operator ID: lc812tech

ALS Bottle#: 13

Worklist Smp#: 20

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

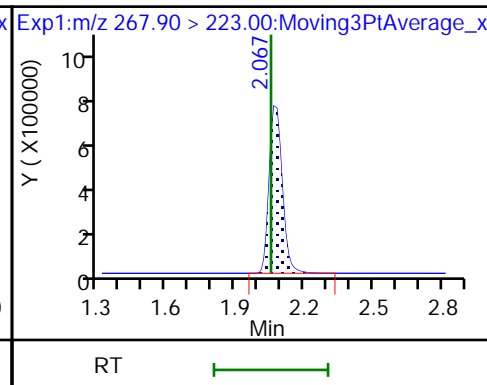
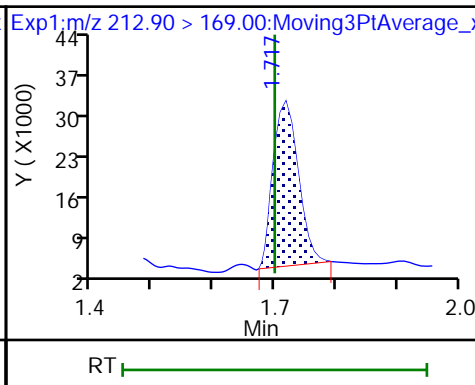
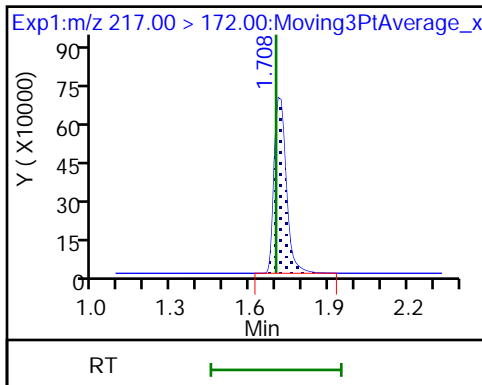
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

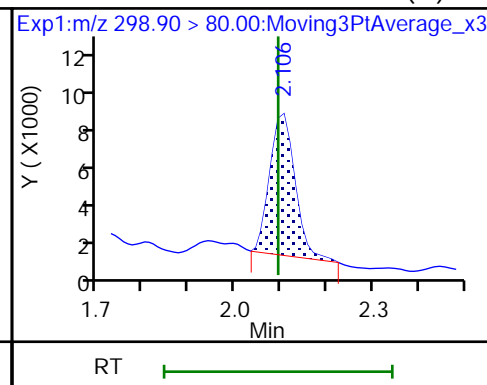
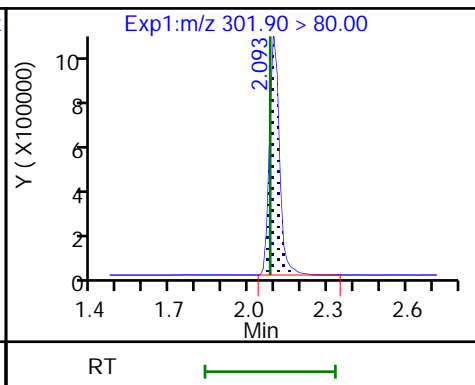
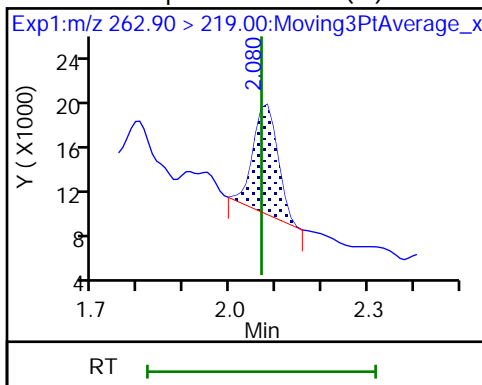
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

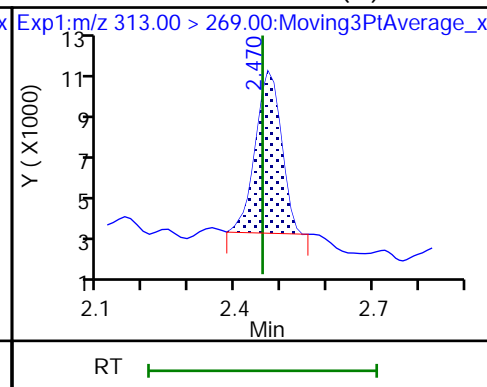
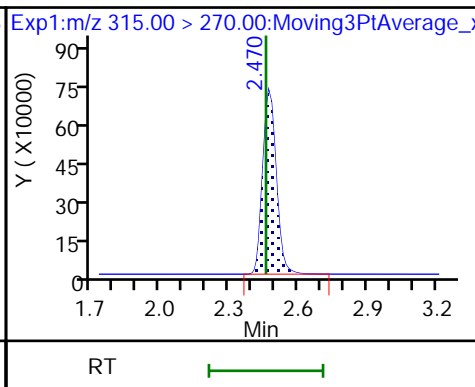
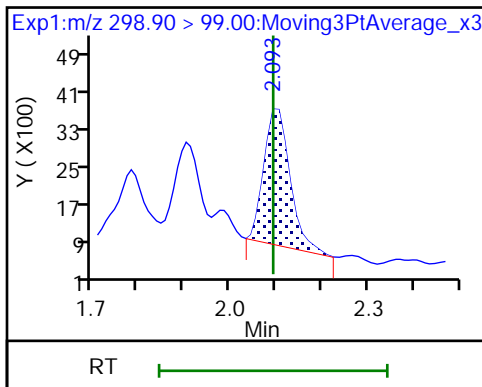
5 Perfluorobutanesulfonic acid (M)



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

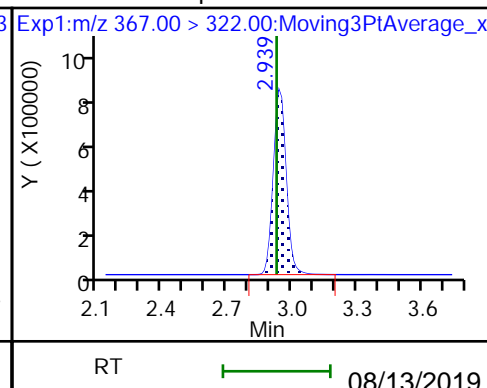
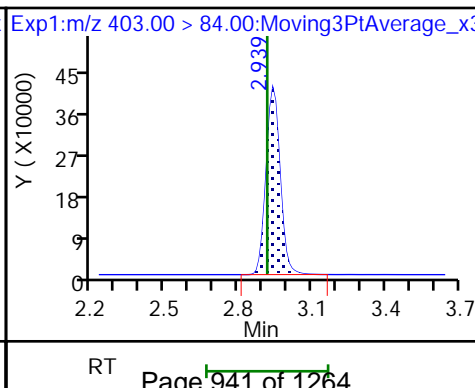
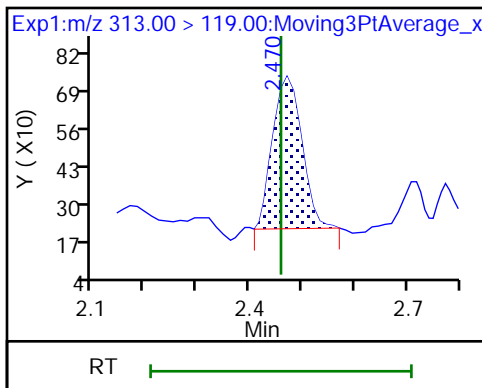
6 Perfluorohexanoic acid (M)

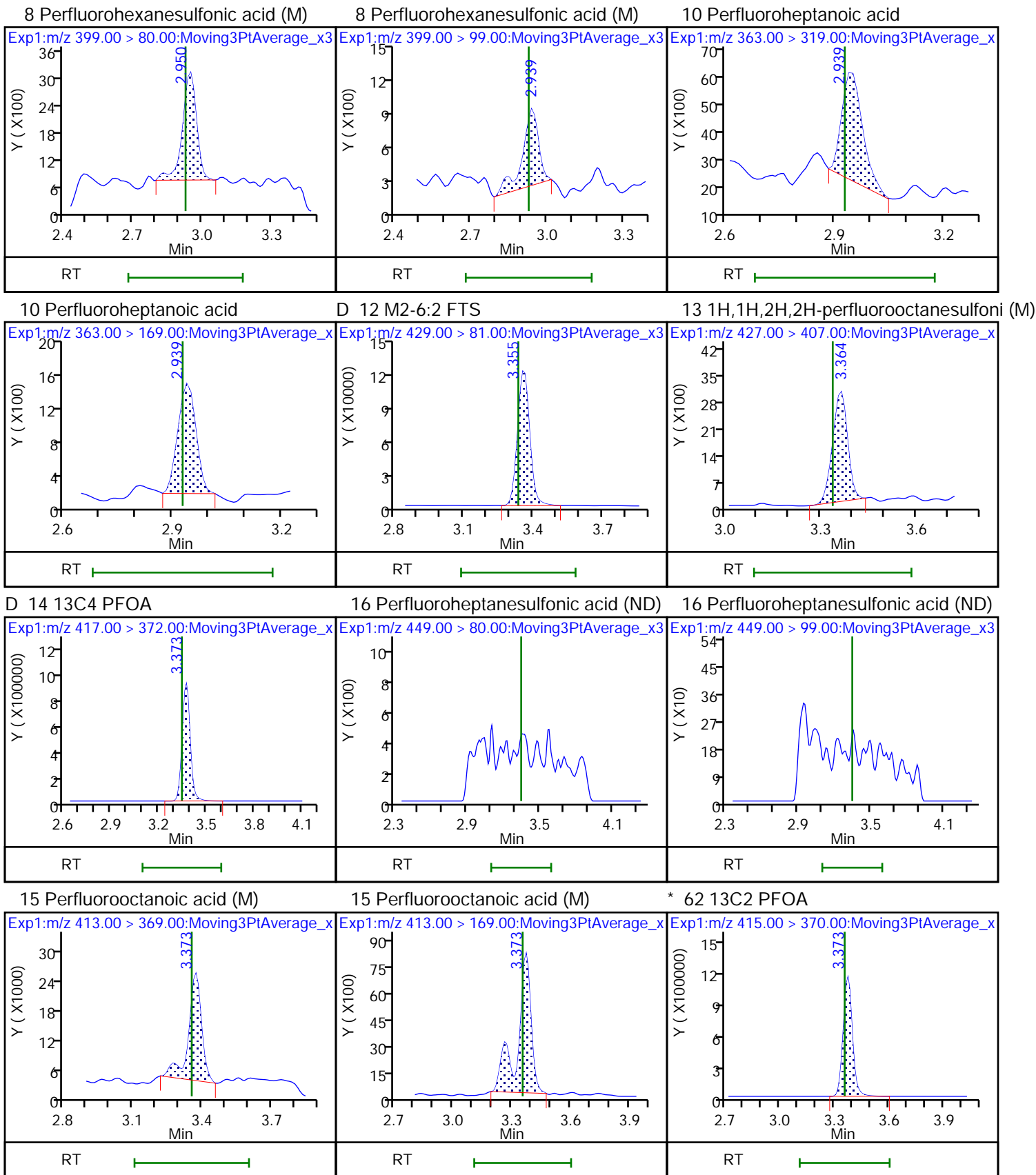


6 Perfluorohexanoic acid

D 11 18O2 PFHxS

D 9 13C4 PFHpA

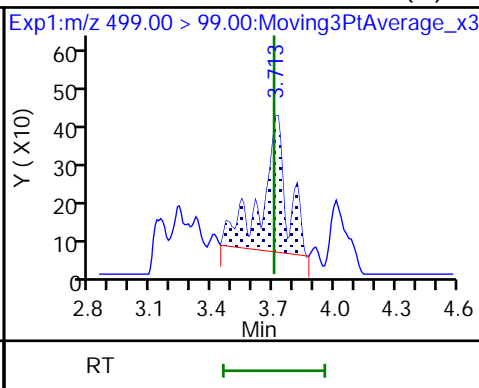
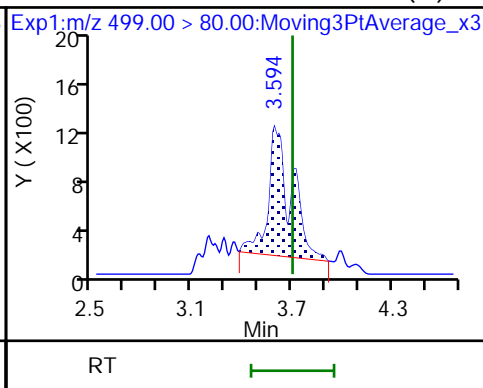
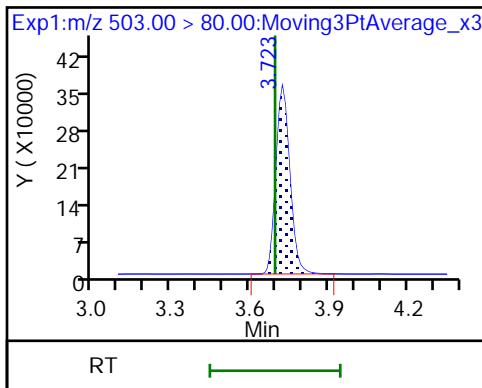




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

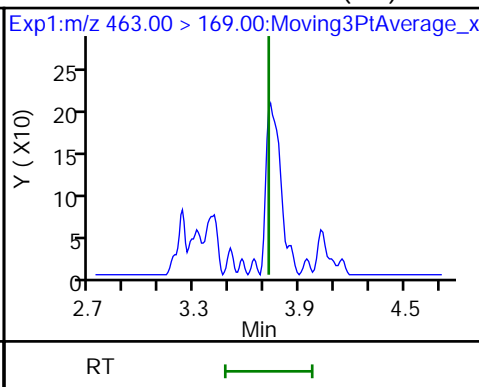
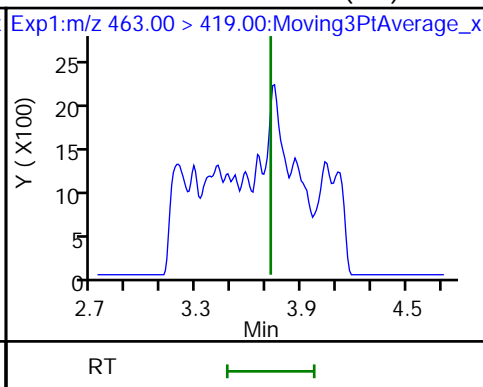
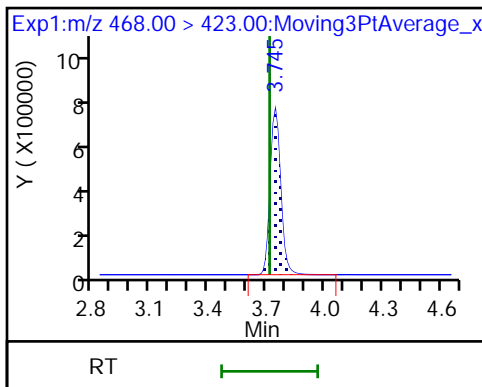
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (ND)

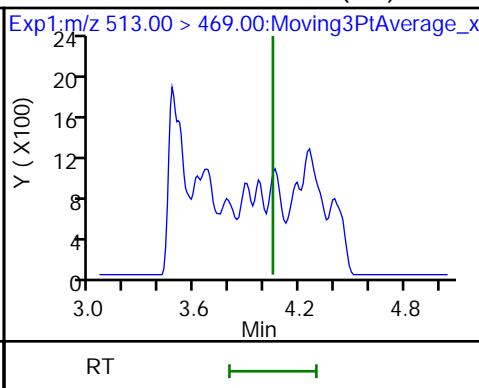
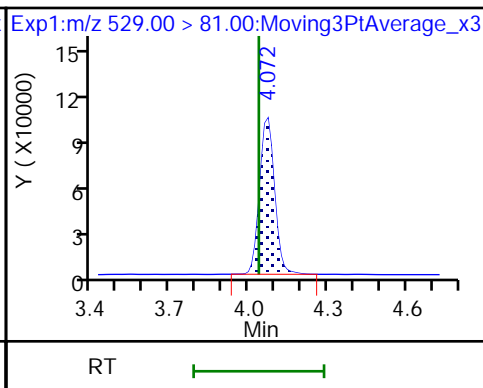
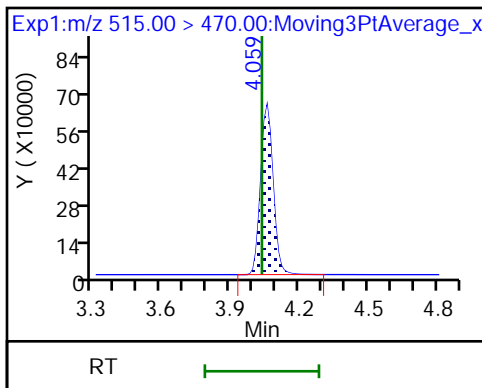
20 Perfluorononanoic acid (ND)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

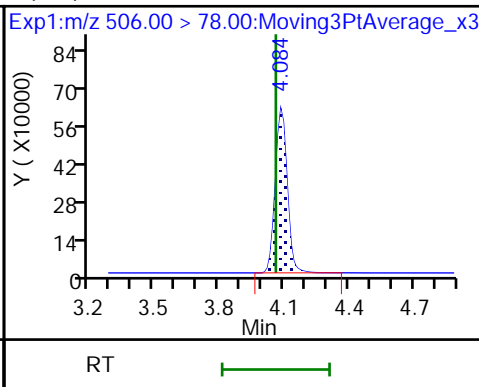
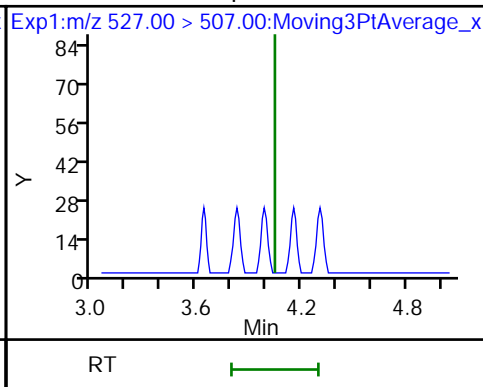
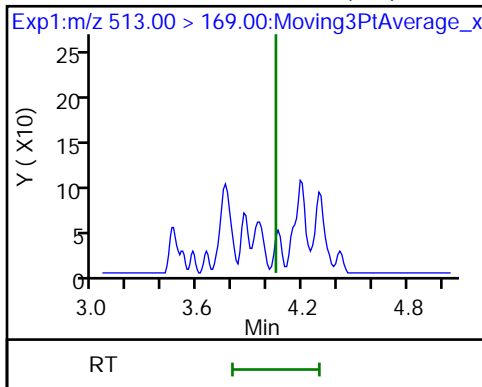
24 Perfluorodecanoic acid (ND)



24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonate (ND)

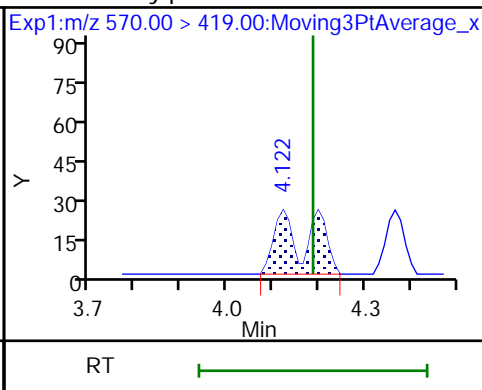
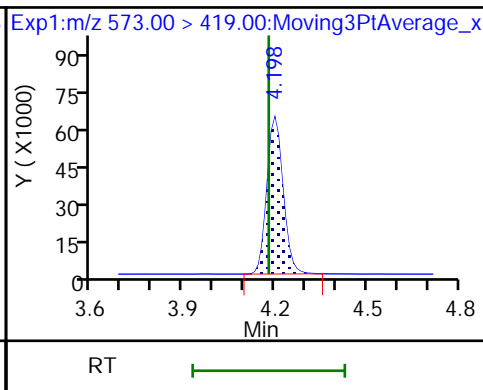
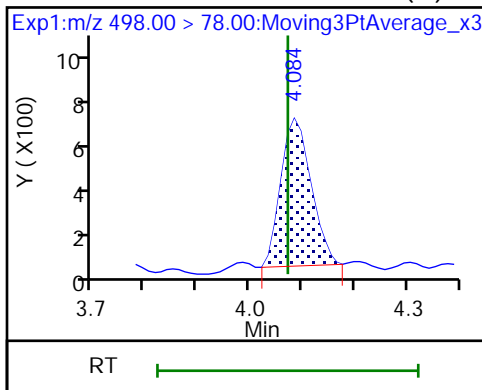
(ND) 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

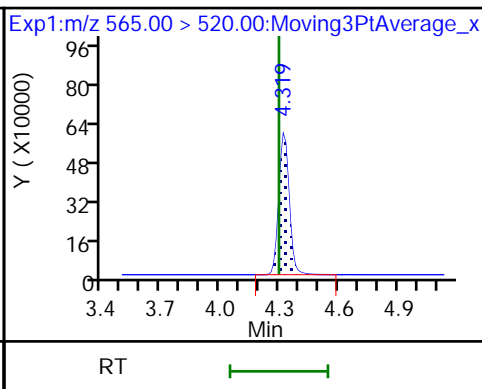
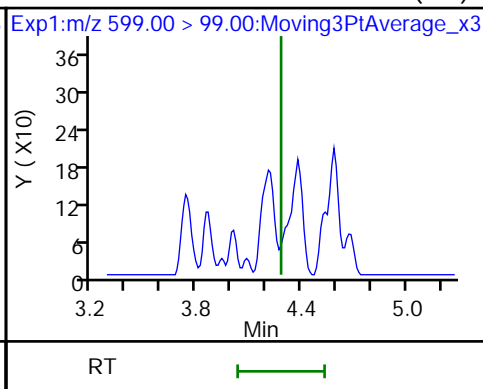
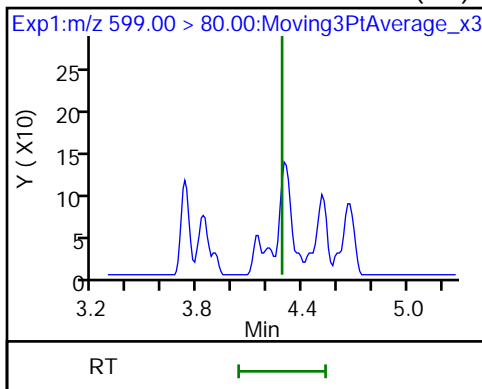
28 N-methylperfluorooctanesulfonamido (M)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

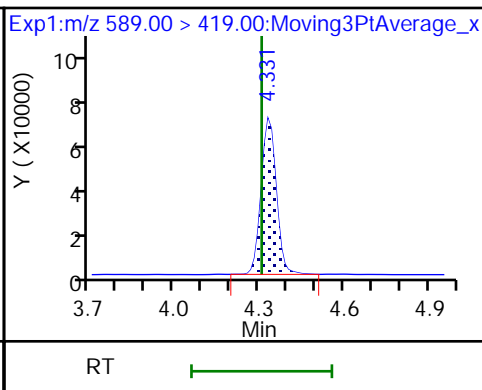
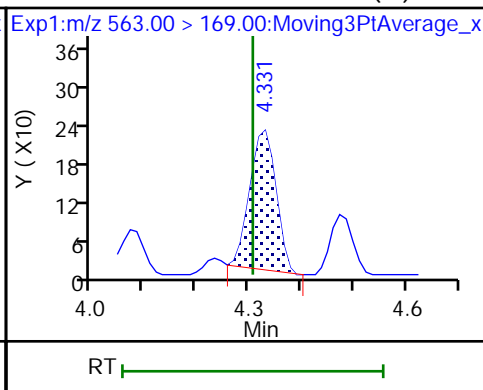
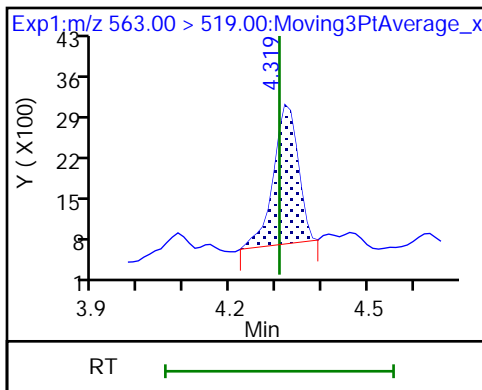
D 30 13C2 PFUa



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid (M)

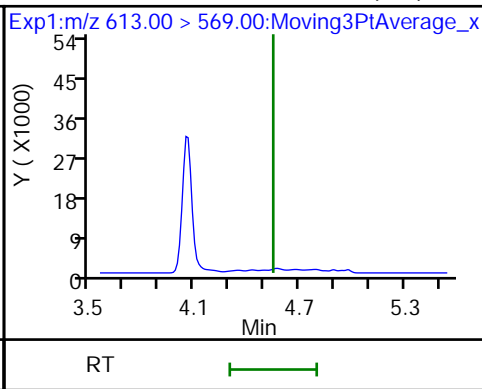
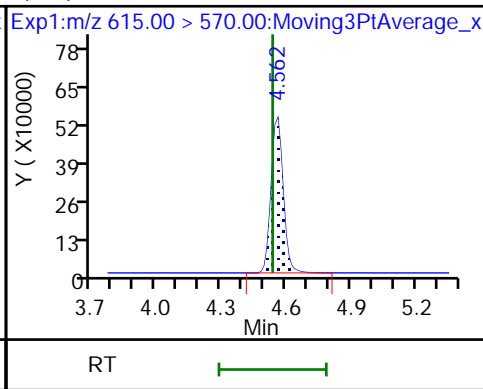
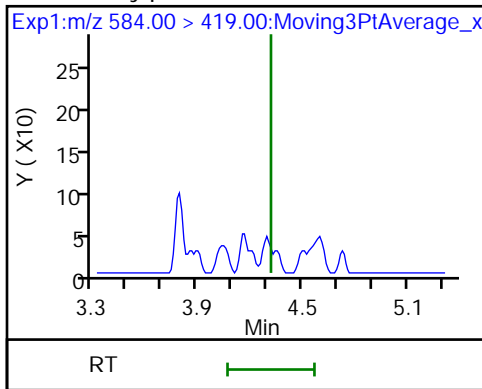
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 33 13C2 PFDoA

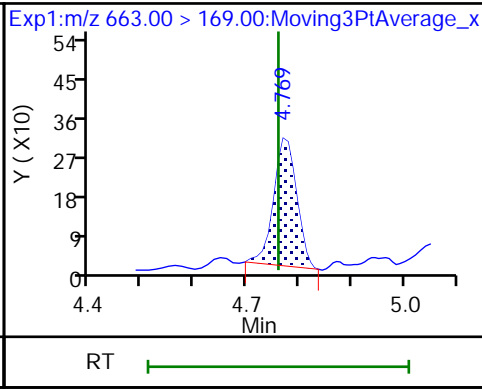
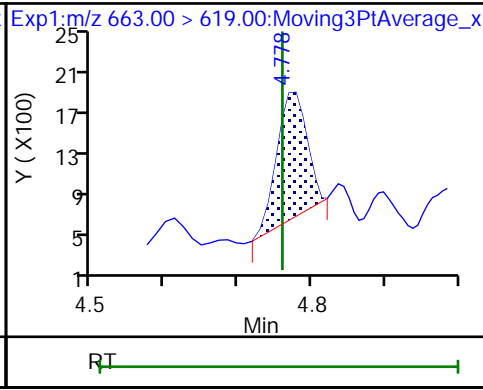
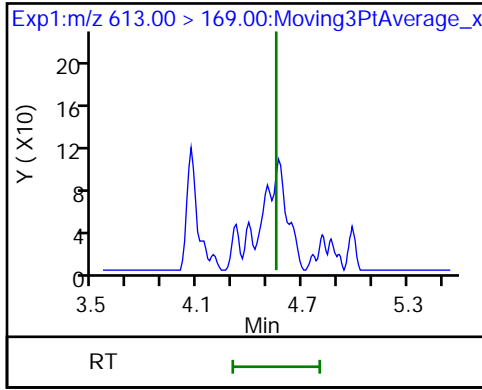
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (M)

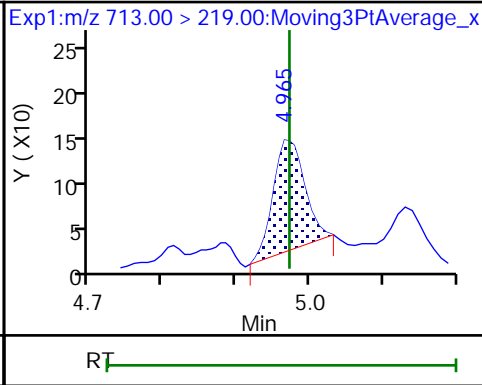
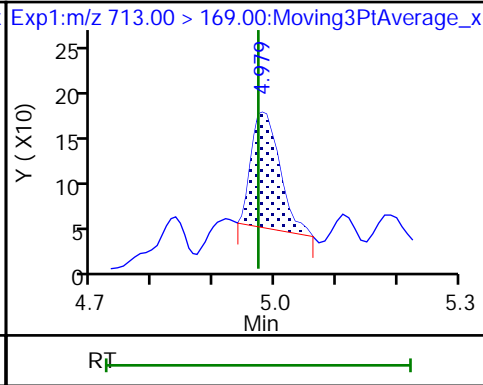
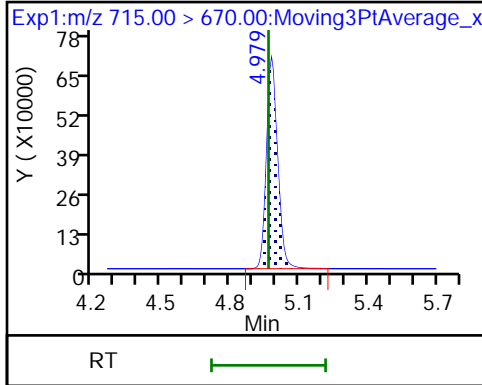
41 Perfluorotridecanoic acid (M)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid (M)



Eurofins TestAmerica, Burlington

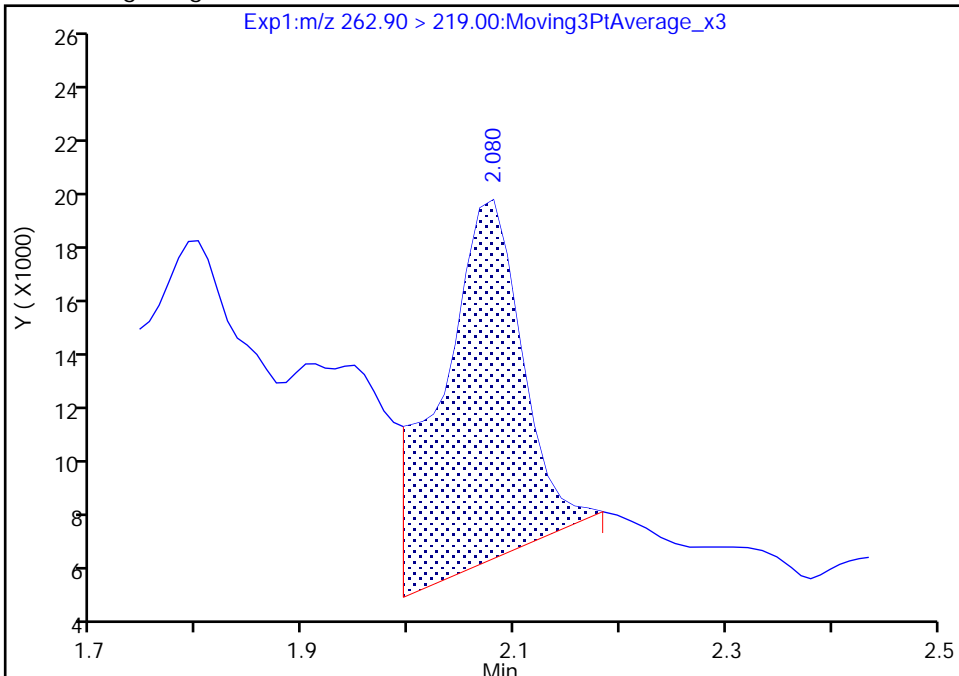
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

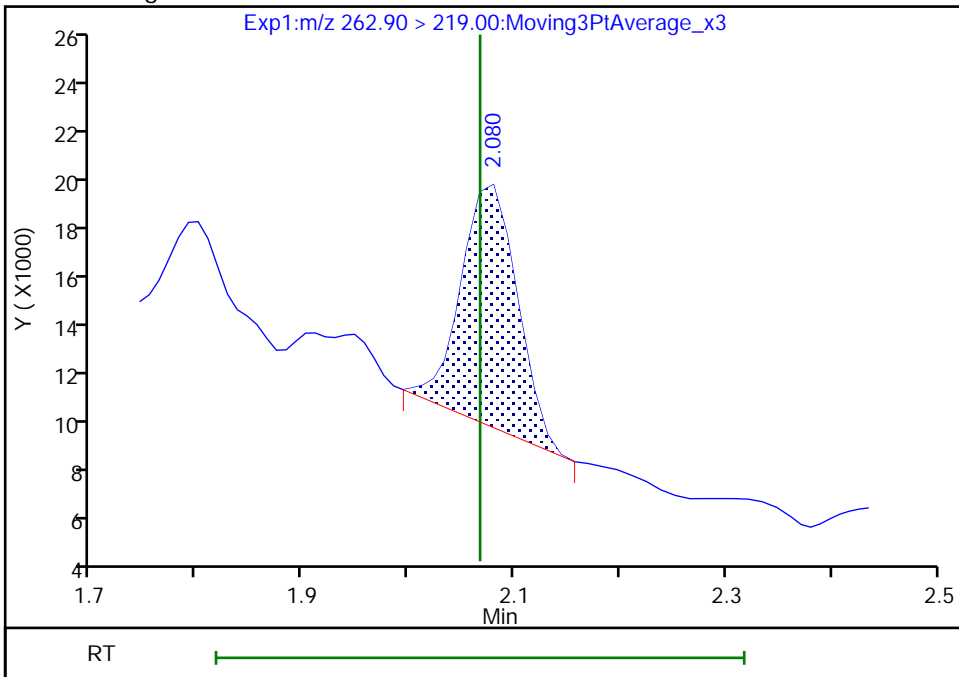
RT: 2.08
Area: 68586
Amount: 1.232986
Amount Units: ng/ml

Processing Integration Results



RT: 2.08
Area: 35412
Amount: 0.636609
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:32:43
Audit Action: Manually Integrated

Audit Reason: Baseline
Page 946 of 1264

Eurofins TestAmerica, Burlington

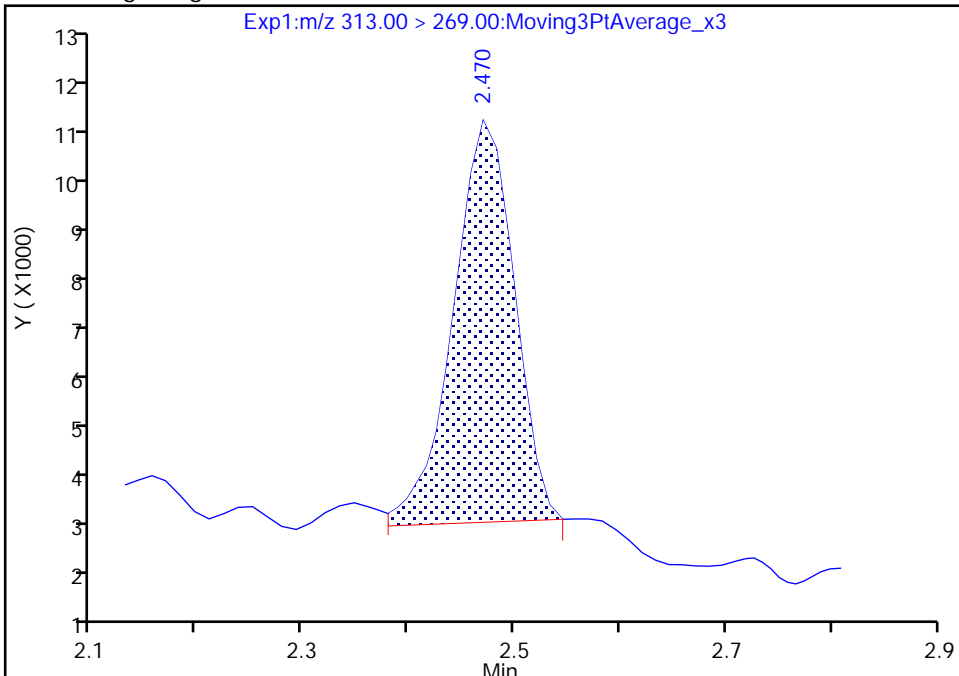
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

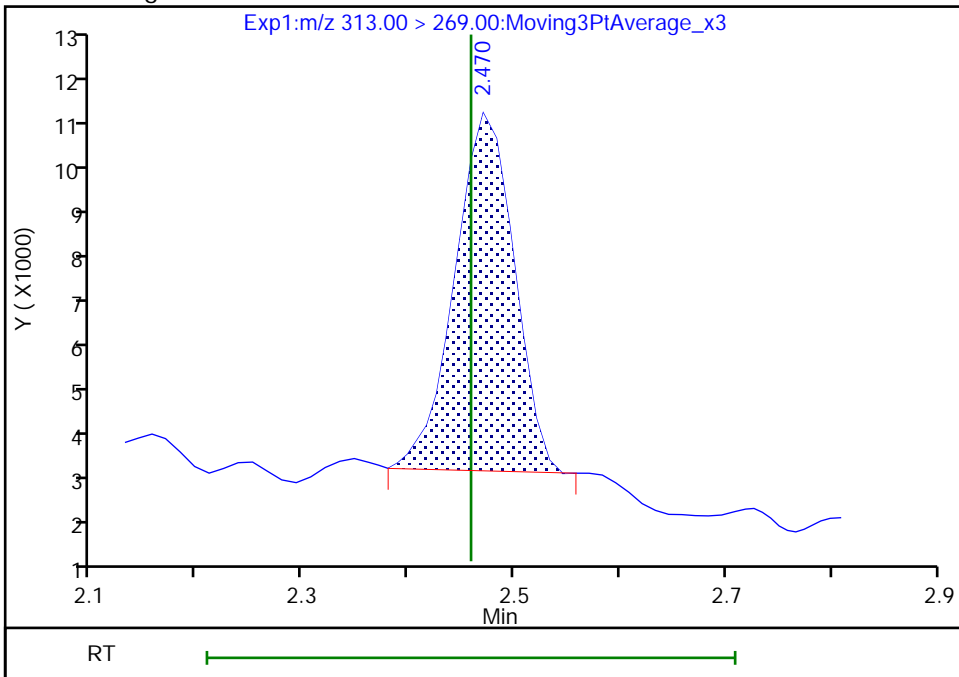
RT: 2.47
Area: 30402
Amount: 0.493938
Amount Units: ng/ml

Processing Integration Results



RT: 2.47
Area: 29183
Amount: 0.474133
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:33:03
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

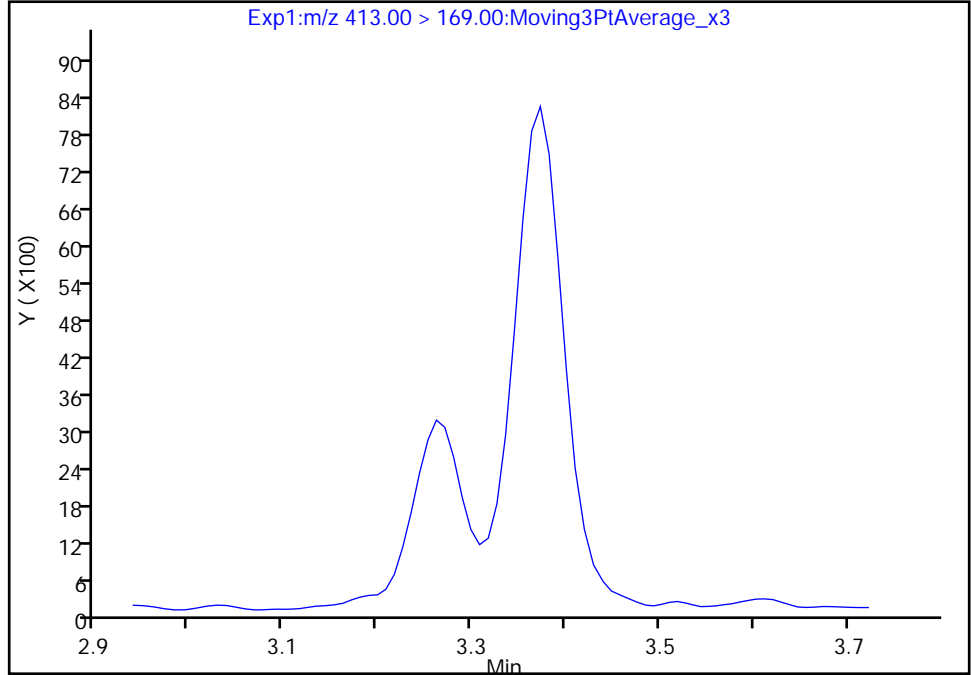
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

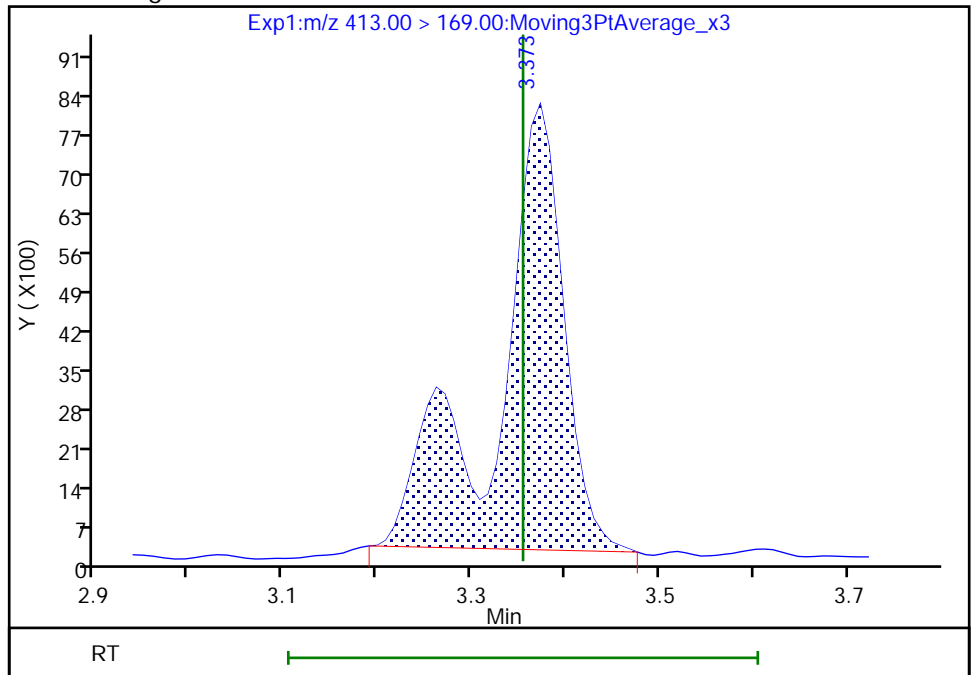
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 39295
Amount: 1.257427
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:33:53
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

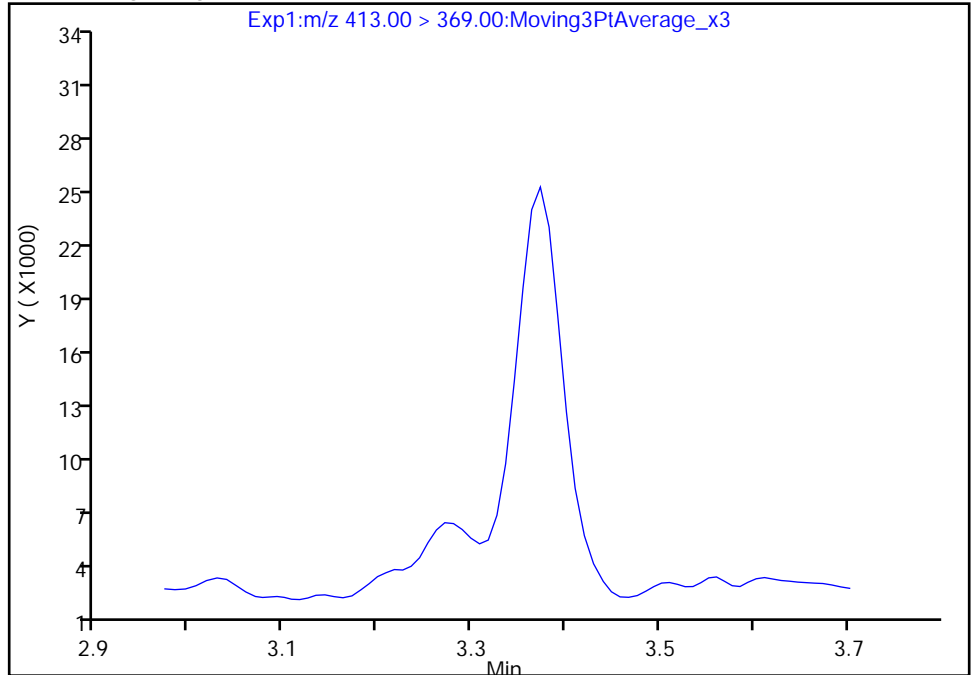
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

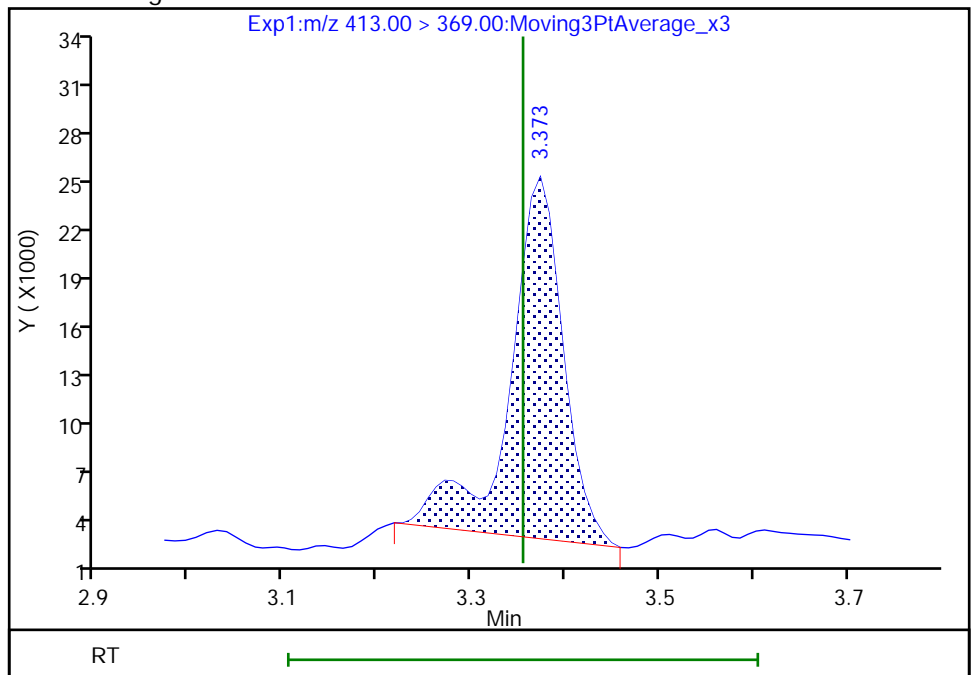
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 87080
Amount: 1.257427
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

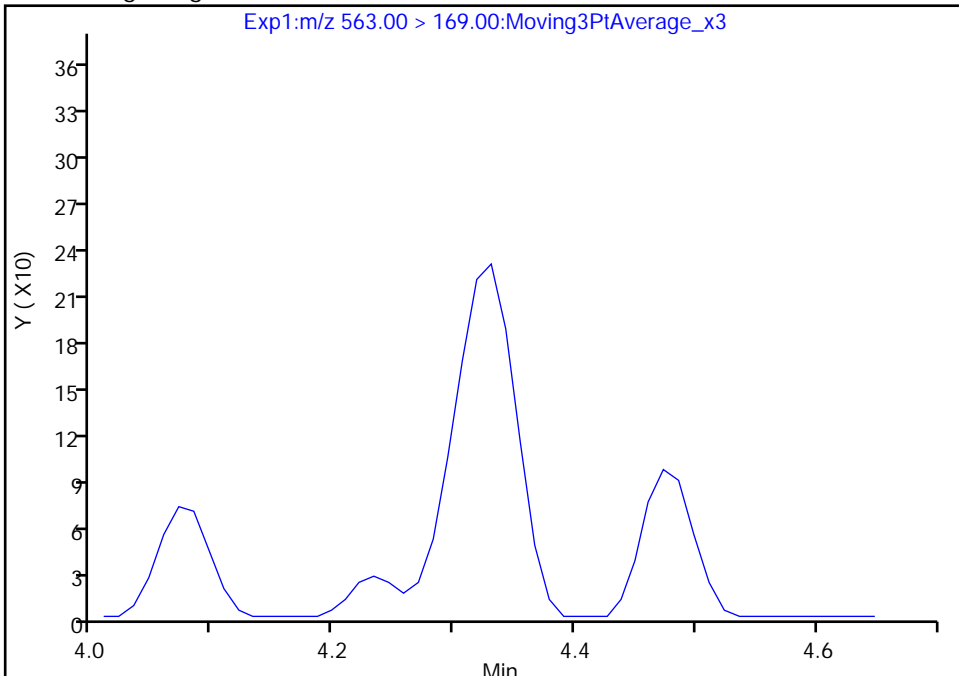
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

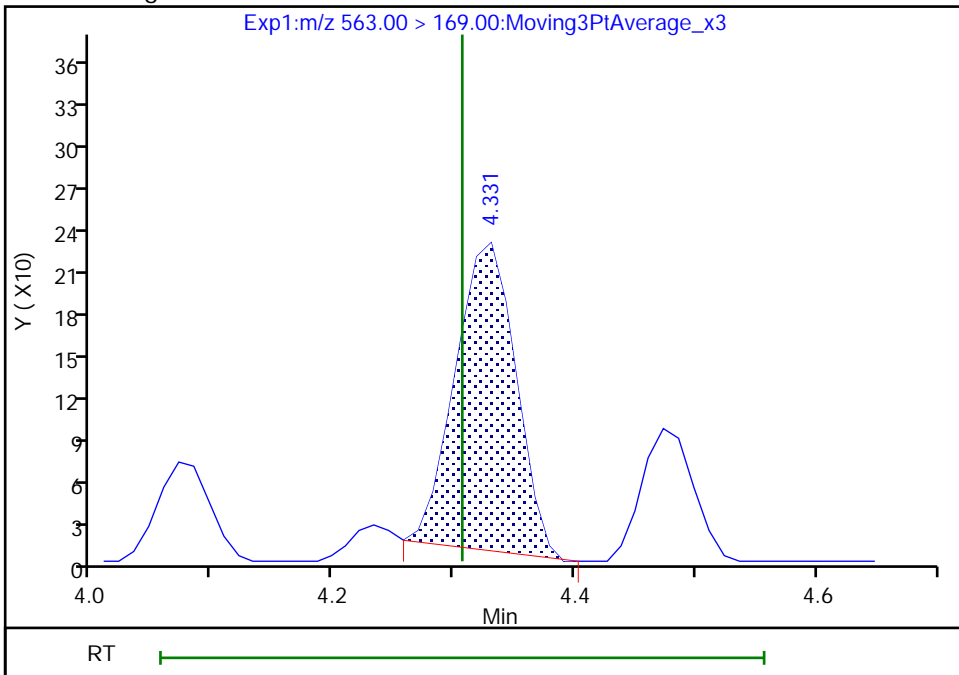
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.33
Area: 764
Amount: 0.240908
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:34:47
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurolins TestAmerica, Burlington

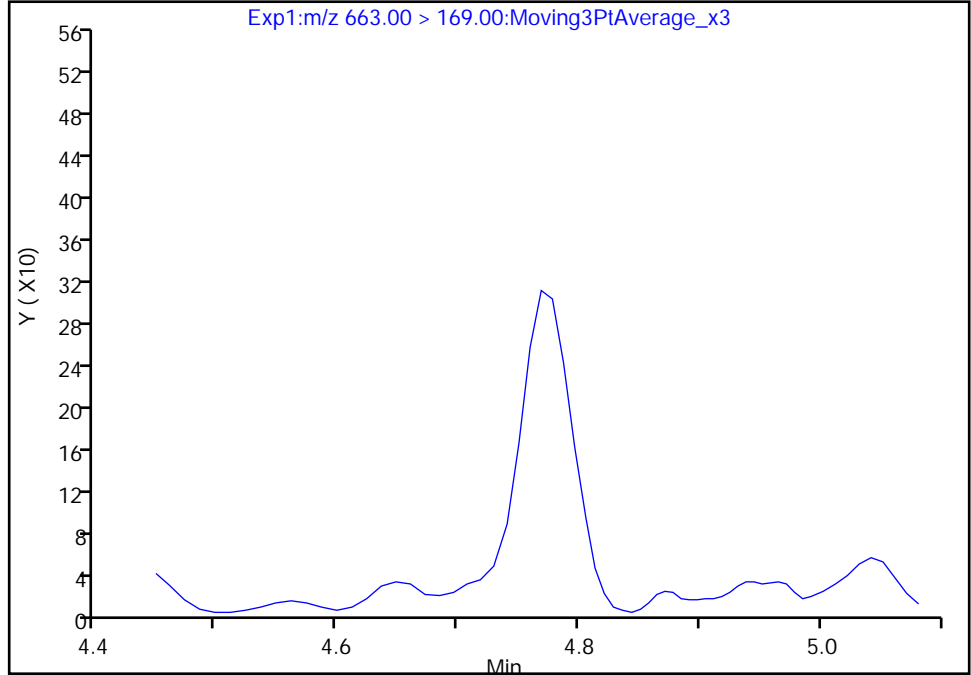
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

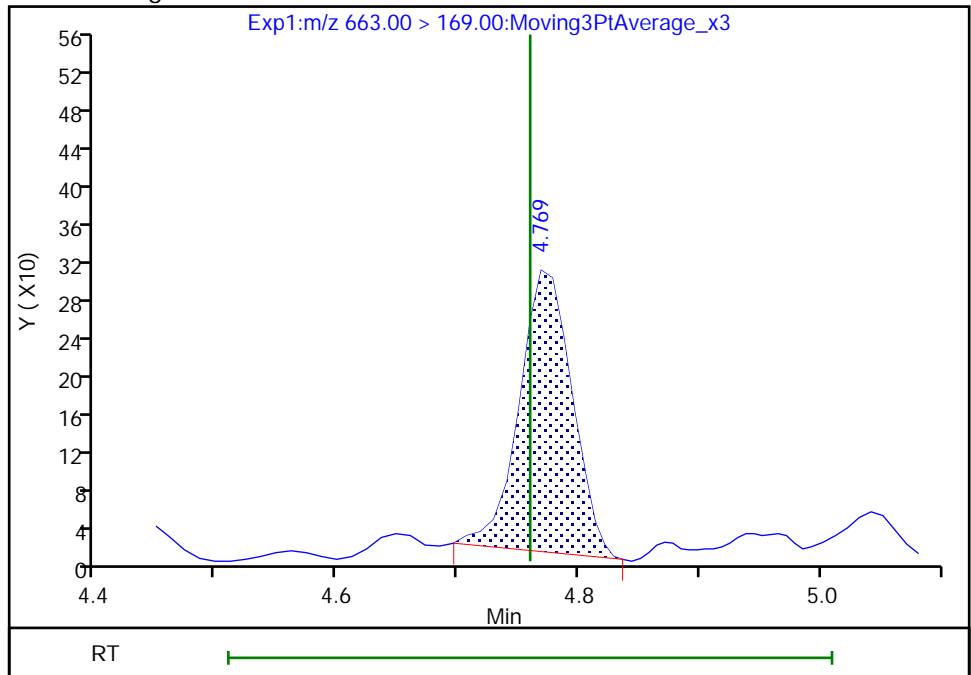
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.77
Area: 898
Amount: 0.092453
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

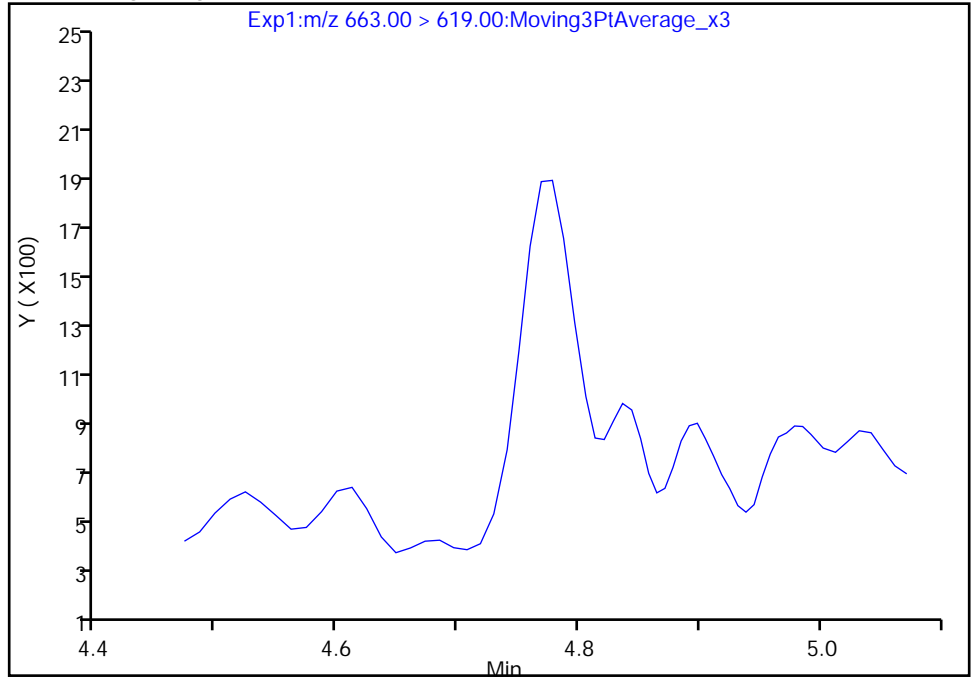
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

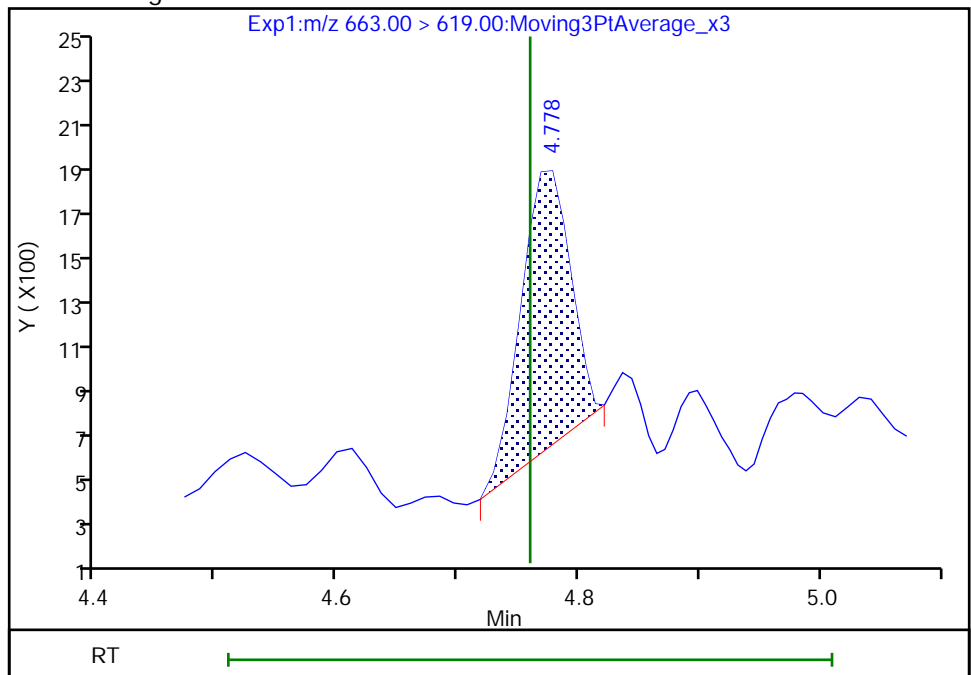
Not Detected
Expected RT: 4.76

Processing Integration Results



RT: 4.78
Area: 3487
Amount: 0.092453
Amount Units: ng/ml

Manual Integration Results



Euofins TestAmerica, Burlington

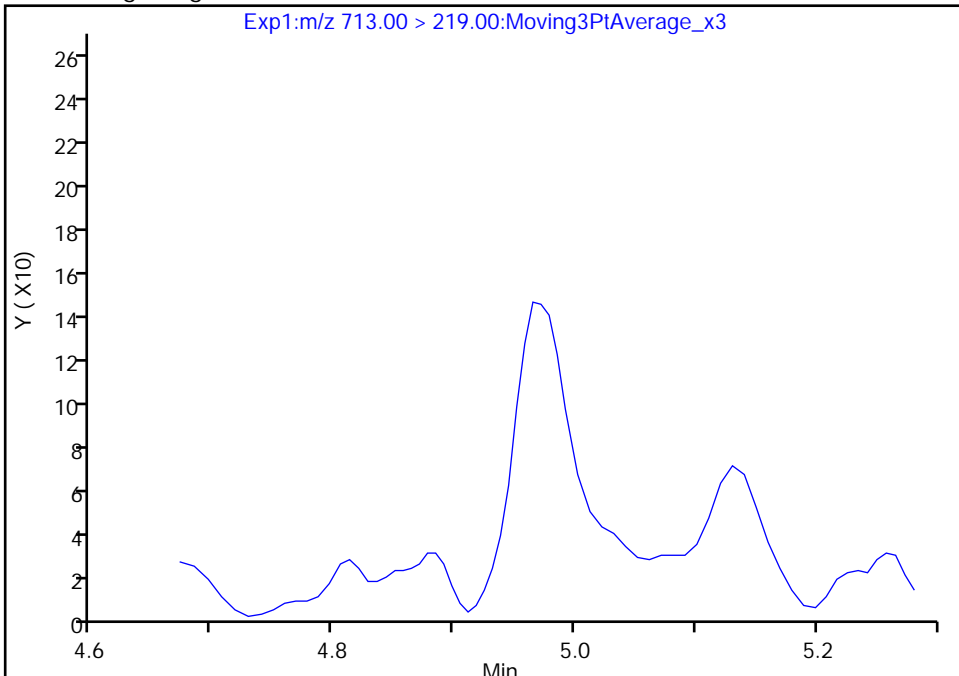
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

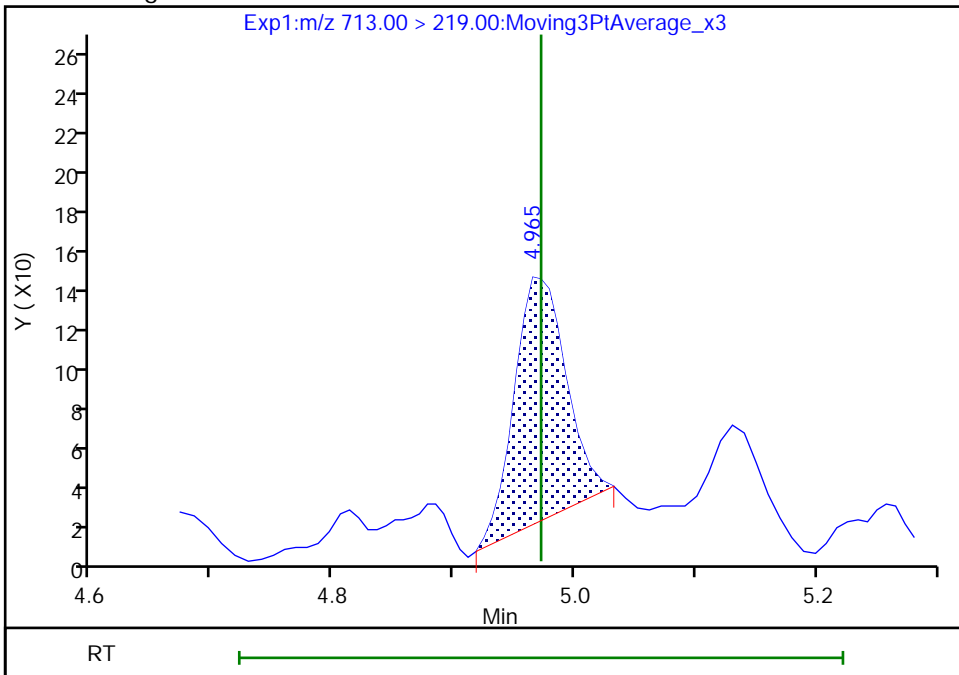
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 367
Amount: 0.067577
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:35:21
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

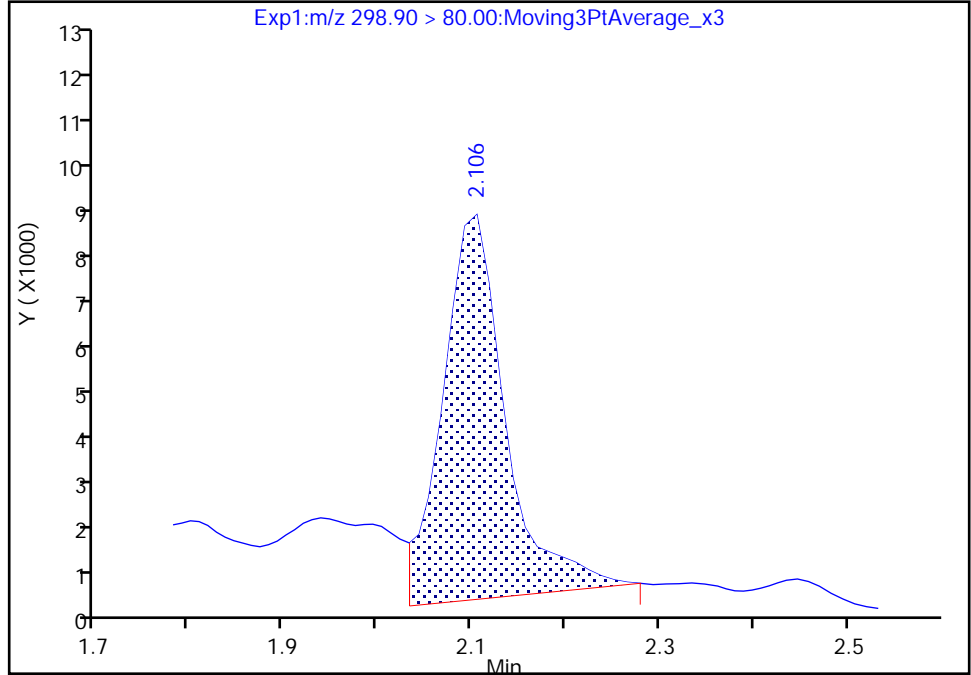
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

5 Perfluorobutanesulfonic acid, CAS: 375-73-5

Signal: 1

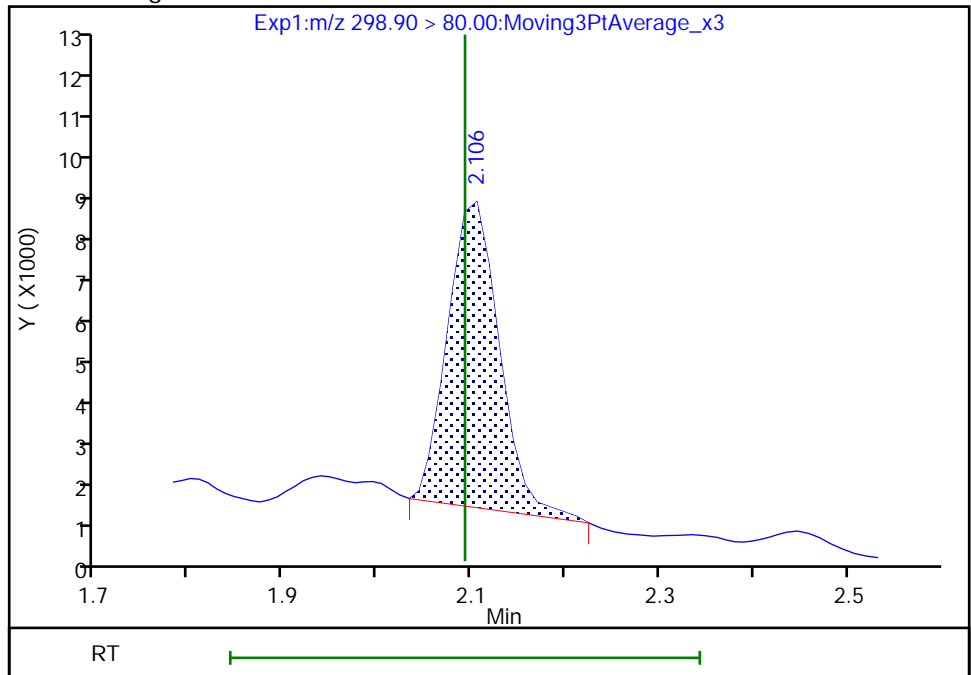
RT: 2.11
Area: 35540
Amount: 0.578929
Amount Units: ng/ml

Processing Integration Results



RT: 2.11
Area: 25782
Amount: 0.419976
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:32:54
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

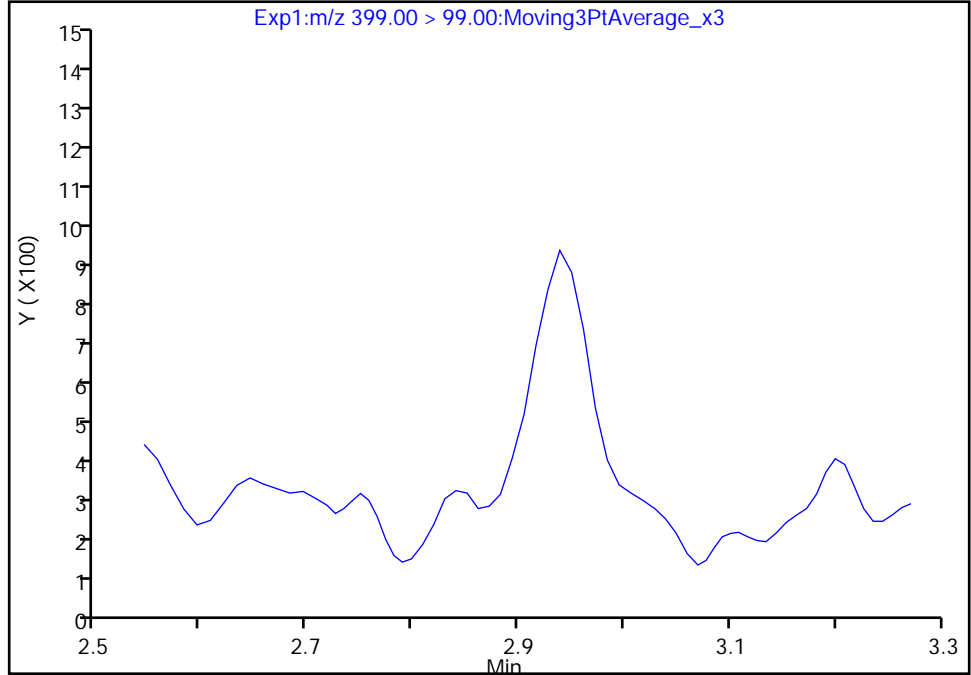
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

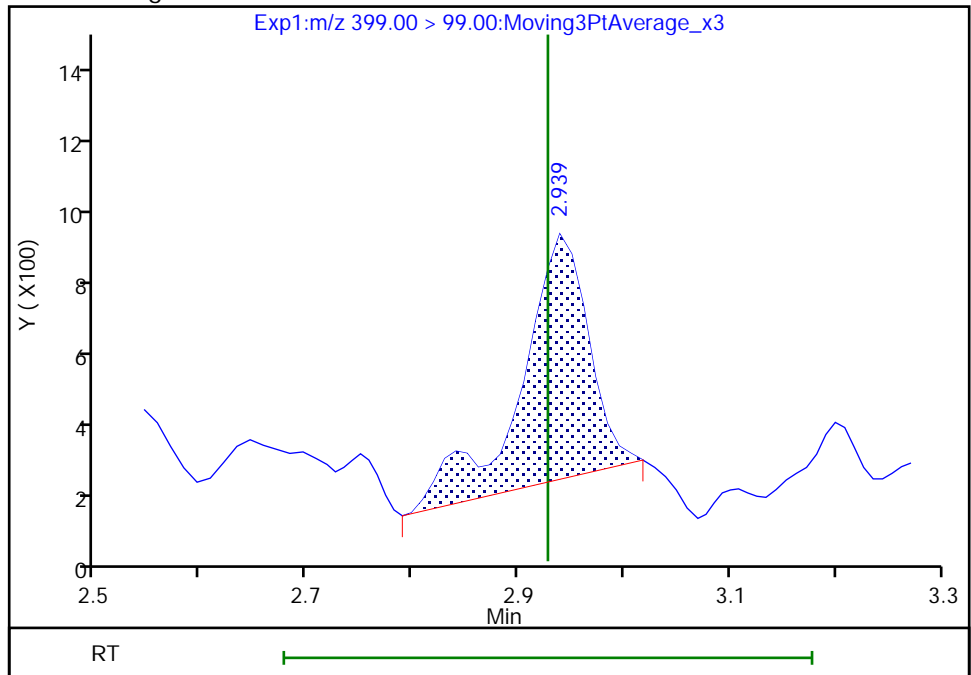
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 2966
Amount: 0.221411
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:33:16
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

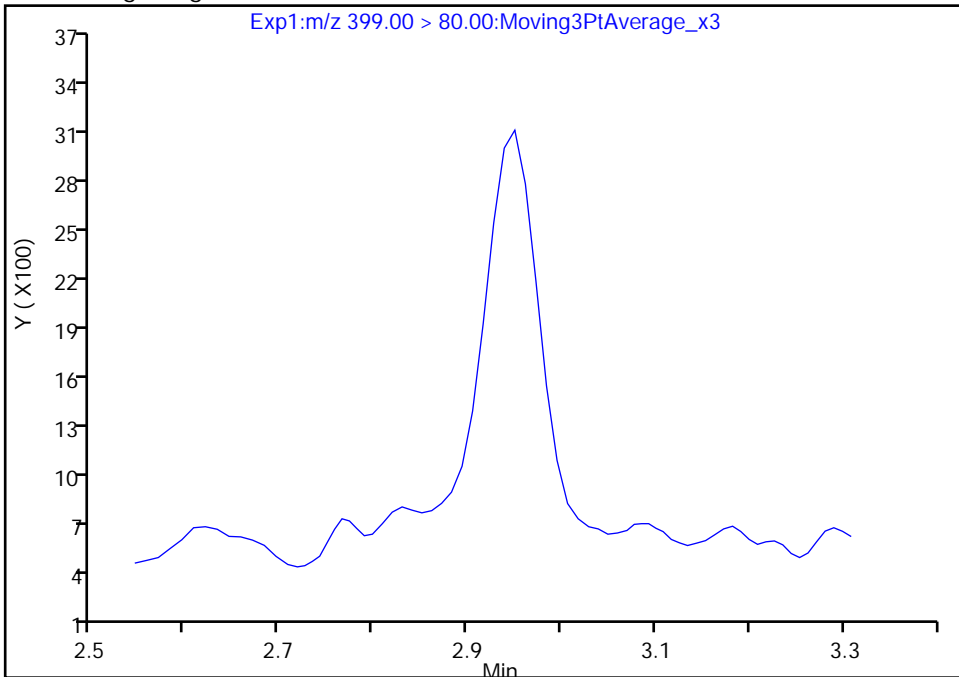
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

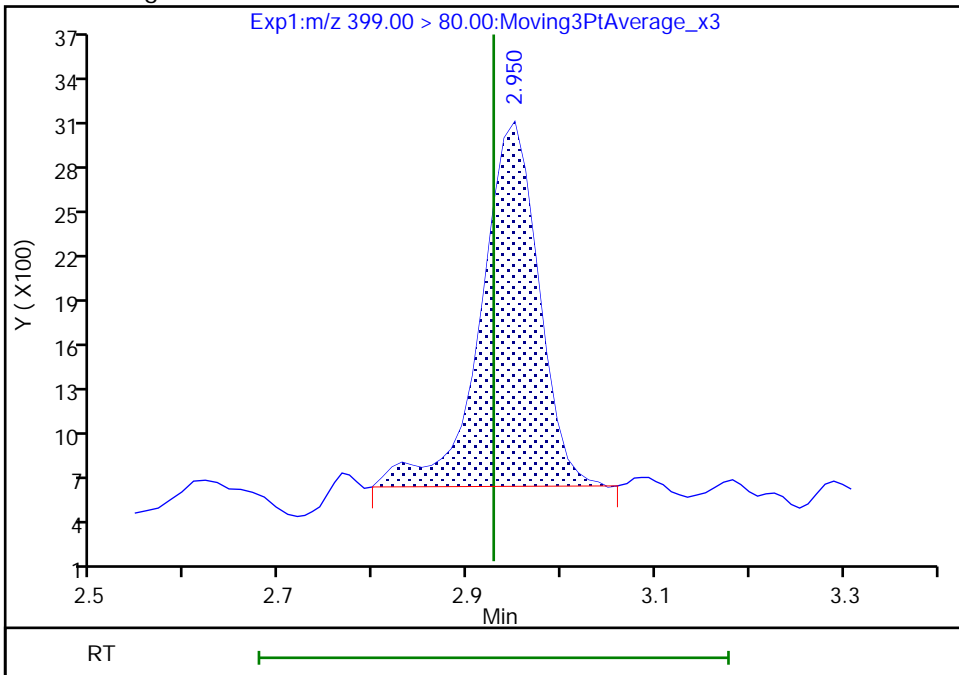
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.95
Area: 10206
Amount: 0.221411
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

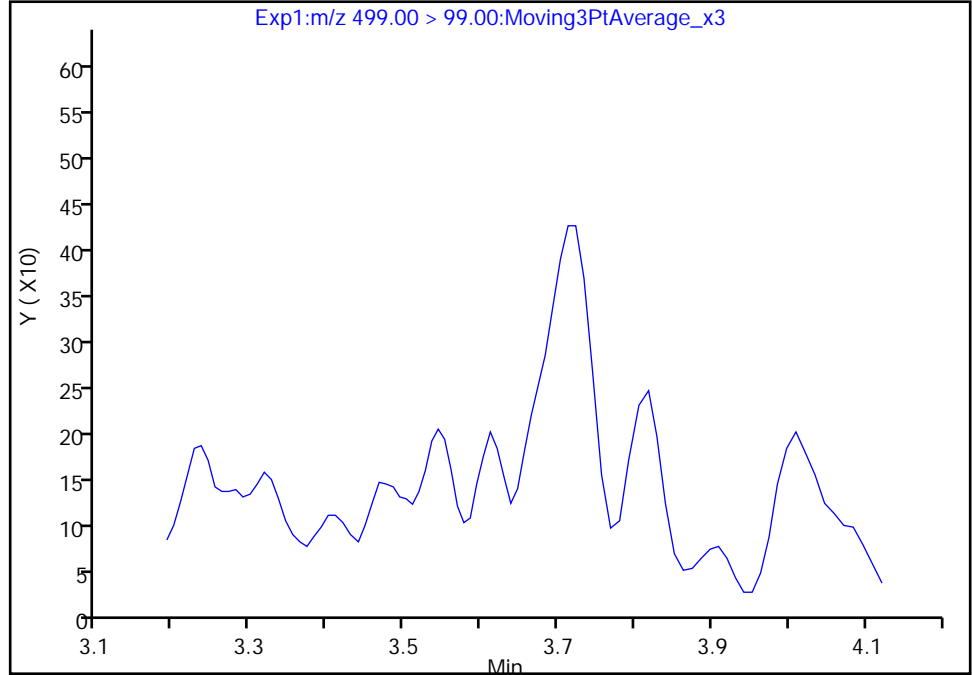
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

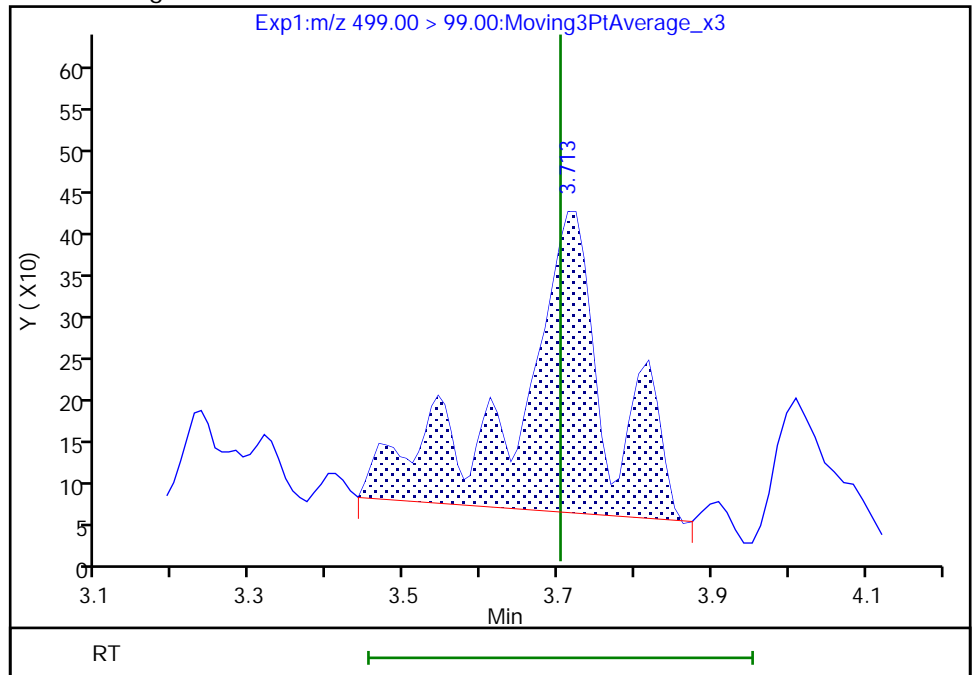
Not Detected
Expected RT: 3.70

Processing Integration Results



RT: 3.71
Area: 3045
Amount: 0.374871
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:34:09
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

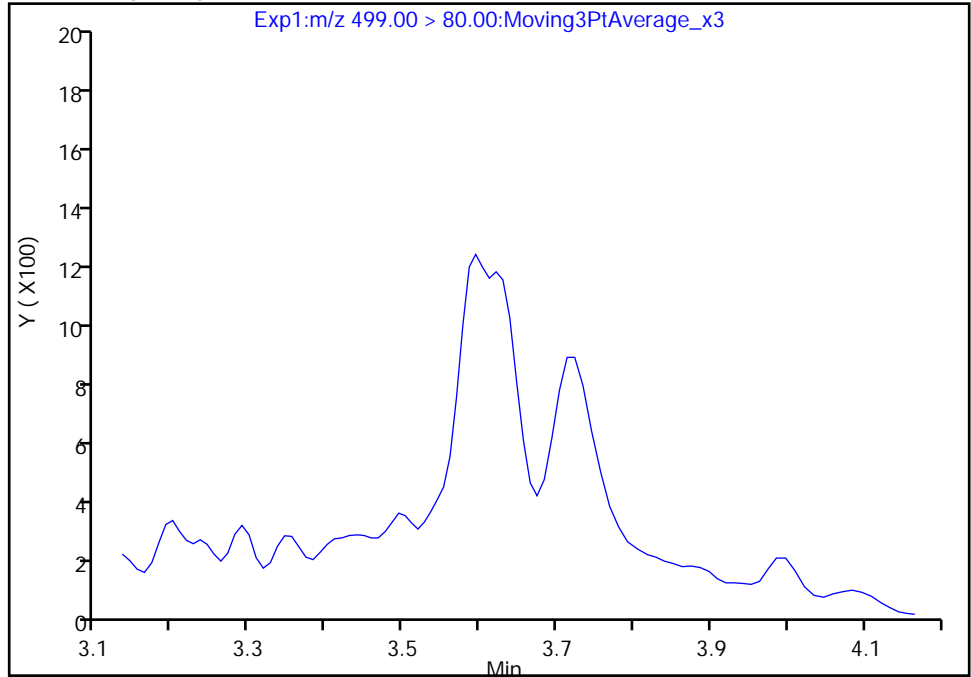
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

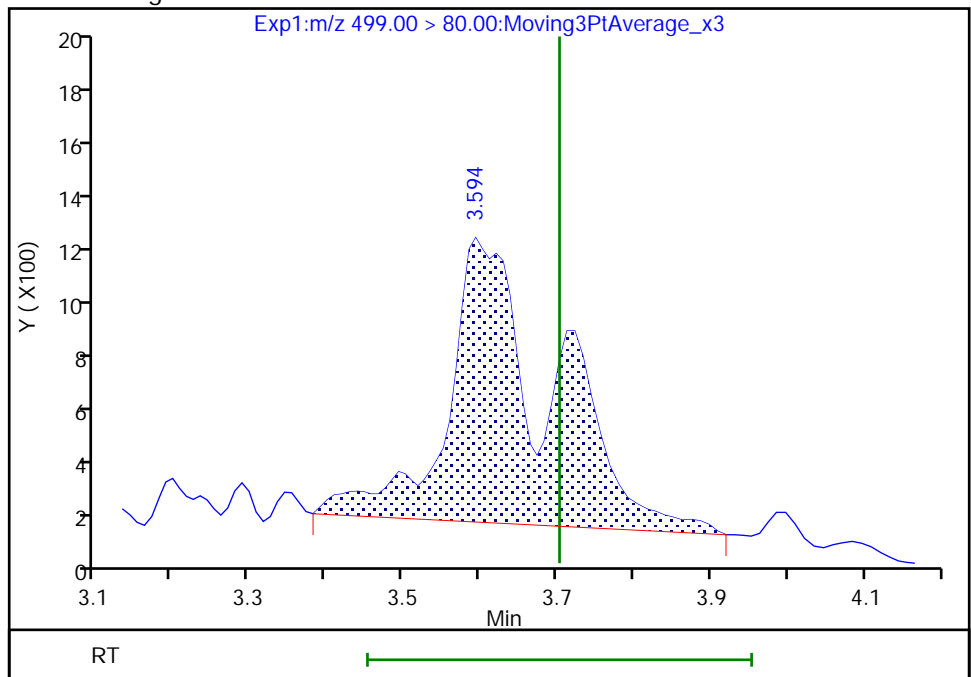
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.59
Area: 9804
Amount: 0.374871
Amount Units: ng/ml



Euofins TestAmerica, Burlington

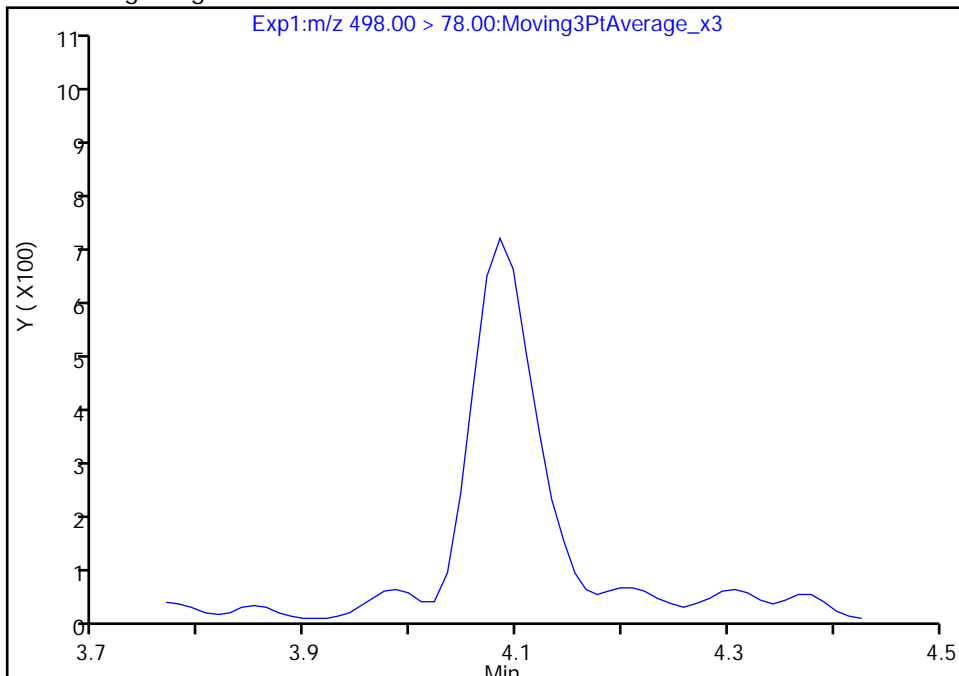
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

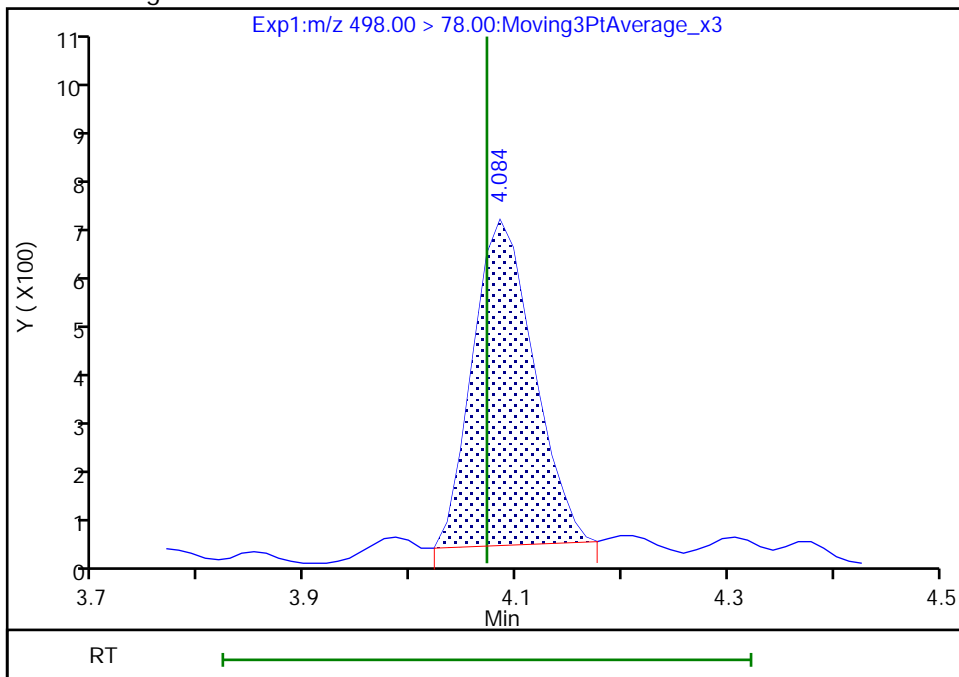
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.08
Area: 2594
Amount: 0.060462
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:34:28
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

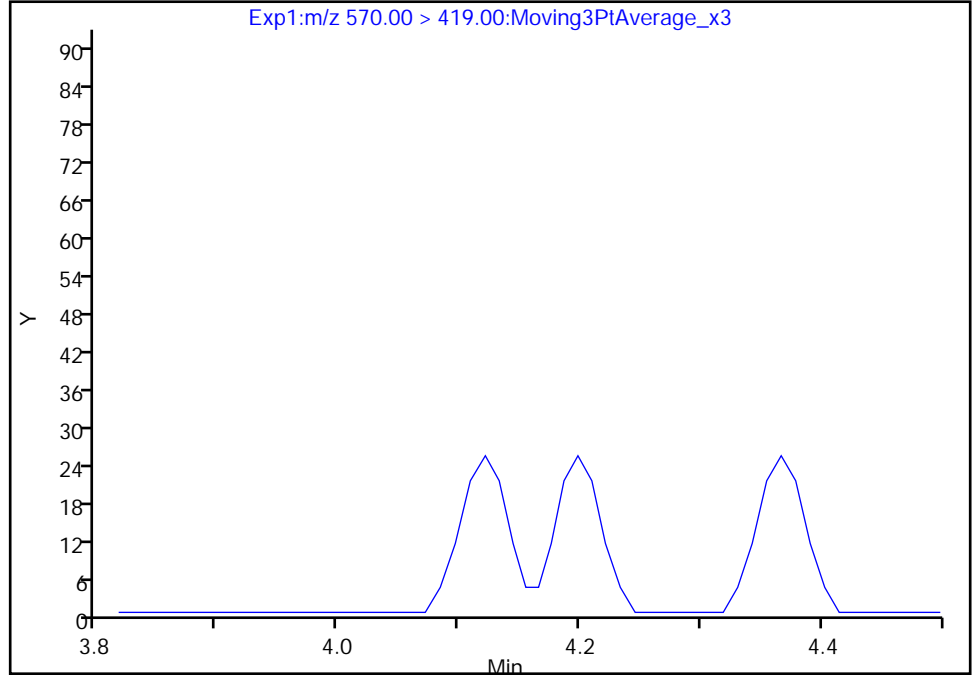
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

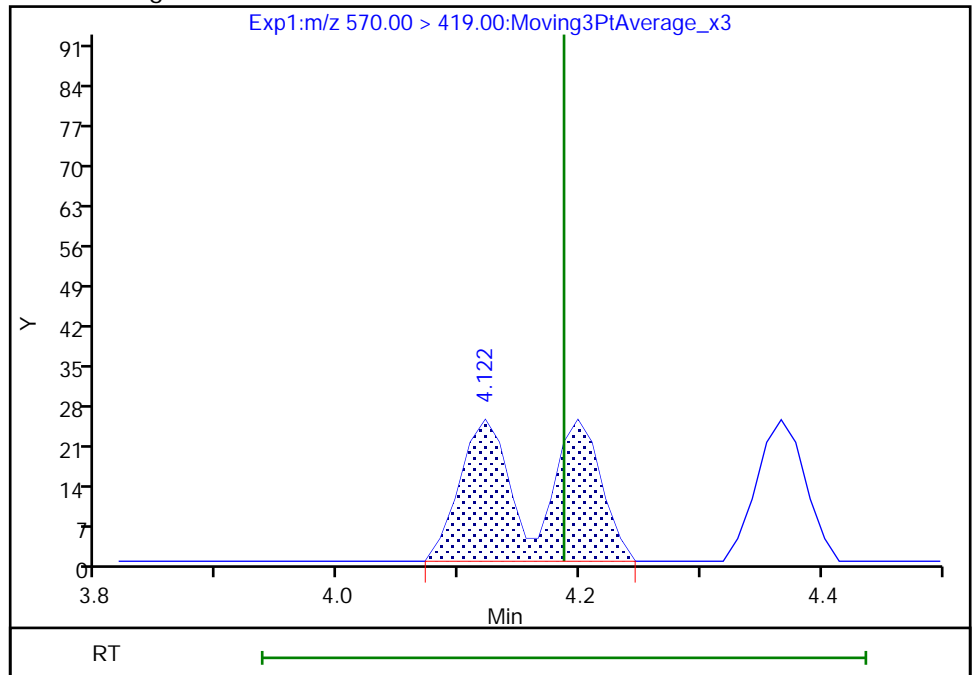
Not Detected
Expected RT: 4.19

Processing Integration Results



RT: 4.12
Area: 134
Amount: 0.037794
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:34:35
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

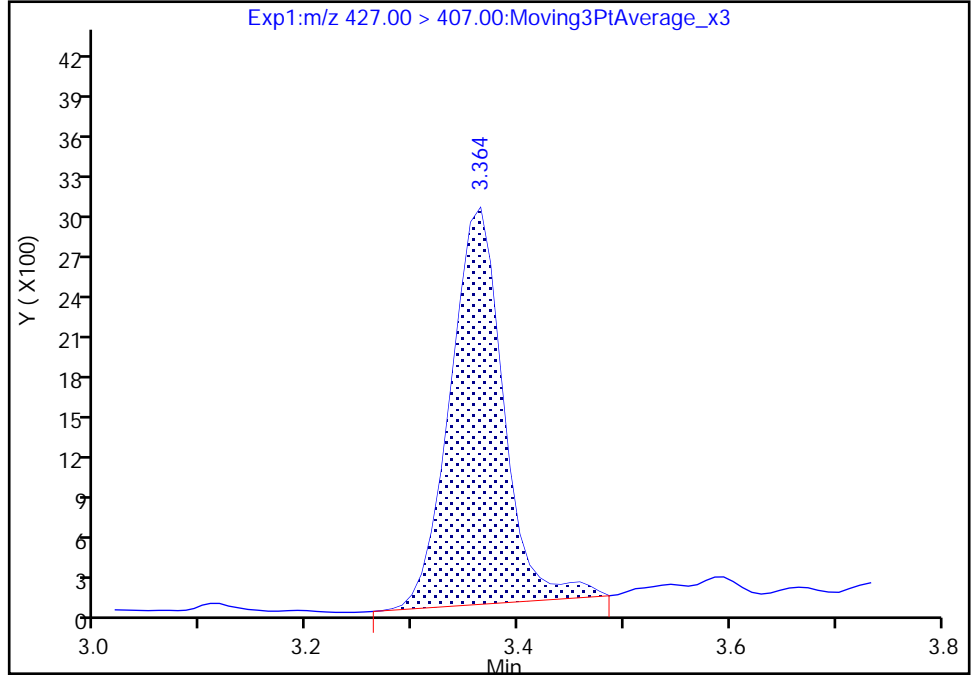
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E020.d
Injection Date: 02-Aug-2019 06:22:07 Instrument ID: LC812
Lims ID: 480-156213-F-17-A Lab Sample ID: 200-156213-17
Client ID: 356023-MW1B
Operator ID: lc812tech ALS Bottle#: 13 Worklist Smp#: 20
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

13 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:, CAS: 27619-97-2

Signal: 1

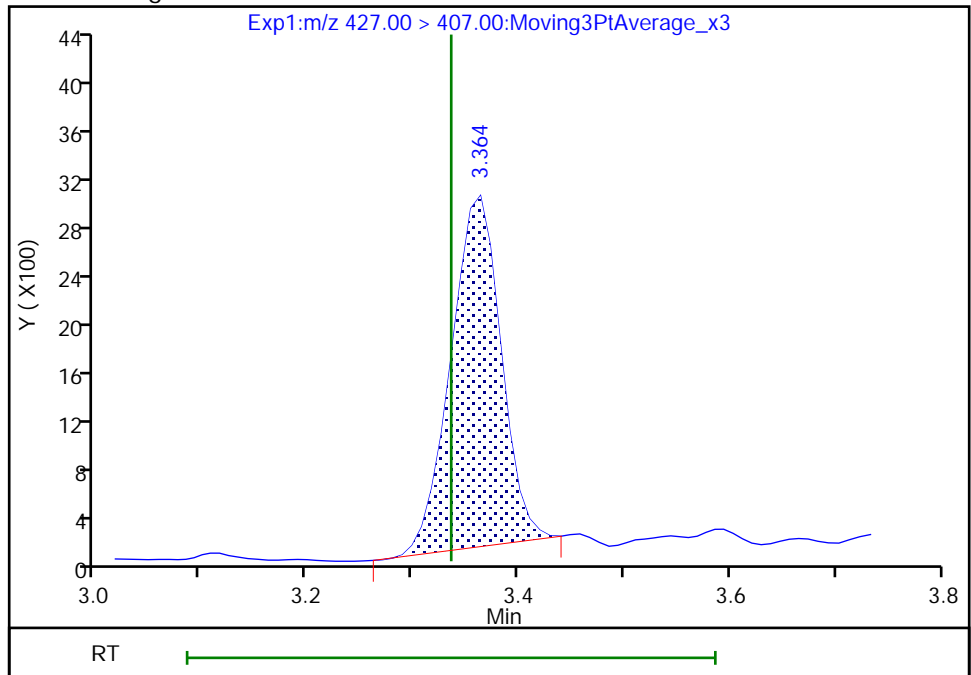
Processing Integration Results

RT: 3.36
Area: 10344
Amount: 0.660254
Amount Units: ng/ml



Manual Integration Results

RT: 3.36
Area: 9555
Amount: 0.609892
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:33:37

Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5R Lab Sample ID: 480-156213-18
 Matrix: Water Lab File ID: SC080119E021.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 11:10
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 298.7 (mL) Date Analyzed: 08/02/2019 06:30
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.2	J	1.7	0.84
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.89	J	1.7	0.53
307-24-4	Perfluorohexanoic acid (PFHxA)	0.65	J	1.7	0.64
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.76
335-67-1	Perfluorooctanoic acid (PFOA)	1.2	J	1.7	0.53
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.7	0.64
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.44
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.7	0.49
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.50
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.77
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.42	J	1.7	0.41
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.67
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.7	0.80
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.75
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.74	J	1.7	0.51
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.4	8.4
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		17	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	17	1.3
27619-97-2	6:2 FTS	ND		17	3.9
39108-34-4	8:2 FTS	ND		17	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW5R Lab Sample ID: 480-156213-18
 Matrix: Water Lab File ID: SC080119E021.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 11:10
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 298.7 (mL) Date Analyzed: 08/02/2019 06:30
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	60		25-150
STL00992	13C4 PFBA	84		25-150
STL01893	13C5 PFPeA	85		25-150
STL00993	13C2 PFHxA	82		50-150
STL01892	13C4 PFHpA	90		50-150
STL00990	13C4 PFOA	80		50-150
STL00995	13C5 PFNA	82		50-150
STL00996	13C2 PFDA	85		50-150
STL00997	13C2 PFUnA	77		50-150
STL00998	13C2 PFDoA	72		50-150
STL02116	13C2 PFTeDA	61		50-150
STL02337	13C3 PFBS	89		50-150
STL00994	18O2 PFHxS	87		50-150
STL00991	13C4 PFOS	82		50-150
STL02118	d3-NMeFOSAA	60		50-150
STL02117	d5-NEtFOSAA	64		50-150
STL02279	M2-6:2 FTS	101		25-150
STL02280	M2-8:2 FTS	91		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
 Lims ID: 480-156213-F-18-A
 Client ID: 356023-MW5R
 Sample Type: Client
 Inject. Date: 02-Aug-2019 06:30:11 ALS Bottle#: 14 Worklist Smp#: 21
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-18-A
 Misc. Info.: 200-0037095-021 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:38:27
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.505	3054710	42.1	84.3	10702	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.005	41675	0.7401		7.9	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	2909825	42.7	85.5	6979	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	30107	0.5346		1.4	
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	2766776	41.4	89.0	228517	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	15116	0.2499	Target=1.90	6.6	
	298.90 > 99.00	2.093	2.093	0.0	1.000	8328		1.82(0.95-2.85)	7.8	
D 7 13C2 PFHxA	315.00 > 270.00	2.470	2.459	0.011	0.734	2783308	41.2	82.3	6599	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.000	22134	0.3861	Target=13.23	4.3	
	313.00 > 119.00	2.459	2.459	0.0	0.995	1853		11.94(6.61-19.84)	2.6	
D 11 18O2 PFHxS	403.00 > 84.00	2.939	2.916	0.023	0.874	1605837	41.0	86.7	4101	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.874	2967739	44.8	89.6	8241	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.939	2.928	0.011	1.000	12670	0.2832	Target=3.37	9.2	M
	399.00 > 99.00	2.939	2.928	0.011	1.000	3031		4.18(1.69-5.06)	3.5	M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.000	8474	0.1524	Target=3.76	1.8	M
	363.00 > 169.00	2.939	2.928	0.011	1.000	2529		3.35(1.88-5.65)	12.6	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.355	3.335	0.020	0.997	389801	47.8		101	663	
13 1H,1H,2H,2H-perfluorooctanesuloni										
427.00 > 407.00	3.355	3.336	0.019	1.000	7773	0.5523			23.0	
D 14 13C4 PFOA										
417.00 > 372.00	3.364	3.344	0.020	1.000	2805285	40.1		80.2	6678	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.373	3.355	0.018	1.003	41956	0.6872	Target=2.84		4.0	M
413.00 > 169.00	3.364	3.355	0.009	1.000	17884		2.35(1.42-4.25)		36.8	M
* 62 13C2 PFOA										
415.00 > 370.00	3.364	3.355	0.009		3846735	50.0			10356	
D 18 13C4 PFOS										
503.00 > 80.00	3.723	3.695	0.028	1.107	1281469	39.3		82.1	3833	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.612	3.703	-0.091	0.970	11161	0.4398	Target=4.33		15.2	RM
499.00 > 99.00	3.723	3.703	0.020	1.000	1743		6.40(2.16-6.49)		4.2	M
D 19 13C5 PFNA										
468.00 > 423.00	3.745	3.715	0.030	1.113	2617733	41.0		82.0	9786	
20 Perfluorononanoic acid										
463.00 > 419.00	3.745	3.723	0.022	1.000	2784	0.0587	Target=8.15		1.0	M
463.00 > 169.00	3.734	3.723	0.011	0.997	501		5.56(4.08-12.23)		6.3	M
D 23 13C2 PFDA										
515.00 > 470.00	4.059	4.036	0.023	1.207	2164881	42.4		84.8	11409	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.036	0.023	1.207	327802	43.6		91.0	641	
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.214	1747829	29.8		59.6	4287	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.084	4.072	0.012	1.000	2056	0.0644			16.2	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.198	4.178	0.020	1.248	195419	30.0		59.9	1632	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.284	1783461	38.3		76.7	8386	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.307	0.012	1.000	4124	0.1347	Target=7.95		2.0	M
563.00 > 169.00	4.319	4.307	0.012	1.000	1012		4.08(3.98-11.93)		12.3	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.308	0.023	1.287	233521	32.1		64.3	946	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.343	4.319	0.024	1.003	413	0.1382			4.6	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.537	0.012	1.352	1797756	35.9		71.8	6542	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.478	2086683	30.3		60.5	8958	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.979	4.972	0.007	1.001	458	0.0824	Target=1.02		3.7	M
713.00 > 219.00	4.972	4.972	0.0	1.000	507		0.90(0.51-1.54)		12.2	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d

Injection Date: 02-Aug-2019 06:30:11

Instrument ID: LC812

Lims ID: 480-156213-F-18-A

Lab Sample ID: 200-156213-18

Client ID: 356023-MW5R

Operator ID: lc812tech

ALS Bottle#: 14

Worklist Smp#: 21

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

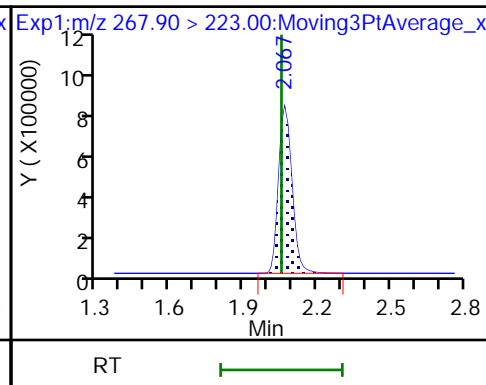
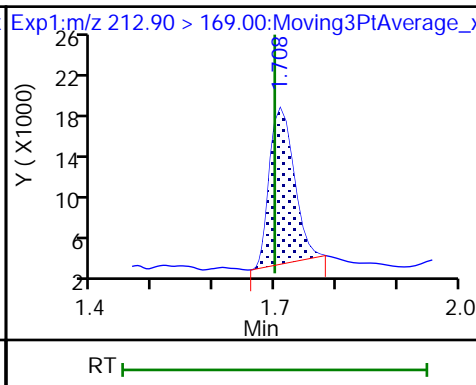
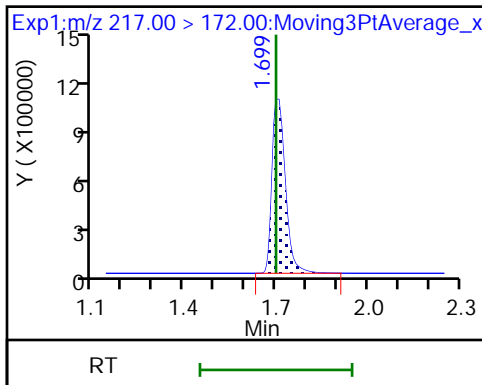
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

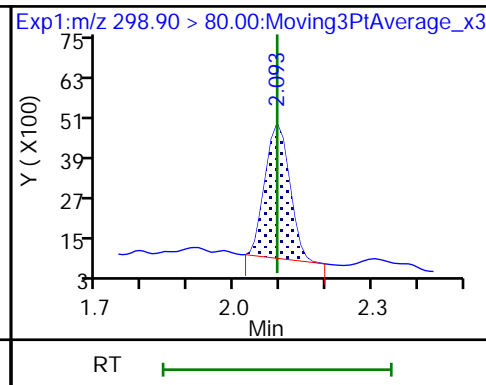
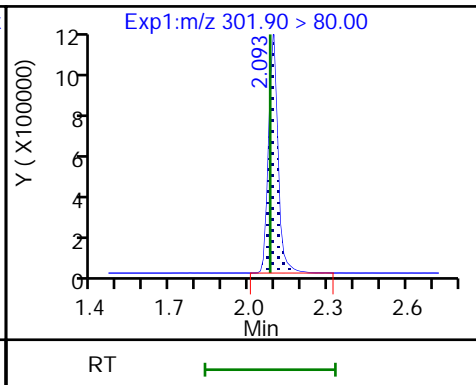
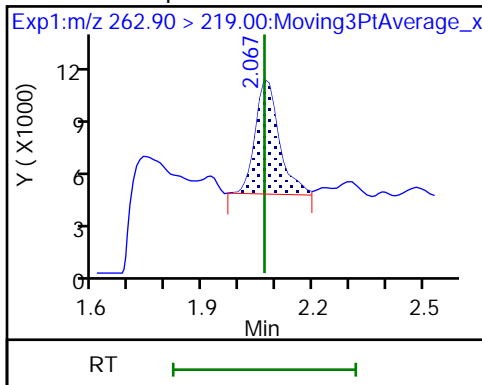
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

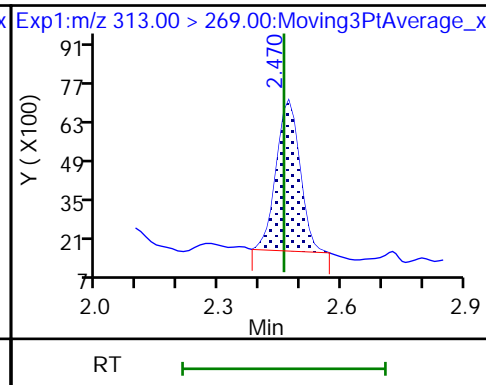
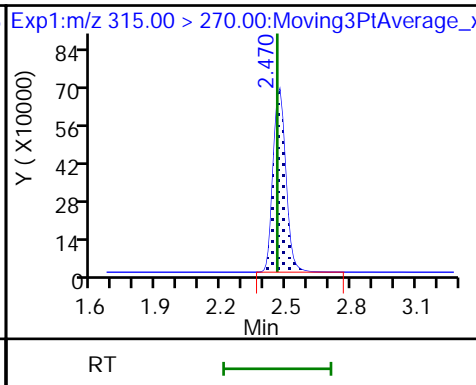
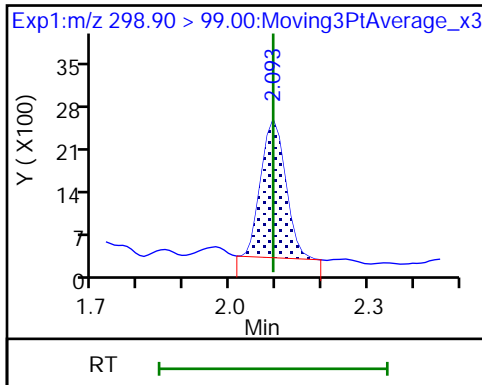
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 7 13C2 PFHxA

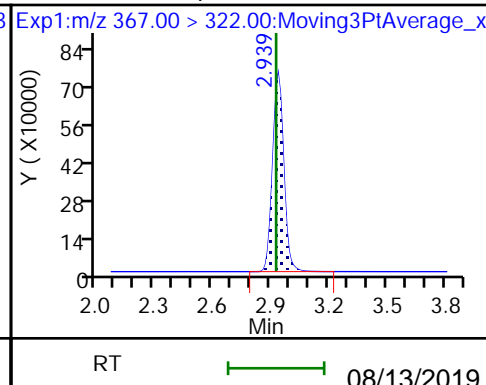
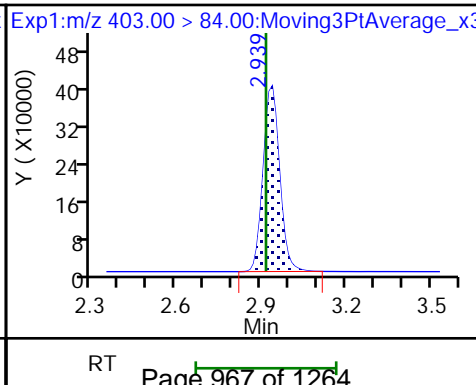
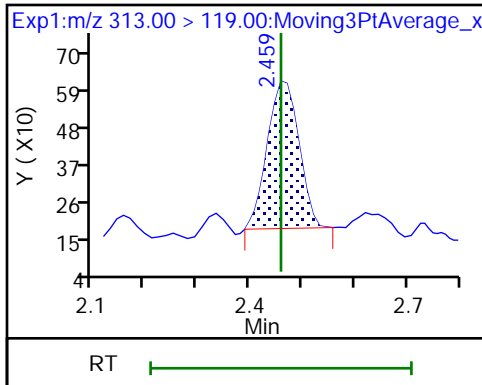
6 Perfluorohexanoic acid

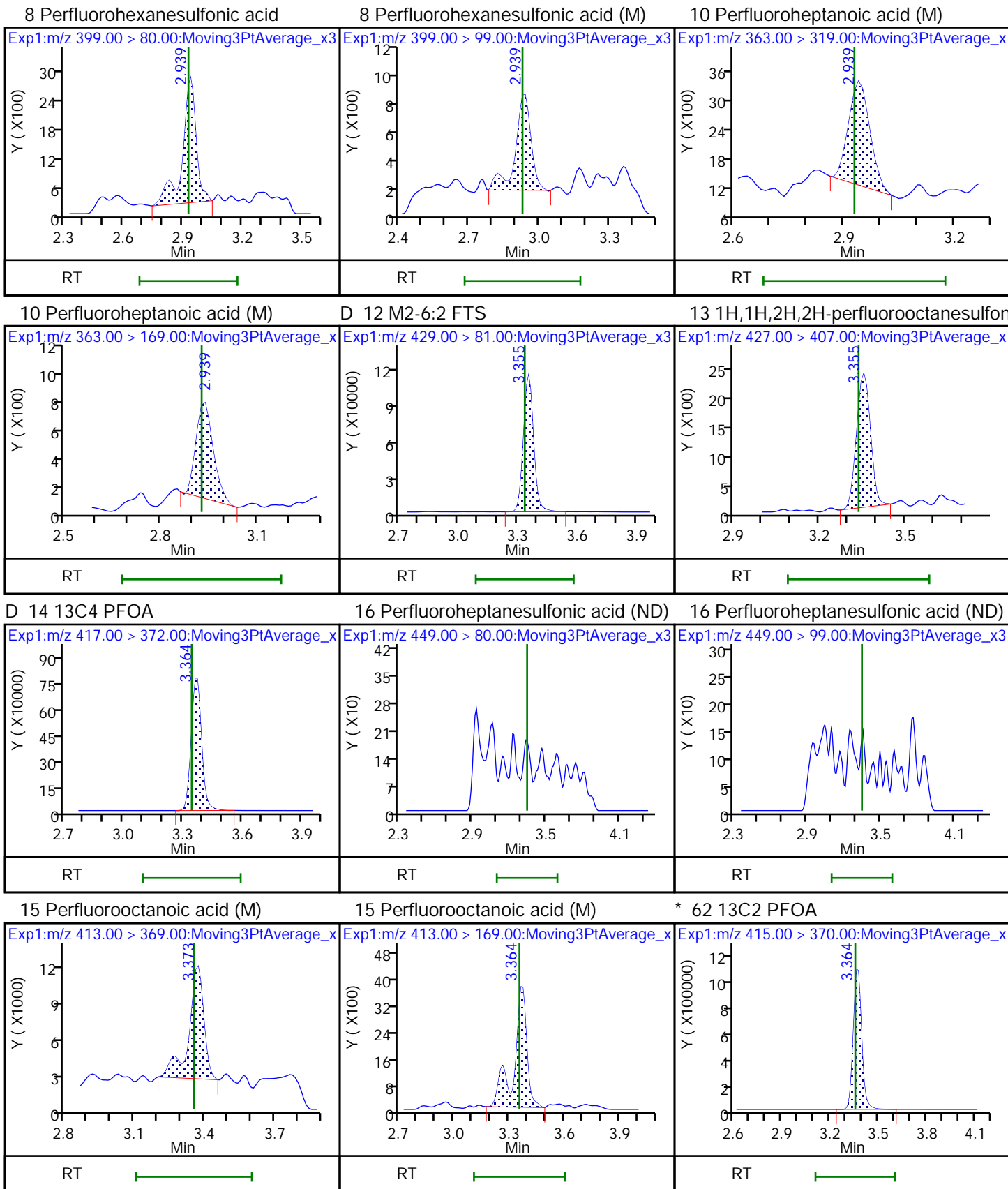


6 Perfluorohexanoic acid

D 11 18O2 PFHxS

D 9 13C4 PFHpA

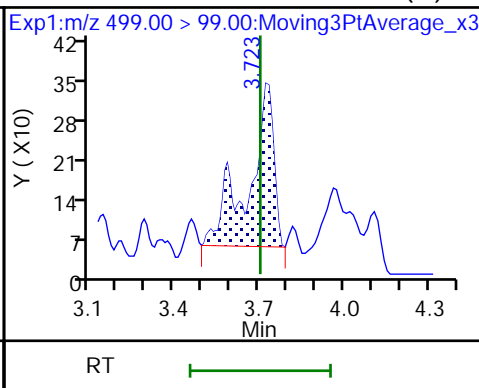
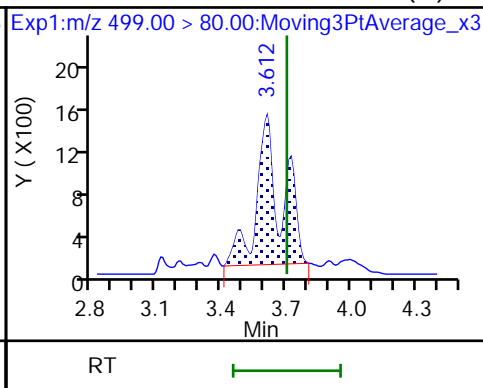
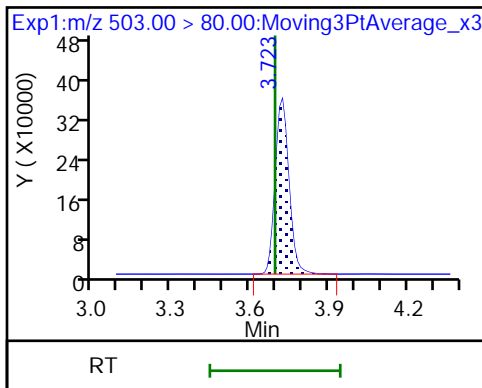




D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

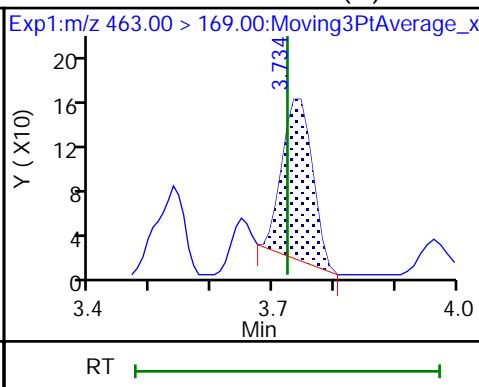
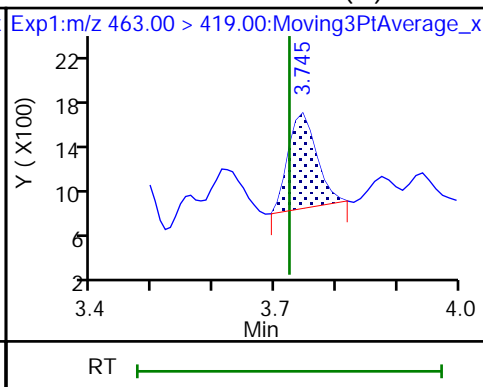
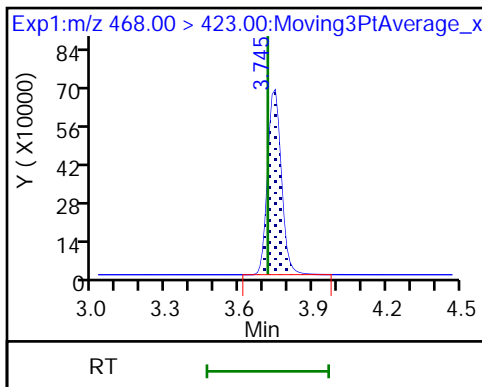
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (M)

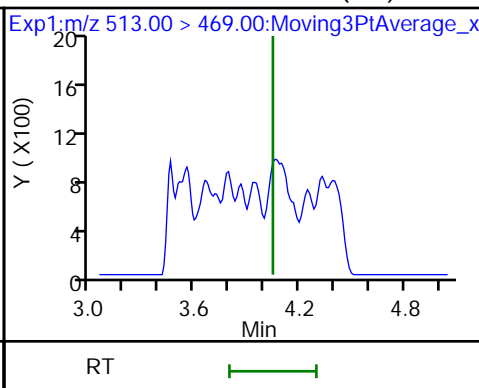
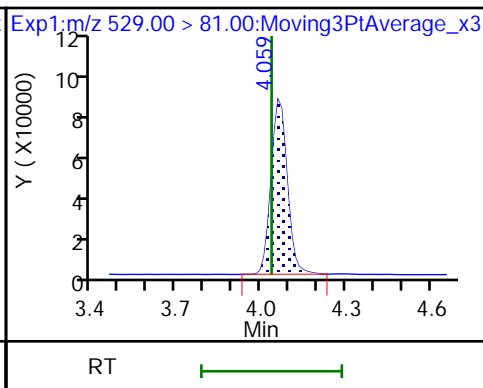
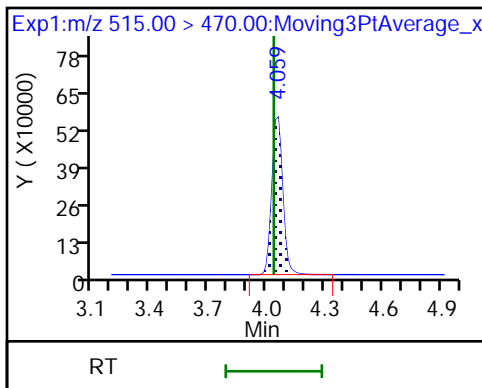
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

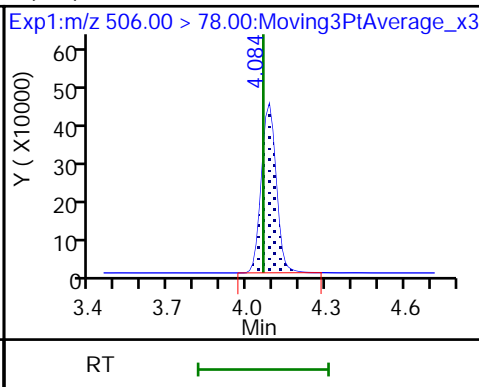
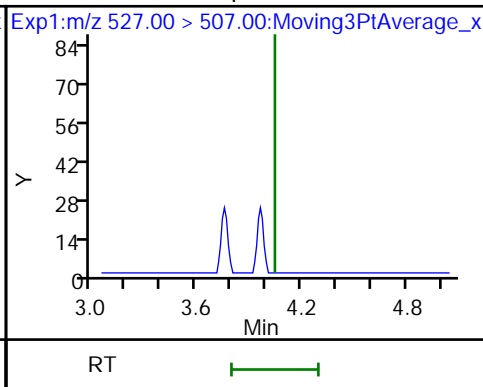
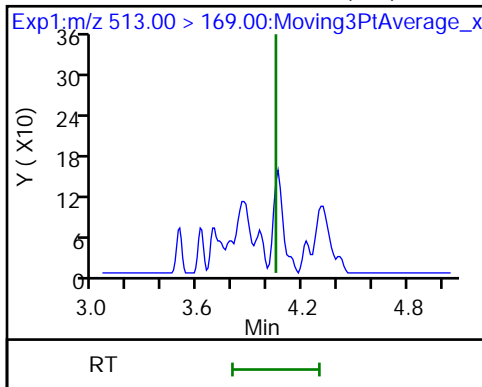
24 Perfluorodecanoic acid (ND)



24 Perfluorodecanoic acid (ND)

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (ND)

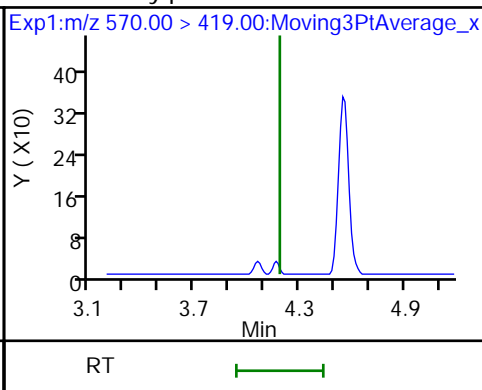
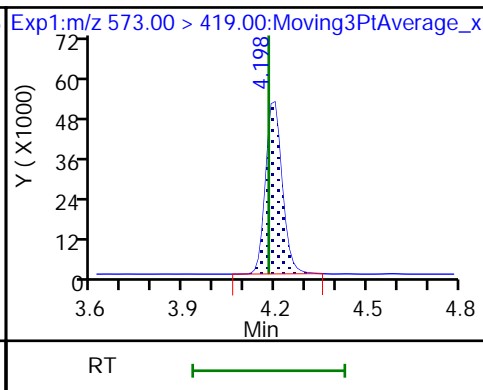
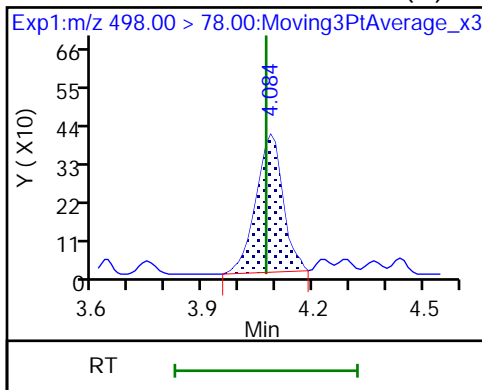
(ND) 3C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

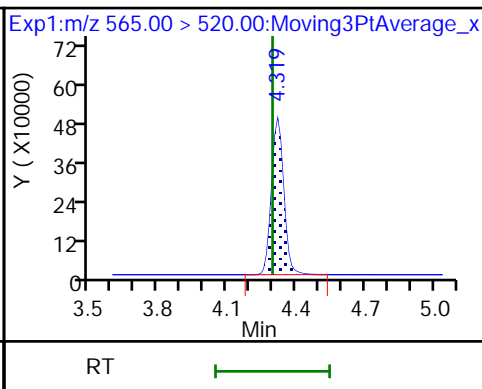
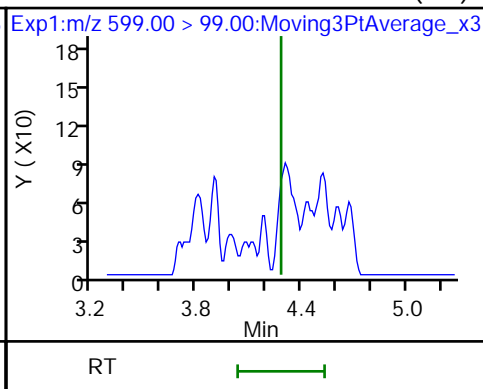
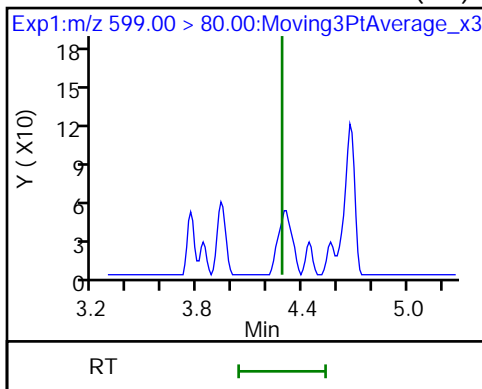
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

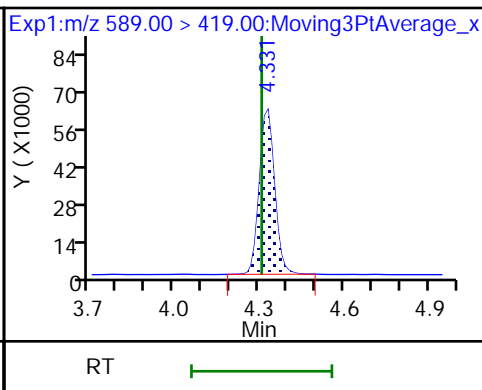
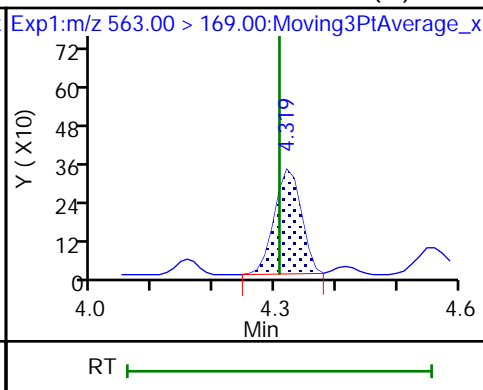
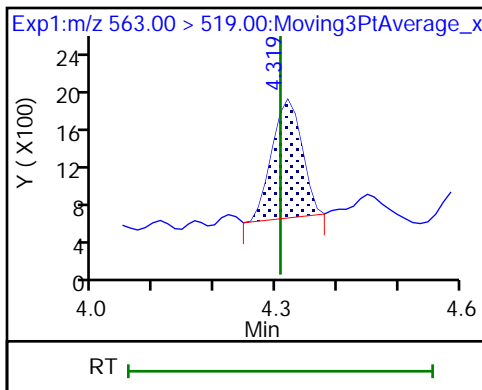
D 30 13C2 PFUoA



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid (M)

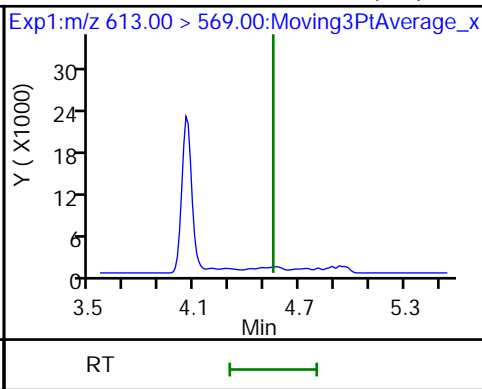
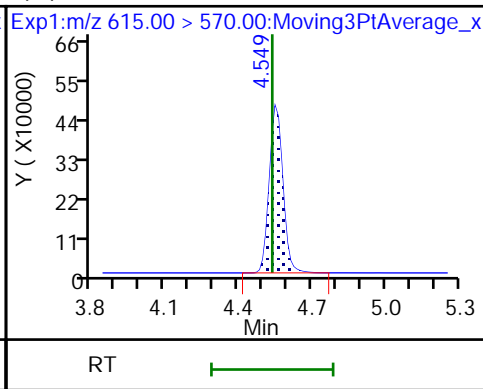
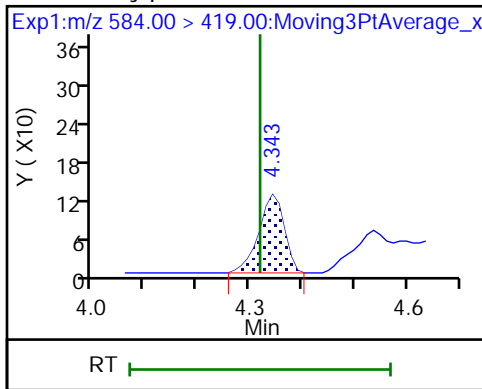
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamide (M)

D 36 13C2 PFDoA

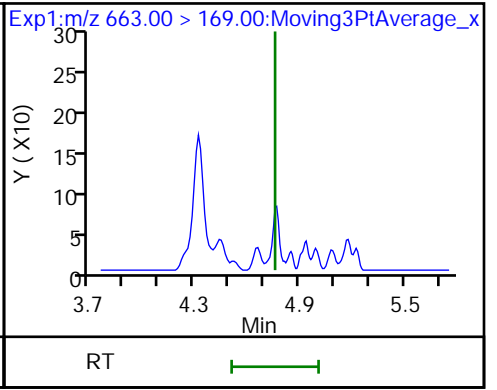
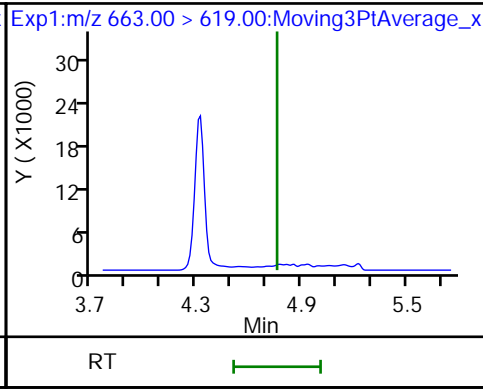
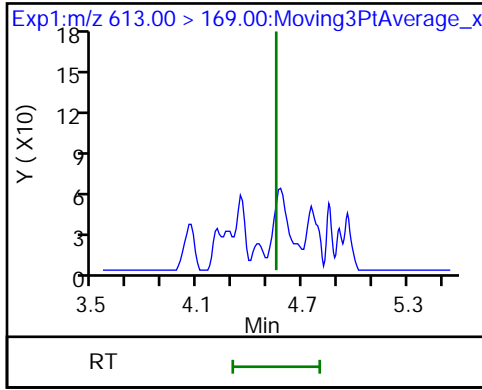
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

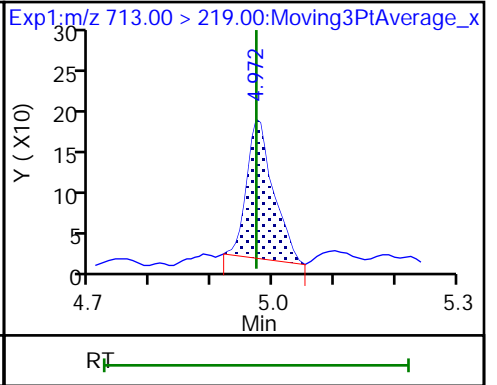
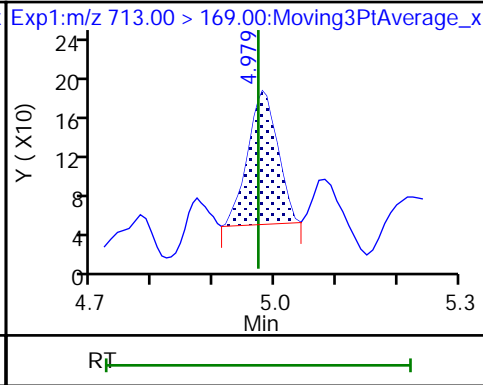
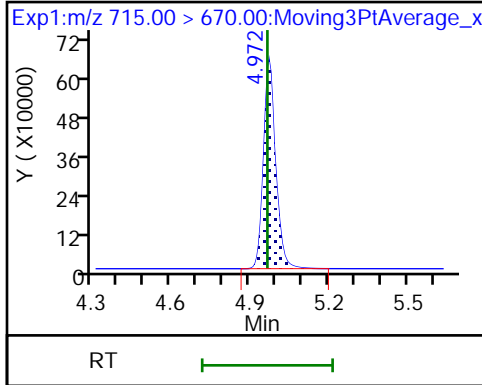
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (M)

42 Perfluorotetradecanoic acid (M)



Eurofins TestAmerica, Burlington

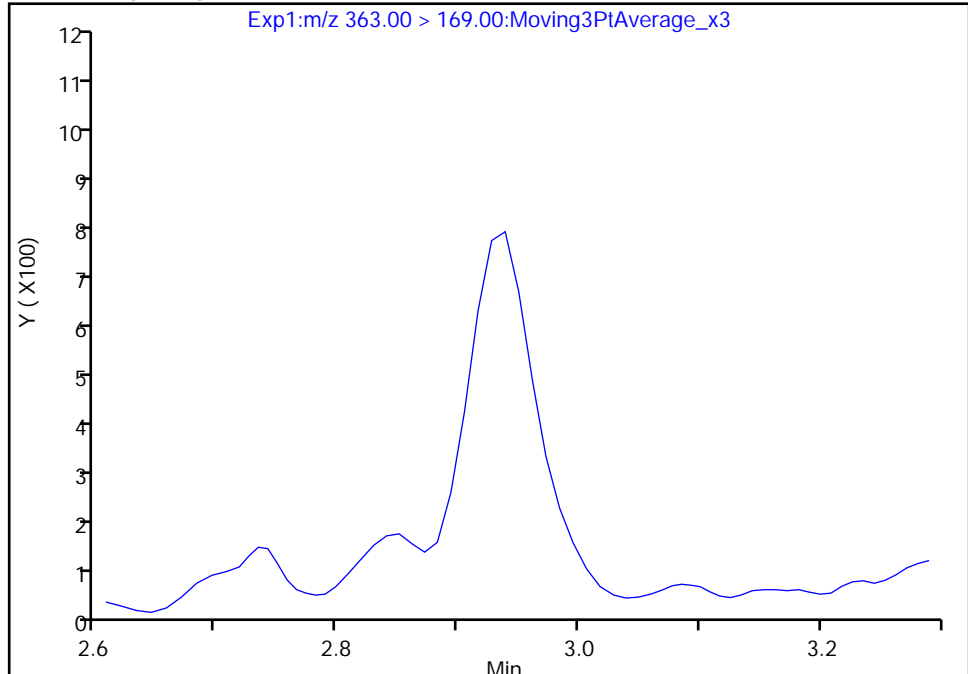
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

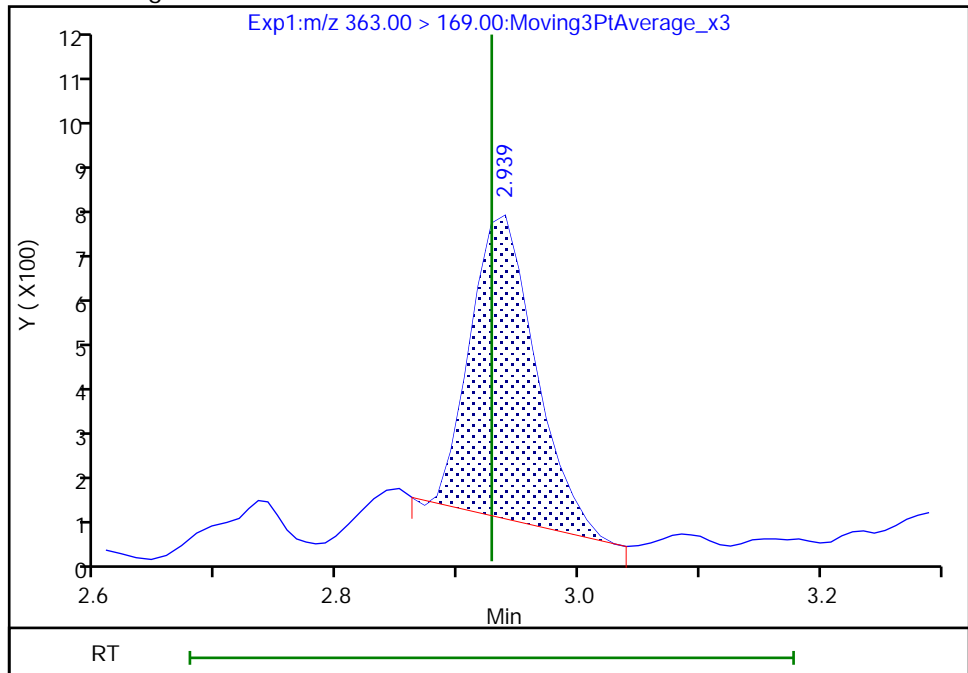
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 2529
Amount: 0.152424
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:36:25
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

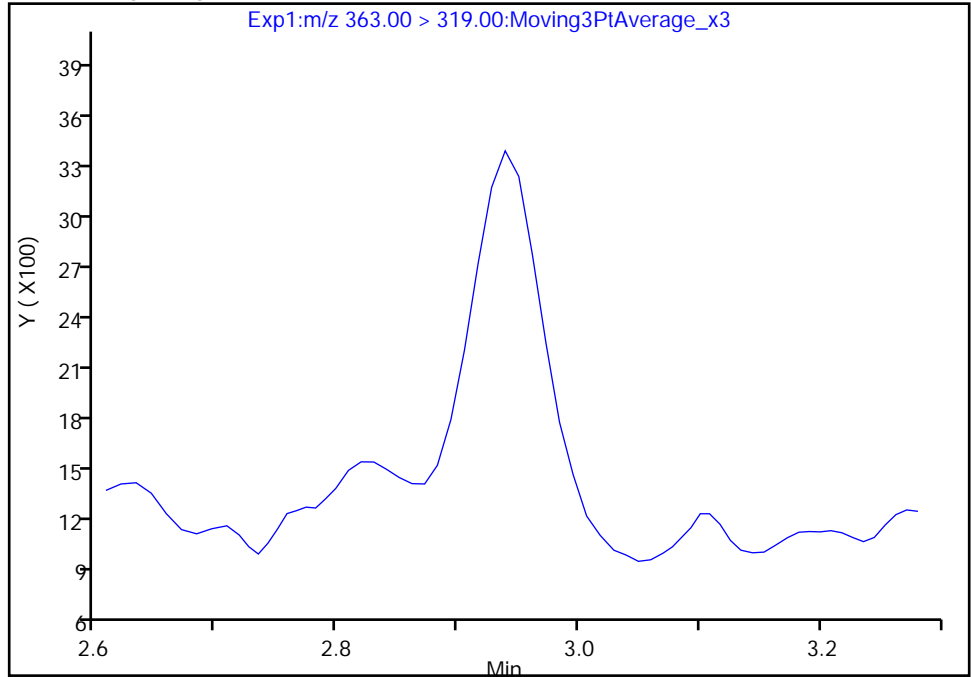
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

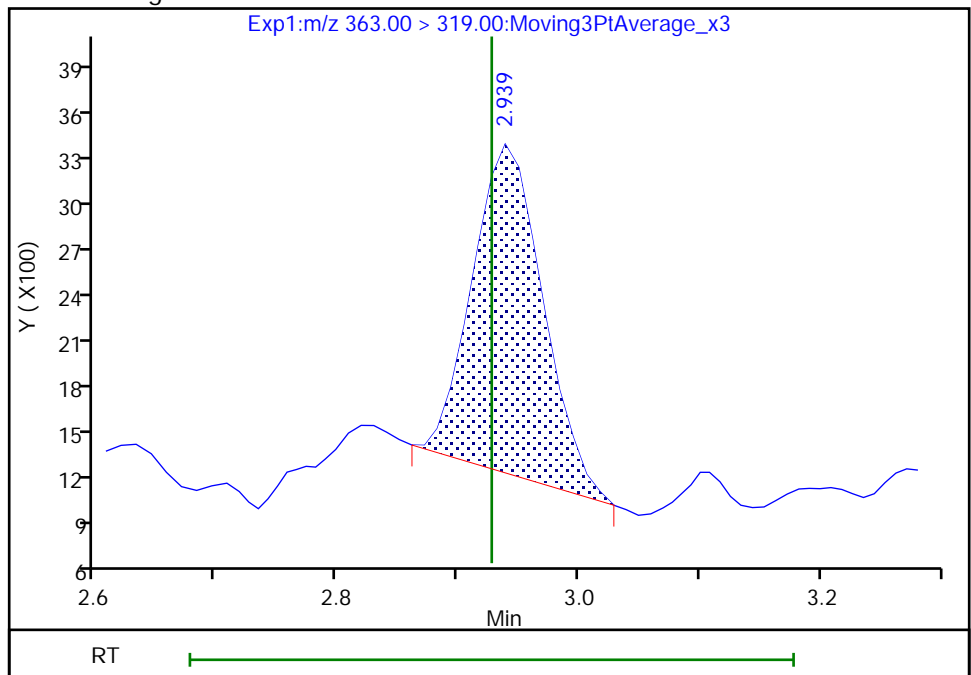
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 8474
Amount: 0.152424
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

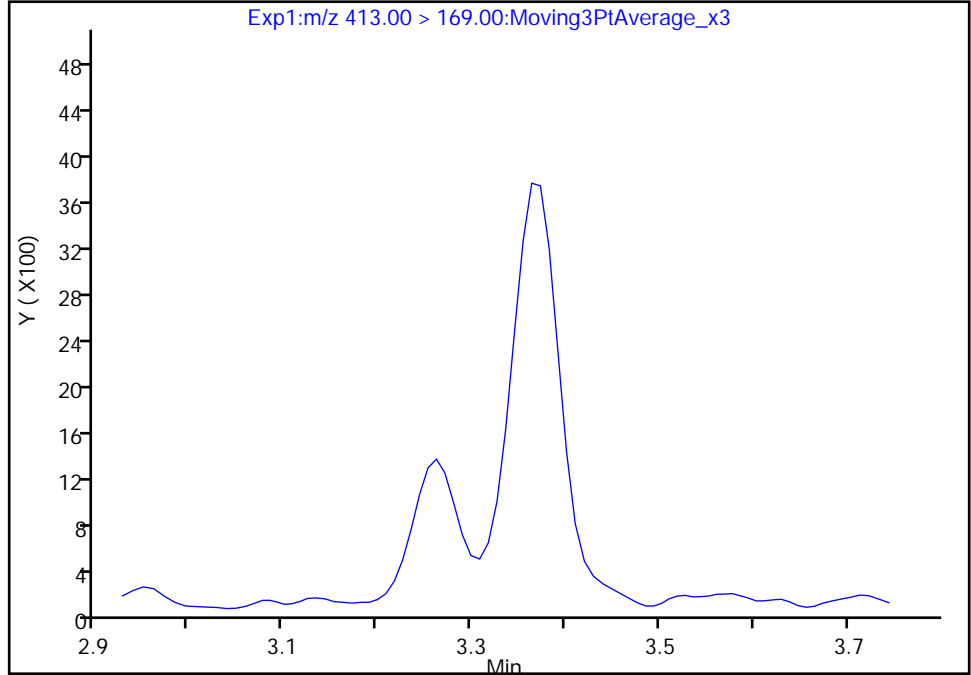
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

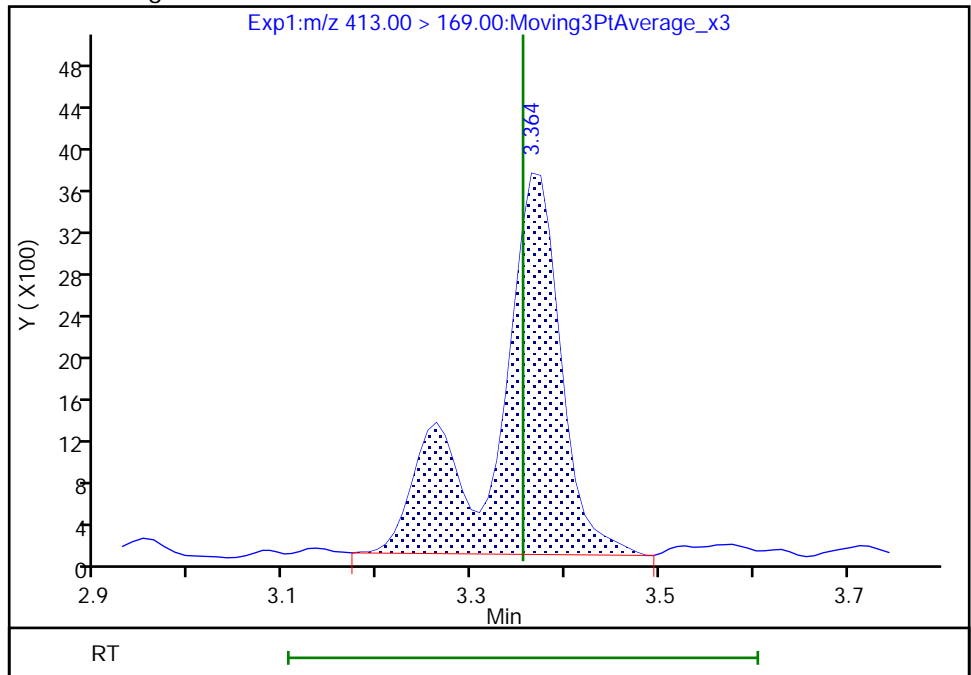
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 17884
Amount: 0.687239
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:36:45
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

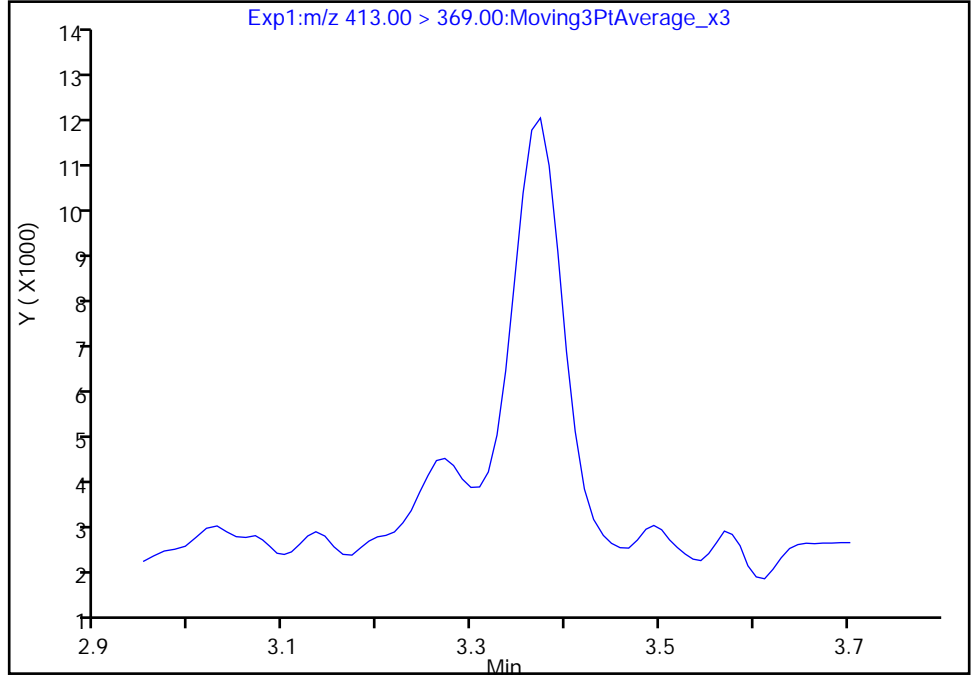
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

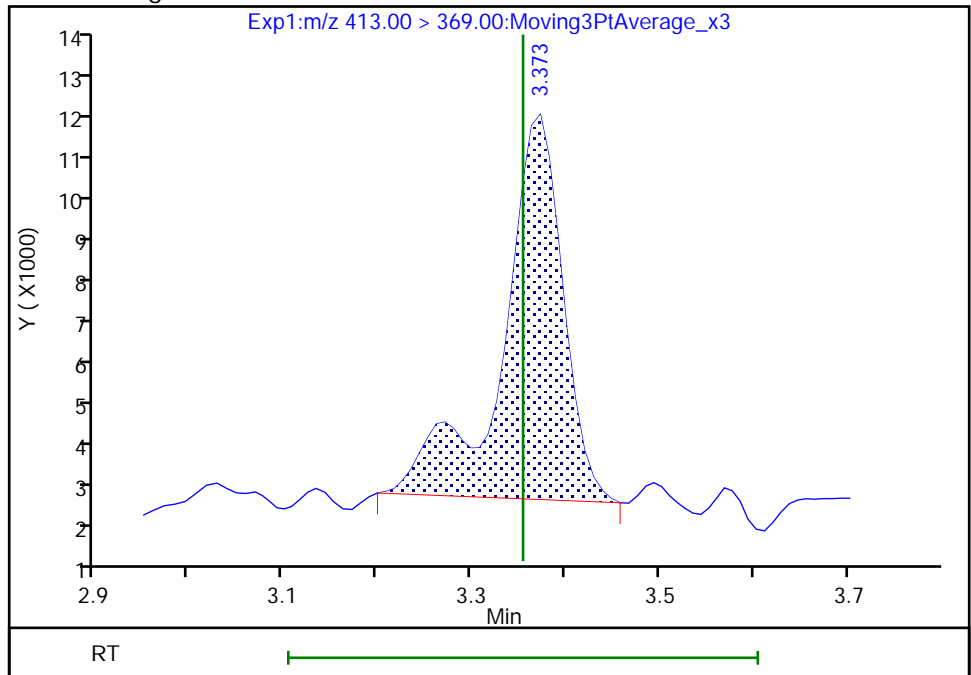
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 41956
Amount: 0.687239
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

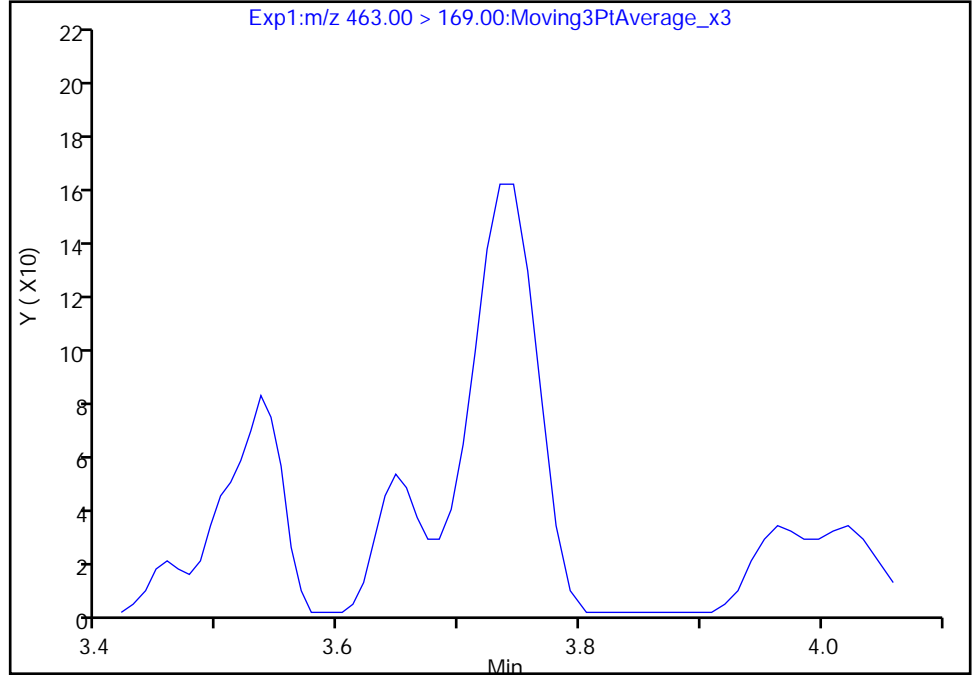
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

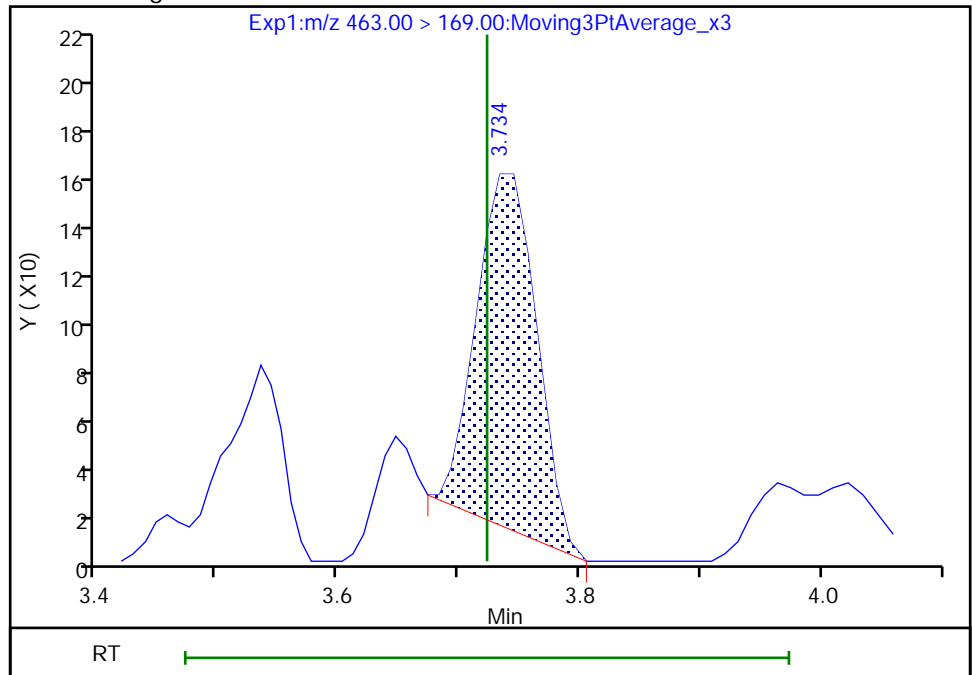
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.73
Area: 501
Amount: 0.058699
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:37:21
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

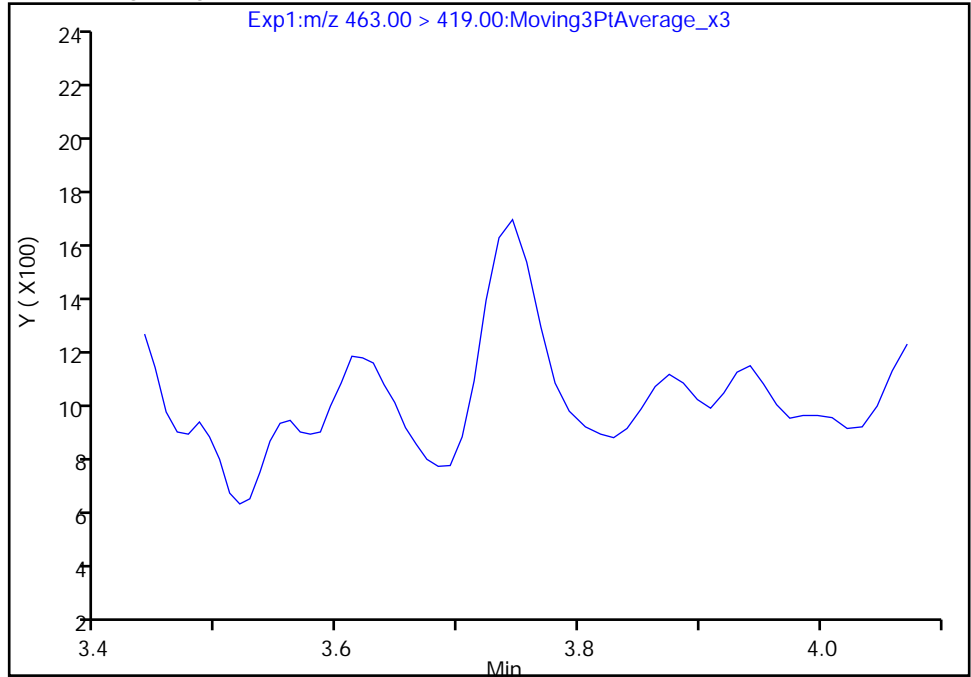
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

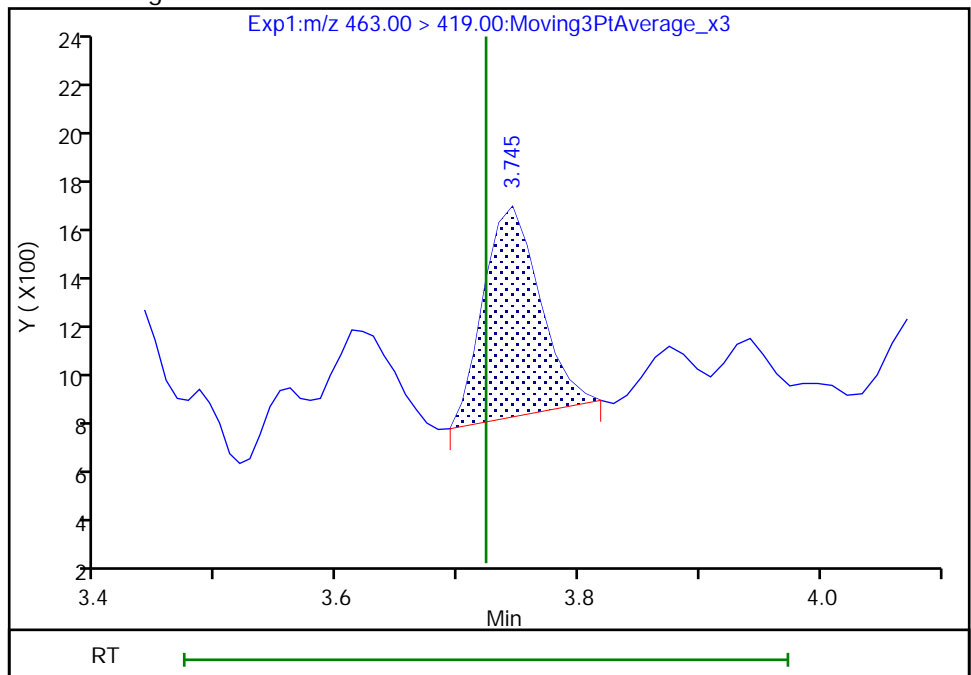
Not Detected
Expected RT: 3.72

Processing Integration Results



RT: 3.74
Area: 2784
Amount: 0.058699
Amount Units: ng/ml

Manual Integration Results



Eurofins TestAmerica, Burlington

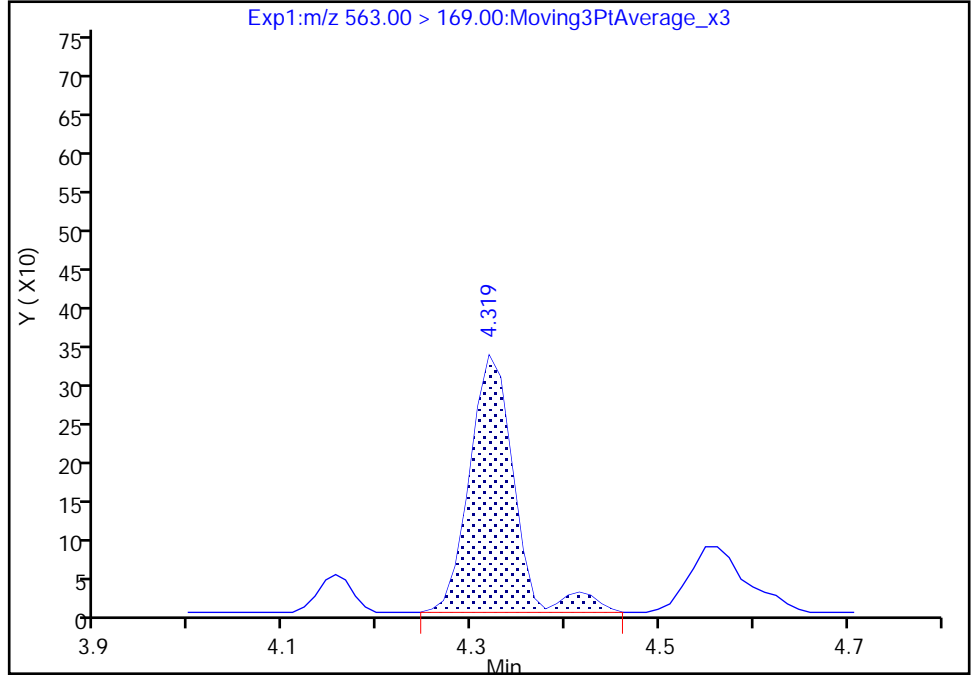
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

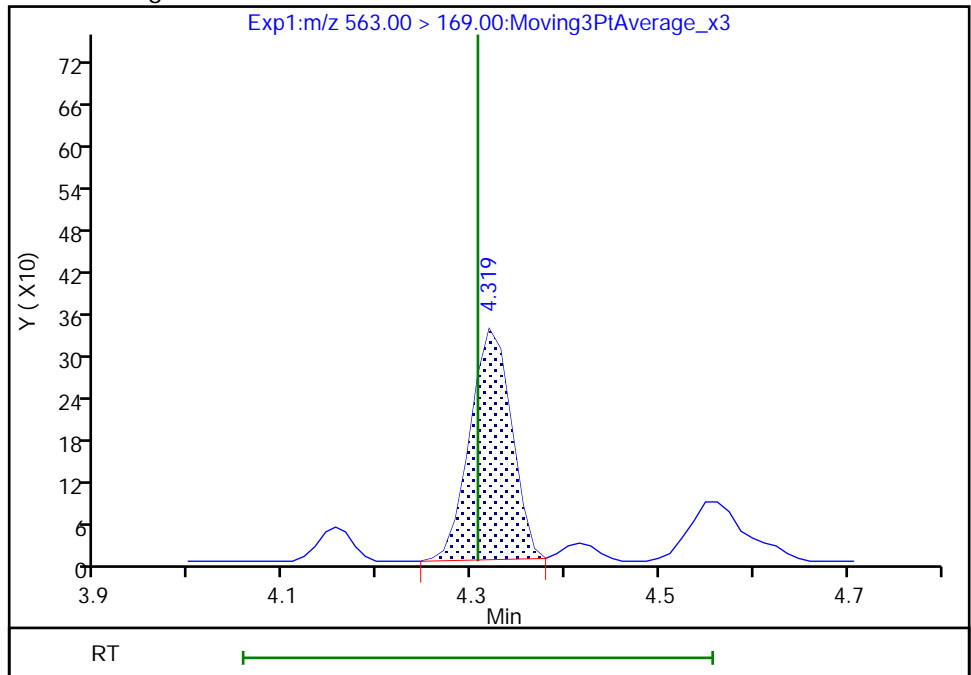
RT: 4.32
Area: 1098
Amount: 0.134744
Amount Units: ng/ml

Processing Integration Results



RT: 4.32
Area: 1012
Amount: 0.134744
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:37:51
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

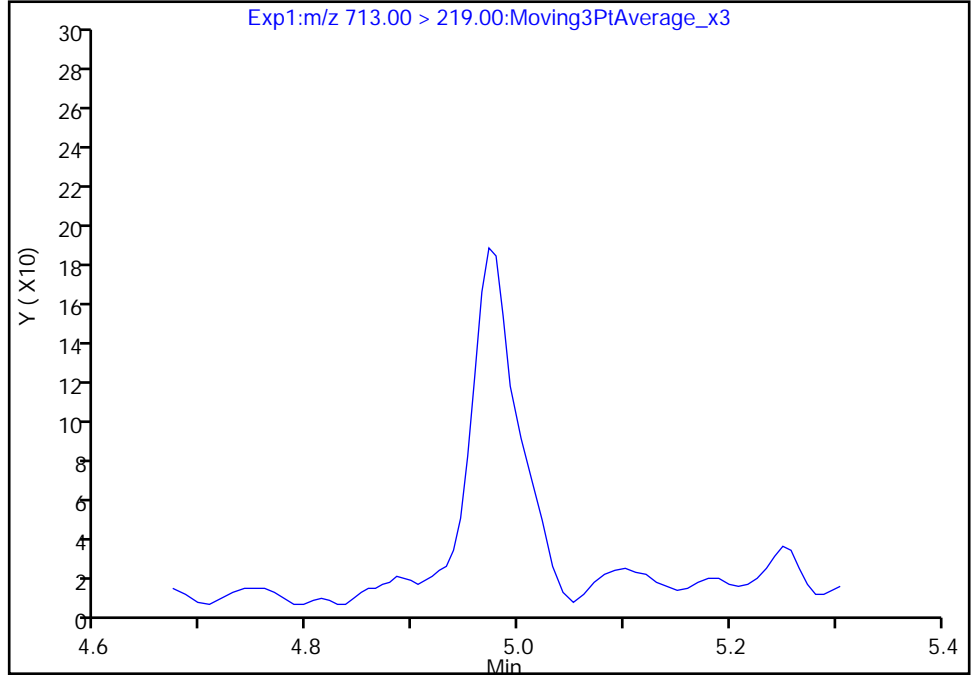
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 2

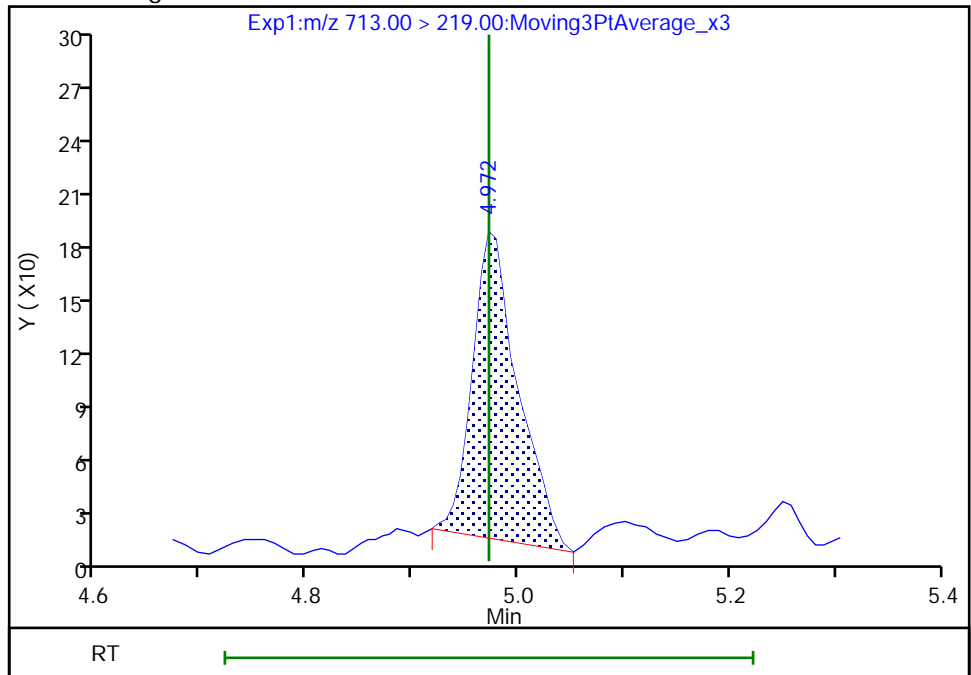
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.97
Area: 507
Amount: 0.082438
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:38:12
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

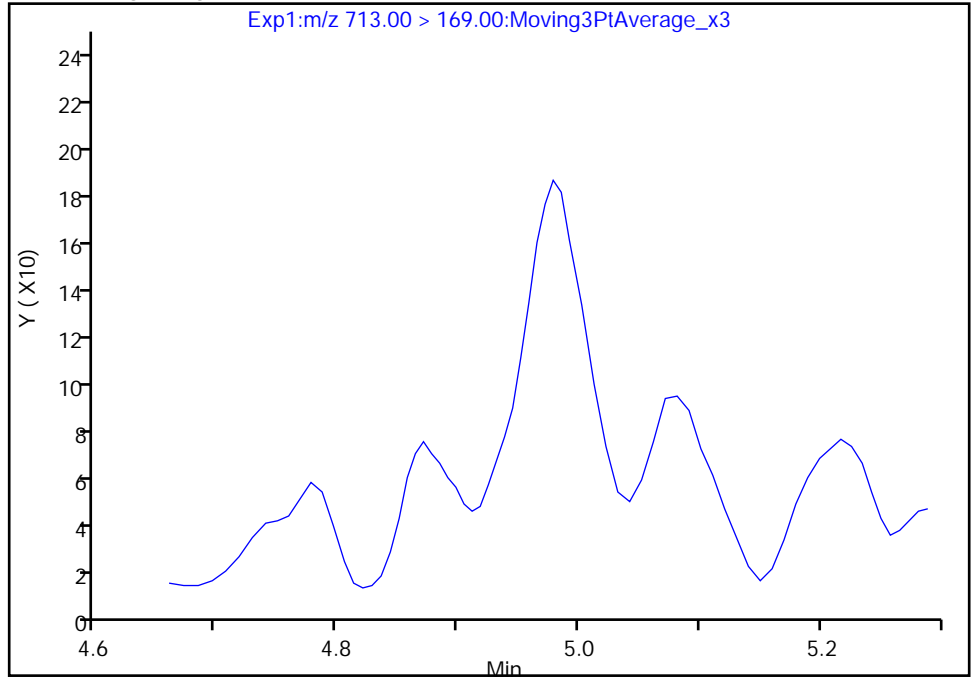
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

42 Perfluorotetradecanoic acid, CAS: 376-06-7

Signal: 1

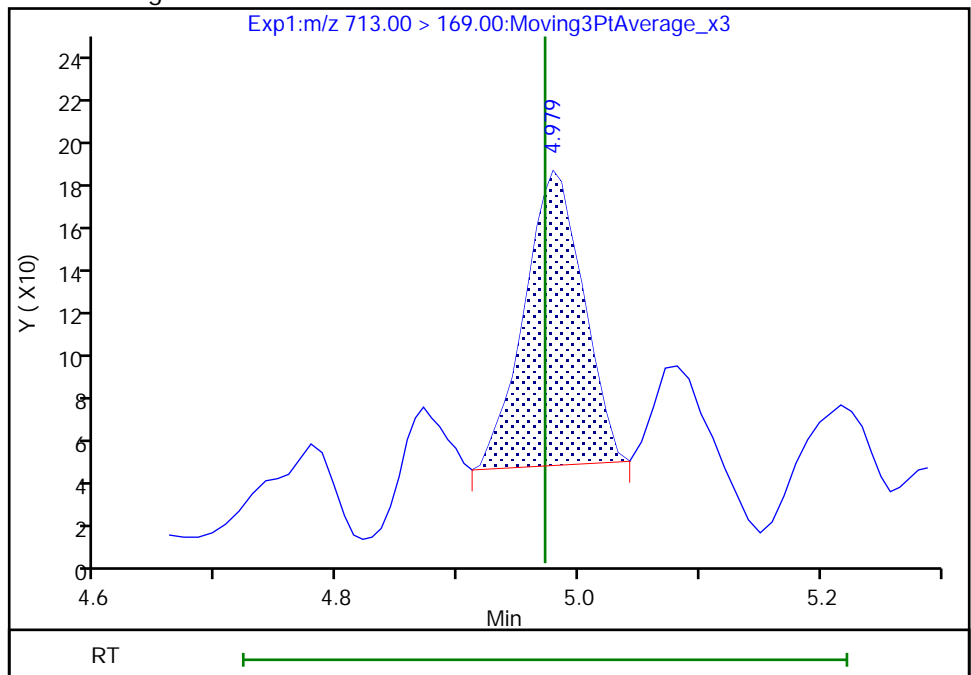
Not Detected
Expected RT: 4.97

Processing Integration Results



Manual Integration Results

RT: 4.98
Area: 458
Amount: 0.082438
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

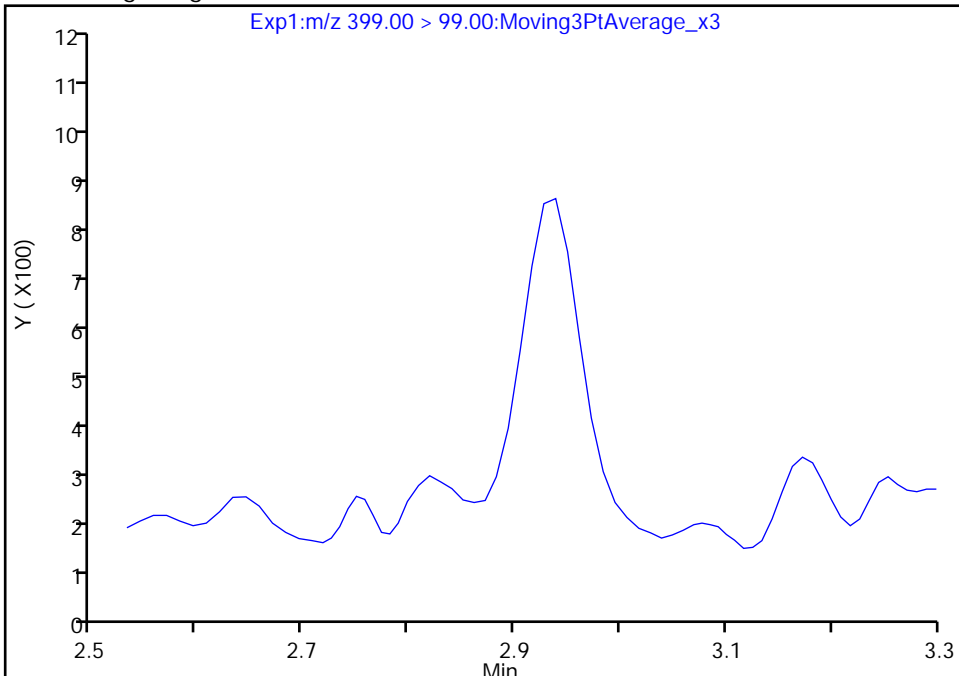
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

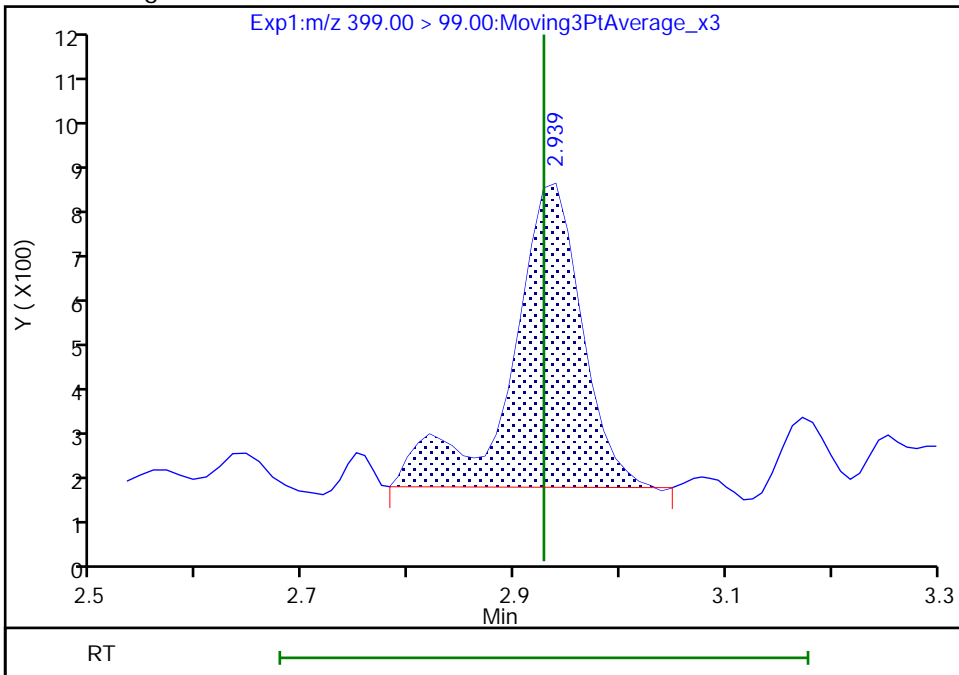
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 3031
Amount: 0.283198
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:36:17
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

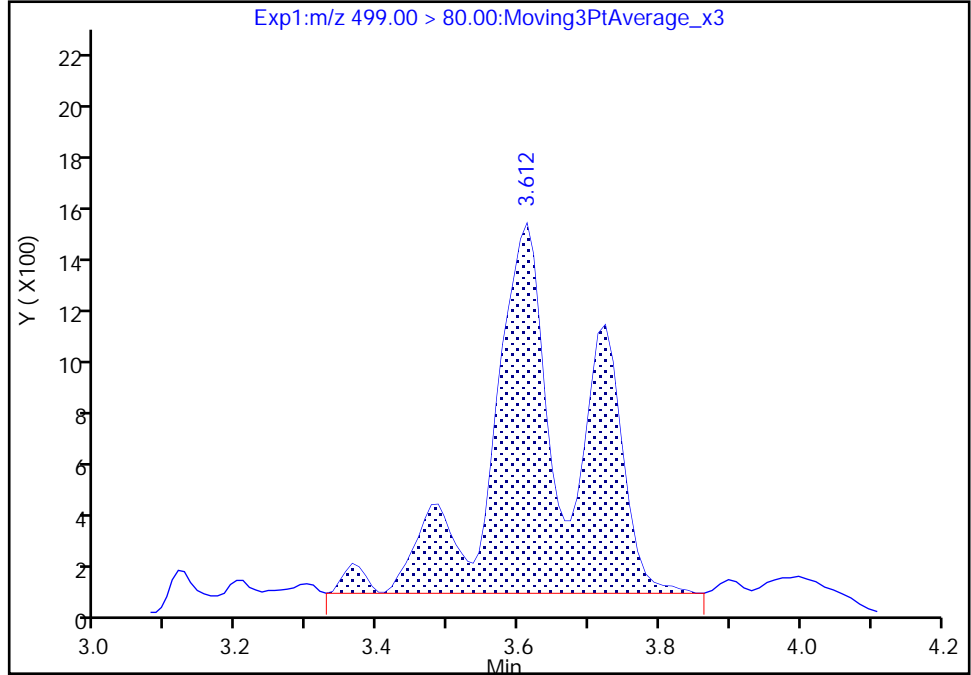
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

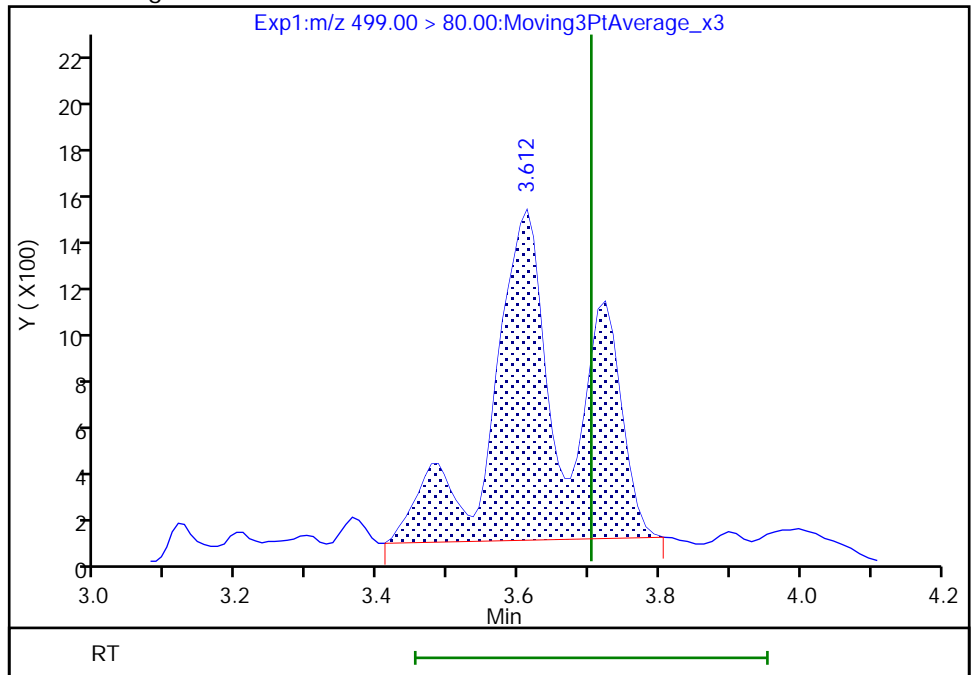
RT: 3.61
Area: 11838
Amount: 0.466520
Amount Units: ng/ml

Processing Integration Results



RT: 3.61
Area: 11161
Amount: 0.439840
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:37:03
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

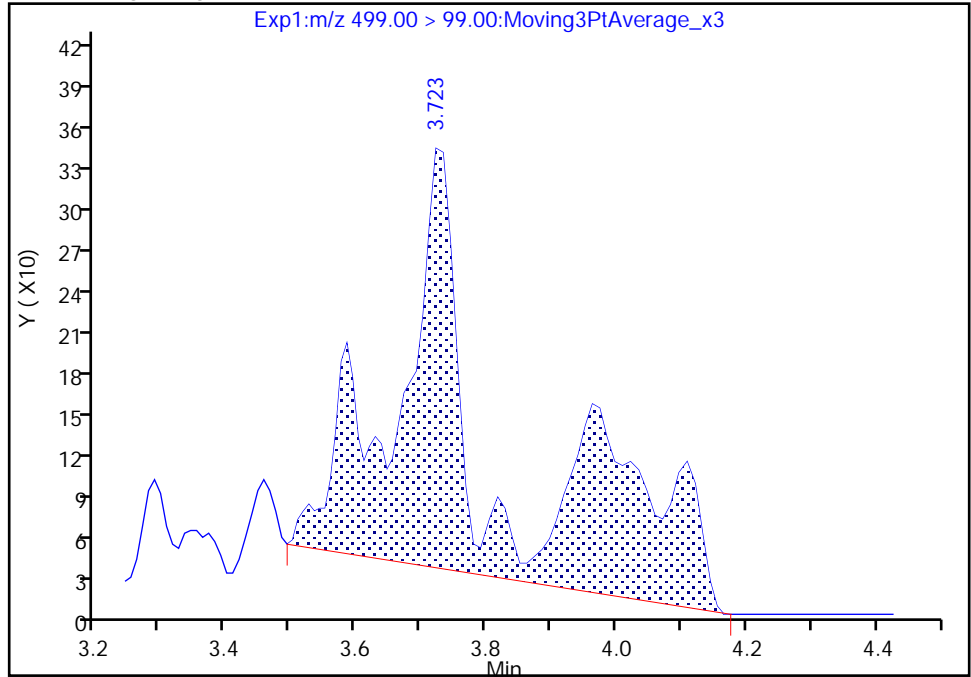
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

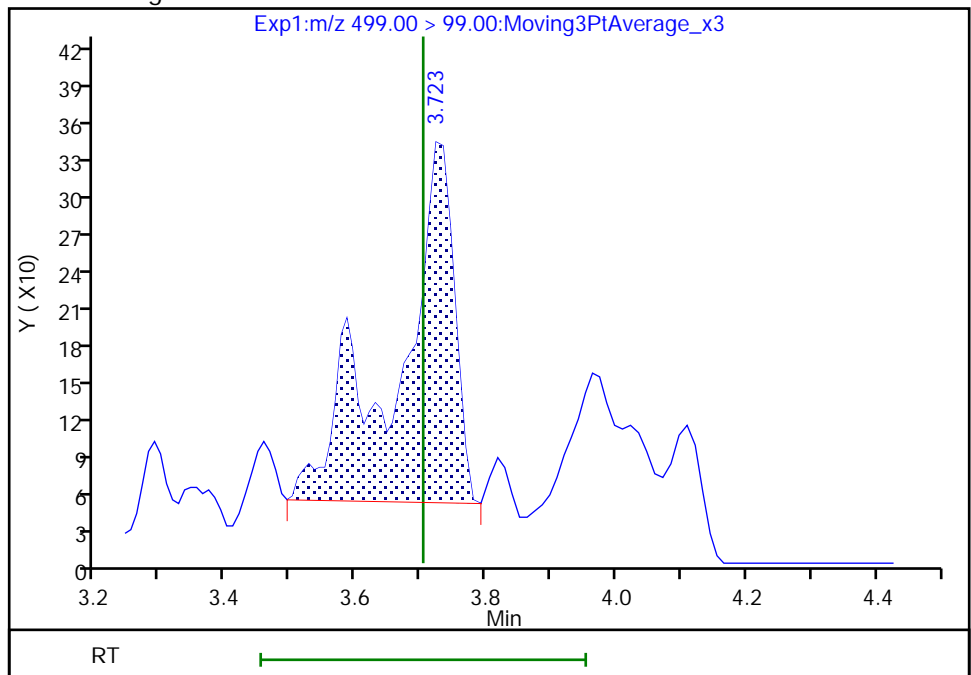
RT: 3.72
Area: 3420
Amount: 0.466520
Amount Units: ng/ml

Processing Integration Results



RT: 3.72
Area: 1743
Amount: 0.439840
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:37:10

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

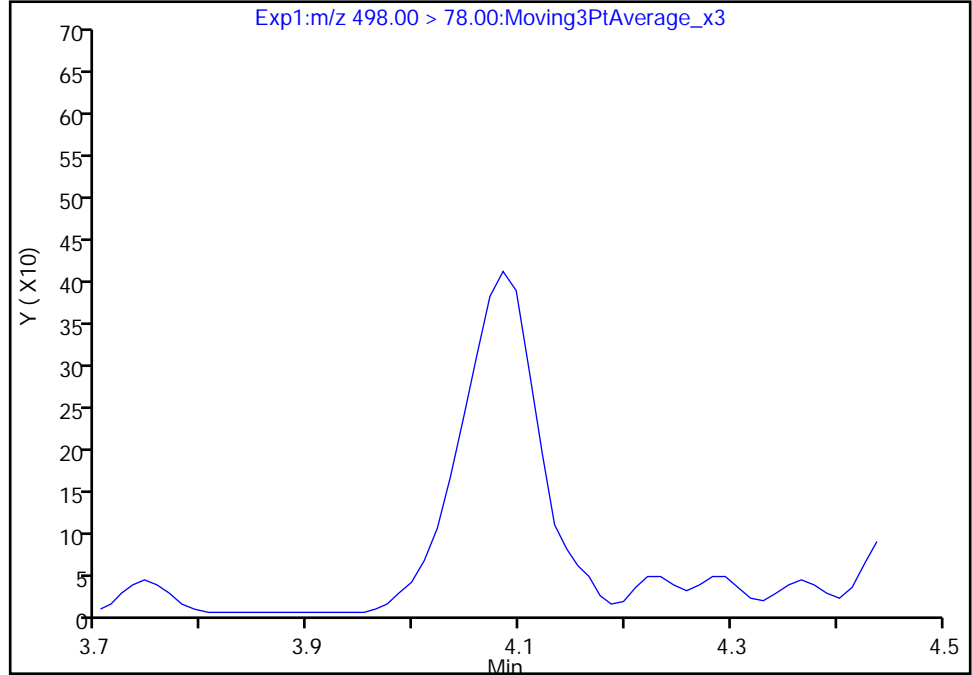
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

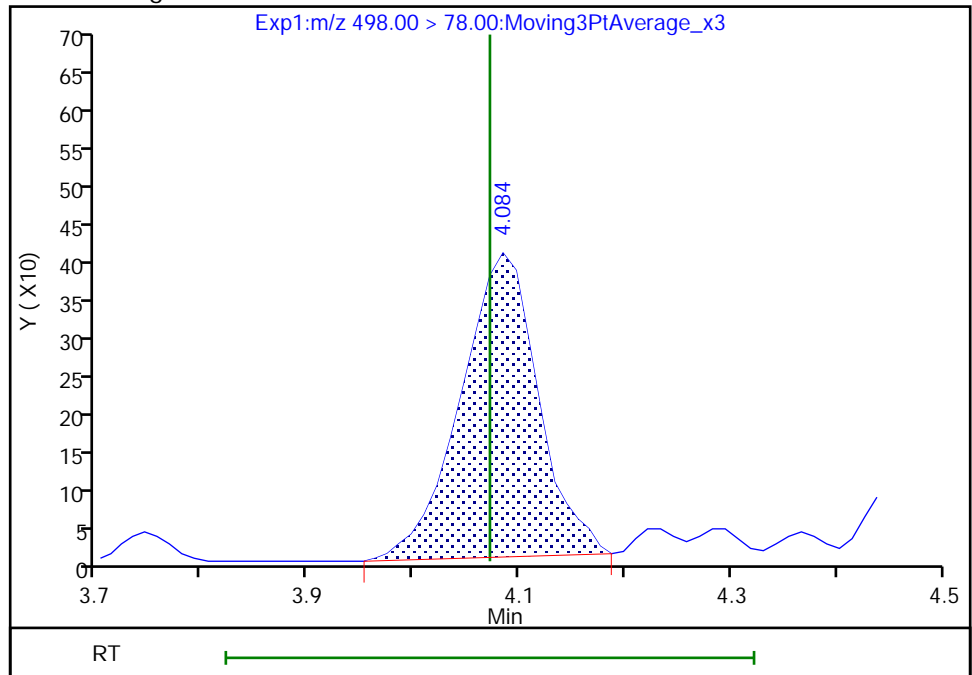
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.08
Area: 2056
Amount: 0.064426
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:37:35
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

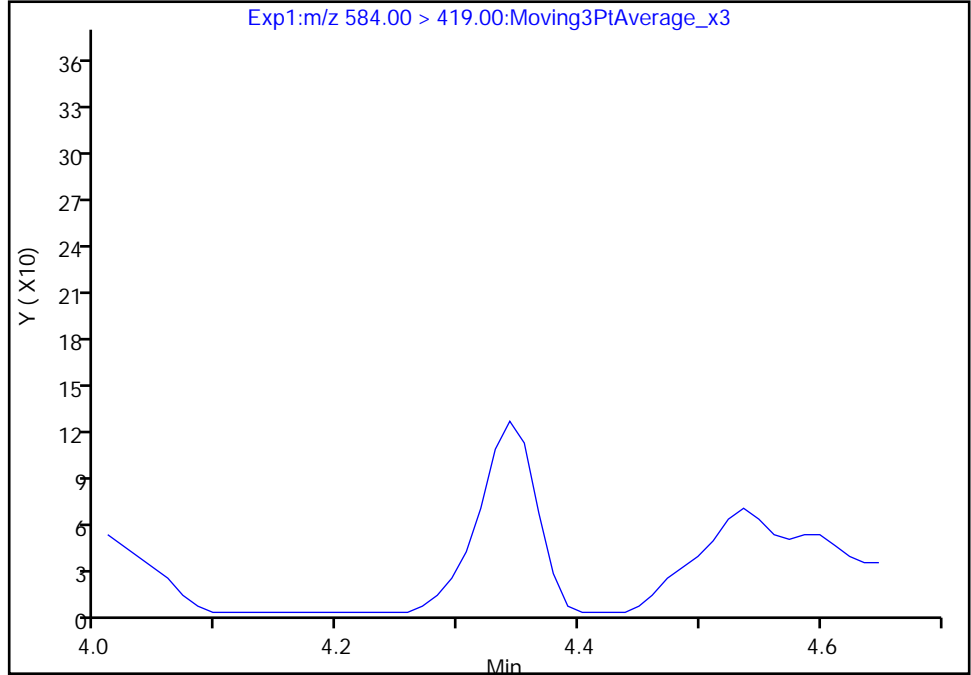
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E021.d
Injection Date: 02-Aug-2019 06:30:11 Instrument ID: LC812
Lims ID: 480-156213-F-18-A Lab Sample ID: 200-156213-18
Client ID: 356023-MW5R
Operator ID: lc812tech ALS Bottle#: 14 Worklist Smp#: 21
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

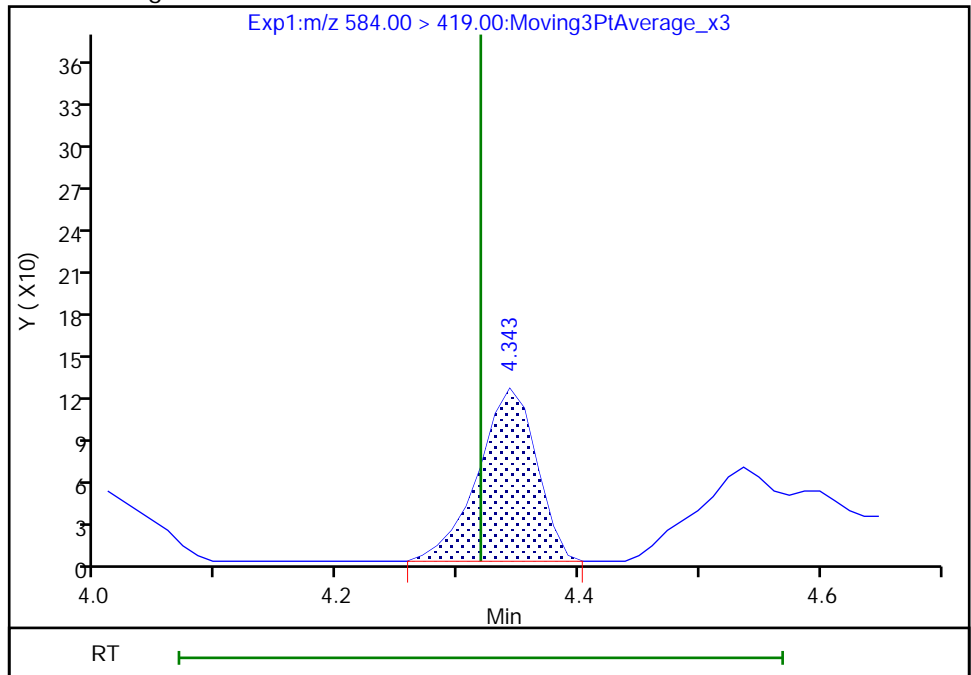
Not Detected
Expected RT: 4.32

Processing Integration Results



RT: 4.34
Area: 413
Amount: 0.138177
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:37:57
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW7R Lab Sample ID: 480-156213-19
 Matrix: Water Lab File ID: SC080119E022.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 11:30
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 306.9(mL) Date Analyzed: 08/02/2019 06:38
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.4	J	1.6	0.81
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.77	J	1.6	0.51
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		1.6	0.62
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.74
335-67-1	Perfluorooctanoic acid (PFOA)	1.5	J	1.6	0.51
375-95-1	Perfluorononanoic acid (PFNA)	ND		1.6	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	ND		1.6	0.63
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.43
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		1.6	0.48
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		1.6	0.49
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.75
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.72	J	1.6	0.40
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.65
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.77
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.73
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.97	J	1.6	0.50
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		8.1	8.1
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		16	1.4
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND	*	16	1.2
27619-97-2	6:2 FTS	ND		16	3.7
39108-34-4	8:2 FTS	ND		16	2.4

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW7R Lab Sample ID: 480-156213-19
 Matrix: Water Lab File ID: SC080119E022.d
 Analysis Method: 537 (modified) Date Collected: 07/12/2019 11:30
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 306.9(mL) Date Analyzed: 08/02/2019 06:38
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 2(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	55		25-150
STL00992	13C4 PFBA	77		25-150
STL01893	13C5 PFPeA	76		25-150
STL00993	13C2 PFHxA	77		50-150
STL01892	13C4 PFHpA	82		50-150
STL00990	13C4 PFOA	79		50-150
STL00995	13C5 PFNA	78		50-150
STL00996	13C2 PFDA	76		50-150
STL00997	13C2 PFUnA	76		50-150
STL00998	13C2 PFDoA	71		50-150
STL02116	13C2 PFTeDA	59		50-150
STL02337	13C3 PFBS	86		50-150
STL00994	18O2 PFHxS	87		50-150
STL00991	13C4 PFOS	80		50-150
STL02118	d3-NMeFOSAA	57		50-150
STL02117	d5-NEtFOSAA	59		50-150
STL02279	M2-6:2 FTS	95		25-150
STL02280	M2-8:2 FTS	103		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
 Lims ID: 480-156213-F-19-A
 Client ID: 356023-MW7R
 Sample Type: Client
 Inject. Date: 02-Aug-2019 06:38:15 ALS Bottle#: 15 Worklist Smp#: 22
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-19-A
 Misc. Info.: 200-0037095-022 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:43:32
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.506	2952798	38.3	76.6	10783	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.000	46956	0.8627		8.8	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.613	2736869	37.8	75.6	5815	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	24988	0.4718		1.2	M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.620	2852240	40.1	86.2	373427	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	27523	0.4414	Target=1.90	13.6	
	298.90 > 99.00	2.093	2.093	0.0	1.000	14224		1.93(0.95-2.85)	12.9	
D 7 13C2 PFHxA	315.00 > 270.00	2.471	2.459	0.012	0.732	2753945	38.3	76.6	6889	
6 Perfluorohexanoic acid	313.00 > 269.00	2.471	2.459	0.012	1.000	17746	0.3129	Target=13.23	3.4	M
	313.00 > 119.00	2.471	2.459	0.012	1.000	2073		8.56(6.61-19.84)	3.0	M
D 11 18O2 PFHxS	403.00 > 84.00	2.939	2.916	0.023	0.871	1705062	40.9	86.5	7149	
D 9 13C4 PFHpA	367.00 > 322.00	2.939	2.928	0.011	0.871	2880341	40.9	81.8	6519	
8 Perfluorohexanesulfonic acid	399.00 > 80.00	2.939	2.928	0.011	1.000	12673	0.2668	Target=3.37	10.9	M
	399.00 > 99.00	2.950	2.928	0.022	1.004	3395		3.73(1.69-5.06)	4.0	M
10 Perfluoroheptanoic acid	363.00 > 319.00	2.939	2.928	0.011	1.000	11134	0.2063	Target=3.76	2.6	M
	363.00 > 169.00	2.939	2.928	0.011	1.000	3031		3.67(1.88-5.65)	13.1	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 12 M2-6:2 FTS										
429.00 > 81.00	3.355	3.335	0.020	0.995	390257	45.0		94.7	638	
13 1H,1H,2H,2H-perfluorooctanesuloni										
427.00 > 407.00	3.364	3.336	0.028	1.003	7016	0.4979			22.2	
D 14 13C4 PFOA										
417.00 > 372.00	3.373	3.344	0.029	1.000	2947423	39.6		79.2	10933	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.373	3.355	0.018	1.000	57981	0.9039	Target=2.84		5.9	M
413.00 > 169.00	3.373	3.355	0.018	1.000	24621		2.35(1.42-4.25)		63.3	M
* 62 13C2 PFOA										
415.00 > 370.00	3.373	3.355	0.018		4091619	50.0			13828	
D 18 13C4 PFOS										
503.00 > 80.00	3.723	3.695	0.028	1.104	1326273	38.2		79.9	4512	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.612	3.703	-0.091	0.970	15573	0.5930	Target=4.33		25.2	RM
499.00 > 99.00	3.703	3.703	0.0	0.995	2231		6.98(2.16-6.49)		3.6	M
D 19 13C5 PFNA										
468.00 > 423.00	3.745	3.715	0.030	1.110	2661592	39.2		78.4	12825	
20 Perfluorononanoic acid										
463.00 > 419.00	3.745	3.723	0.022	1.000	4312	0.0894	Target=8.15		1.6	M
463.00 > 169.00	3.734	3.723	0.011	0.997	562		7.67(4.08-12.23)		6.6	M
D 23 13C2 PFDA										
515.00 > 470.00	4.060	4.036	0.024	1.203	2071830	38.1		76.3	15876	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.060	4.036	0.024	1.203	395238	49.4		103	781	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.060	4.047	0.013	1.000	3167	0.0789	Target=9.58		1.3	M
513.00 > 169.00	4.060	4.047	0.013	1.000	622		5.09(4.79-14.37)		4.8	M
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.211	1722721	27.6		55.3	5129	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.084	4.072	0.012	1.000	2097	0.0667			13.3	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.198	4.178	0.020	1.245	198093	28.6		57.1	1692	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.280	1868389	37.8		75.5	17203	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.307	0.012	1.000	5650	0.1762	Target=7.95		2.7	M
563.00 > 169.00	4.319	4.307	0.012	1.000	1164		4.85(3.98-11.93)		12.0	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.308	0.023	1.284	227381	29.4		58.8	867	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.307	4.319	-0.012	0.994	279	0.0959			2.2	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.537	0.012	1.349	1889725	35.5		71.0	4963	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.474	2178303	29.7		59.4	9681	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d

Injection Date: 02-Aug-2019 06:38:15

Instrument ID: LC812

Lims ID: 480-156213-F-19-A

Lab Sample ID: 200-156213-19

Client ID: 356023-MW7R

Operator ID: lc812tech

ALS Bottle#: 15

Worklist Smp#: 22

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

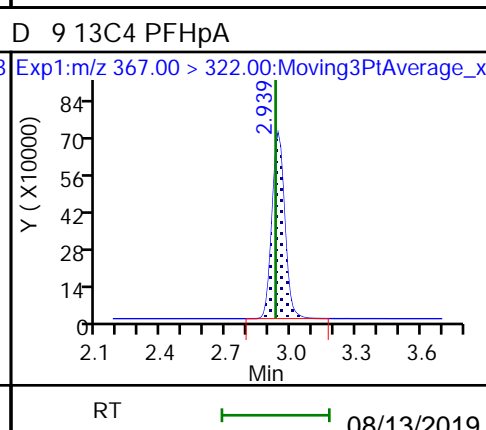
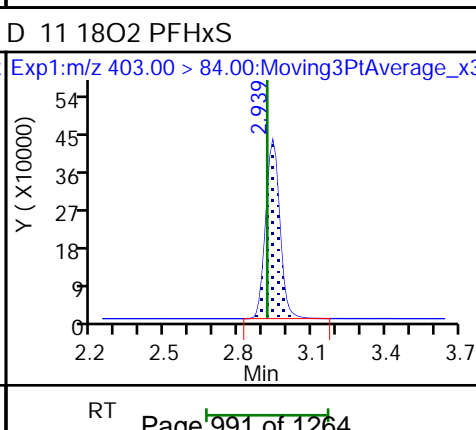
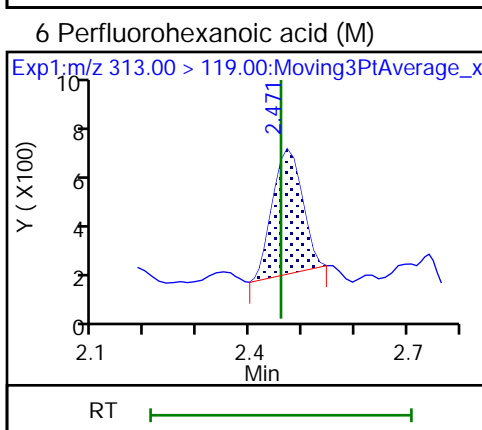
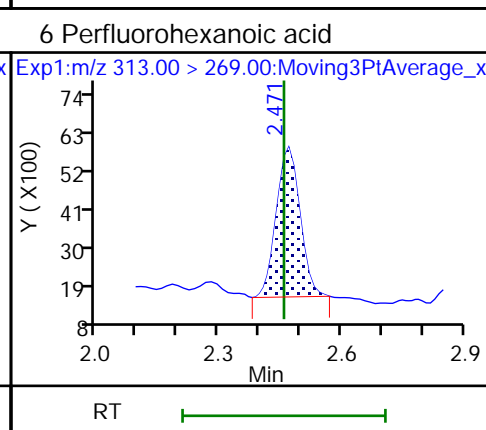
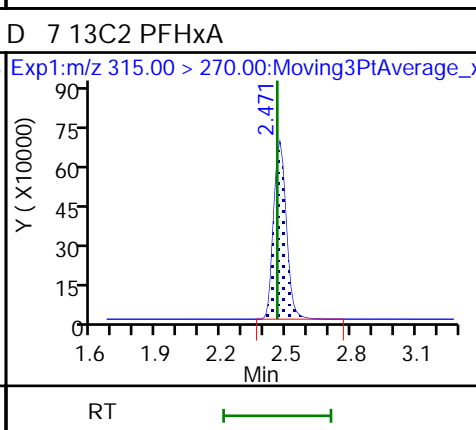
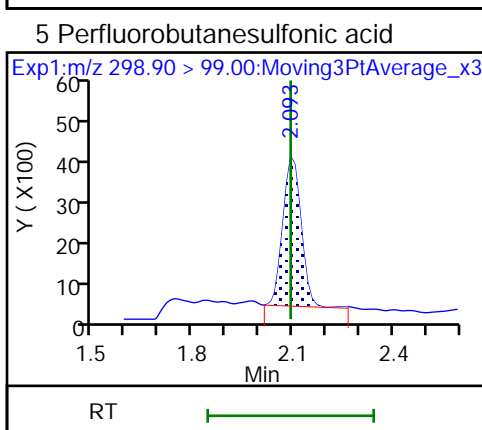
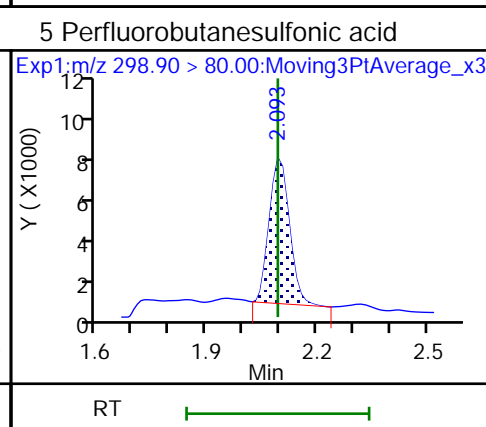
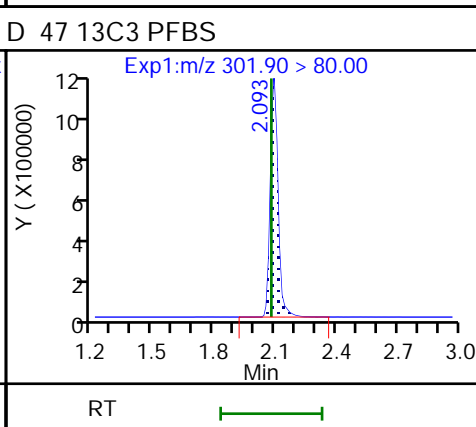
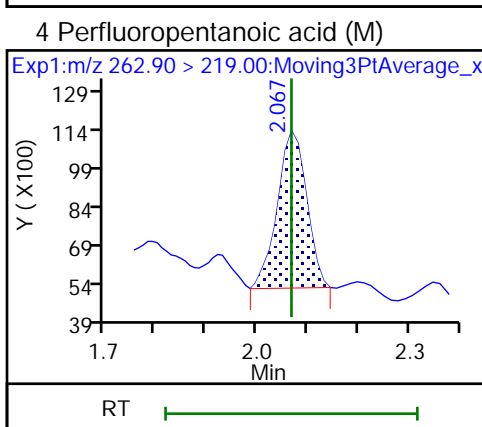
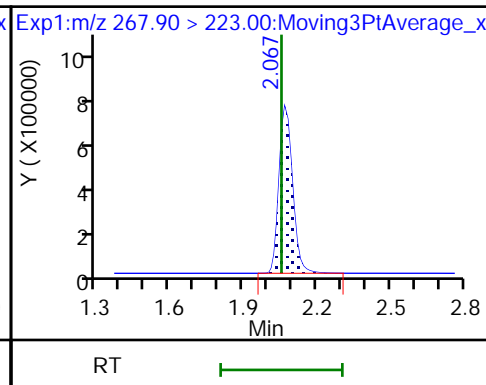
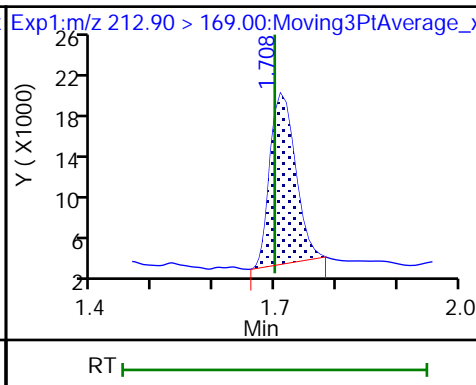
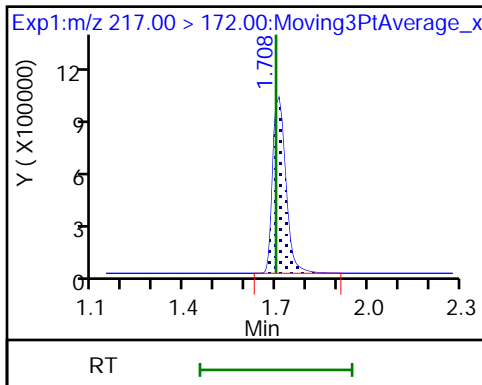
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

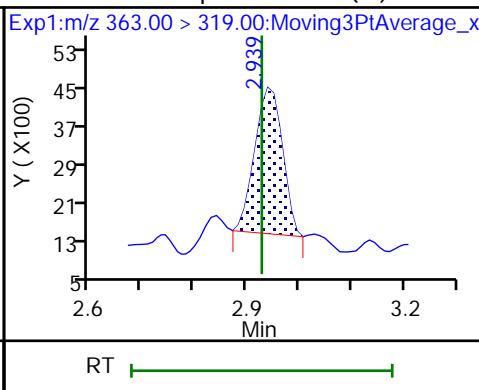
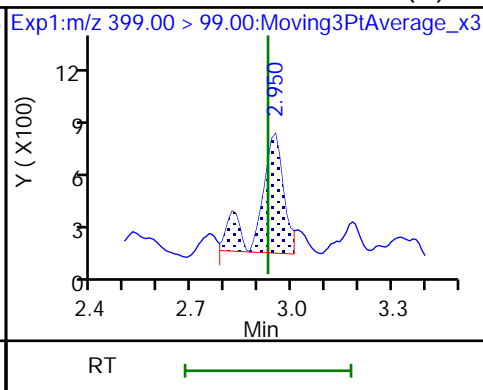
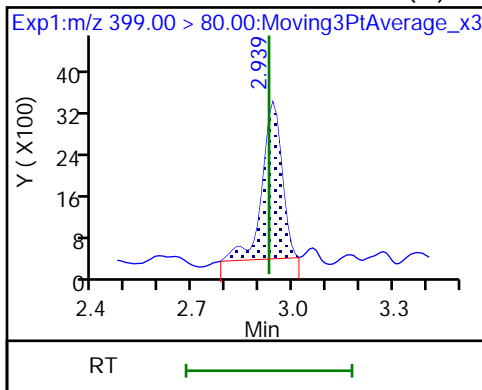
D 3 13C5 PFPeA



8 Perfluorohexanesulfonic acid (M)

8 Perfluorohexanesulfonic acid (M)

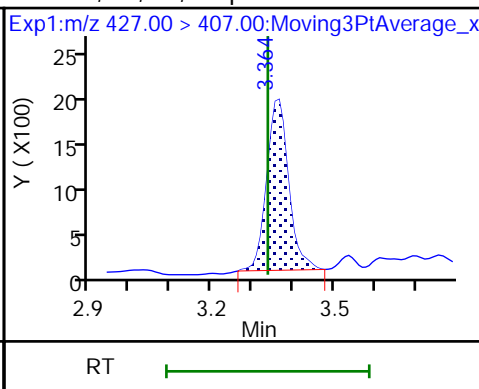
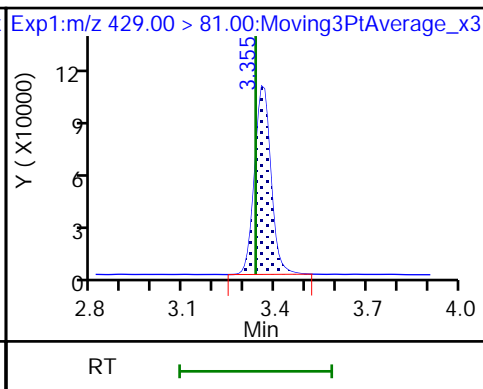
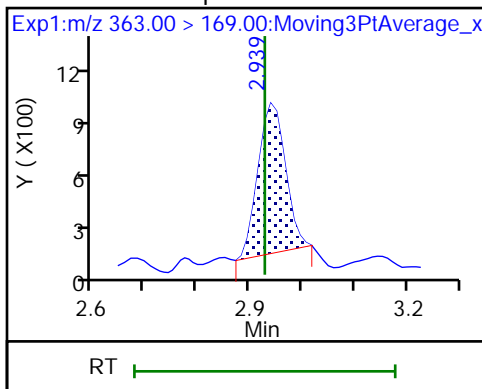
10 Perfluoroheptanoic acid (M)



10 Perfluoroheptanoic acid

D 12 M2-6:2 FTS

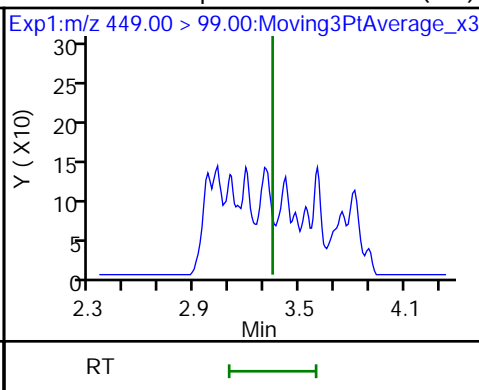
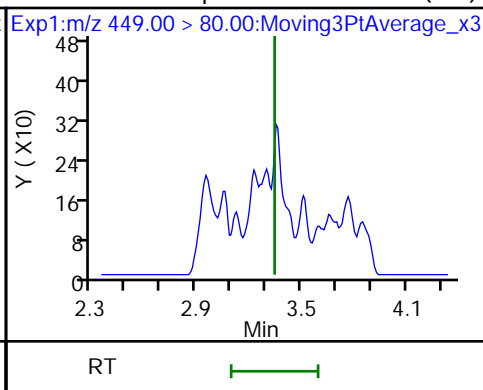
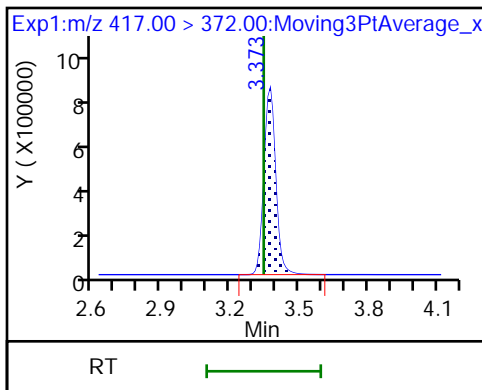
13 1H,1H,2H,2H-perfluorooctanesulfoni



D 14 13C4 PFOA

16 Perfluoroheptanesulfonic acid (ND)

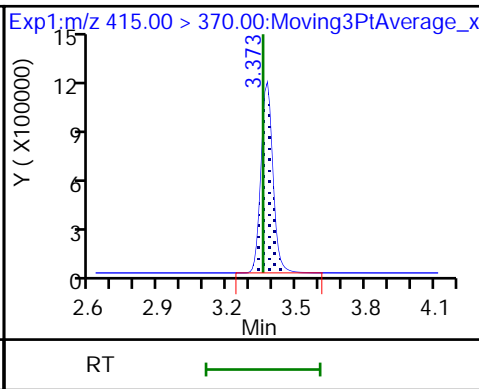
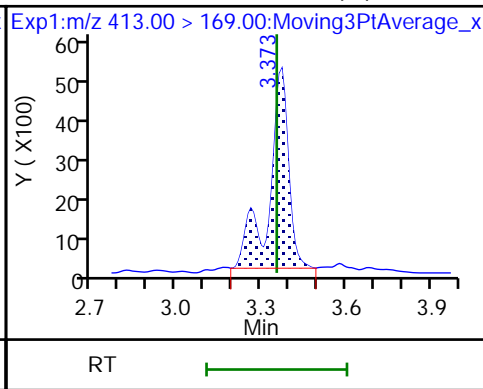
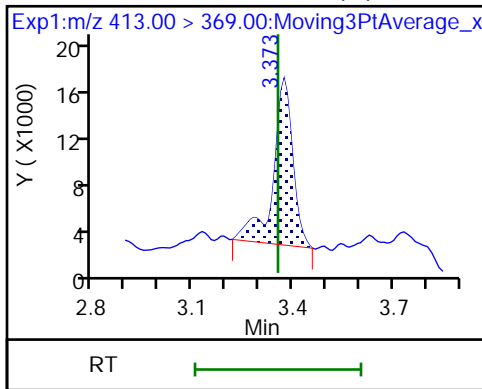
16 Perfluoroheptanesulfonic acid (ND)



15 Perfluorooctanoic acid (M)

15 Perfluorooctanoic acid (M)

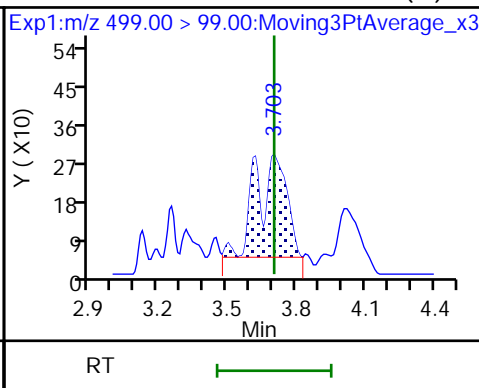
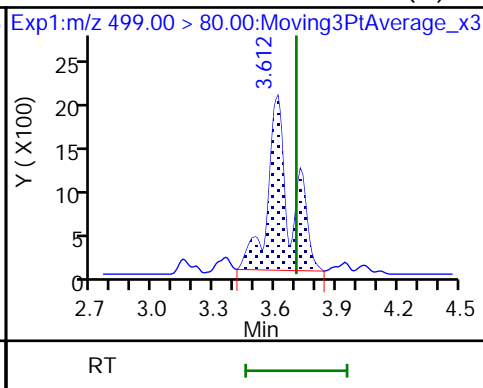
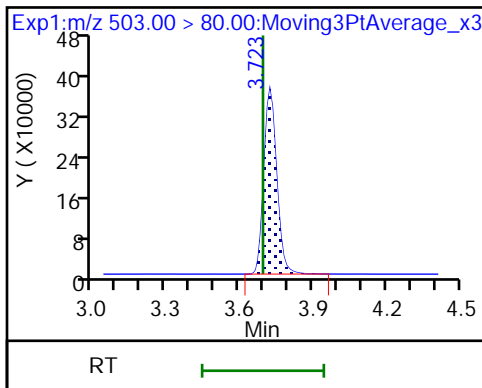
* 62 13C2 PFOA



D 18 13C4 PFOS

17 Perfluorooctanesulfonic acid (M)

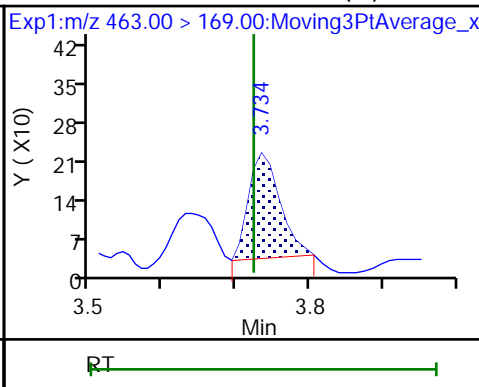
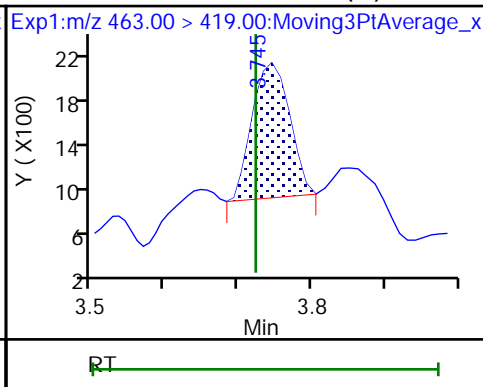
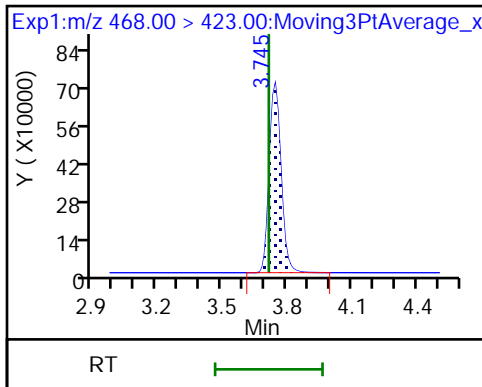
17 Perfluorooctanesulfonic acid (M)



D 19 13C5 PFNA

20 Perfluorononanoic acid (M)

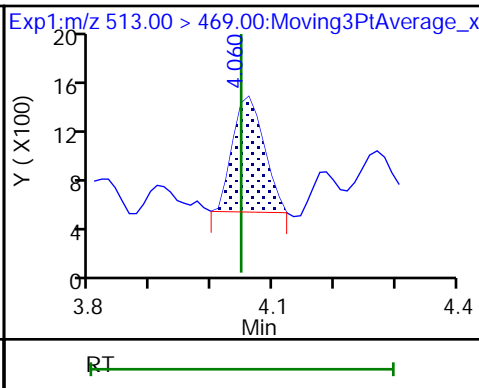
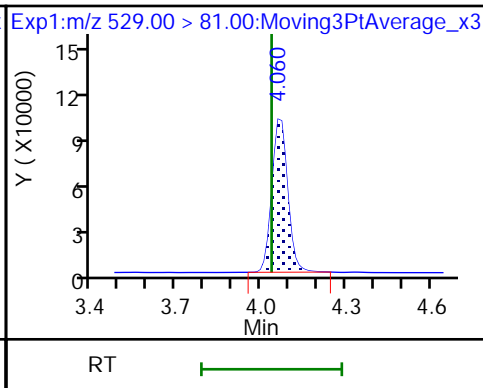
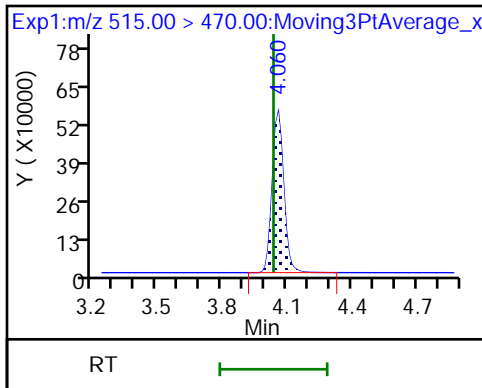
20 Perfluorononanoic acid (M)



D 23 13C2 PFDA

D 26 M2-8:2 FTS

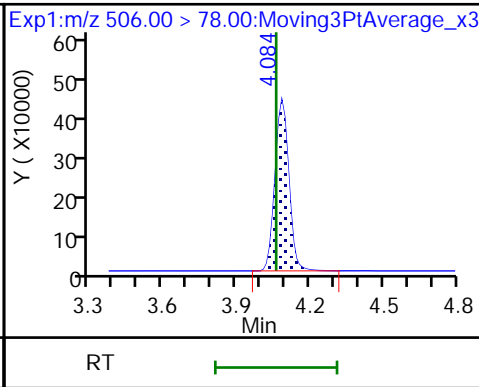
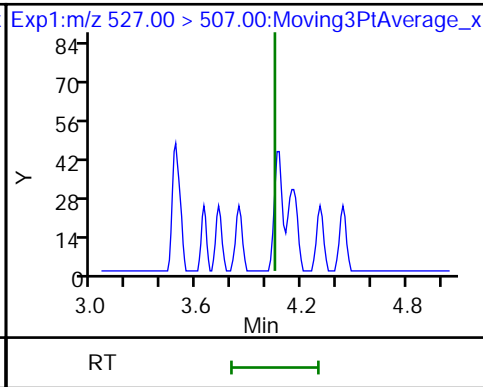
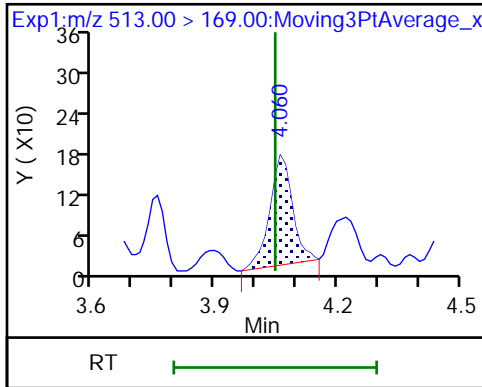
24 Perfluorodecanoic acid



24 Perfluorodecanoic acid (M)

25 1H,1H,2H,2H-perfluorodecanesulfonate (M)

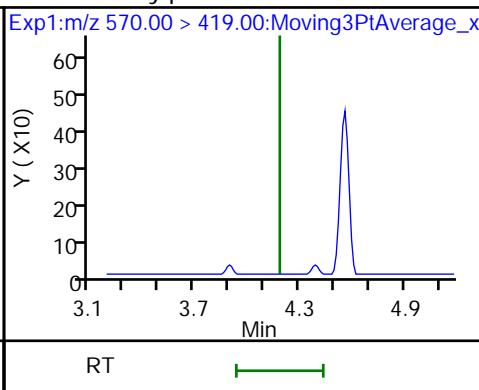
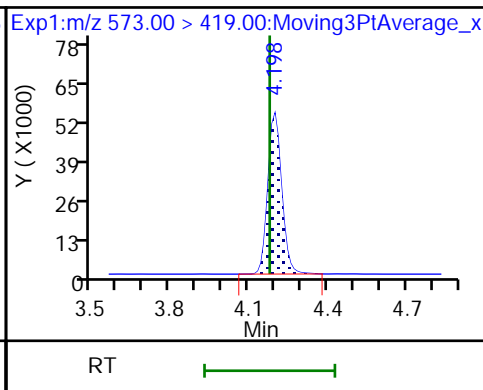
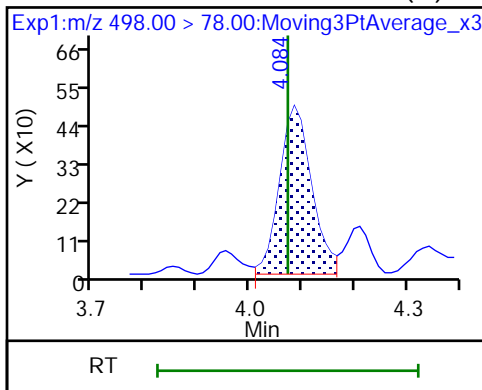
(M) 13C8 FOSA



22 Perfluorooctanesulfonamide (M)

D 27 d3-NMeFOSAA

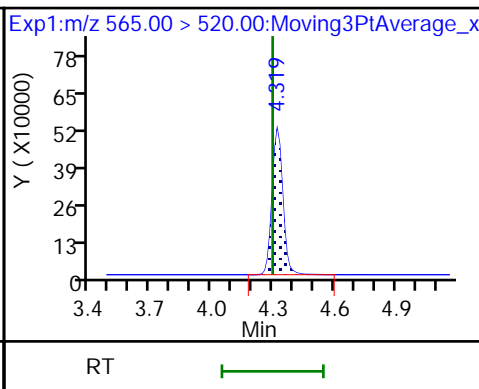
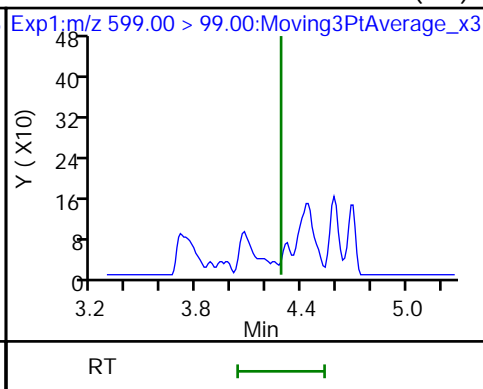
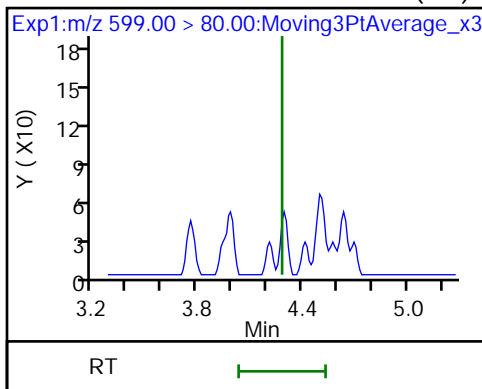
28 N-methylperfluorooctanesulfonamido (ND)



29 Perfluorodecanesulfonic acid (ND)

29 Perfluorodecanesulfonic acid (ND)

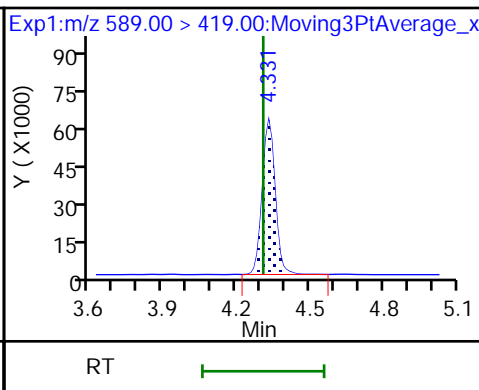
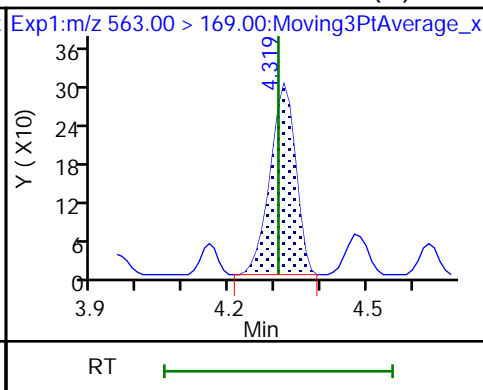
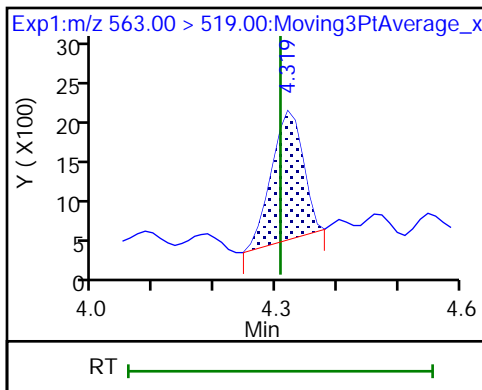
D 30 13C2 PFUoA



31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid (M)

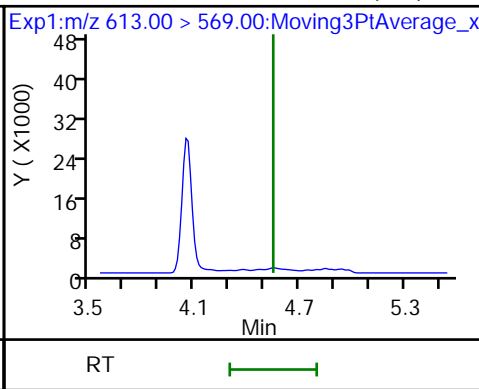
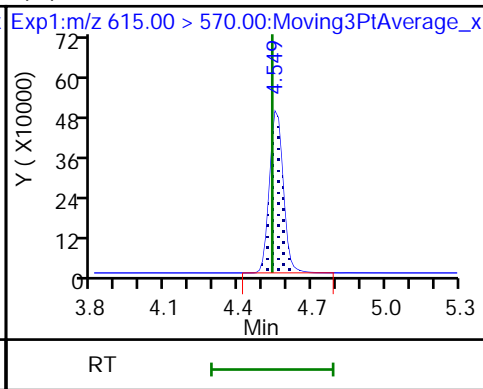
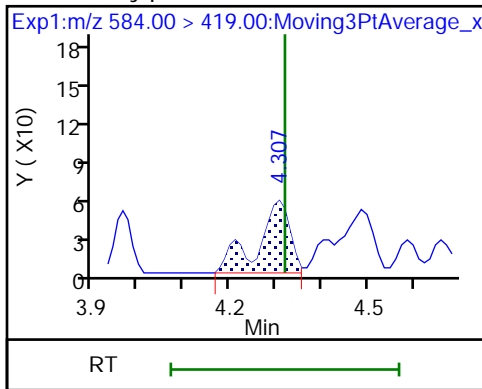
D 32 d5-NEtFOSAA



33 N-ethylperfluorooctanesulfonamido (M)

D 36 13C2 PFDoA

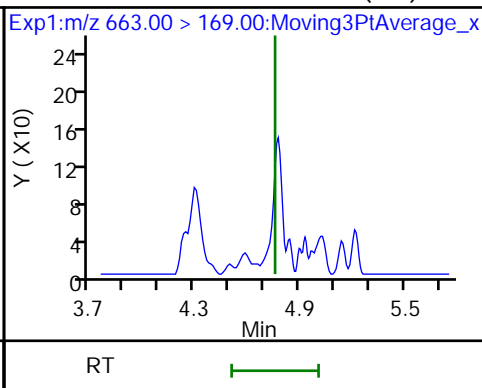
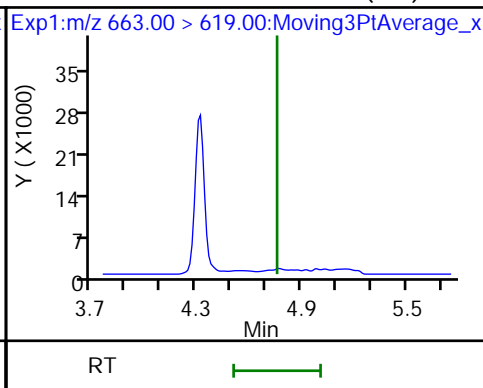
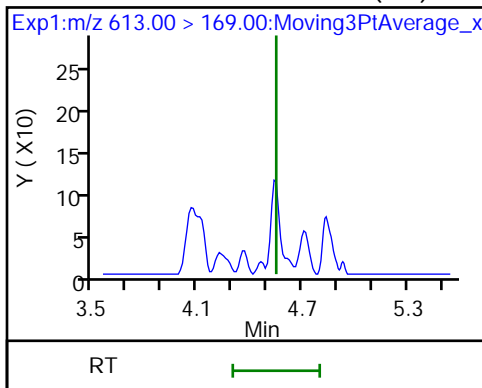
37 Perfluorododecanoic acid (ND)



37 Perfluorododecanoic acid (ND)

41 Perfluorotridecanoic acid (ND)

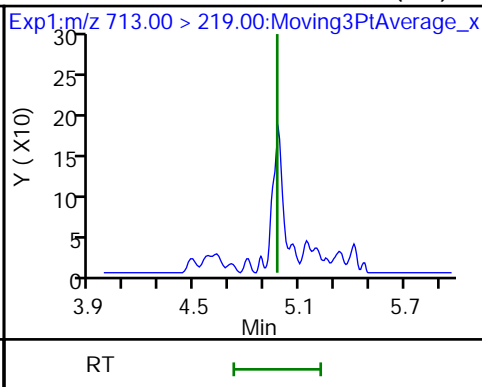
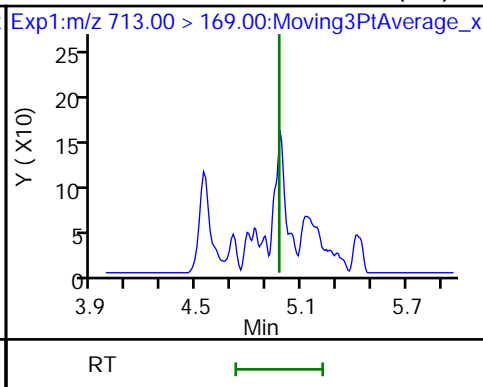
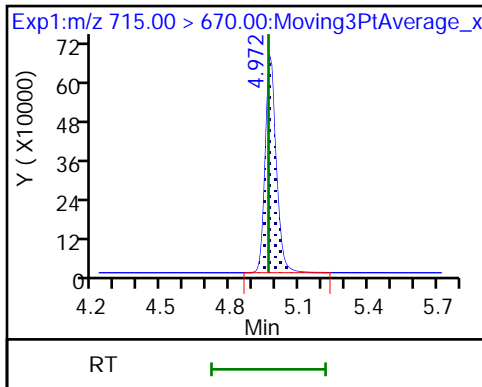
41 Perfluorotridecanoic acid (ND)



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid (ND)

42 Perfluorotetradecanoic acid (ND)



Eurofins TestAmerica, Burlington

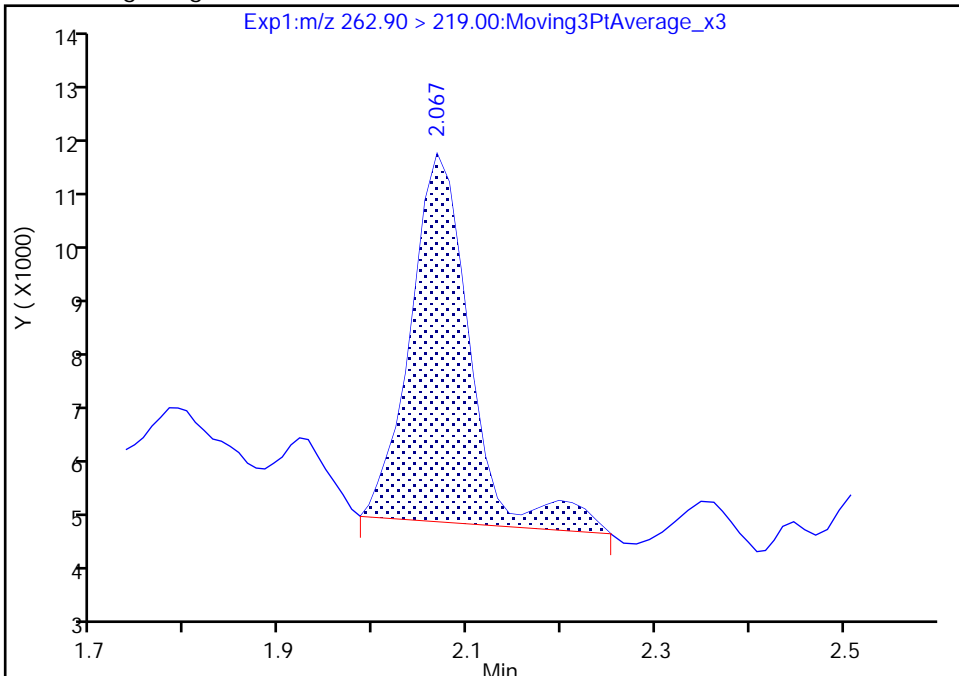
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

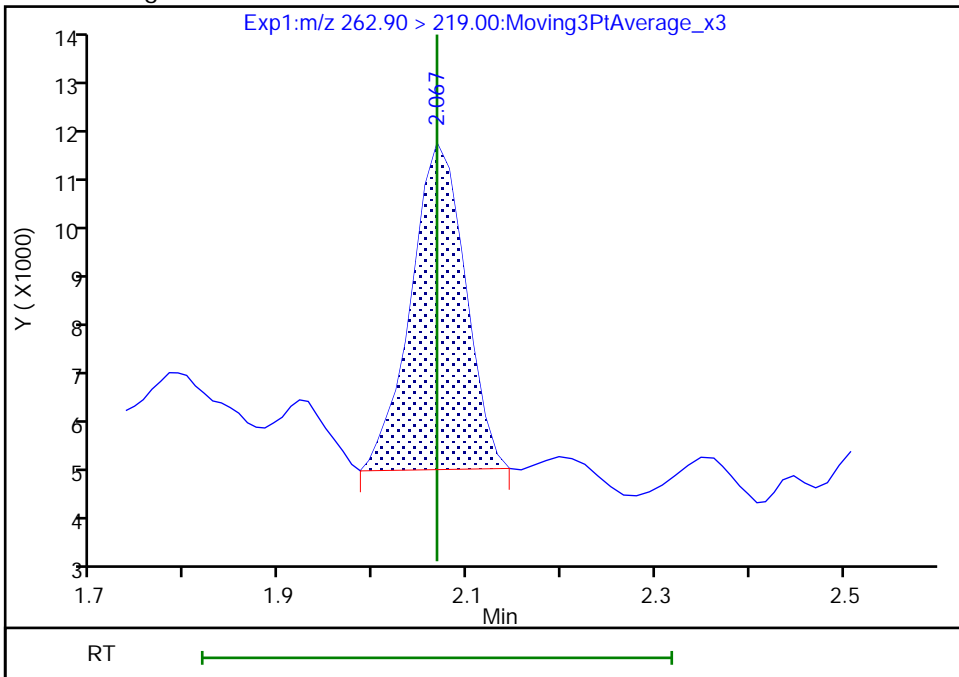
RT: 2.07
Area: 28219
Amount: 0.532761
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 24988
Amount: 0.471761
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:38:56
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

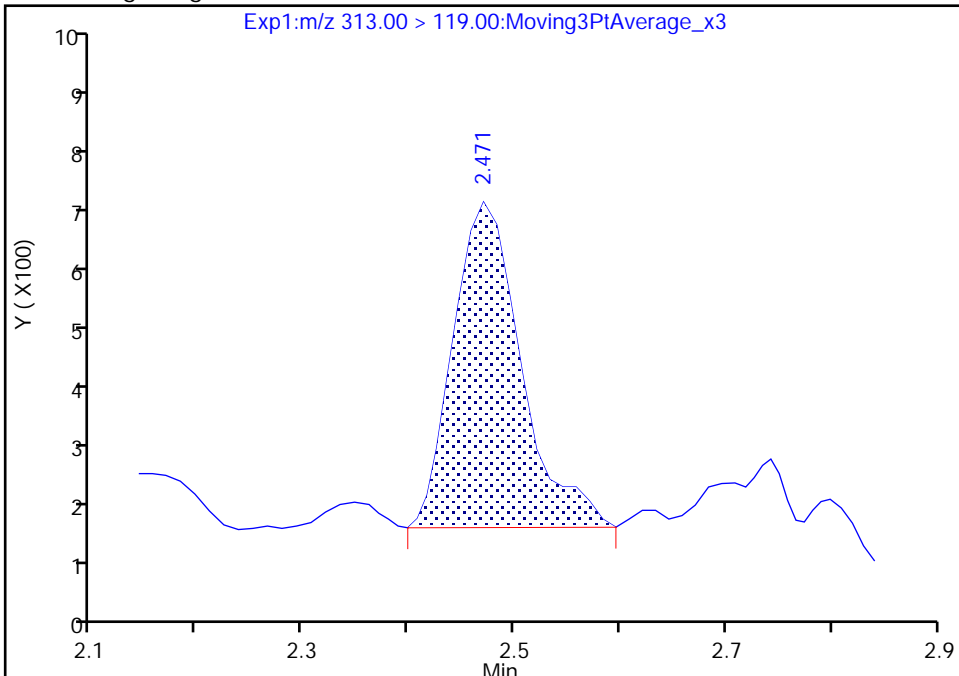
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 2

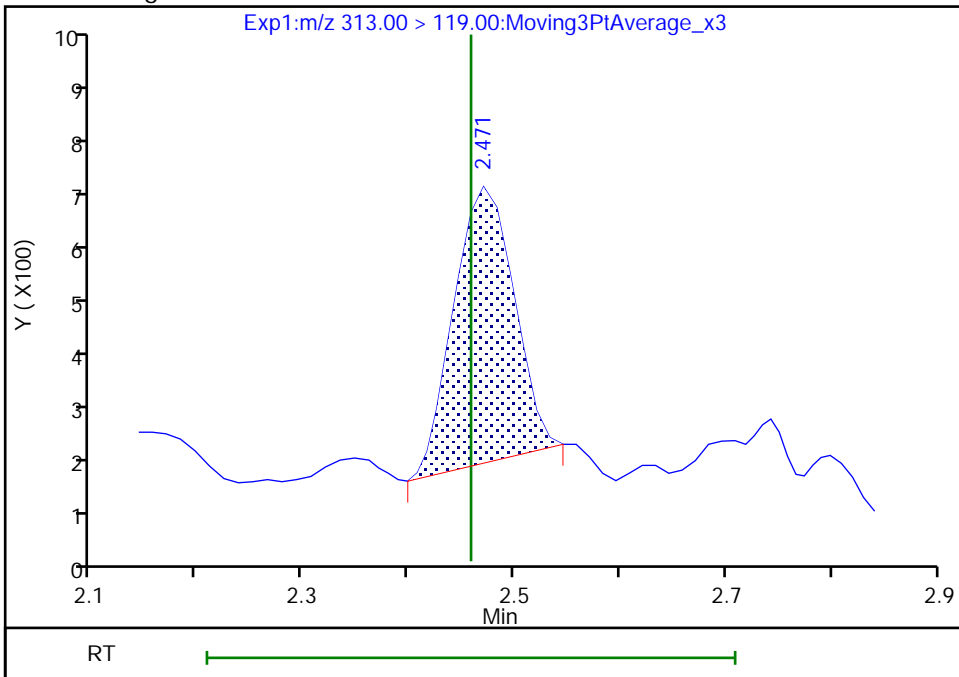
RT: 2.47
Area: 2500
Amount: 0.312875
Amount Units: ng/ml

Processing Integration Results



RT: 2.47
Area: 2073
Amount: 0.312875
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:39:05
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

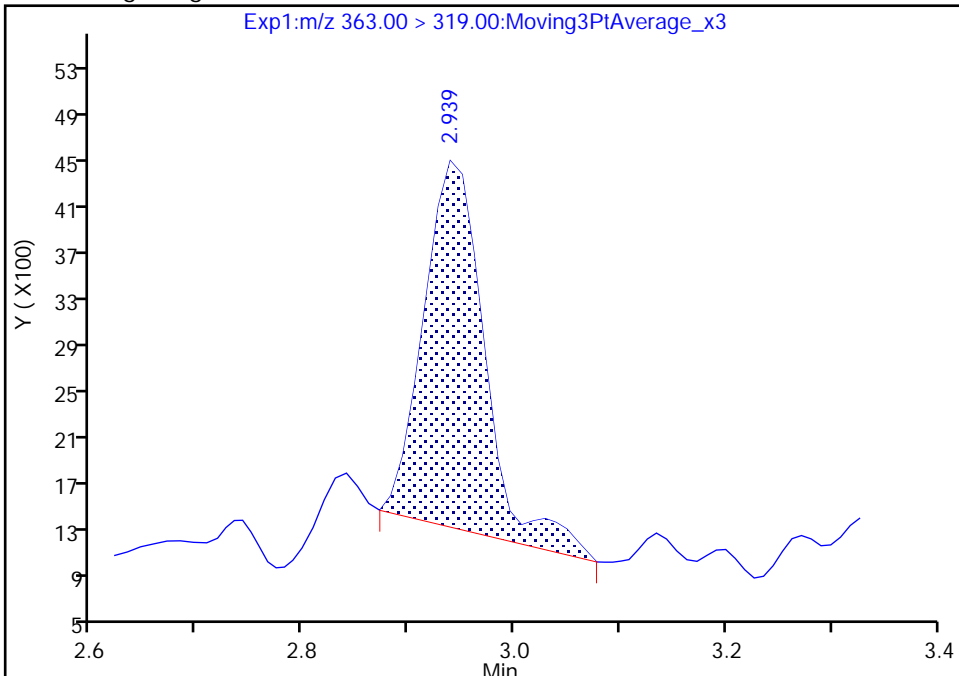
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

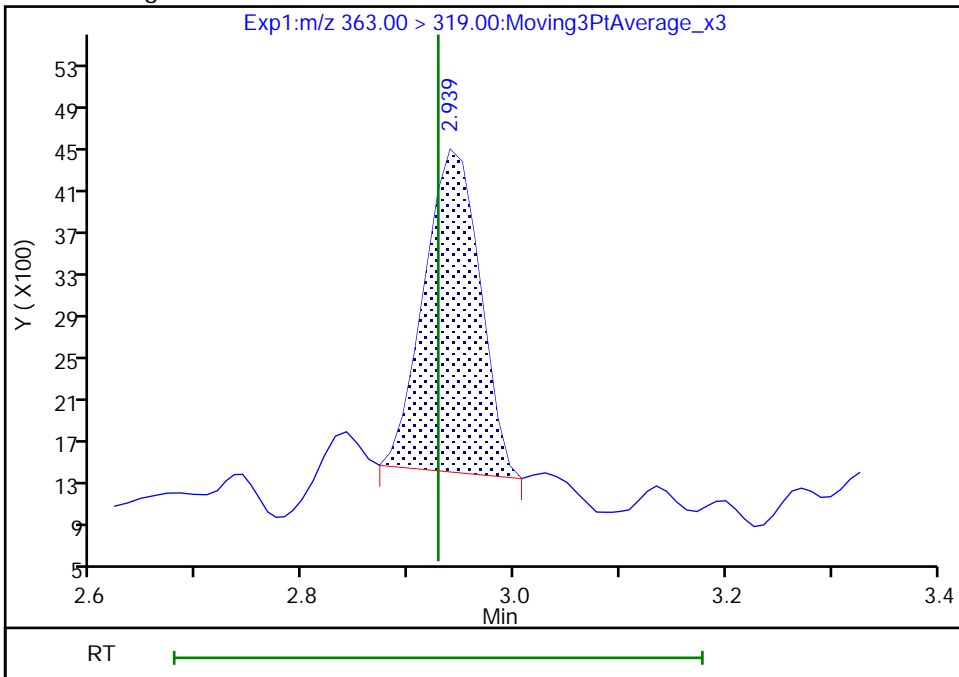
RT: 2.94
Area: 12568
Amount: 0.232924
Amount Units: ng/ml

Processing Integration Results



RT: 2.94
Area: 11134
Amount: 0.206347
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:40:30
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

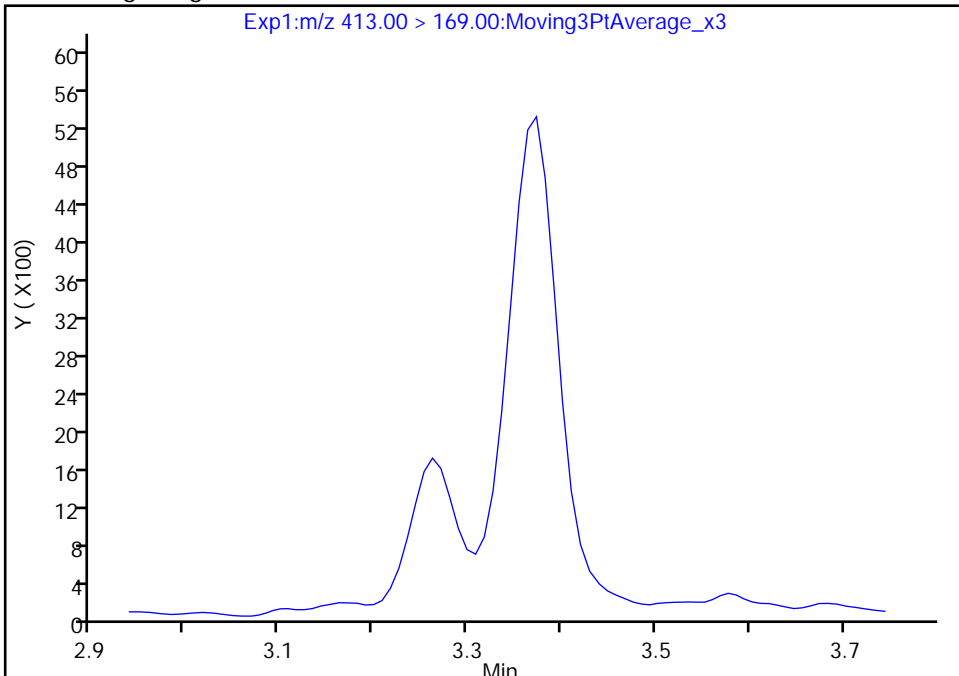
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

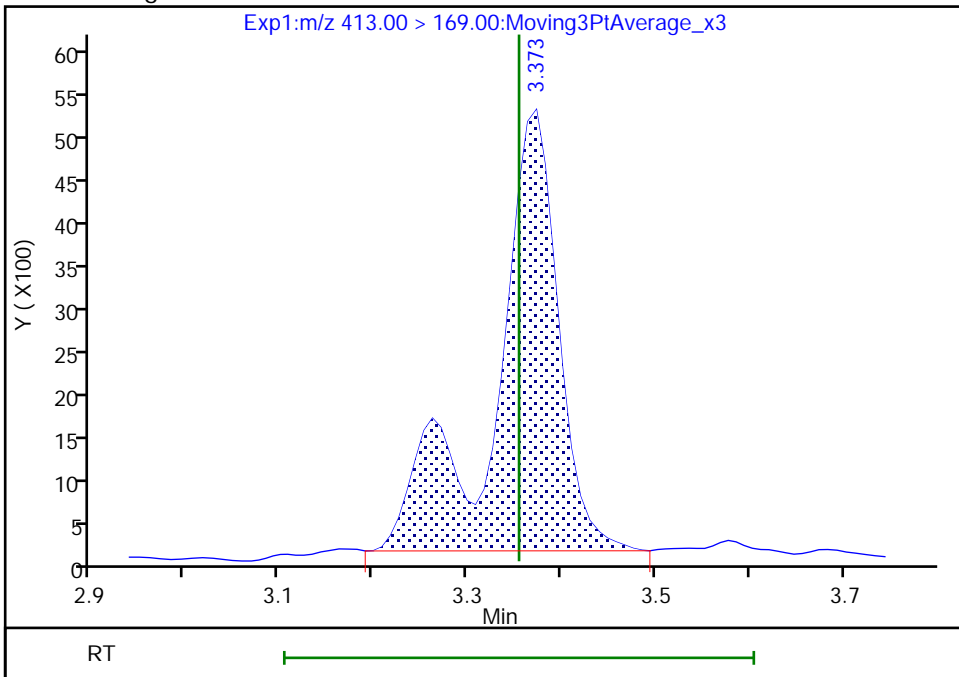
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 24621
Amount: 0.903928
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:40:45
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

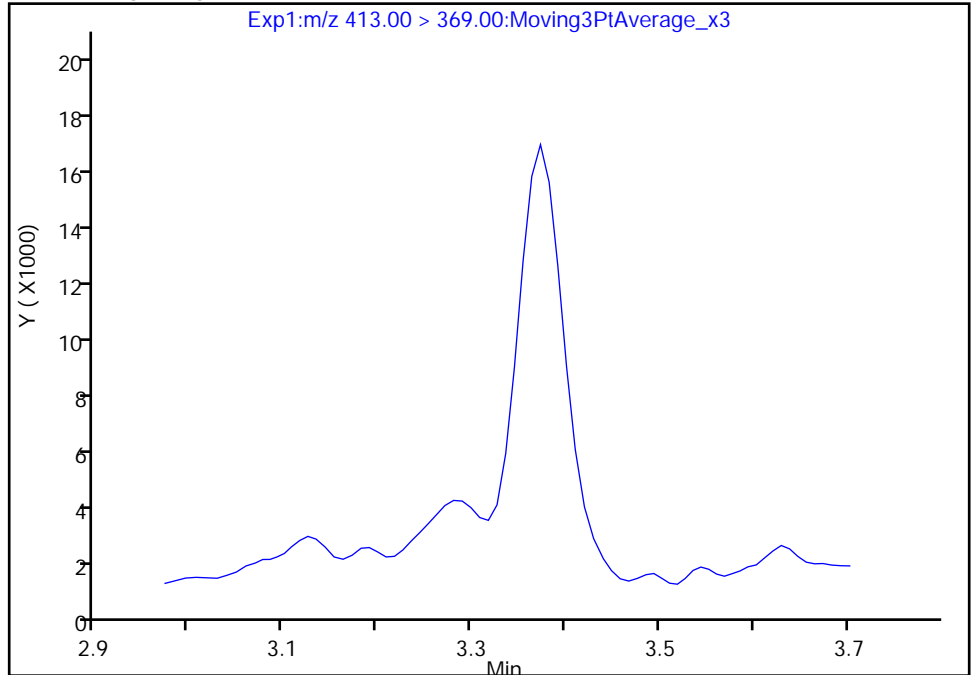
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

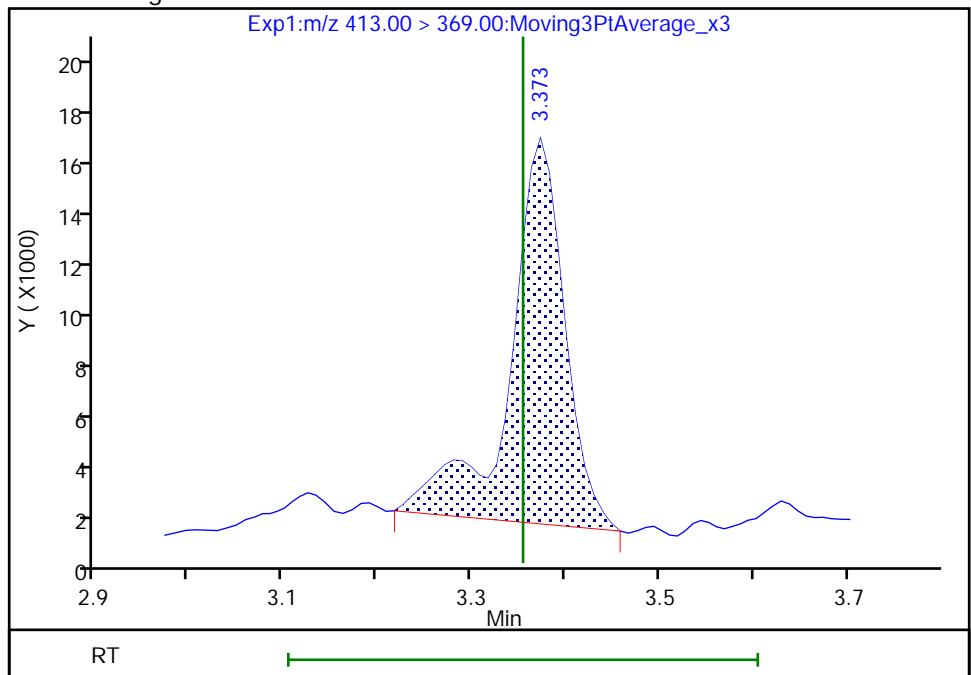
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 57981
Amount: 0.903928
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:40:49

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

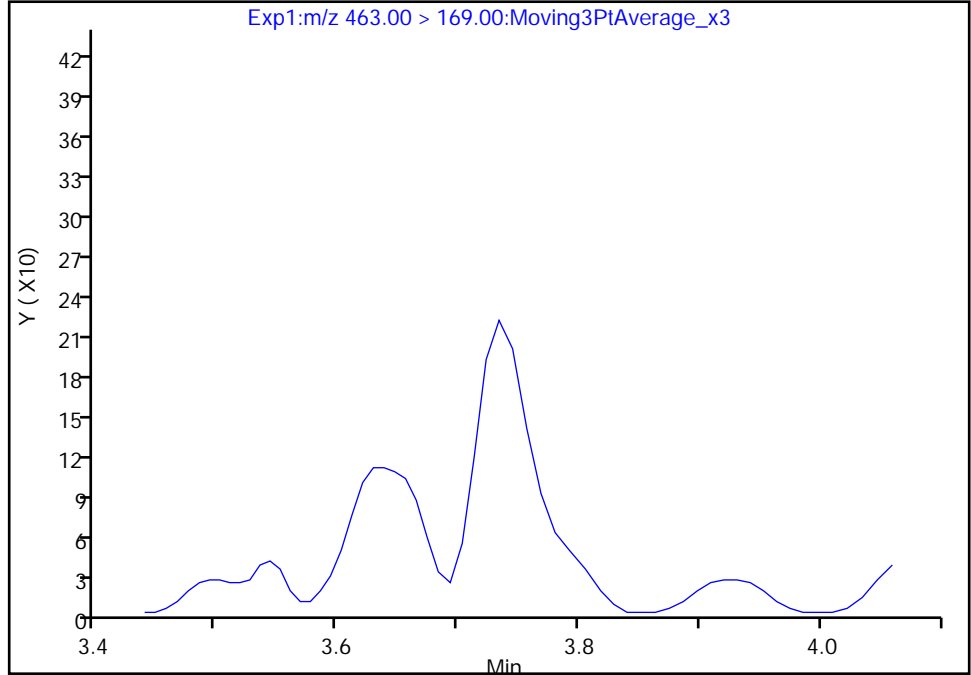
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

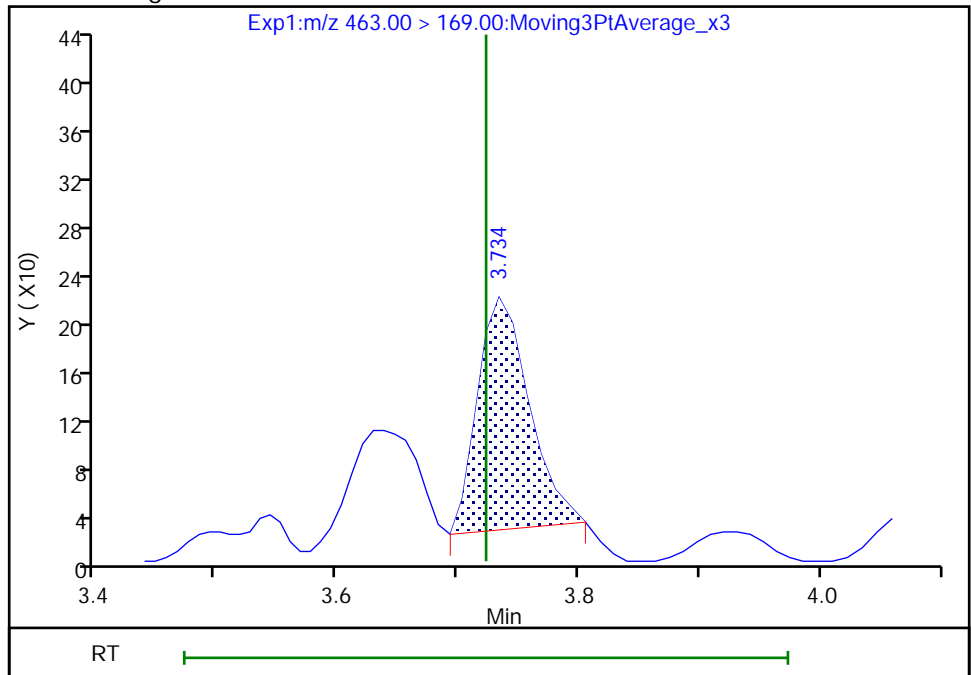
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.73
Area: 562
Amount: 0.089419
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

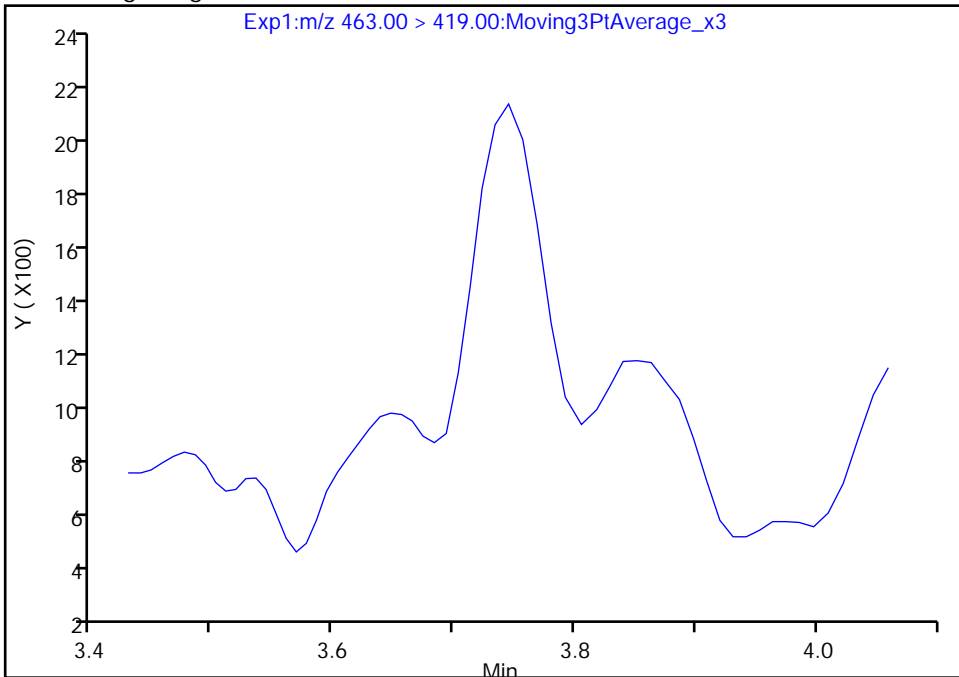
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

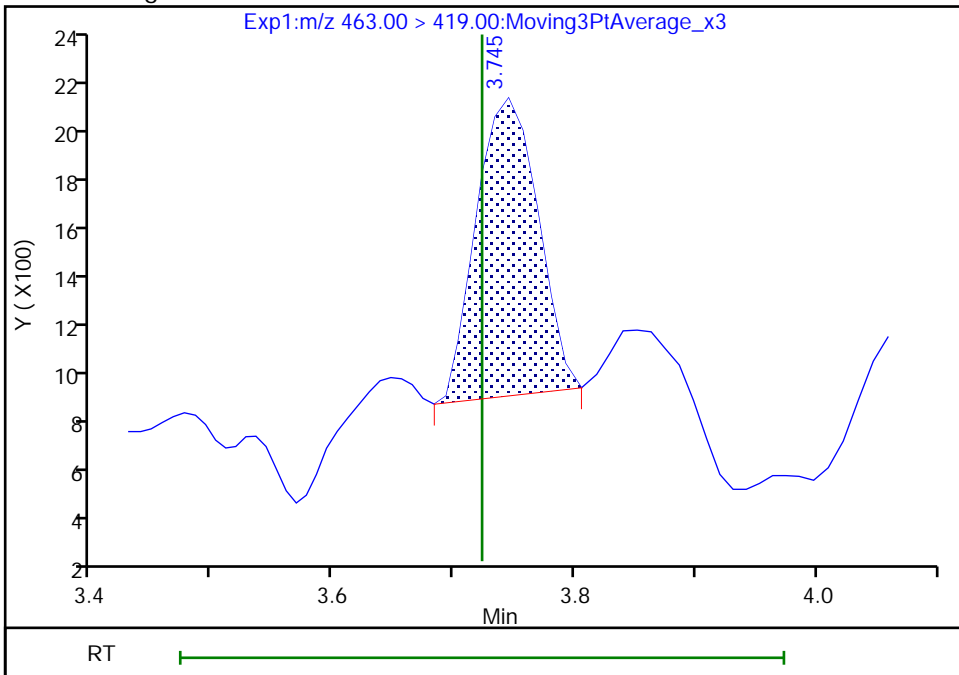
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.75
Area: 4312
Amount: 0.089419
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

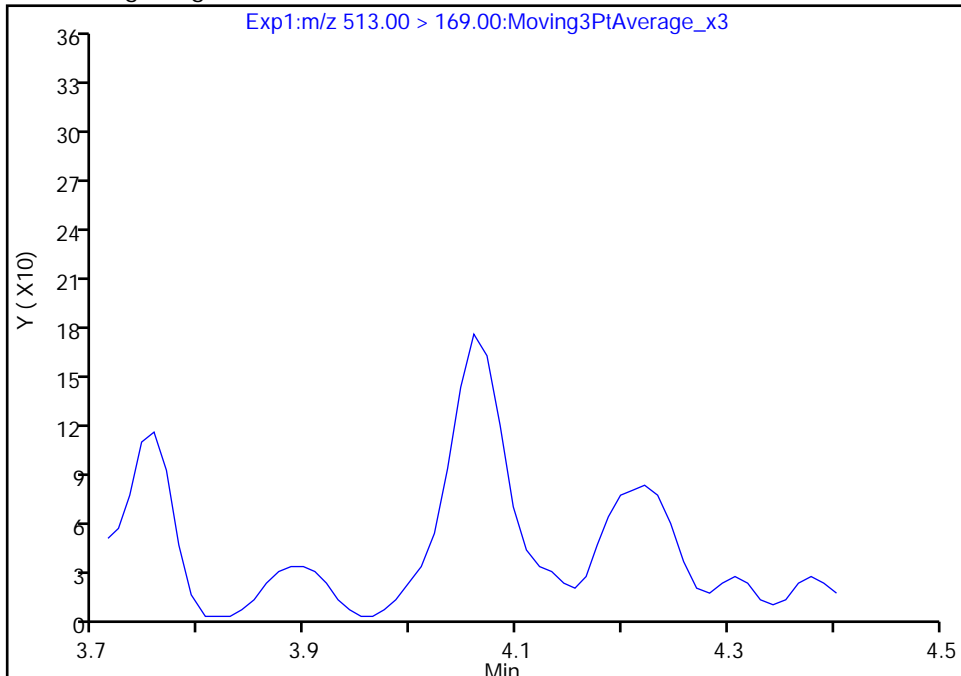
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

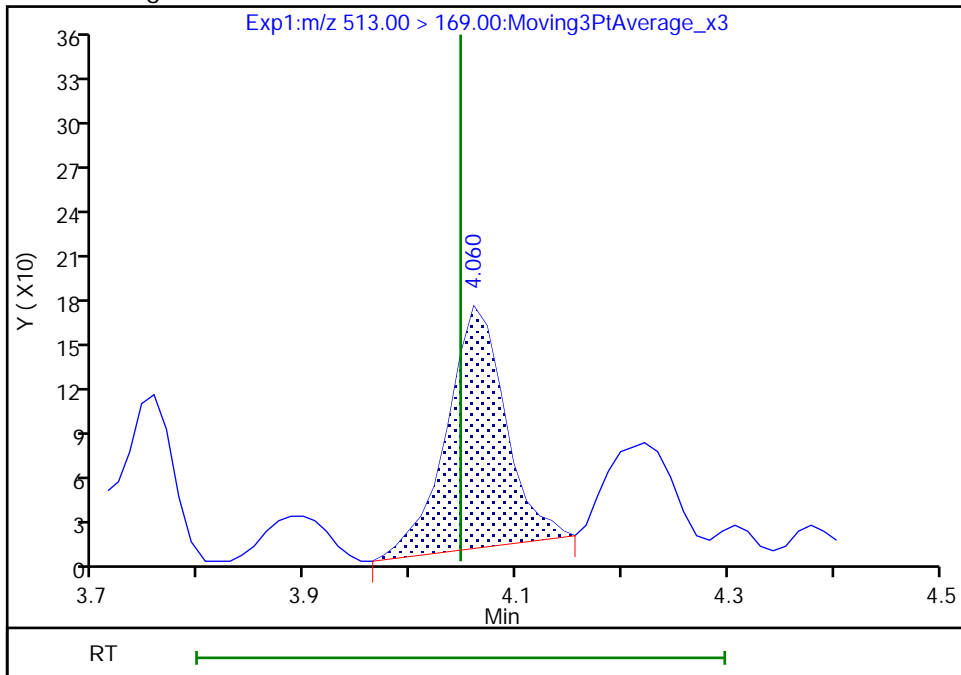
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.06
Area: 622
Amount: 0.078941
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:41:45
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

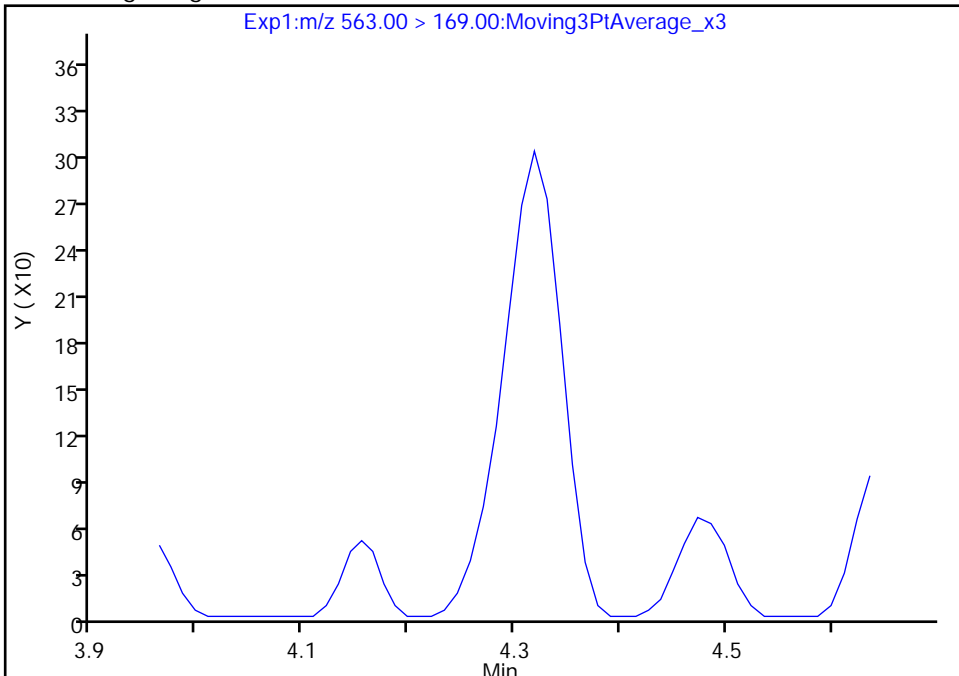
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

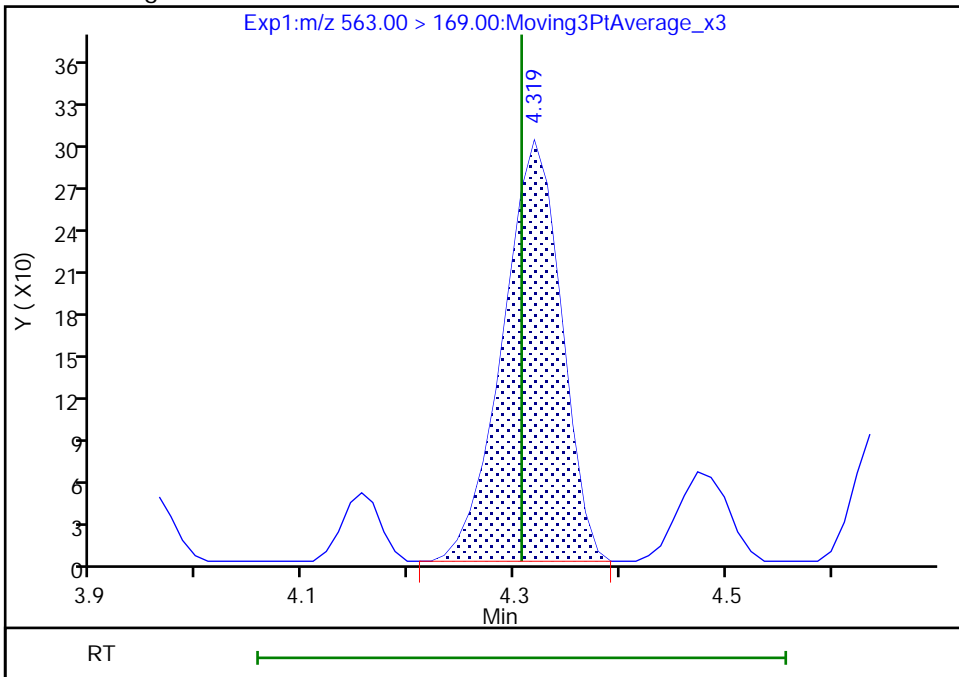
Not Detected
Expected RT: 4.31

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 1164
Amount: 0.176213
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:42:49
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

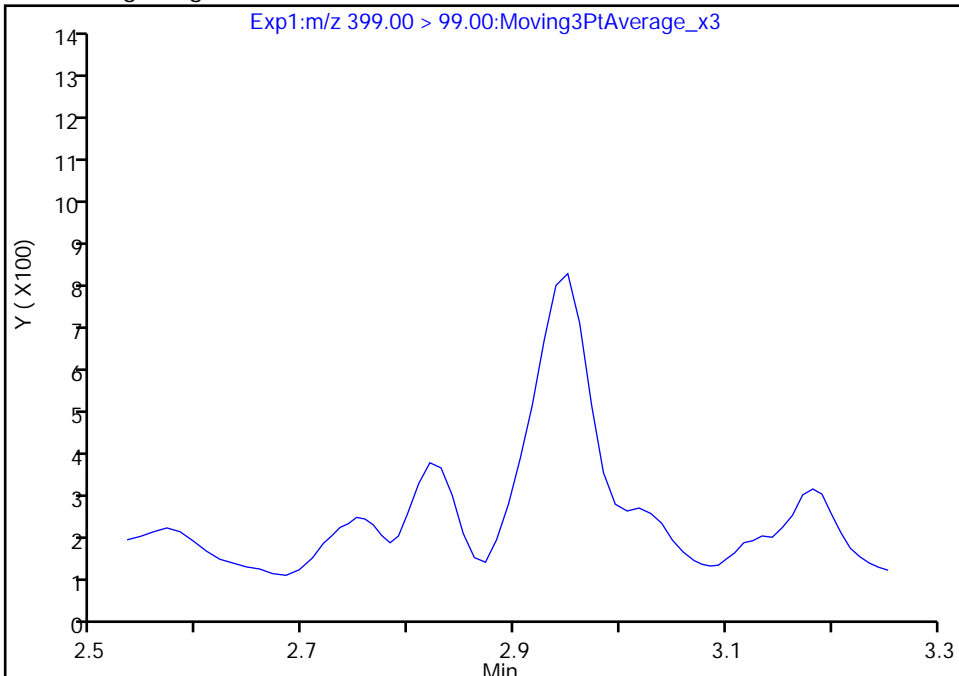
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

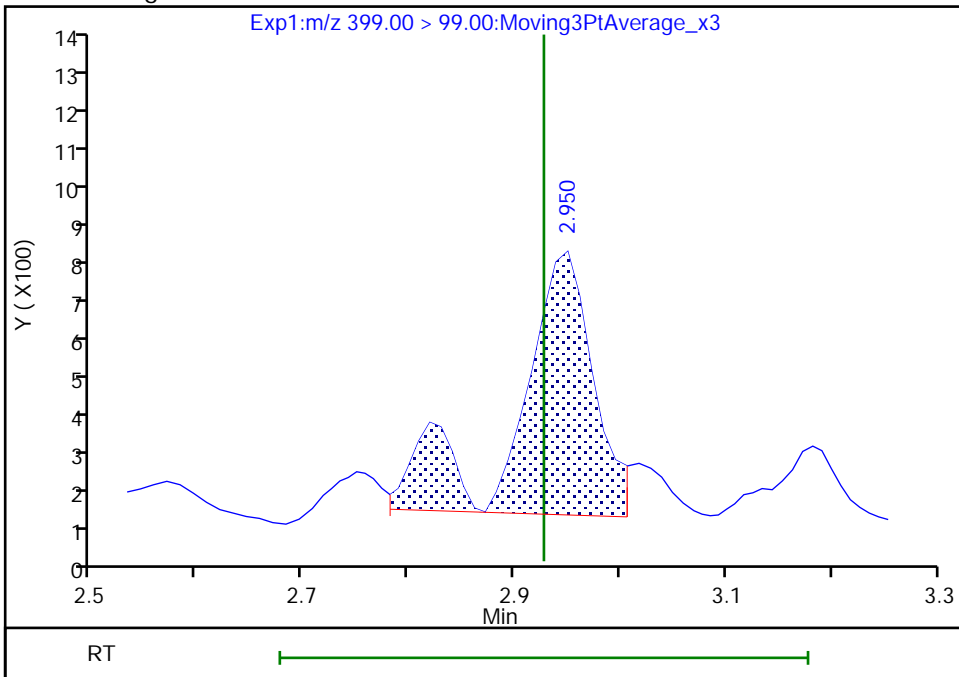
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.95
Area: 3395
Amount: 0.266780
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:40:22
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

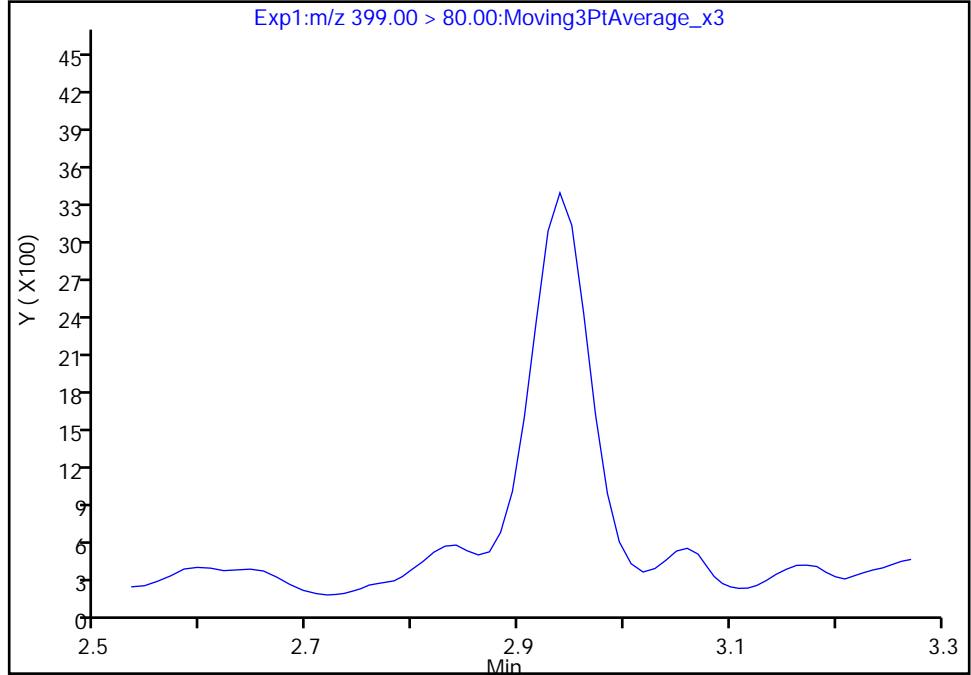
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

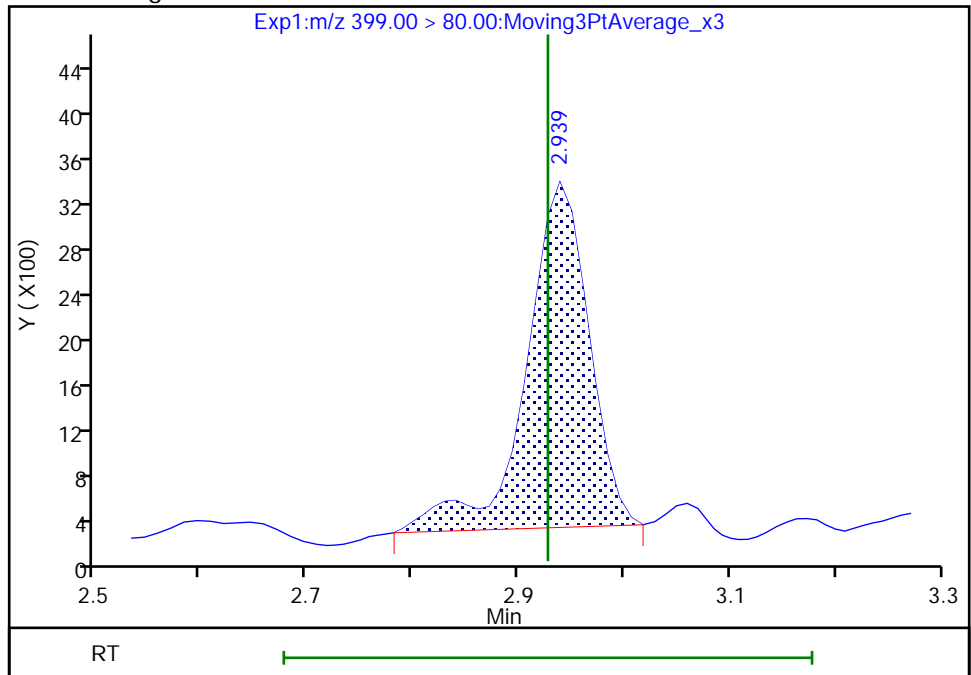
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.94
Area: 12673
Amount: 0.266780
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:40:22

Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

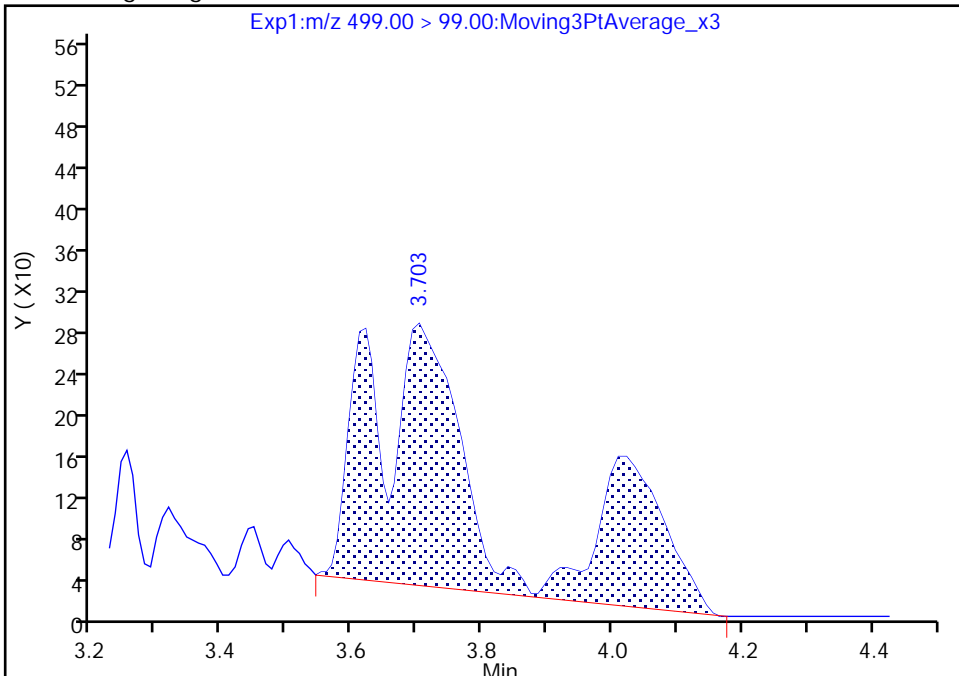
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

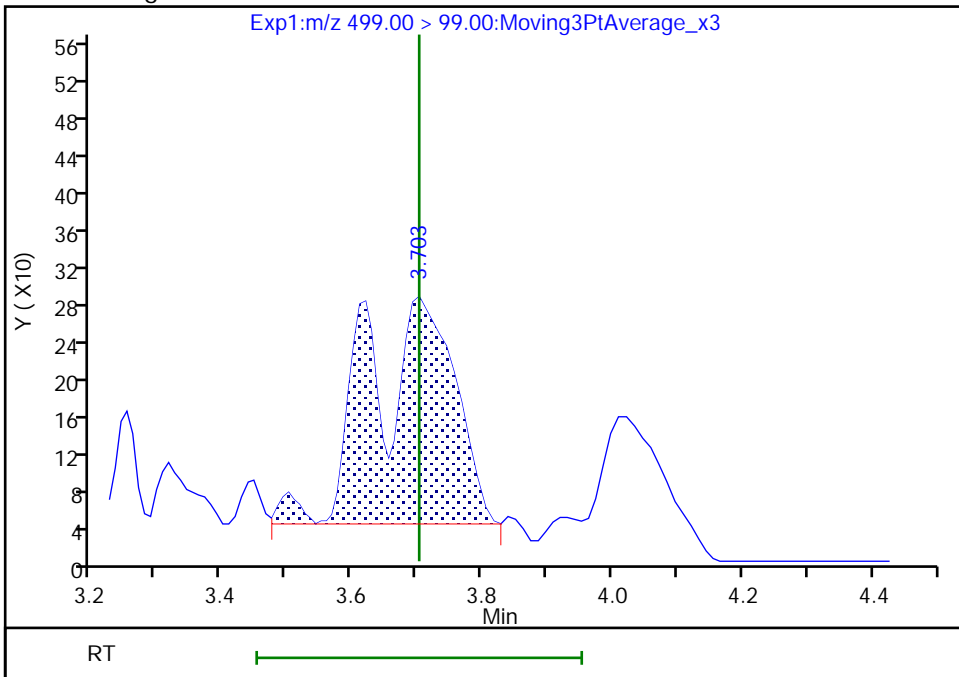
RT: 3.70
Area: 3433
Amount: 0.640195
Amount Units: ng/ml

Processing Integration Results



RT: 3.70
Area: 2231
Amount: 0.592979
Amount Units: ng/ml

Manual Integration Results



Reviewer: murrayjw, 12-Aug-2019 09:33:10
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

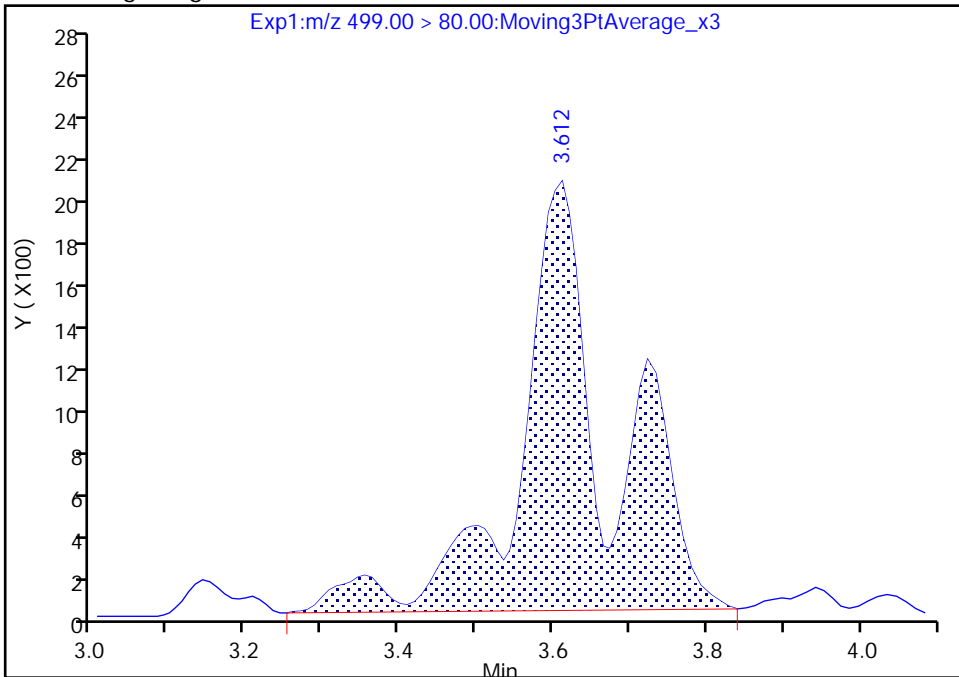
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

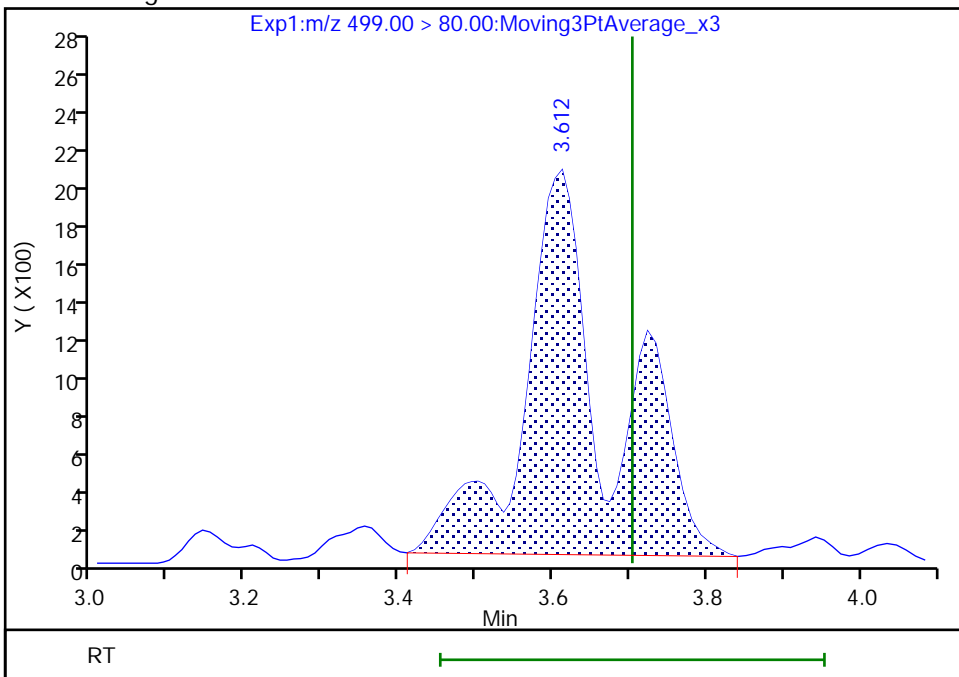
RT: 3.61
Area: 16813
Amount: 0.640195
Amount Units: ng/ml

Processing Integration Results



RT: 3.61
Area: 15573
Amount: 0.592979
Amount Units: ng/ml

Manual Integration Results



Reviewer: murrayjw, 12-Aug-2019 09:33:10

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Euofins TestAmerica, Burlington

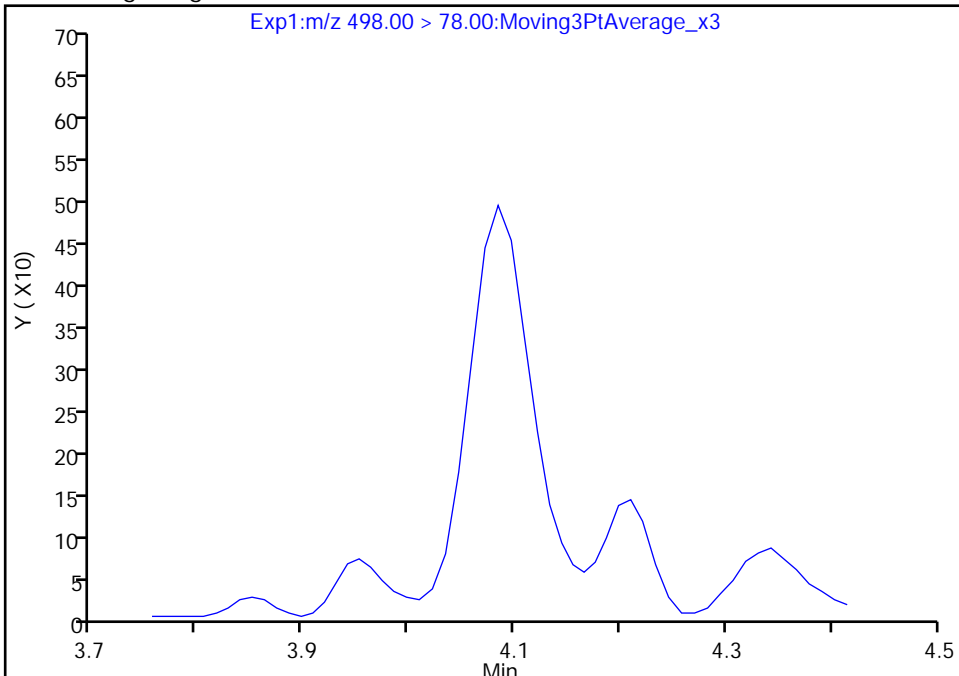
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

22 Perfluorooctanesulfonamide, CAS: 754-91-6

Signal: 1

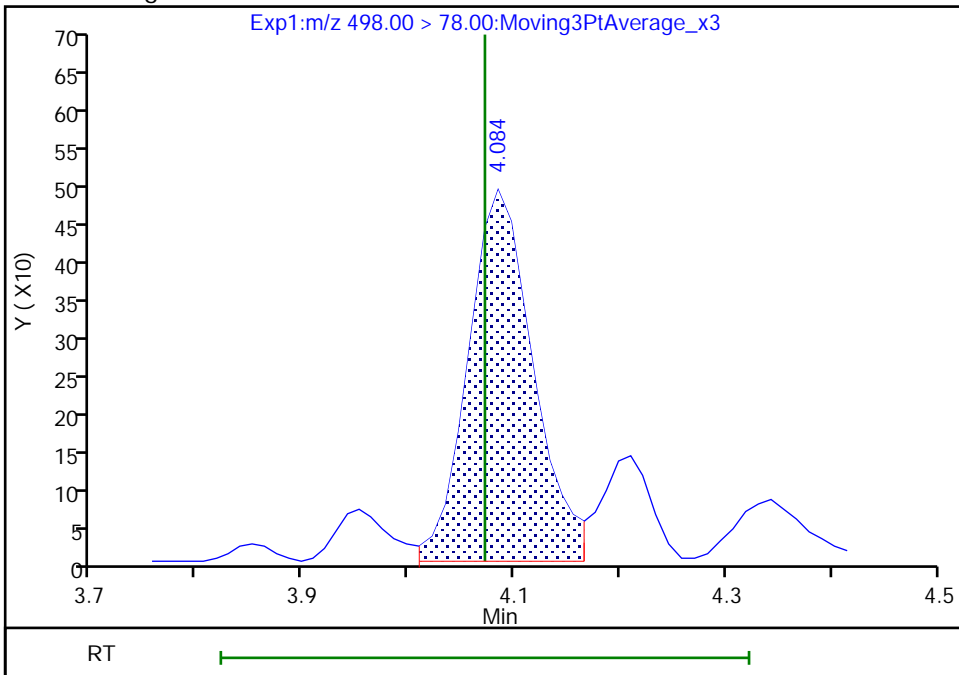
Not Detected
Expected RT: 4.07

Processing Integration Results



Manual Integration Results

RT: 4.08
Area: 2097
Amount: 0.066668
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:42:08
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Burlington

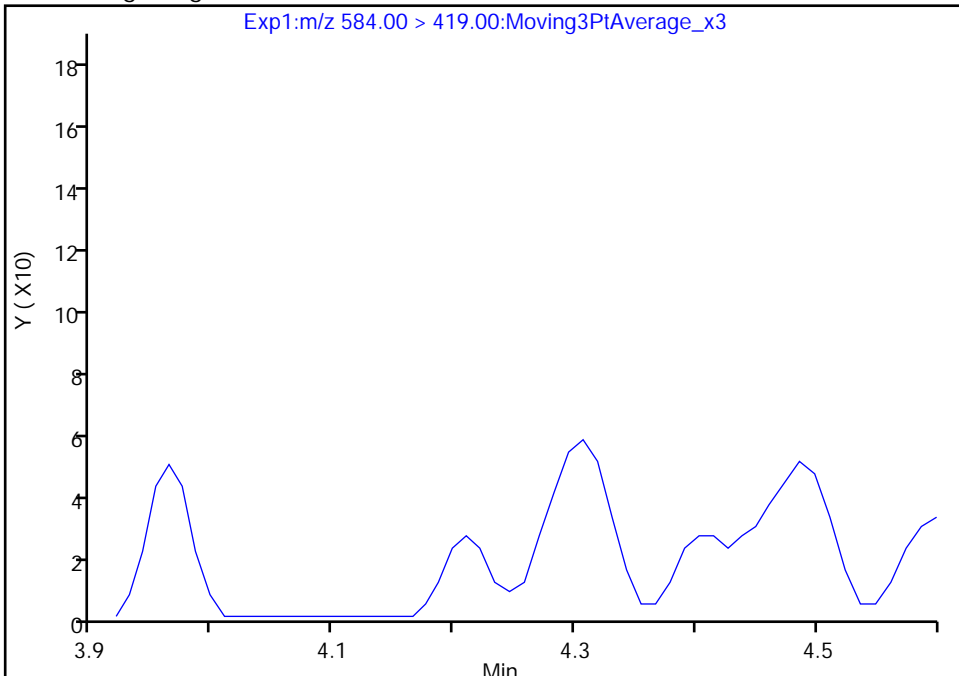
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E022.d
Injection Date: 02-Aug-2019 06:38:15 Instrument ID: LC812
Lims ID: 480-156213-F-19-A Lab Sample ID: 200-156213-19
Client ID: 356023-MW7R
Operator ID: lc812tech ALS Bottle#: 15 Worklist Smp#: 22
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

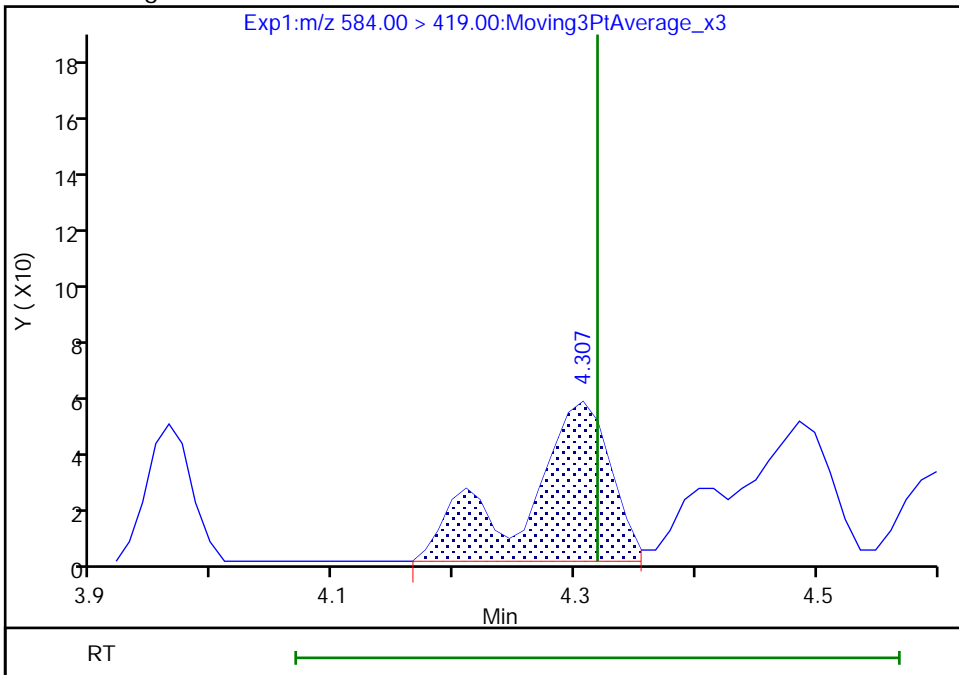
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.31
Area: 279
Amount: 0.095866
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 17:43:08
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1 Analy Batch No.: 145525

SDG No.: _____

Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2019 10:54 Calibration End Date: 07/26/2019 11:34 Calibration ID: 42108

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-145525/17	SC072619A017.d
Level 2	IC 200-145525/18	SC072619A018.d
Level 3	IC 200-145525/19	SC072619A019.d
Level 4	ICIS 200-145525/20	SC072619A020.d
Level 5	IC 200-145525/21	SC072619A021.d
Level 6	IC 200-145525/22	SC072619A022.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								
Perfluorobutanoic acid (PFBA)	0.9094 0.9138	0.9459	0.8978	0.9272	0.9358	AveID		0.9217			1.9		35.0				
Perfluoropentanoic acid (PFPeA)	1.0173 0.9364	0.9766	0.9293	0.9801	0.9663	AveID		0.9677			3.3		35.0				
Perfluorobutanesulfonic acid (PFBS)	0.9648 0.9688	1.1109	0.9849	1.0446	1.0255	AveID		1.0166			5.5		35.0				
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	2.9530 2.1879	2.3604	2.1985	2.3690	2.2655	AveID		2.3891			12.0		50.0				
Perfluorohexanoic acid (PFHxA)	1.0845 0.9903	1.0695	0.9856	1.0315	1.0172	AveID		1.0298			3.9		35.0				
Perfluoropentanesulfonic acid	0.8896 0.8658	0.9130	0.8846	0.8805	0.9329	AveID		0.8944			2.7		50.0				
HFPO-DA	2.8147 2.5133	2.4508	2.5858	2.5574	2.3266	AveID		2.5414			6.4		35.0				
Perfluoroheptanoic acid (PFHpA)	1.0200 0.8633	0.9357	0.9332	0.9486	0.9191	AveID		0.9367			5.4		35.0				
Perfluorohexanesulfonic acid (PFHxS)	1.4427 1.2632	1.3893	1.2824	1.2794	1.2497	AveID		1.3178			6.0		35.0				
DONA	4.6355 4.4820	4.9631	4.7836	4.8404	4.8201	AveID		4.7541			3.6		50.0				
Perfluoroheptanesulfonic Acid (PFHpS)	1.1362 1.3098	1.1957	1.1689	1.1989	1.2180	AveID		1.2046			4.9		50.0				
6:2 FTS	1.6984 1.7033	1.8419	1.7021	1.7251	1.6195	AveID		1.7151			4.2		35.0				
Perfluorooctanoic acid (PFOA)	1.1316 1.0335	1.1790	1.0399	1.0630	1.0817	AveID		1.0881			5.2		35.0				
Perfluorooctanesulfonic acid (PFOS)	0.9611 0.9440	1.0104	0.9000	0.9323	0.9314	AveID		0.9465			3.9		35.0				
Perfluorononanoic acid (PFNA)	0.8913 0.9050	0.8998	0.9078	0.8736	0.9578	AveID		0.9059			3.1		35.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1 Analy Batch No.: 145525

SDG No.: _____

Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2019 10:54 Calibration End Date: 07/26/2019 11:34 Calibration ID: 42108

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								
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	1.9478 2.1423	2.1955	2.2435	2.2261	2.2915	AveID		2.1744			5.6		50.0				
Perfluorononanesulfonic acid	0.8882 0.7995	0.8173	0.8740	0.8922	0.7959	AveID		0.8445			5.3		50.0				
Perfluorooctanesulfonamide (FOSA)	0.8811 0.9278	0.9436	0.8982	0.9123	0.9146	AveID		0.9129			2.4		35.0				
Perfluorodecanoic acid (PFDA)	1.0248 0.9493	1.1041	0.8447	0.9467	0.9394	AveID		0.9682			9.1		35.0				
8:2 FTS	1.3876 1.3021	1.5320	1.3277	1.3001	1.1710	AveID		1.3368			8.9		35.0				
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.7849 0.7554	0.7453	0.6999	0.7651	0.7896	AveID		0.7567			4.3		35.0				
Perfluorodecanesulfonic acid (PFDS)	0.6809 0.6645	0.6609	0.6235	0.6692	0.6773	AveID		0.6627			3.1		50.0				
Perfluoroundecanoic acid (PFUnA)	0.8941 0.7654	0.9029	1.0152	0.8006	0.7701	AveID		0.8581			11.4		35.0				
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	0.6574 0.6198	0.7043	0.6316	0.6250	0.6017	AveID		0.6400			5.7		35.0				
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	3.1928 3.1273	3.4518	3.4420	3.5202	3.1275	AveID		3.3103			5.4		50.0				
Perfluorododecanoic acid (PFDoA)	0.9754 1.0357	1.0297	1.0400	1.0211	1.0322	AveID		1.0224			2.3		35.0				
10:2 FTS	0.8041 0.9218	0.9163	0.8283	0.8189	0.7878	AveID		0.8462			6.9		50.0				
Perfluorododecanesulfonic acid (PFDoS)	0.3424 0.3209	0.3103	0.3021	0.3215	0.3083	AveID		0.3176			4.5		50.0				
Perfluorotridecanoic acid (PFTriA)	0.9090 0.8522	0.9700	0.9318	0.9743	0.8684	AveID		0.9176			5.5		50.0				
Perfluorotetradecanoic acid (PFTeA)	0.1457 0.1283	0.1355	0.1297	0.1273	0.1321	AveID		0.1331			5.1		35.0				
Perfluoro-n-hexadecanoic acid (PFHxDA)	1.3139 0.9082	1.1320	1.0144	1.0126	0.9477	L2ID	0.3707	0.9451						0.9990		0.9900	
Perfluoro-n-octadecanoic acid (PFODA)	0.6914 0.7351	0.7389	0.7326	0.8282	0.7848	AveID		0.7518			6.4		50.0				
13C4 PFBA	0.8956 1.0143	0.8628	0.8670	0.8846	1.1296	Ave		0.9423			11.4		30.0				
13C5 PFPeA	0.8179 0.9438	0.8322	0.8064	0.8394	1.0709	Ave		0.8851			11.7		30.0				
13C3 PFBS	0.8149 0.9687	0.7958	0.7983	0.8128	1.0257	Ave		0.8694			11.6		30.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1 Analy Batch No.: 145525

SDG No.: _____

Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2019 10:54 Calibration End Date: 07/26/2019 11:34 Calibration ID: 42108

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								
M2-4:2 FTS	0.0687 0.0984	0.0724	0.0797	0.0771	0.1084	Ave		0.0841			18.7		30.0				
13C2 PFHxA	0.8298 0.9375	0.8057	0.8129	0.8175	1.0712	Ave		0.8791			12.1		30.0				
13C3 HFPO-DA	0.0519 0.0603	0.0573	0.0493	0.0457	0.0739	Ave		0.0564			17.8		30.0				
13C4 PFHpA	0.7953 0.9340	0.8175	0.7708	0.8152	1.0337	Ave		0.8611			11.8		30.0				
18O2 PFHxS	0.4705 0.5535	0.4739	0.4686	0.4770	0.6115	Ave		0.5092			11.7		30.0				
M2-6:2 FTS	0.1010 0.1073	0.0951	0.1010	0.0990	0.1325	Ave		0.1060			12.8		30.0				
13C4 PFOA	0.8375 0.9510	0.8566	0.8485	0.8588	1.1043	Ave		0.9094			11.4		30.0				
13C4 PFOS	0.4127 0.4422	0.3958	0.3812	0.3874	0.5259	Ave		0.4242			12.8		30.0				
13C5 PFNA	0.7941 0.8785	0.7818	0.7551	0.7842	0.9837	Ave		0.8296			10.4		30.0				
13C8 FOSA	0.7045 0.7753	0.7317	0.7040	0.7170	0.9395	Ave		0.7620			11.9		30.0				
13C2 PFDA	0.6040 0.6502	0.5695	0.6619	0.6540	0.8427	Ave		0.6637			14.3		30.0				
M2-8:2 FTS	0.0910 0.0992	0.0881	0.0870	0.0942	0.1273	Ave		0.0978			15.4		30.0				
d3-NMeFOSAA	0.0821 0.0971	0.0778	0.0753	0.0774	0.0988	Ave		0.0848			12.4		30.0				
13C2 PFUnA	0.5899 0.6347	0.5656	0.5170	0.5749	0.7449	Ave		0.6045			13.0		30.0				
d5-NEtFOSAA	0.0874 0.0997	0.0898	0.0819	0.0896	0.1185	Ave		0.0945			13.9		30.0				
13C2 PFDoA	0.6337 0.6831	0.6099	0.5726	0.6033	0.8017	Ave		0.6507			12.7		30.0				
13C2 PFTeDA	0.8122 0.9809	0.8056	0.8040	0.8567	1.1165	Ave		0.8960			14.2		30.0				
13C2 PFHxDA	0.7789 0.8703	0.7664	0.7288	0.6889	0.9497	Ave		0.7972			12.1		30.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1 Analy Batch No.: 145525

SDG No.: _____

Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2019 10:54 Calibration End Date: 07/26/2019 11:34 Calibration ID: 42108

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-145525/17	SC072619A017.d
Level 2	IC 200-145525/18	SC072619A018.d
Level 3	IC 200-145525/19	SC072619A019.d
Level 4	ICIS 200-145525/20	SC072619A020.d
Level 5	IC 200-145525/21	SC072619A021.d
Level 6	IC 200-145525/22	SC072619A022.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Perfluorobutanoic acid (PFBA)		AveID	87772 16042972	181265	425099	1729812	4228614	1.00 200	2.00	5.00	20.0	50.0
Perfluoropentanoic acid (PFPeA)		AveID	89658 15297007	180493	409244	1735050	4139546	1.00 200	2.00	5.00	20.0	50.0
Perfluorobutanesulfonic acid (PFBS)		AveID	74900 14359485	173561	379584	1582927	3719539	0.884 177	1.77	4.42	17.7	44.2
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)		AveID	20409 3480073	35464	89347	359555	917729	0.934 187	1.87	4.67	18.7	46.7
Perfluorohexanoic acid (PFHxA)		AveID	96971 16070080	191379	437532	1778549	4359274	1.00 200	2.00	5.00	20.0	50.0
Perfluoropentanesulfonic acid		AveID	73276 13617110	151358	361774	1415812	3590630	0.938 188	1.88	4.69	18.8	46.9
HFPO-DA		AveID	15738 2624870	31195	69647	246656	687657	1.00 200	2.00	5.00	20.0	50.0
Perfluoroheptanoic acid (PFHpA)		AveID	87416 13958091	169875	392838	1631009	3800723	1.00 200	2.00	5.00	20.0	50.0
Perfluorohexanesulfonic acid (PFHxS)		AveID	66563 11013497	133064	298686	1171156	2781849	0.910 182	1.82	4.55	18.2	45.5
DONA		AveID	194212 32315396	410989	938009	3725551	9553035	0.942 188	1.88	4.71	18.8	47.1
Perfluoroheptanesulfonic Acid (PFHpS)		AveID	48108 9543674	100067	231634	932564	2439583	0.952 190	1.90	4.76	19.0	47.6
6:2 FTS		AveID	17526 2997907	36889	88994	341591	813484	0.948 190	1.90	4.74	19.0	47.4
Perfluorooctanoic acid (PFOA)		AveID	102133 17012607	224294	481891	1925196	4778704	1.00 200	2.00	5.00	20.0	50.0
Perfluorooctanesulfonic acid (PFOS)		AveID	39667 6705110	82423	173858	706916	1818452	0.928 186	1.86	4.64	18.6	46.4
Perfluorononanoic acid (PFNA)		AveID	76274 13762455	156241	374348	1444962	3769472	1.00 200	2.00	5.00	20.0	50.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid		AveID	80739 15281982	179878	435253	1695158	4493418	0.932 186	1.86	4.66	18.6	46.6

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1 Analy Batch No.: 145525

SDG No.: _____

Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2019 10:54 Calibration End Date: 07/26/2019 11:34 Calibration ID: 42108

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Perfluorononanesulfonic acid		AveID	37925 5874380	68974	174659	699858	1607516	0.960 192	1.92	4.80	19.2	48.0
Perfluorooctanesulfonamide (FOSA)		AveID	66890 12449793	153333	345321	1379443	3437601	1.00 200	2.00	5.00	20.0	50.0
Perfluorodecanoic acid (PFDA)		AveID	66704 10684329	139639	305367	1305700	3167025	1.00 200	2.00	5.00	20.0	50.0
8:2 FTS		AveID	13032 2141277	28727	60411	247475	571112	0.958 192	1.92	4.79	19.2	47.9
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)		AveID	6948 1269712	12870	28789	124854	312259	1.00 200	2.00	5.00	20.0	50.0
Perfluorodecanesulfonic acid (PFDS)		AveID	29194 4902732	56004	125116	527069	1373624	0.964 193	1.93	4.82	19.3	48.2
Perfluoroundecanoic acid (PFUnA)		AveID	56839 8408507	113426	286638	970744	2294835	1.00 200	2.00	5.00	20.0	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)		AveID	6191 1069354	14049	28242	118045	285259	1.00 200	2.00	5.00	20.0	50.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid		AveID	133770 22547771	285835	674951	2709425	6198405	0.942 188	1.88	4.71	18.8	47.1
Perfluorododecanoic acid (PFDoA)		AveID	66612 12245212	139487	325214	1299068	3310627	1.00 200	2.00	5.00	20.0	50.0
10:2 FTS		AveID	7599 1525462	17290	37924	156858	386623	0.964 193	1.93	4.82	19.3	48.2
Perfluorododecanesulfonic acid (PFDoS)		AveID	14743 2377415	26406	60868	254267	627811	0.968 194	1.94	4.84	19.4	48.4
Perfluorotridecanoic acid (PFTriA)		AveID	62078 10075759	131396	291354	1239569	2785171	1.00 200	2.00	5.00	20.0	50.0
Perfluorotetradecanoic acid (PFTeA)		AveID	12755 2178886	24247	56948	230029	590253	1.00 200	2.00	5.00	20.0	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)		L2ID	110287 13681373	192689	403751	1471103	3600245	1.00 200	2.00	5.00	20.0	50.0
Perfluoro-n-octadecanoic acid (PFODA)		AveID	58033 11072789	125768	291577	1203266	2981594	1.00 200	2.00	5.00	20.0	50.0
13C4 PFBA	13PF OA	Ave	4825626 4388965	4790602	4735112	4664130	4518898	50.0 50.0	50.0	50.0	50.0	50.0
13C5 PFPeA	13PF OA	Ave	4406691 4083939	4620281	4403817	4425810	4283995	50.0 50.0	50.0	50.0	50.0	50.0
13C3 PFBS	13PF OA	Ave	4083540 3898309	4109072	4054587	3985512	3815956	46.5 46.5	46.5	46.5	46.5	46.5
M2-4:2 FTS	13PF OA	Ave	345569 397647	375615	406391	379441	405087	46.7 46.7	46.7	46.7	46.7	46.7
13C2 PFHxA	13PF OA	Ave	4470781 4056783	4473437	4439363	4310528	4285397	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
LCMS BY ISOTOPIC DILUTION - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1 Analy Batch No.: 145525

SDG No.: _____

Instrument ID: LC812 GC Column: C-18 ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/26/2019 10:54 Calibration End Date: 07/26/2019 11:34 Calibration ID: 42108

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
13C3 HFPO-DA	13PF OA	Ave	279571 261102	318213	269344	241116	295558	50.0 50.0	50.0	50.0	50.0	50.0
13C4 PFHpA	13PF OA	Ave	4285194 4041886	4538861	4209662	4298357	4135183	50.0 50.0	50.0	50.0	50.0	50.0
18O2 PFHxS	13PF OA	Ave	2398226 2265919	2489096	2421176	2378974	2314098	47.3 47.3	47.3	47.3	47.3	47.3
M2-6:2 FTS	13PF OA	Ave	517038 440938	501736	523962	496068	503377	47.5 47.5	47.5	47.5	47.5	47.5
13C4 PFOA	13PF OA	Ave	4512614 4115123	4756035	4634073	4527918	4417613	50.0 50.0	50.0	50.0	50.0	50.0
13C4 PFOS	13PF OA	Ave	2125983 1829286	2100981	1990042	1952787	2011380	47.8 47.8	47.8	47.8	47.8	47.8
13C5 PFNA	13PF OA	Ave	4278714 3801723	4340953	4123753	4134912	3935423	50.0 50.0	50.0	50.0	50.0	50.0
13C8 FOSA	13PF OA	Ave	3795798 3354736	4062610	3844495	3780239	3758489	50.0 50.0	50.0	50.0	50.0	50.0
13C2 PFDA	13PF OA	Ave	3254332 2813650	3161787	3614917	3448085	3371154	50.0 50.0	50.0	50.0	50.0	50.0
M2-8:2 FTS	13PF OA	Ave	469572 411129	468782	454990	475878	487711	47.9 47.9	47.9	47.9	47.9	47.9
d3-NMeFOSAA	13PF OA	Ave	442613 420217	431715	411329	407992	395443	50.0 50.0	50.0	50.0	50.0	50.0
13C2 PFUnA	13PF OA	Ave	3178652 2746310	3140582	2823529	3031155	2979973	50.0 50.0	50.0	50.0	50.0	50.0
d5-NEtFOSAA	13PF OA	Ave	470844 431348	498703	447183	472168	474055	50.0 50.0	50.0	50.0	50.0	50.0
13C2 PFDoA	13PF OA	Ave	3414650 2955795	3386559	3126922	3180715	3207210	50.0 50.0	50.0	50.0	50.0	50.0
13C2 PFTeDA	13PF OA	Ave	4376430 4244420	4473081	4390949	4516809	4466722	50.0 50.0	50.0	50.0	50.0	50.0
13C2 PFHxDA	13PF OA	Ave	4196934 3765979	4255458	3980161	3632044	3799121	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution
L2ID = Linear 1/conc^2 IsoDil

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A017.d
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 26-Jul-2019 10:54:13 ALS Bottle#: 3 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC1
 Misc. Info.: 200-0036970-017 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3

Method: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 29-Jul-2019 17:48:40 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d

Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: chirgwinb Date: 26-Jul-2019 13:24:51

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.754	1.754	0.0	1.000	87772	0.9867		98.7	7.6	
D 1 13C4 PFBA										
217.00 > 172.00	1.754	1.754	0.0	0.510	4825626	47.5		95.0	10610	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.183	2.183	0.0	1.000	89658	1.05		105	4.2	
D 3 13C5 PFPeA										
267.90 > 223.00	2.183	2.183	0.0	0.635	4406691	46.2		92.4	6801	
D 47 13C3 PFBS										
301.90 > 80.00	2.211	2.211	0.0	0.643	4083540	43.6		93.7	802550	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.225	2.211	0.014	1.006	74900	0.8390	Target=1.98	94.9	202	
298.90 > 99.00	2.211	2.211	0.0	1.000	36635		2.04(0.99-2.97)	94.9	28.7	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.583	2.583	0.0	1.000	20409	1.15		124	174	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.583	2.583	0.0	0.751	345569	38.1		81.6	296	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.633	2.633	0.0	1.000	96971	1.05	Target=12.51	105	25.6	
313.00 > 119.00	2.633	2.633	0.0	1.000	8530		11.37(6.25-18.76)	105	13.4	
D 7 13C2 PFHxA										
315.00 > 270.00	2.633	2.633	0.0	0.765	4470781	47.2		94.4	9971	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.646	2.646	0.0	1.197	73276	0.9329	Target=2.77	99.5	279	
349.00 > 99.00	2.646	2.646	0.0	1.197	27408		2.67(1.38-4.15)	99.5	44.5	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.774	2.766	0.008	1.000	15738	1.11		111	4.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.774	2.766	0.008	0.806	279571	46.0		92.0	1772	
D 11 18O2 PFHxS										
403.00 > 84.00	3.070	3.059	0.011	0.892	2398226	43.7		92.4	20582	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.070	3.059	0.011	1.000	66563	1.00	Target=3.37	109	123	
399.00 > 99.00	3.070	3.059	0.011	1.000	20664		3.22(1.68-5.05)	109	19.2	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.070	3.059	0.011	1.000	87416	1.09	Target=3.74	109	9.9	
363.00 > 169.00	3.070	3.059	0.011	1.000	23092		3.79(1.87-5.62)	109	88.2	
D 9 13C4 PFHpA										
367.00 > 322.00	3.070	3.059	0.011	0.892	4285194	46.2		92.4	15573	
77 DONA										
377.00 > 251.00	3.108	3.108	0.0	0.830	194212	0.9185	Target=2.75	97.5	309	
377.00 > 85.00	3.108	3.108	0.0	0.830	69114		2.81(1.37-4.12)	97.5	106	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.430	3.419	0.011	0.916	48108	0.8980	Target=4.99	94.3	195	
449.00 > 99.00	3.430	3.419	0.011	0.916	9015		5.34(2.50-7.49)	94.3	34.2	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.430	3.429	0.001	1.000	17526	0.9388		99.0	175	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.430	3.429	0.001	0.997	517038	45.3		95.3	1551	
* 62 13C2 PFOA										
415.00 > 370.00	3.440	3.439	0.001		5388080	50.0			17334	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.440	3.439	0.001	1.000	102133	1.04	Target=2.72	104	13.1	
413.00 > 169.00	3.440	3.439	0.001	1.000	38554		2.65(1.36-4.08)	104	100	
D 14 13C4 PFOA										
417.00 > 372.00	3.440	3.439	0.001	1.000	4512614	46.0		92.1	22159	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.745	3.735	0.010	1.000	39667	0.9423	Target=4.21	102	238	
499.00 > 99.00	3.745	3.735	0.010	1.000	10670		3.72(2.10-6.31)	102	29.0	
D 18 13C4 PFOS										
503.00 > 80.00	3.745	3.735	0.010	1.089	2125983	46.5		97.3	8122	
D 19 13C5 PFNA										
468.00 > 423.00	3.768	3.758	0.010	1.095	4278714	47.9		95.7	15251	
20 Perfluorononanoic acid										
463.00 > 419.00	3.768	3.758	0.010	1.000	76274	0.9839	Target=8.52	98.4	15.7	
463.00 > 169.00	3.768	3.758	0.010	1.000	8784		8.68(4.26-12.79)	98.4	99.0	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.898	3.899	-0.001	1.041	80739	0.8348		89.6	250	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.022	4.024	-0.002	1.074	37925	1.01	Target=2.52	105	447	
549.00 > 99.00	4.022	4.024	-0.002	1.074	11666		3.25(1.26-3.78)	105	18.8	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.047	4.049	-0.002	1.000	66890	0.9651		96.5	354	
D 21 13C8 FOSA										
506.00 > 78.00	4.047	4.049	-0.002	1.176	2795798	46.2		92.5	5204	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.059	4.049	0.010	1.000	66704	1.06	Target=9.67	106	4.8	
513.00 > 169.00	4.059	4.049	0.010	1.000	6841		9.75(4.83-14.50)	106	16.4	
D 23 13C2 PFDA										
515.00 > 470.00	4.059	4.049	0.010	1.180	3254332	45.5		91.0	8459	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.072	4.061	0.011	1.000	13032	0.99		104	153	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.072	4.061	0.011	1.184	469572	44.6		93.0	1504	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.187	4.189	-0.002	0.997	6948	1.04		104	12.9	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.198	4.189	0.009	1.220	442613	48.5		96.9	3126	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.283	4.284	-0.001	1.144	29194	0.99	Target=2.60	103	288	
599.00 > 99.00	4.283	4.284	-0.001	1.144	10824		2.70(1.30-3.90)	103	24.9	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.308	0.011	1.255	3178652	48.8		97.6	12412	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.308	0.011	1.000	56839	1.04	Target=8.30	104	14.9	
563.00 > 169.00	4.319	4.308	0.011	1.000	6657		8.54(4.15-12.45)	104	41.9	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.320	0.011	1.259	470844	46.3		92.5	1441	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.331	4.332	-0.001	1.000	6191	1.03		103	44.1	M
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.415	4.404	0.011	1.179	133770	0.9086		96.5	1363	
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.550	-0.001	1.322	3414650	48.7		97.4	7432	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.561	4.550	0.011	1.003	66612	0.9541	Target=7.78	95.4	5.6	
613.00 > 169.00	4.561	4.550	0.011	1.003	8130		8.19(3.89-11.67)	95.4	66.1	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.574	4.575	-0.001	1.123	7599	0.9160		95.0	79.3	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.740	4.730	0.010	1.266	14743	1.04	Target=0.49	108	56.3	
699.00 > 99.00	4.740	4.730	0.010	1.266	27336		0.54(0.25-0.74)	108	195	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.778	0.0	1.050	62078	0.99	Target=5.37	99.1	4.8	
663.00 > 169.00	4.778	4.778	0.0	1.050	10897		5.70(2.68-8.05)	99.1	59.8	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.022	5.013	0.009	1.000	12755	1.09	Target=1.00	109	50.0	
713.00 > 219.00	5.012	5.013	-0.001	0.998	12254		1.04(0.50-1.50)	109	95.4	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.022	5.013	0.009	1.460	4376430	45.3		90.7	9837	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.587	5.583	0.004	1.624	4196934	48.9		97.7	13024	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.592	5.583	0.009	1.001	110287	1.00	Target=5.39	99.8	5.3	
813.00 > 169.00	5.597	5.583	0.013	1.002	19927		5.53(2.70-8.09)	99.8	142	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	6.221	6.207	0.014	1.114	58033	0.9196	Target=5.46	92.0	12.2	
913.00 > 169.00	6.221	6.207	0.014	1.114	10818		5.36(2.73-8.19)	92.0	119	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFAS32-L1_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A017.d

Injection Date: 26-Jul-2019 10:54:13

Instrument ID: LC812

Lims ID: IC

Client ID:

Operator ID: lc812tech

ALS Bottle#: 3

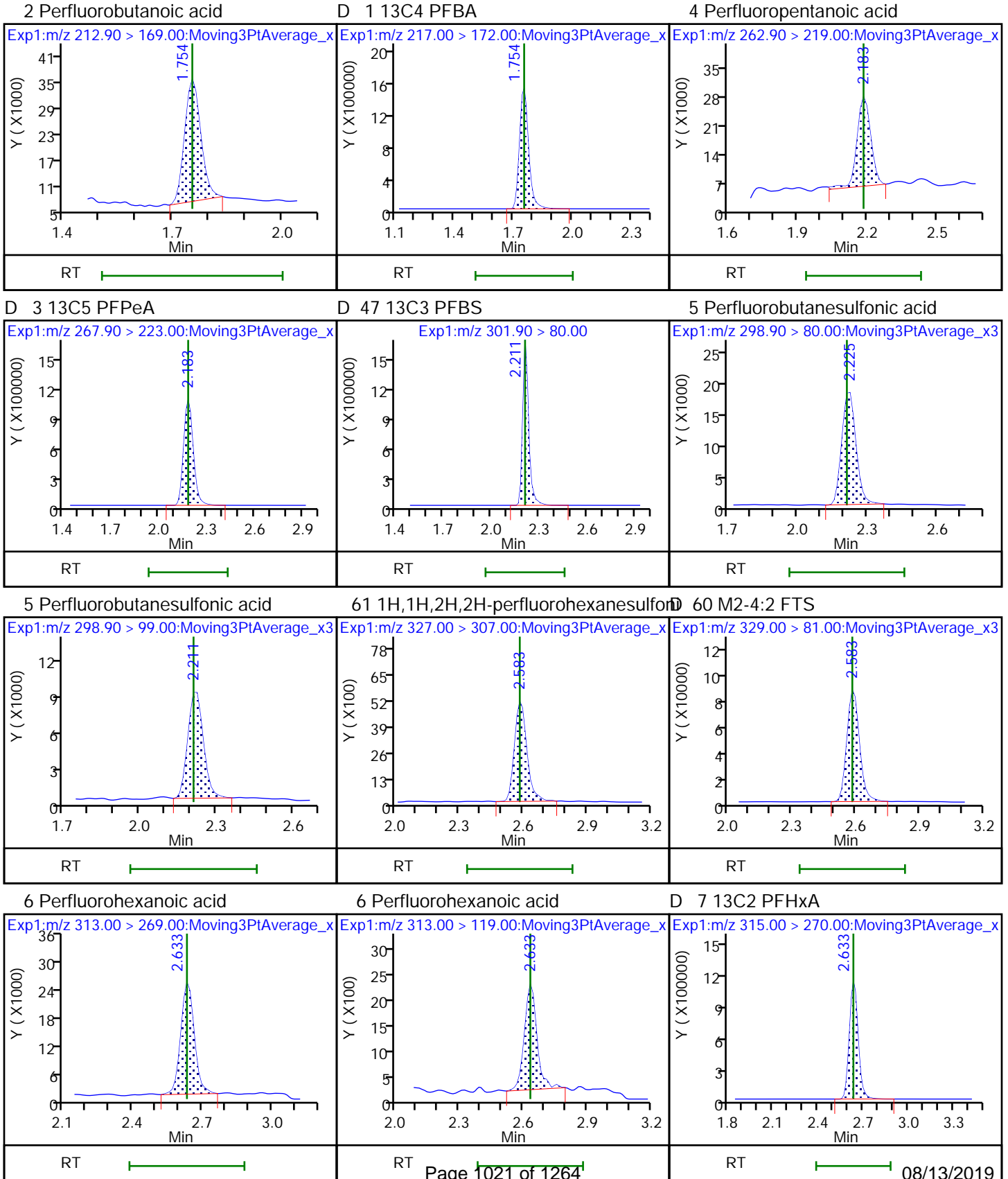
Worklist Smp#: 17

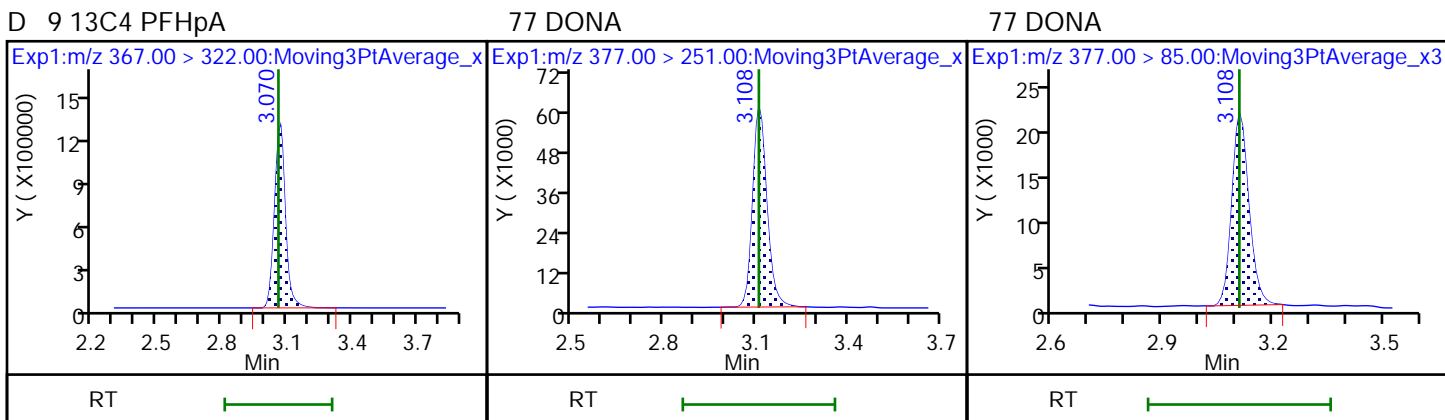
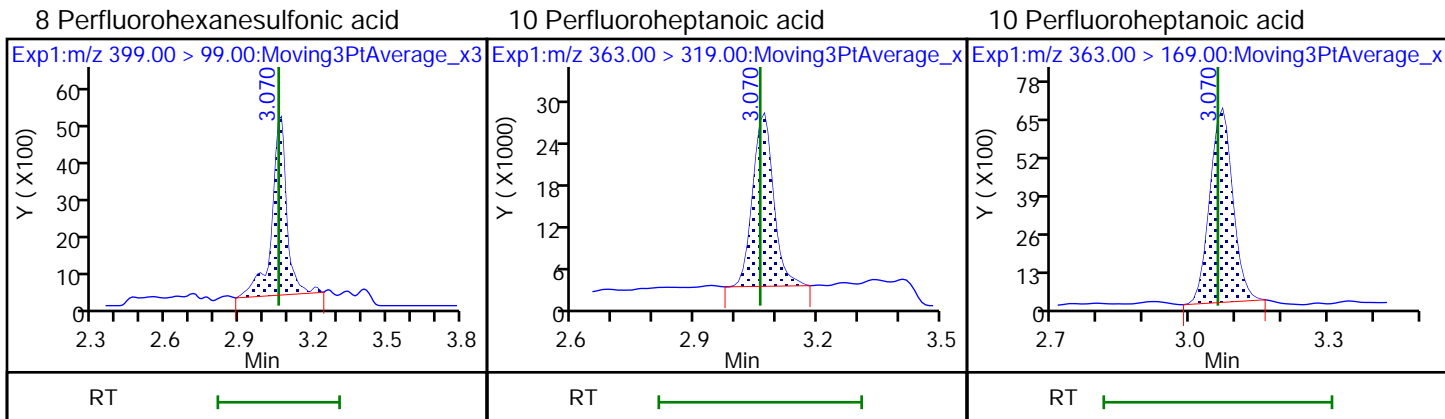
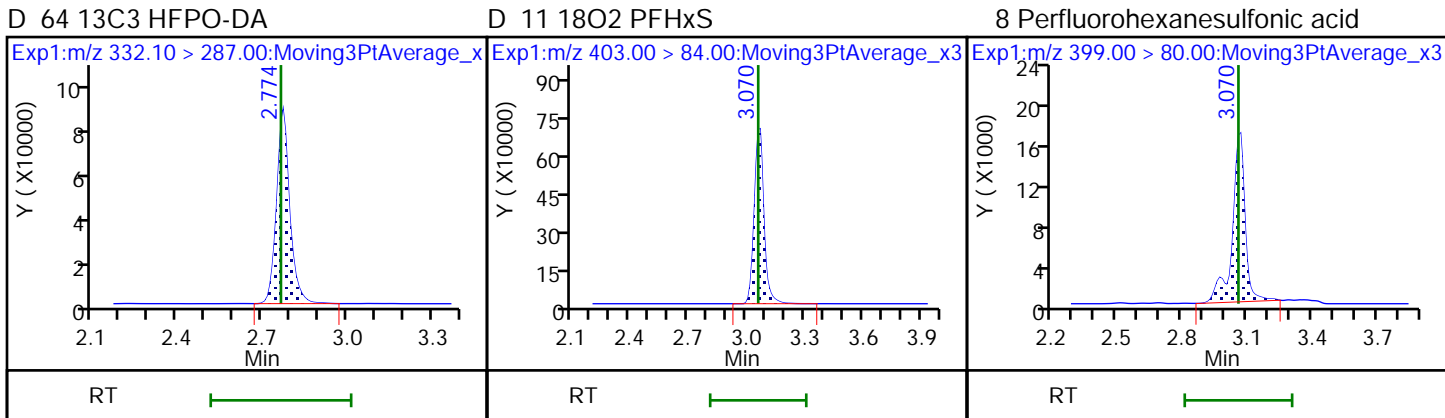
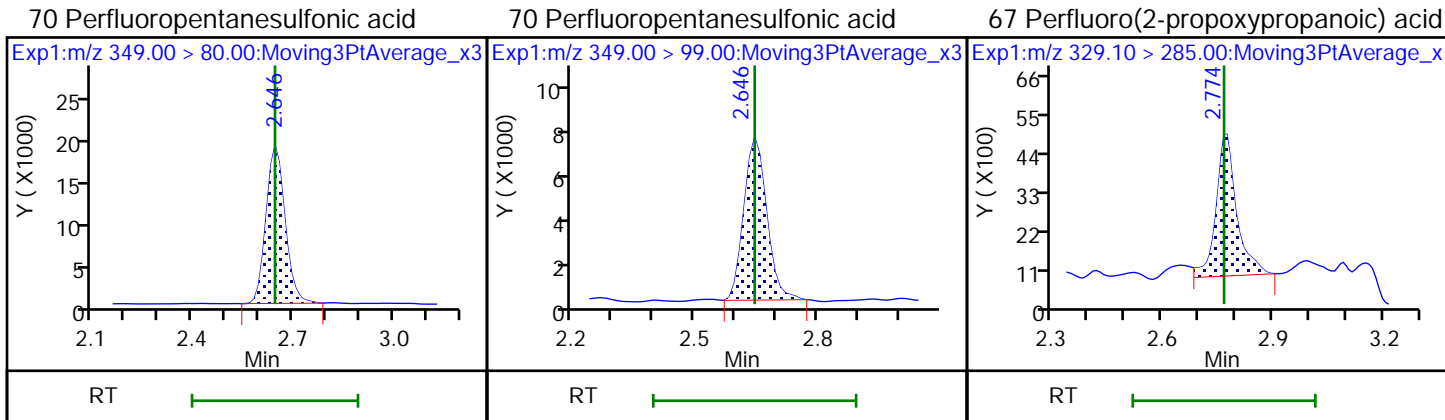
Injection Vol: 2.0 ul

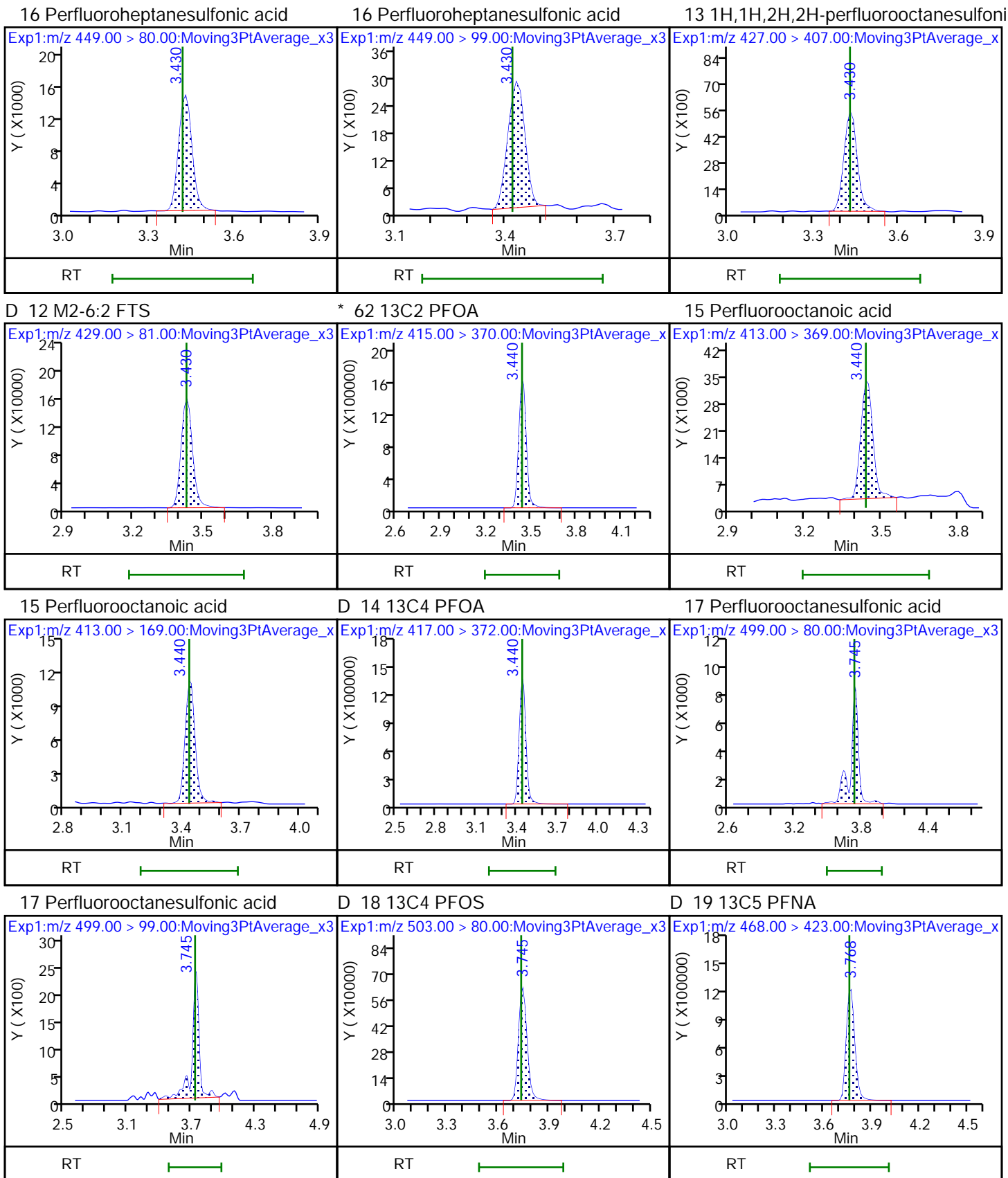
Dil. Factor: 1.0000

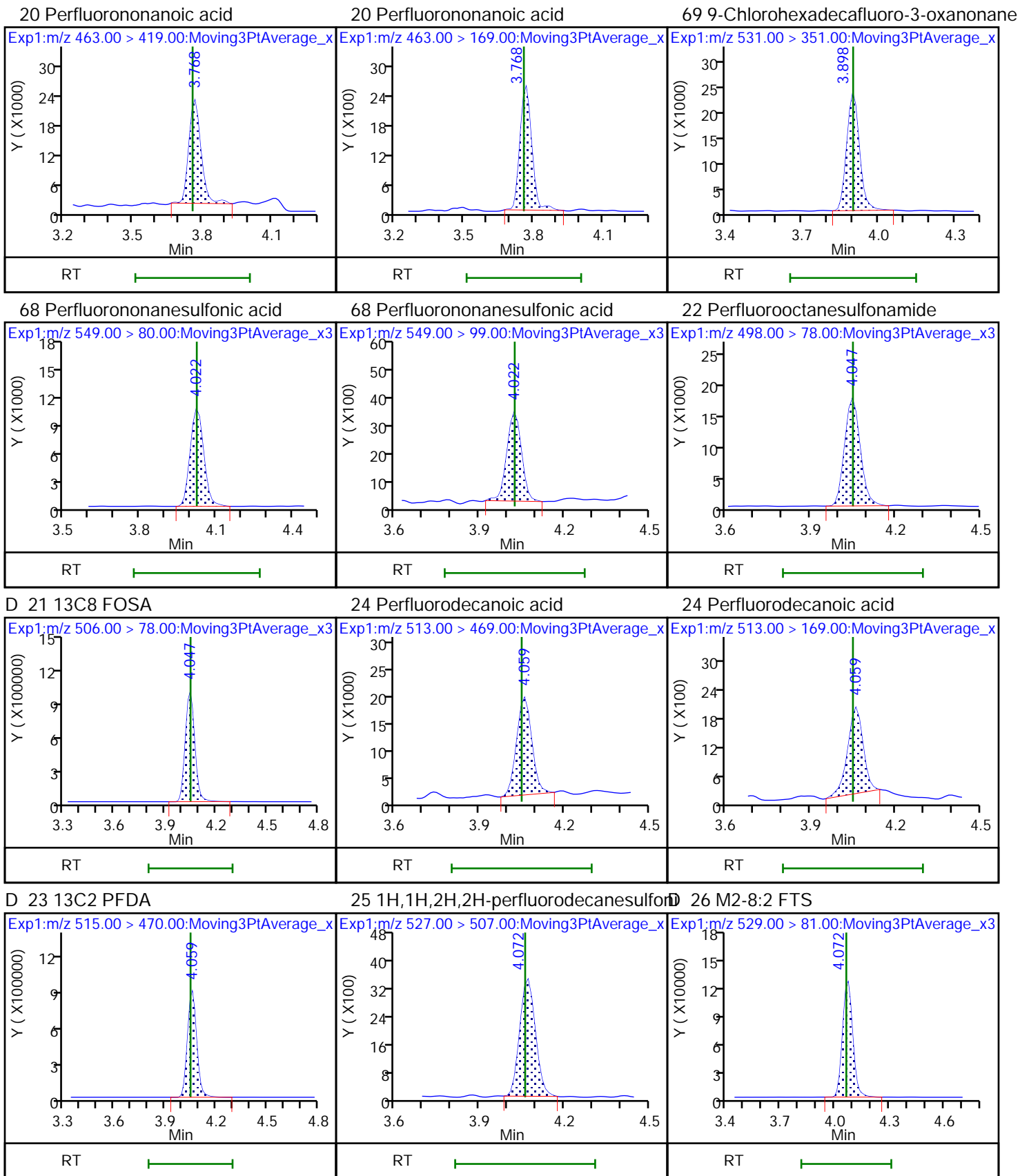
Method: PFC_LC812

Limit Group: LC_PFC_ICAL



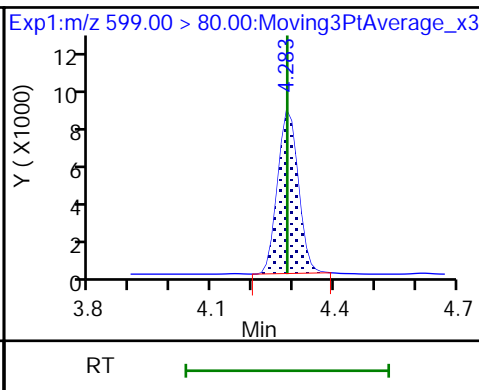
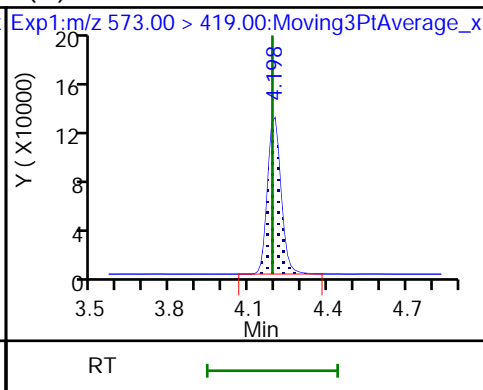
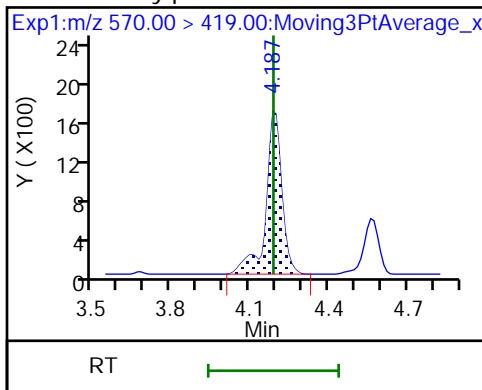






28 N-methylperfluorooctanesulfonamid (M) d3-NMeFOSAA

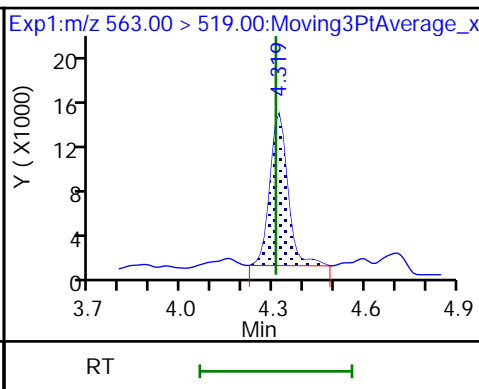
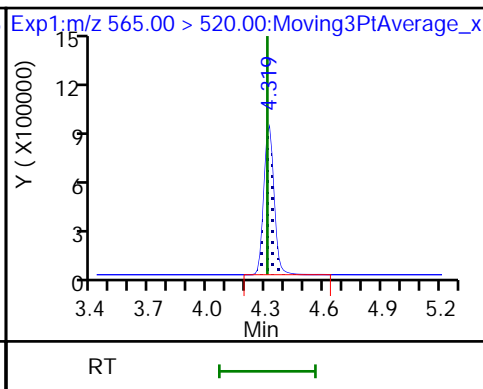
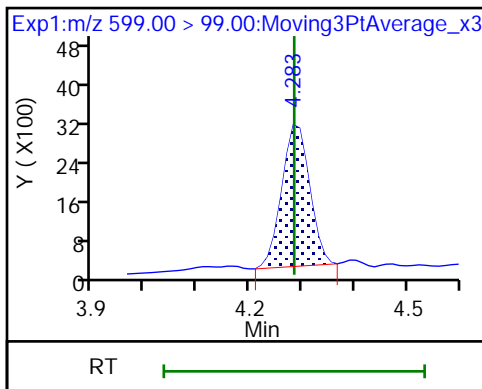
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

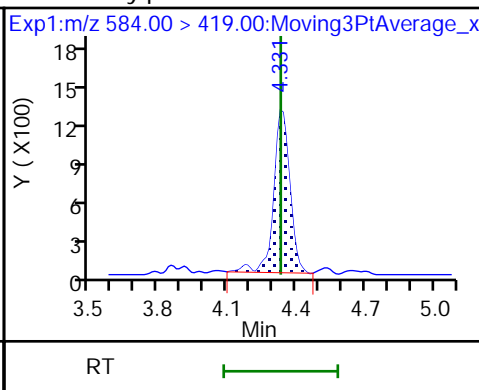
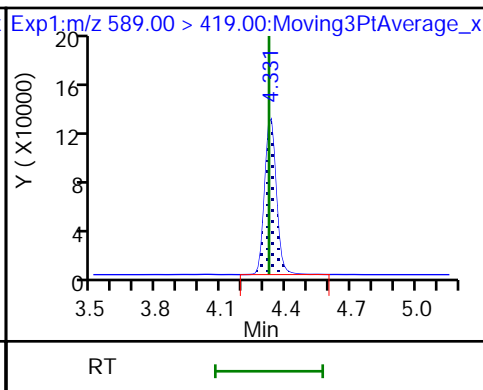
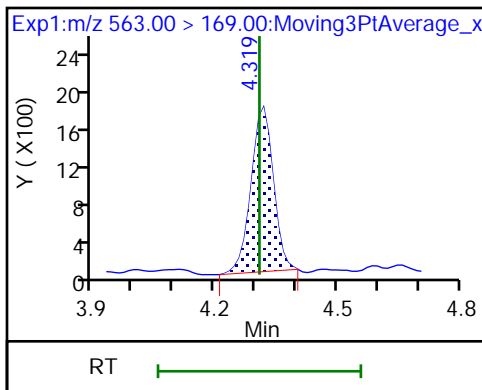
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

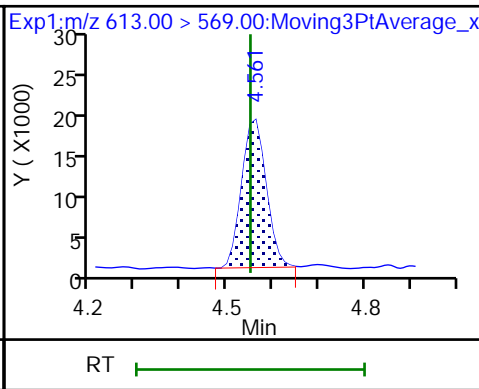
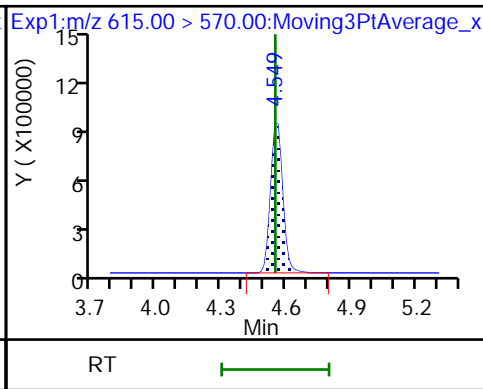
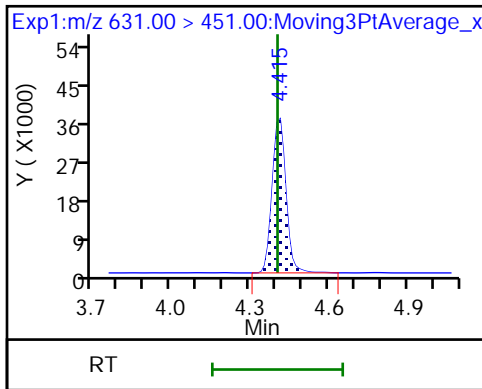
D 32 d5-NEtFOSAA

33 N-ethylperfluorooctanesulfonamidoa (M)



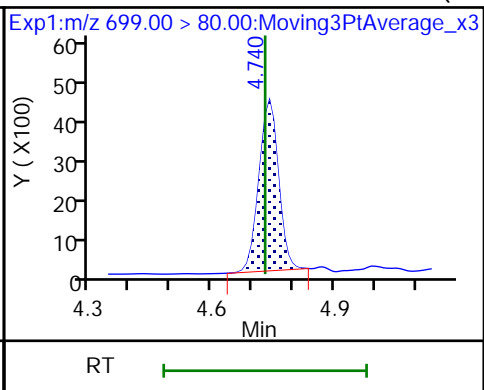
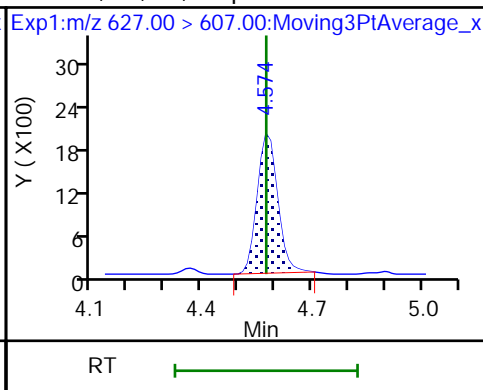
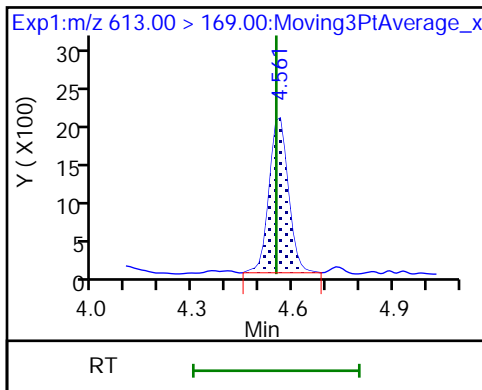
66 11-Chloroeicosafluoro-3-oxaundecaD 36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

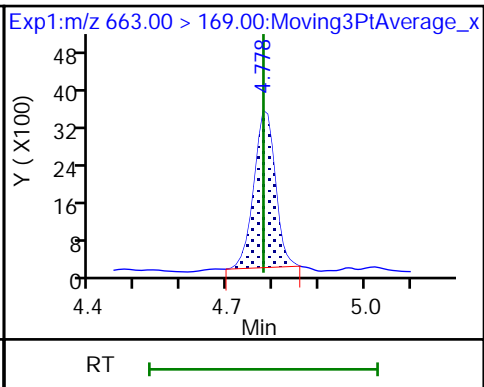
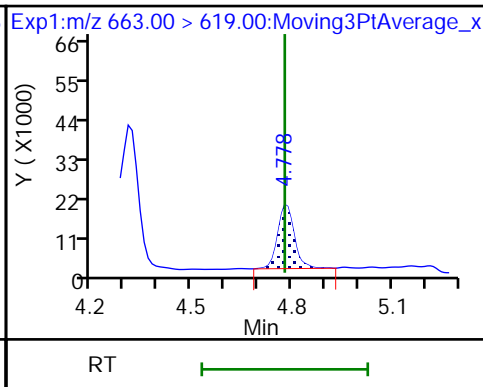
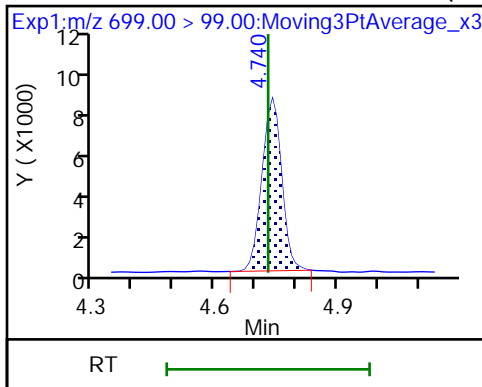
74 1H,1H,2H,2H-perfluorododecanesulfo 75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

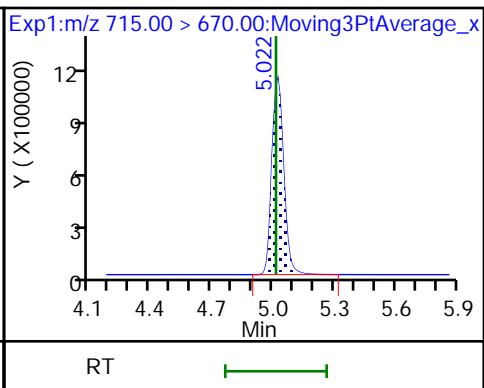
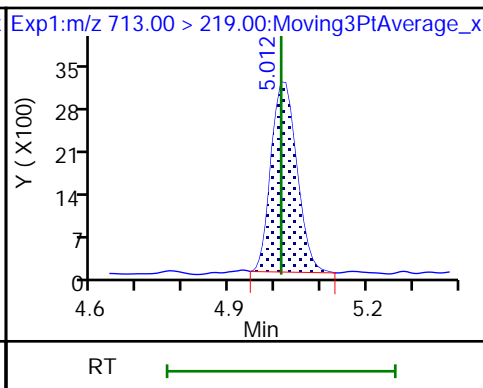
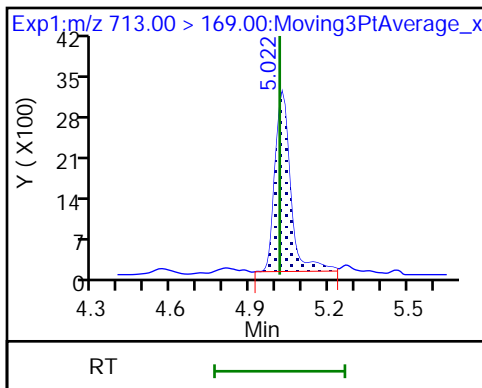
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

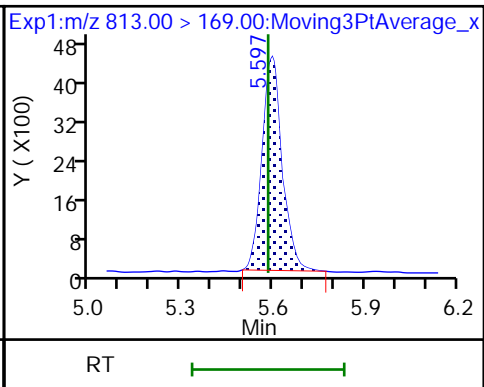
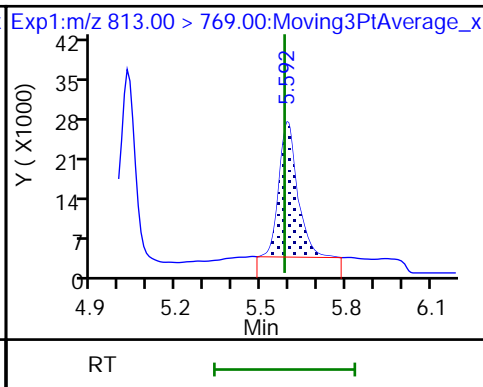
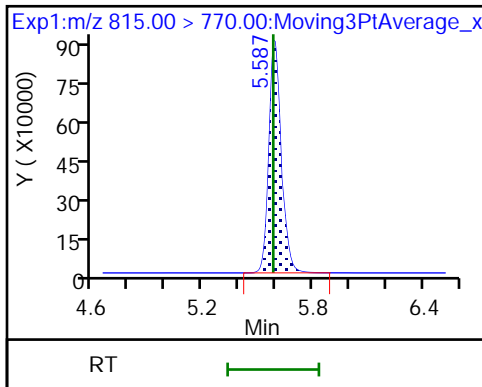
D 43 13C2 PFTeDA



D 44 13C2 PFHxDA

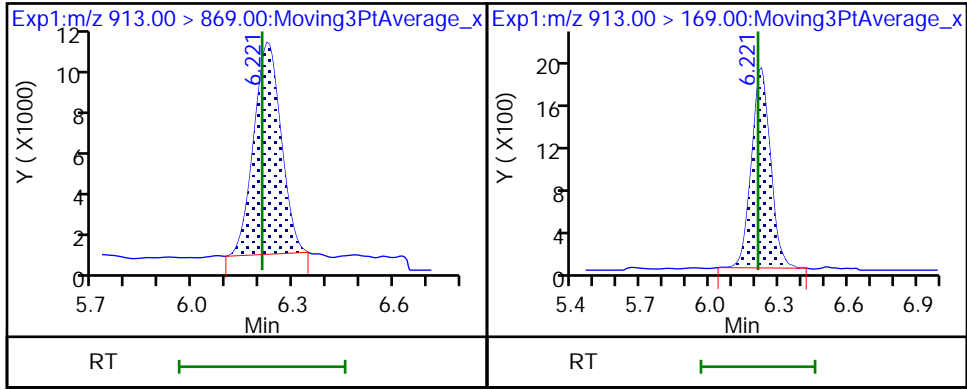
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

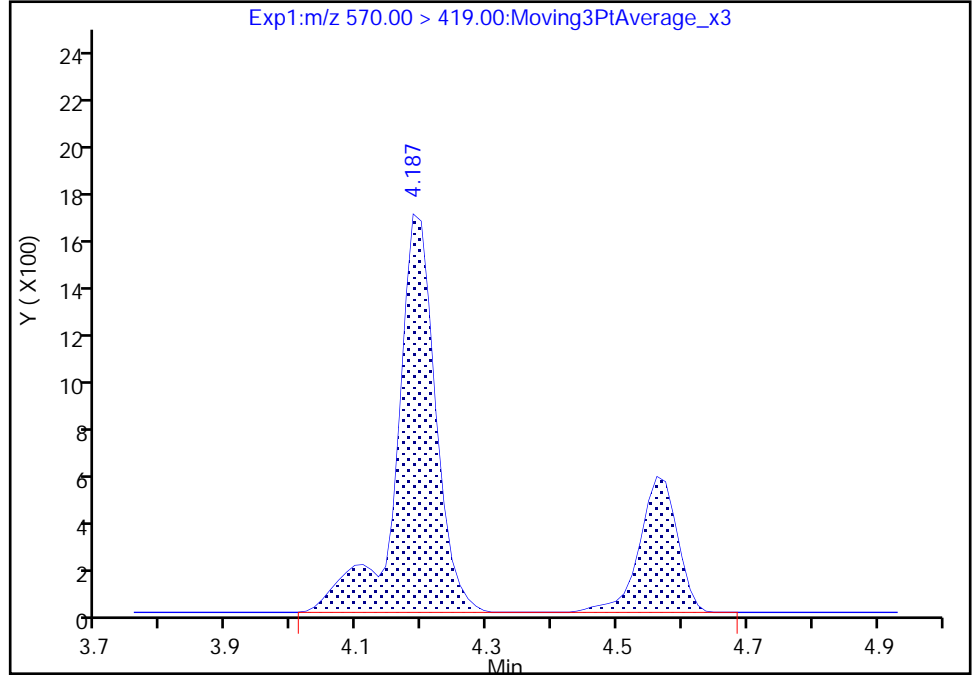
Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A017.d
Injection Date: 26-Jul-2019 10:54:13 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

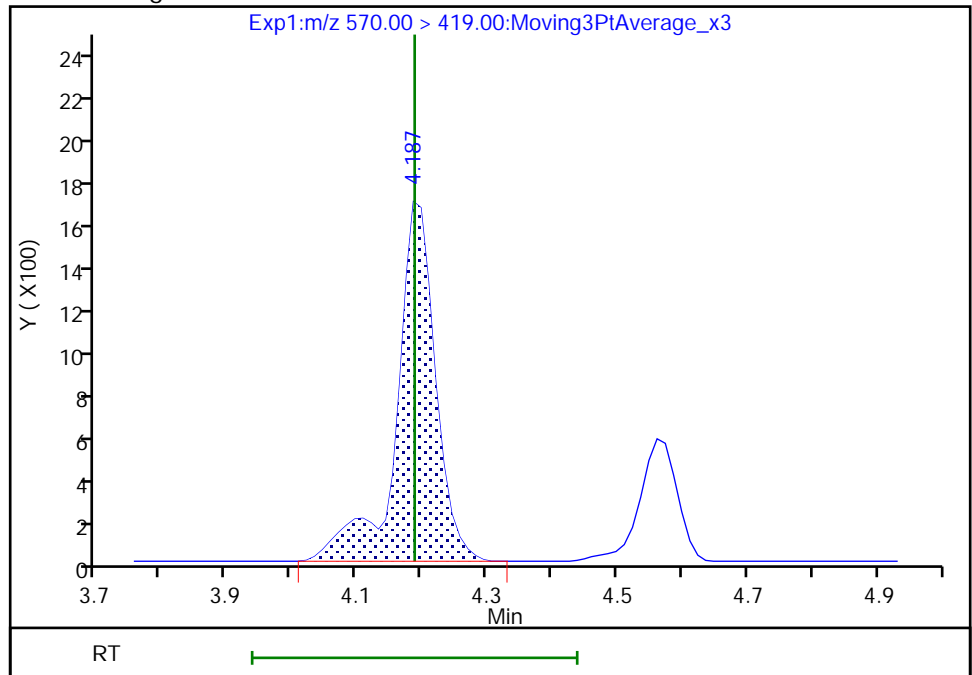
RT: 4.19
Area: 9215
Amount: 1.307953
Amount Units: ng/ml

Processing Integration Results



RT: 4.19
Area: 6948
Amount: 1.037256
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 26-Jul-2019 13:39:18
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

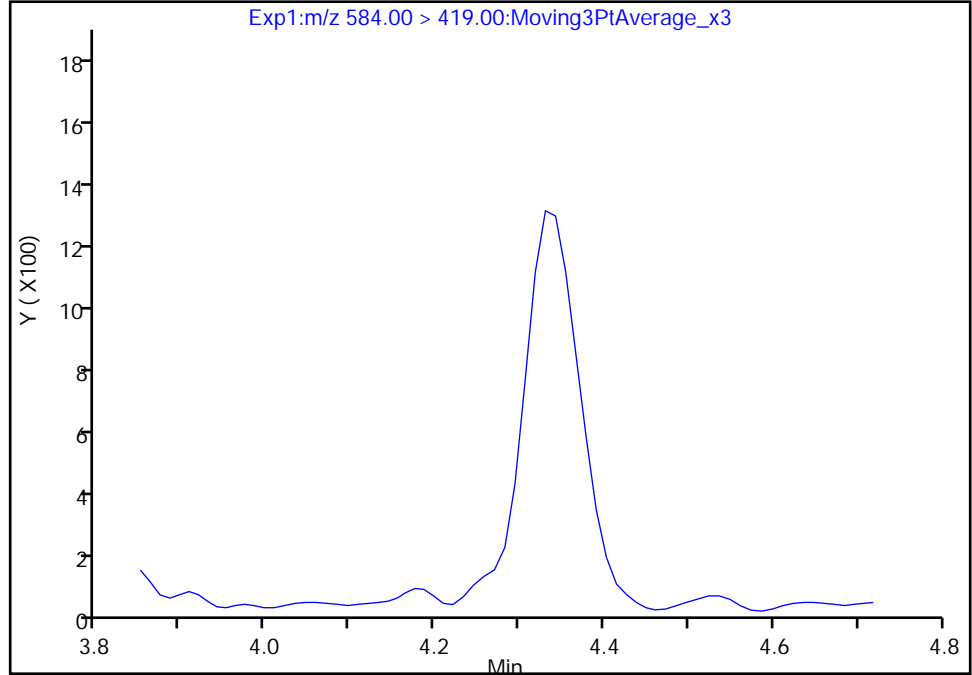
Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A017.d
Injection Date: 26-Jul-2019 10:54:13 Instrument ID: LC812
Lims ID: IC
Client ID:
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

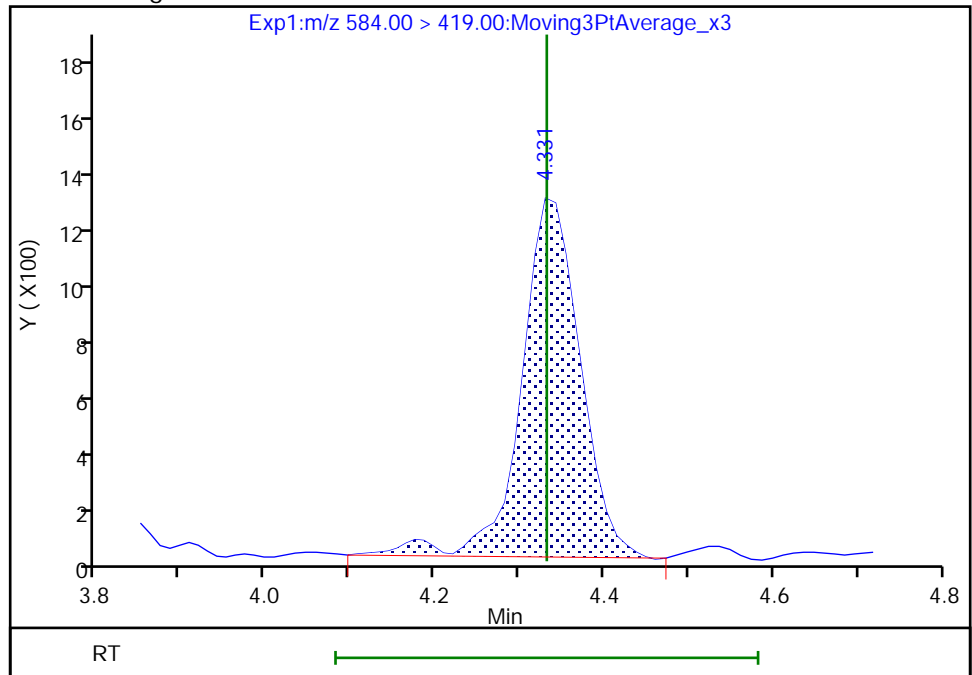
Not Detected
Expected RT: 4.33

Processing Integration Results



RT: 4.33
Area: 6191
Amount: 1.027298
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 26-Jul-2019 13:39:31
Audit Action: Manually Integrated

Audit Reason: Missed Peak

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A018.d
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 26-Jul-2019 11:02:14 ALS Bottle#: 4 Worklist Smp#: 18
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC2
 Misc. Info.: 200-0036970-018 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3

Method: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 29-Jul-2019 17:48:58 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d

Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: chirgwinb Date: 26-Jul-2019 13:25:33

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.754	1.754	0.0	1.005	181265	2.05		103	15.0	
D 1 13C4 PFBA										
217.00 > 172.00	1.745	1.754	-0.009	0.507	4790602	45.8		91.6	10324	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.183	2.183	0.0	1.000	180493	2.02		101	8.4	
D 3 13C5 PFPeA										
267.90 > 223.00	2.183	2.183	0.0	0.635	4620281	47.0		94.0	6805	
D 47 13C3 PFBS										
301.90 > 80.00	2.211	2.211	0.0	0.643	4109072	42.6		91.5	749772	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.211	2.211	0.0	1.000	173561	1.93	Target=1.98	109	539	
298.90 > 99.00	2.211	2.211	0.0	1.000	84320		2.06(0.99-2.97)	109	64.3	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.583	2.583	0.0	1.000	35464	1.85		98.8	231	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.583	2.583	0.0	0.751	375615	40.2		86.1	362	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.633	2.633	0.0	1.000	191379	2.08	Target=12.51	104	48.4	
313.00 > 119.00	2.633	2.633	0.0	1.000	13868		13.80(6.25-18.76)	104	16.6	
D 7 13C2 PFHxA										
315.00 > 270.00	2.633	2.633	0.0	0.765	4473437	45.8		91.7	8558	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.646	2.646	0.0	1.197	151358	1.92	Target=2.77	102	443	
349.00 > 99.00	2.646	2.646	0.0	1.197	53456		2.83(1.38-4.15)	102	97.8	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.766	2.766	0.0	1.000	31195	1.93		96.4	9.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.766	2.766	0.0	0.804	318213	50.8		102	2013	
D 11 18O2 PFHxS										
403.00 > 84.00	3.060	3.059	0.001	0.889	2489096	44.0		93.1	25971	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.060	3.059	0.001	1.000	133064	1.92	Target=3.37	105	195	
399.00 > 99.00	3.060	3.059	0.001	1.000	37828		3.52(1.68-5.05)	105	35.9	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.060	3.059	0.001	1.000	169875	2.00	Target=3.74	99.9	19.2	
363.00 > 169.00	3.060	3.059	0.001	1.000	46856		3.63(1.87-5.62)	99.9	189	
D 9 13C4 PFHpA										
367.00 > 322.00	3.060	3.059	0.001	0.889	4538861	47.5		94.9	20569	
77 DONA										
377.00 > 251.00	3.108	3.108	0.0	0.832	410989	1.97	Target=2.75	104	677	
377.00 > 85.00	3.108	3.108	0.0	0.832	147122		2.79(1.37-4.12)	104	258	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.420	3.419	0.001	0.916	100067	1.89	Target=4.99	99.3	427	
449.00 > 99.00	3.420	3.419	0.001	0.916	21482		4.66(2.50-7.49)	99.3	86.2	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.430	3.429	0.001	1.000	36889	2.04		107	255	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.430	3.429	0.001	0.997	501736	42.6		89.8	1328	
* 62 13C2 PFOA										
415.00 > 370.00	3.440	3.439	0.001		5552205	50.0			22313	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.440	3.439	0.001	1.000	224294	2.17	Target=2.72	108	30.0	
413.00 > 169.00	3.440	3.439	0.001	1.000	77400		2.90(1.36-4.08)	108	275	
D 14 13C4 PFOA										
417.00 > 372.00	3.440	3.439	0.001	1.000	4756035	47.1		94.2	14497	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.734	3.735	-0.001	1.000	82423	1.98	Target=4.21	107	326	
499.00 > 99.00	3.734	3.735	-0.001	1.000	20256		4.07(2.10-6.31)	107	50.9	
D 18 13C4 PFOS										
503.00 > 80.00	3.734	3.735	-0.001	1.085	2100981	44.6		93.3	8195	
D 19 13C5 PFNA										
468.00 > 423.00	3.757	3.758	-0.001	1.092	4340953	47.1		94.2	18578	
20 Perfluorononanoic acid										
463.00 > 419.00	3.757	3.758	-0.001	1.000	156241	1.99	Target=8.52	99.3	31.6	
463.00 > 169.00	3.757	3.758	-0.001	1.000	17233		9.07(4.26-12.79)	99.3	166	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.898	3.899	-0.001	1.044	179878	1.88		101	532	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.022	4.024	-0.002	1.077	68974	1.86	Target=2.52	96.8	707	
549.00 > 99.00	4.022	4.024	-0.002	1.077	27715		2.49(1.26-3.78)	96.8	44.6	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.047	4.049	-0.002	1.000	153333	2.07		103	1110	
D 21 13C8 FOSA										
506.00 > 78.00	4.047	4.049	-0.002	1.176	4062039	248.0		96.0	61508	08/13/2019

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.047	4.049	-0.002	1.000	139639	2.28	Target=9.67	114	12.0	
513.00 > 169.00	4.047	4.049	-0.002	1.000	13333		10.47(4.83-14.50)	114	38.6	
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.049	-0.002	1.176	3161787	42.9		85.8	10711	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.059	4.061	-0.002	1.000	28727	2.20		115	342	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.061	-0.002	1.180	468782	43.2		90.1	1562	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.198	4.189	0.009	1.003	12870	1.97		98.5	22.0	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.189	-0.002	1.217	431715	45.9		91.7	3799	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.283	4.284	-0.001	1.147	56004	1.92	Target=2.60	99.7	636	
599.00 > 99.00	4.283	4.284	-0.001	1.147	20898		2.68(1.30-3.90)	99.7	58.4	
D 30 13C2 PFUnA										
565.00 > 520.00	4.307	4.308	-0.001	1.252	3140582	46.8		93.6	14185	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.308	0.011	1.003	113426	2.10	Target=8.30	105	31.1	
563.00 > 169.00	4.319	4.308	0.011	1.003	13176		8.61(4.15-12.45)	105	106	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.320	-0.001	1.255	498703	47.5		95.1	1567	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.331	4.332	-0.001	1.003	14049	2.20		110	101	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.403	4.404	-0.001	1.179	285835	1.96		104	2409	
D 36 13C2 PFDaA										
615.00 > 570.00	4.549	4.550	-0.001	1.322	3386559	46.9		93.7	7468	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.549	4.550	-0.001	1.000	139487	2.01	Target=7.78	101	11.8	
613.00 > 169.00	4.549	4.550	-0.001	1.000	18660		7.48(3.89-11.67)	101	118	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.574	4.575	-0.001	1.127	17290	2.09		108	390	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.729	4.730	-0.001	1.267	26406	1.89	Target=0.49	97.7	72.7	
699.00 > 99.00	4.729	4.730	-0.001	1.267	58892		0.45(0.25-0.74)	97.7	311	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.778	0.0	1.050	131396	2.11	Target=5.37	106	9.4	
663.00 > 169.00	4.778	4.778	0.0	1.050	24542		5.35(2.68-8.05)	106	130	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.022	5.013	0.009	1.002	24247	2.04	Target=1.00	102	82.5	
713.00 > 219.00	5.013	5.013	-0.001	1.000	24497		0.99(0.50-1.50)	102	215	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.013	5.013	-0.001	1.457	4473081	45.0		89.9	9695	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.587	5.583	0.004	1.624	4255458	48.1		96.1	10574	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.587	5.583	0.004	1.000	192689	2.00	Target=5.39	100	9.3	
813.00 > 169.00	5.592	5.583	0.009	1.001	35715		5.40(2.70-8.09)	100	259	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	6.214	6.207	0.007	1.112	125768	1.97	Target=5.46	98.3	27.1	
913.00 > 169.00	6.214	6.207	0.007	1.112	23228		5.41(2.73-8.19)	98.3	230	

Reagents:

LCPFAS32-L2_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A018.d

Injection Date: 26-Jul-2019 11:02:14

Instrument ID: LC812

Lims ID: IC

Client ID:

Operator ID: lc812tech

ALS Bottle#: 4

Worklist Smp#: 18

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

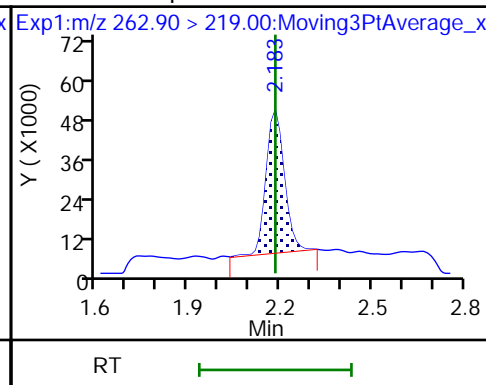
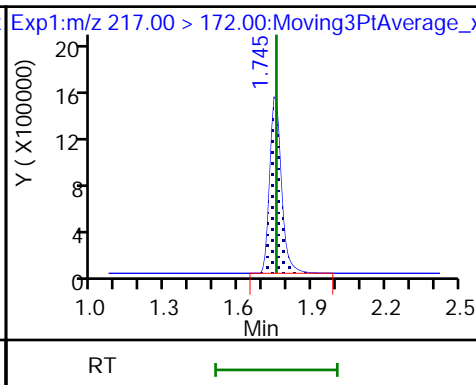
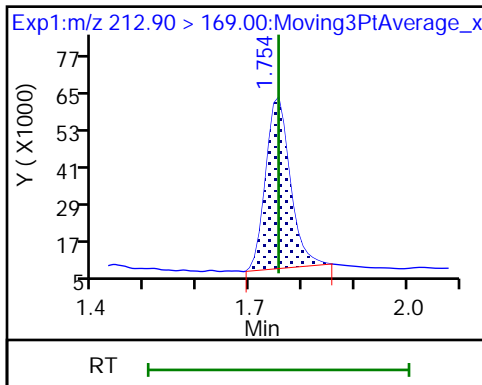
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

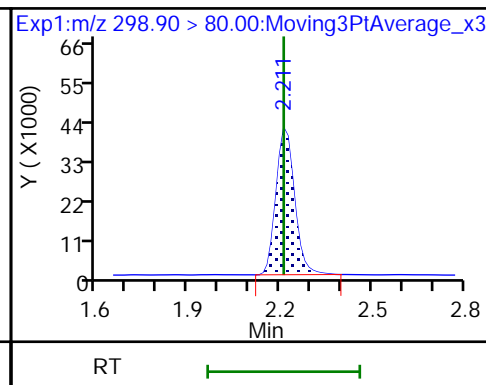
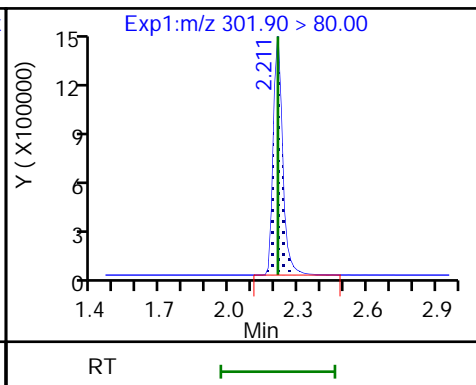
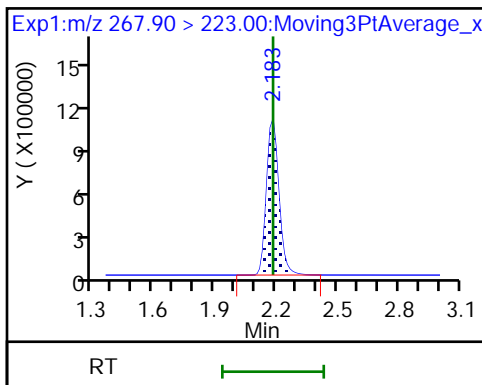
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

D 47 13C3 PFBS

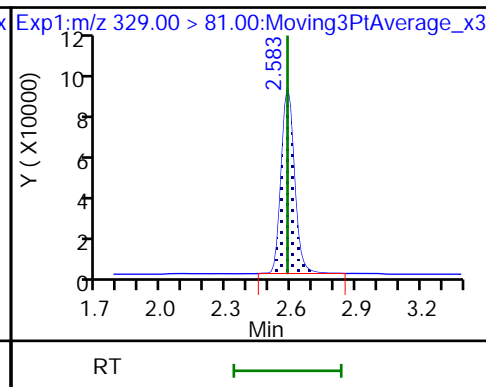
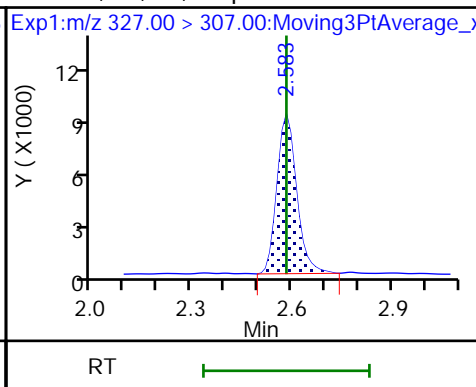
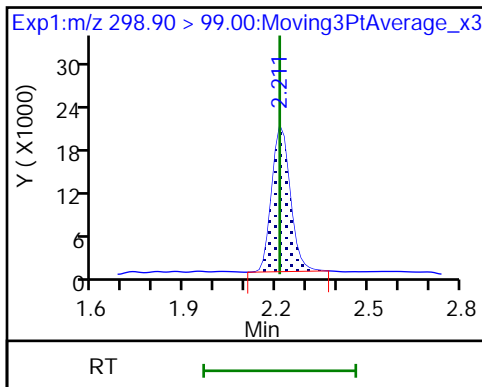
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

61 1H,1H,2H,2H-perfluorohexanesulfonate

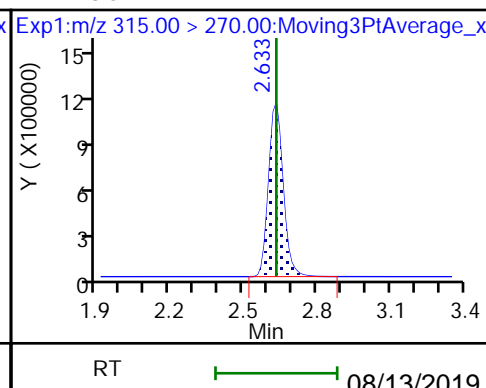
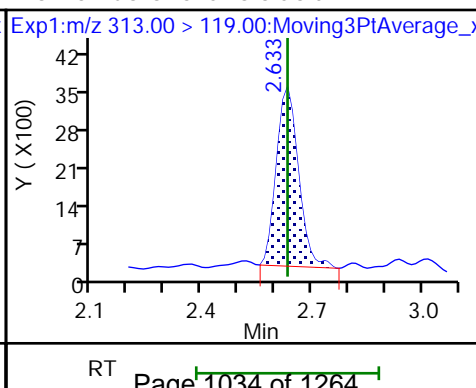
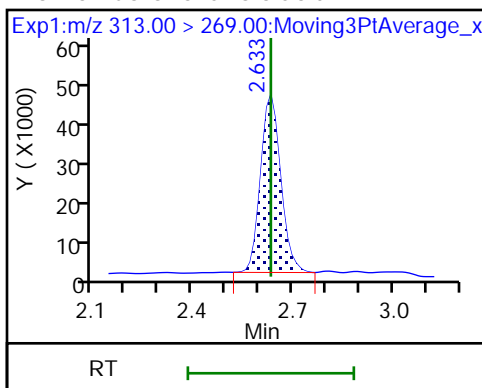
D 60 M2-4:2 FTS

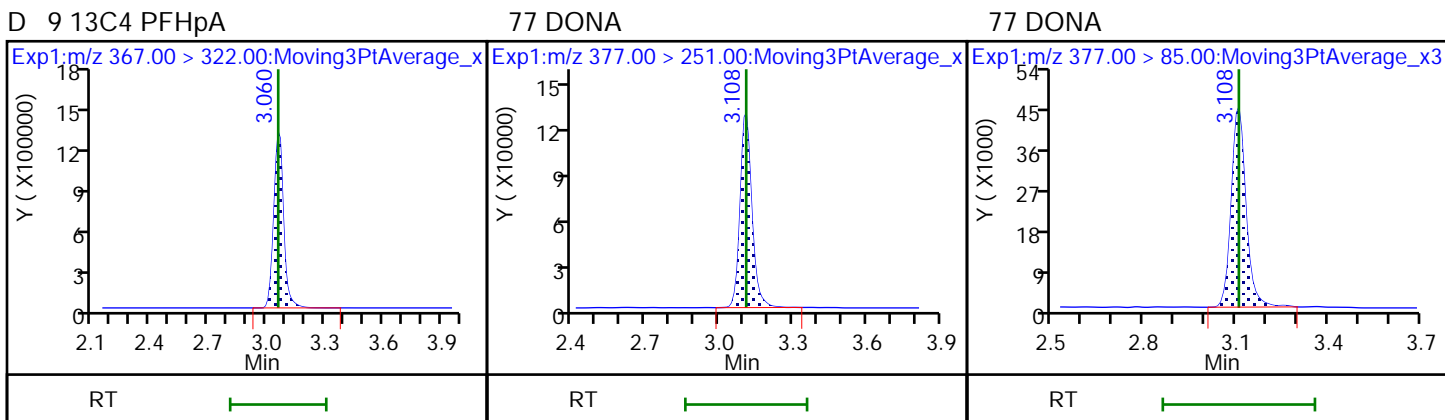
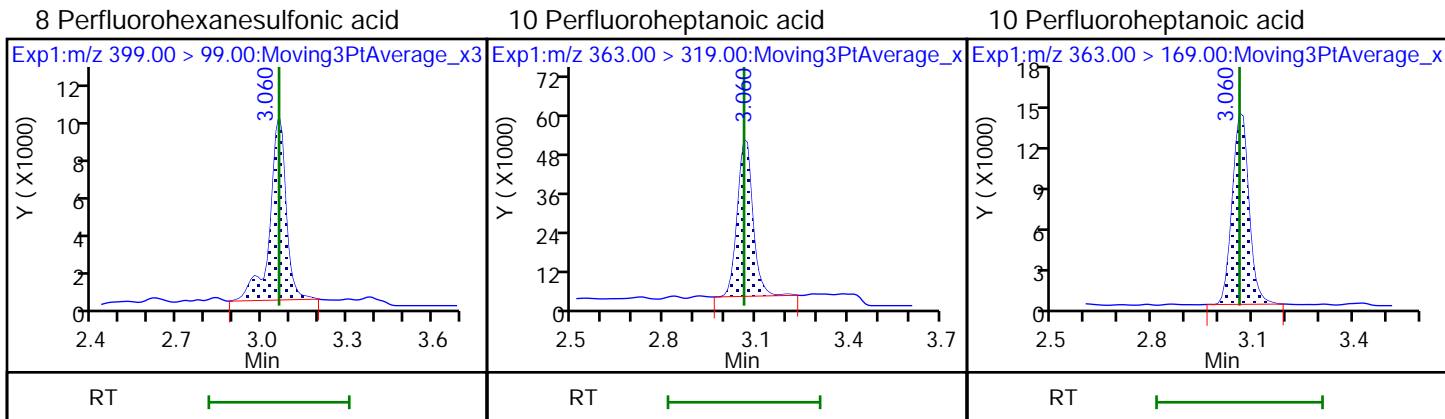
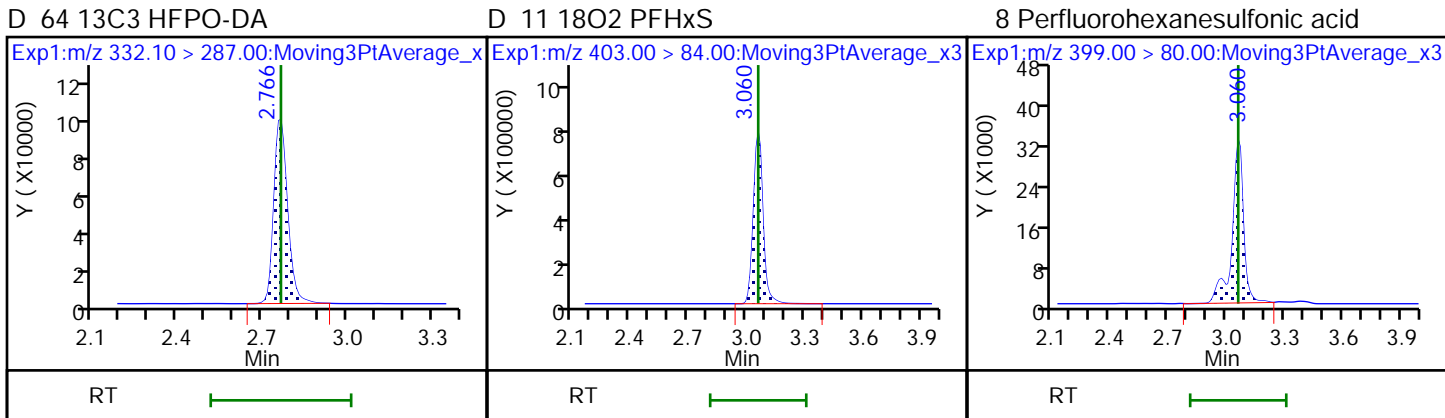
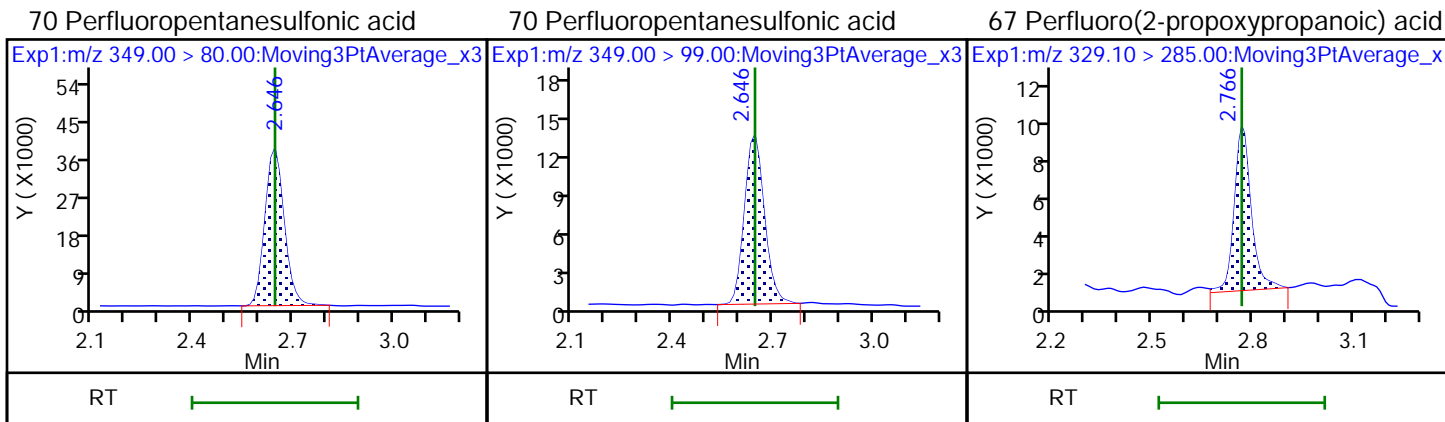


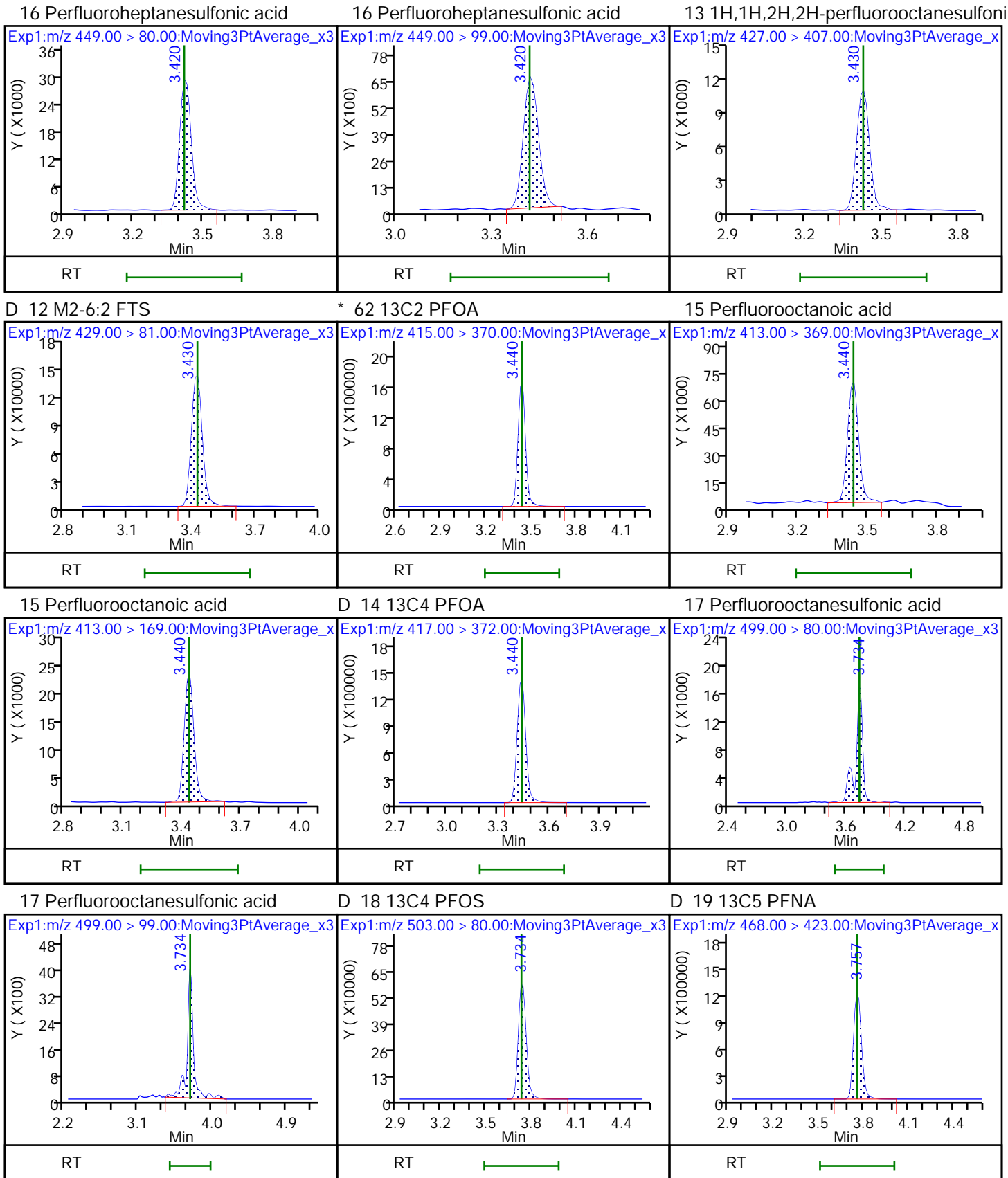
6 Perfluorohexanoic acid

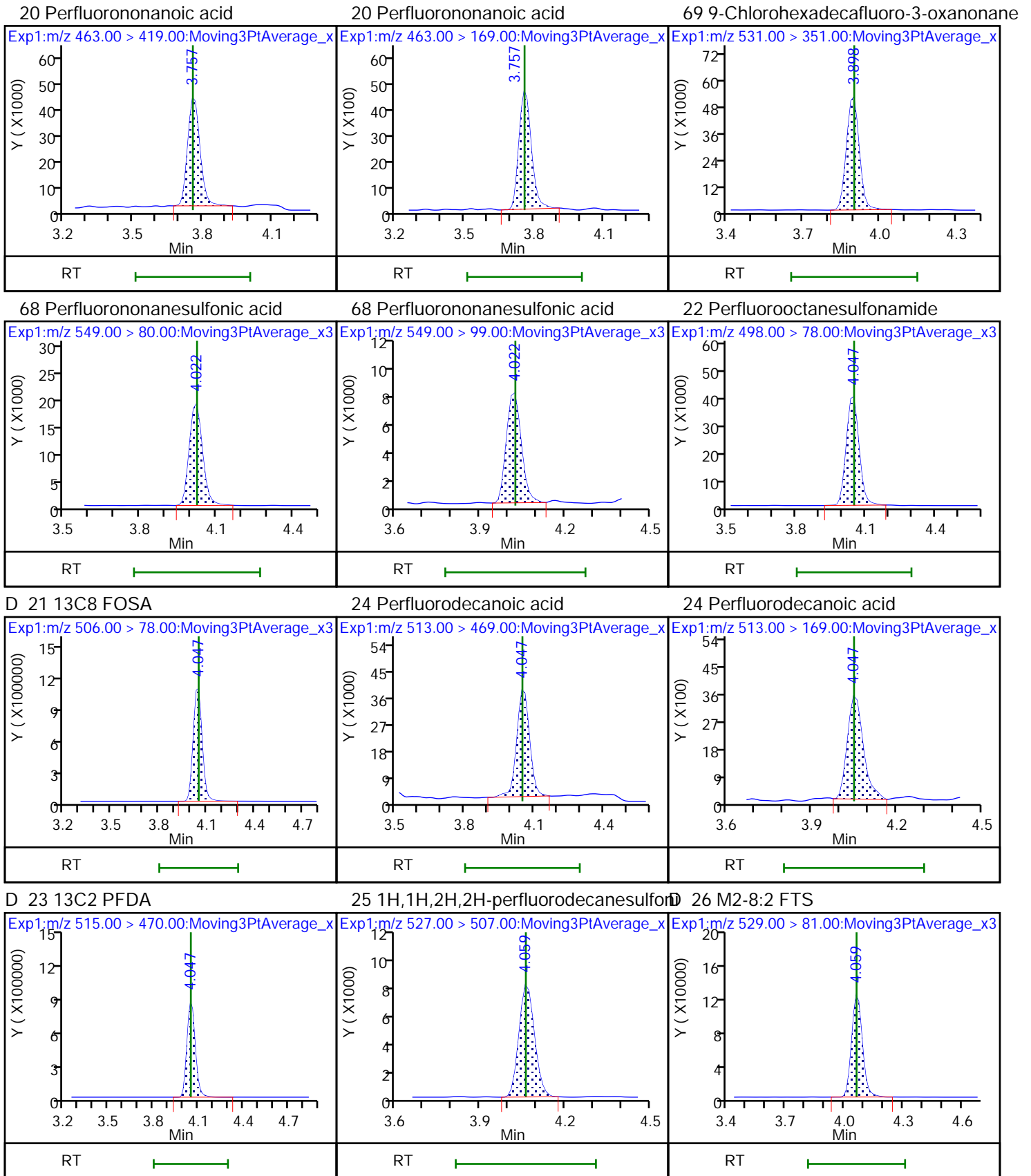
6 Perfluorohexanoic acid

D 7 13C2 PFHxA



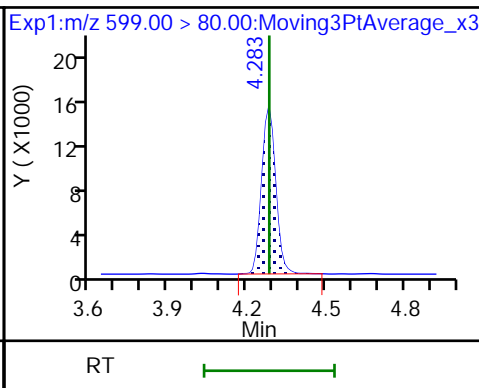
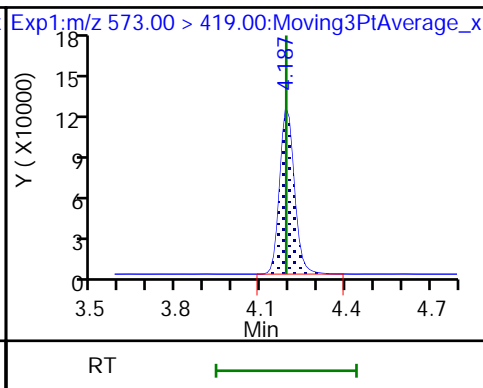
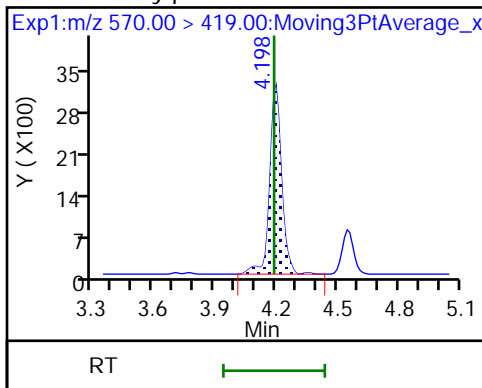






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

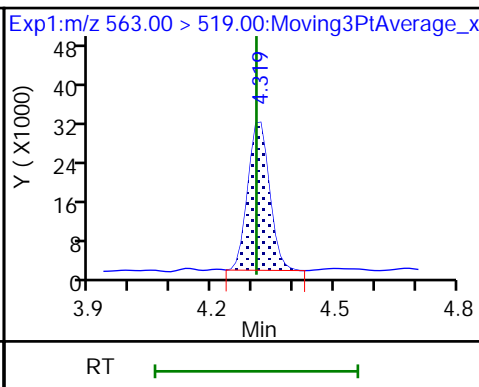
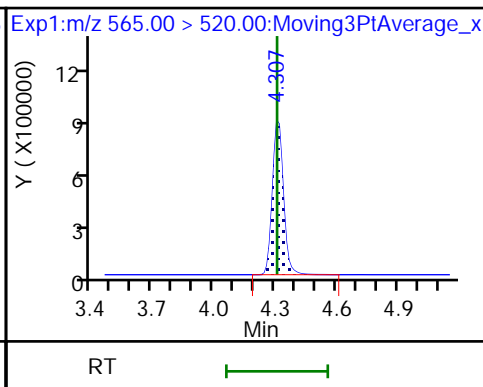
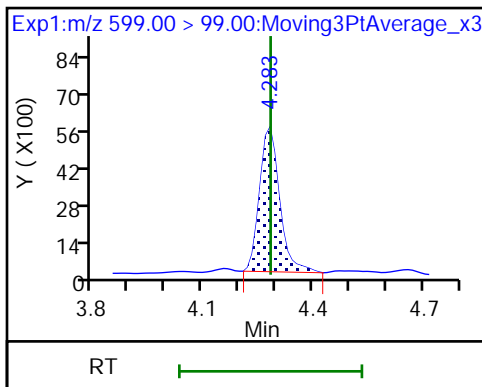
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

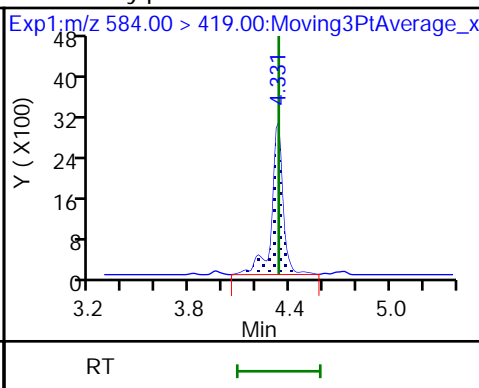
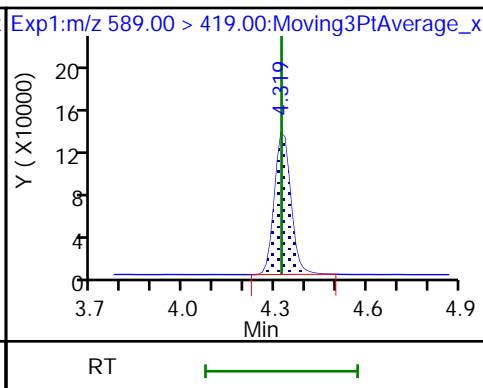
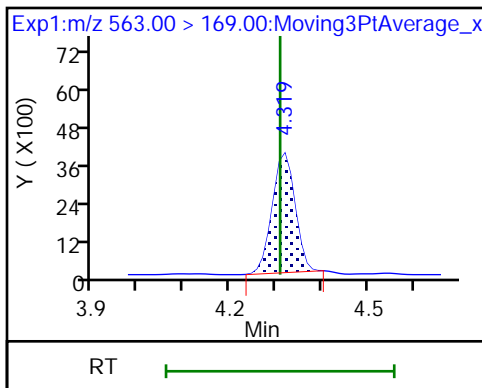
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

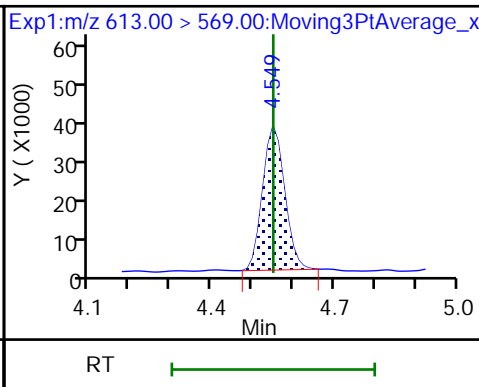
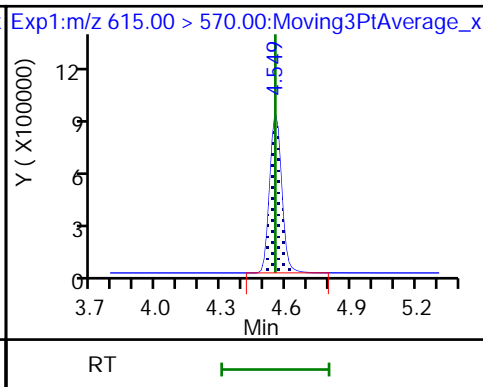
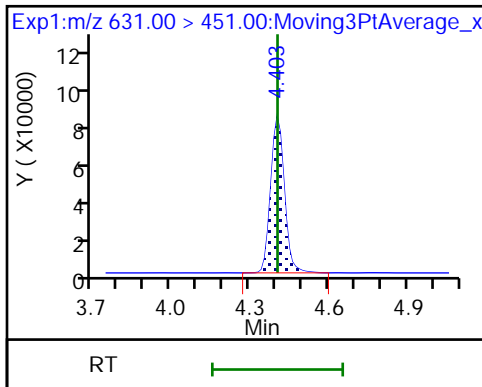
D 32 d5-NEtFOSAA

33 N-ethylperfluorooctanesulfonamidoa



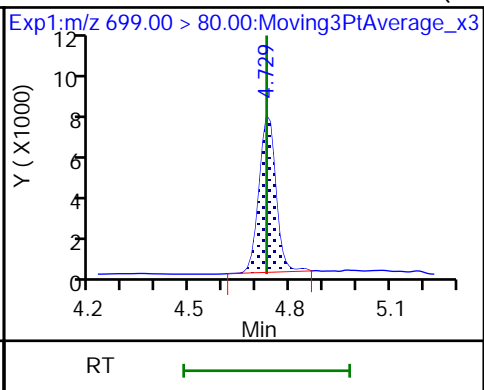
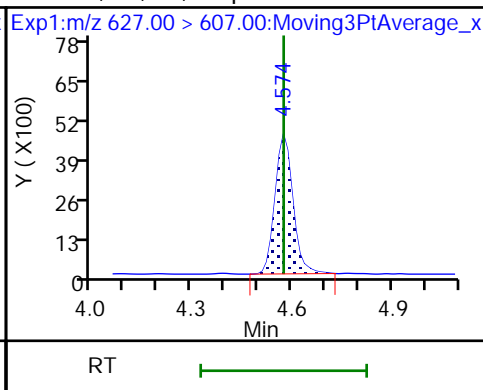
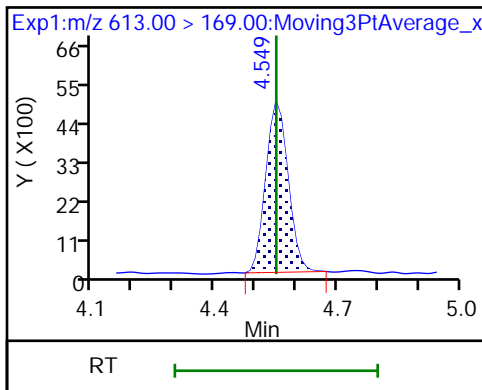
66 11-Chloroeicosafuoro-3-oxaundecaD 36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

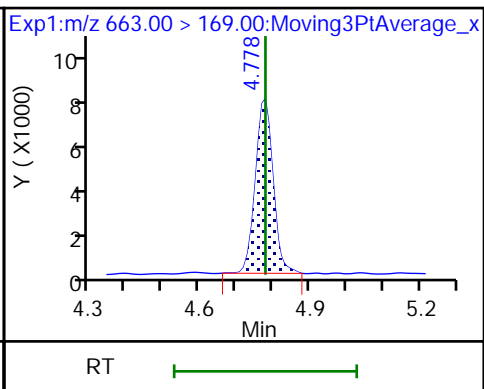
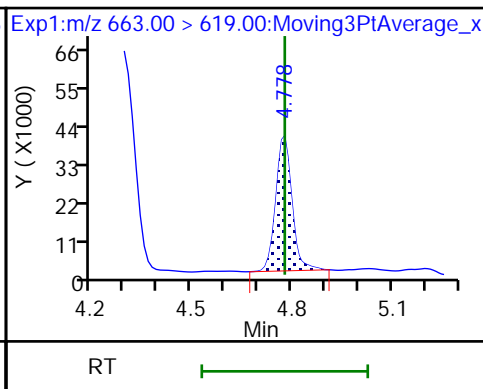
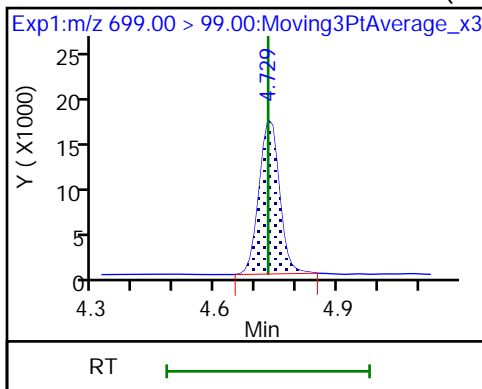
74 1H,1H,2H,2H-perfluorododecanesulfo 75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

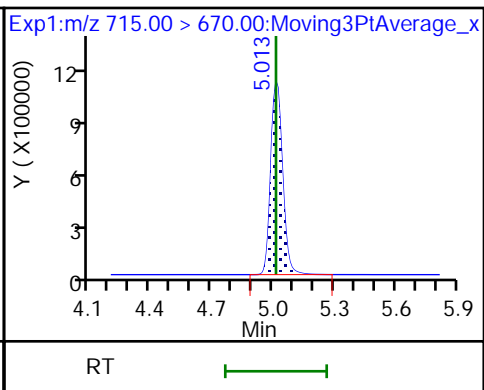
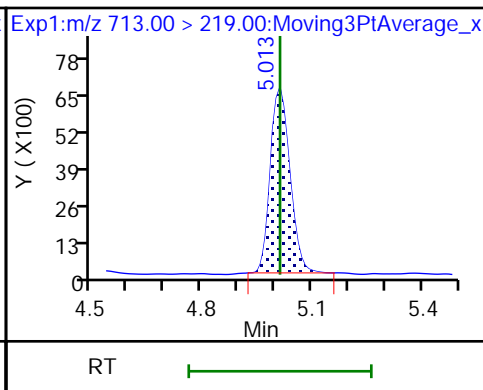
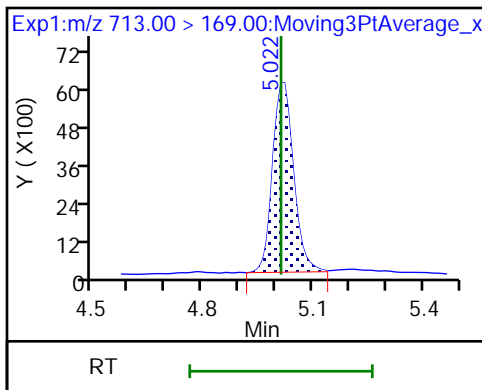
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

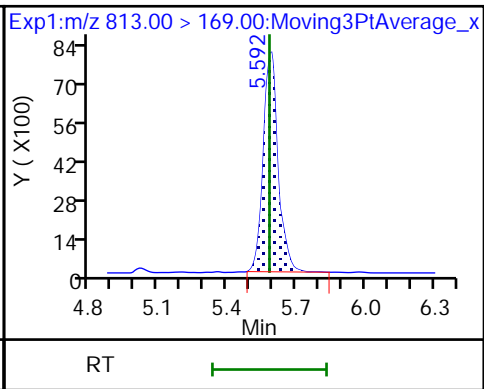
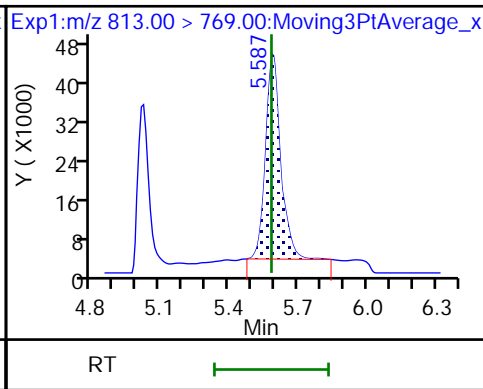
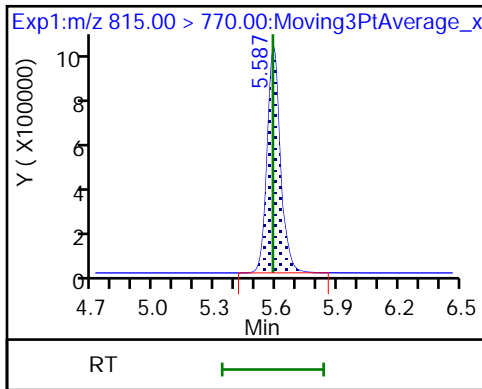
D 43 13C2 PFTeDA



D 44 13C2 PFHxDA

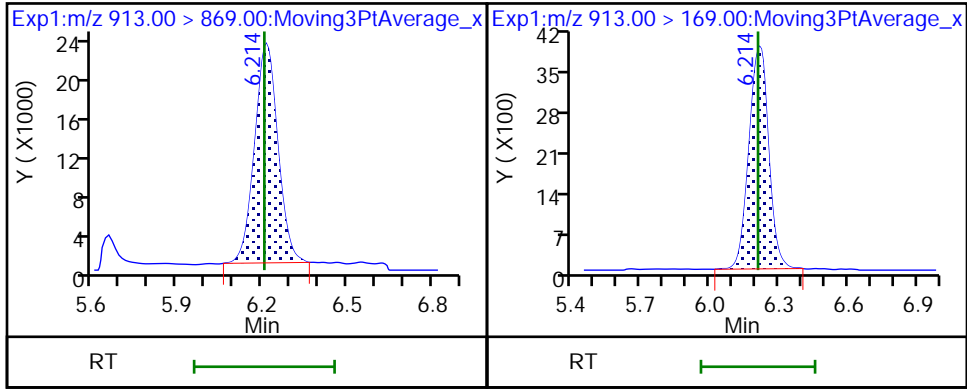
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A019.d
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 26-Jul-2019 11:10:16 ALS Bottle#: 5 Worklist Smp#: 19
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC3
 Misc. Info.: 200-0036970-019 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3

Method: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 29-Jul-2019 17:49:16 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: murrayjw Date: 29-Jul-2019 11:00:26

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.754	1.754	0.0	1.000	425099	4.87		97.4	36.3	
D 1 13C4 PFBA										
217.00 > 172.00	1.754	1.754	0.0	0.510	4735112	46.0		92.0	10174	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.183	2.183	0.0	1.000	409244	4.80		96.0	18.7	
D 3 13C5 PFPeA										
267.90 > 223.00	2.183	2.183	0.0	0.635	4403817	45.6		91.1	6733	
D 47 13C3 PFBS										
301.90 > 80.00	2.211	2.211	0.0	0.643	4054587	42.7		91.8	713581	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.225	2.211	0.014	1.006	379584	4.28	Target=1.98	96.9	989	
298.90 > 99.00	2.225	2.211	0.014	1.006	188887		2.01(0.99-2.97)	96.9	141	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.583	2.583	0.0	1.000	89347	4.30		92.0	712	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.583	2.583	0.0	0.751	406391	44.2		94.7	393	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.633	2.633	0.0	1.000	437532	4.79	Target=12.51	95.7	116	
313.00 > 119.00	2.633	2.633	0.0	1.000	37589		11.64(6.25-18.76)	95.7	53.9	
D 7 13C2 PFHxA										
315.00 > 270.00	2.633	2.633	0.0	0.765	4439363	46.2		92.5	8334	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.646	2.646	0.0	1.197	361774	4.64	Target=2.77	98.9	1313	
349.00 > 99.00	2.646	2.646	0.0	1.197	126655		2.86(1.38-4.15)	98.9	237	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.774	2.766	0.008	1.000	69647	5.09		102	22.6	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.774	2.766	0.008	0.806	269344	43.7		87.4	1503	
D 11 18O2 PFHxS										
403.00 > 84.00	3.070	3.059	0.011	0.892	2421176	43.5		92.0	11872	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.070	3.059	0.011	1.000	298686	4.43	Target=3.37	97.3	1330	
399.00 > 99.00	3.060	3.059	0.001	0.997	88283		3.38(1.68-5.05)	97.3	83.8	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.070	3.059	0.011	1.000	392838	4.98	Target=3.74	99.6	46.4	
363.00 > 169.00	3.070	3.059	0.011	1.000	100586		3.91(1.87-5.62)	99.6	372	
D 9 13C4 PFHpA										
367.00 > 322.00	3.070	3.059	0.011	0.892	4209662	44.8		89.5	11346	
77 DONA										
377.00 > 251.00	3.108	3.108	0.0	0.830	938009	4.74	Target=2.75	101	1690	
377.00 > 85.00	3.108	3.108	0.0	0.830	332299		2.82(1.37-4.12)	101	483	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.430	3.419	0.011	0.916	231634	4.62	Target=4.99	97.0	825	
449.00 > 99.00	3.430	3.419	0.011	0.916	46298		5.00(2.50-7.49)	97.0	185	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.430	3.429	0.001	1.000	88994	4.70		99.2	886	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.430	3.429	0.001	0.997	523962	45.3		95.3	1508	
* 62 13C2 PFOA										
415.00 > 370.00	3.440	3.439	0.001		5461309	50.0			18561	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.440	3.439	0.001	1.000	481891	4.78	Target=2.72	95.6	63.1	
413.00 > 169.00	3.440	3.439	0.001	1.000	188785		2.55(1.36-4.08)	95.6	496	
D 14 13C4 PFOA										
417.00 > 372.00	3.440	3.439	0.001	1.000	4634073	46.7		93.3	13322	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.745	3.735	0.010	1.000	173858	4.41	Target=4.21	95.1	1075	
499.00 > 99.00	3.745	3.735	0.010	1.000	40561		4.29(2.10-6.31)	95.1	161	
D 18 13C4 PFOS										
503.00 > 80.00	3.745	3.735	0.010	1.089	1990042	42.9		89.9	8508	
D 19 13C5 PFNA										
468.00 > 423.00	3.769	3.758	0.011	1.095	4123753	45.5		91.0	26044	
20 Perfluorononanoic acid										
463.00 > 419.00	3.769	3.758	0.011	1.000	374348	5.01	Target=8.52	100	79.2	
463.00 > 169.00	3.769	3.758	0.011	1.000	42831		8.74(4.26-12.79)	100	397	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.898	3.899	-0.001	1.041	435253	4.81		103	1361	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.022	4.024	-0.002	1.074	174659	4.97	Target=2.52	103	1601	
549.00 > 99.00	4.022	4.024	-0.002	1.074	74958		2.33(1.26-3.78)	103	127	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.047	4.049	-0.002	1.000	345321	4.92		98.4	1582	
D 21 13C8 FOSA										
506.00 > 78.00	4.047	4.049	-0.002	1.176	2844095	46.2		92.4	9957	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.060	4.049	0.011	1.000	305367	4.36	Target=9.67	87.2	21.8	
513.00 > 169.00	4.060	4.049	0.011	1.000	32299		9.45(4.83-14.50)	87.2	89.5	
D 23 13C2 PFDA										
515.00 > 470.00	4.060	4.049	0.011	1.180	3614917	49.9		99.7	18527	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.072	4.061	0.011	1.000	60411	4.76		99.3	823	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.072	4.061	0.011	1.184	454990	42.6		88.9	1577	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.198	4.189	0.009	1.000	28789	4.62		92.5	55.2	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.198	4.189	0.009	1.220	411329	44.4		88.9	2060	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.283	4.284	-0.001	1.144	125116	4.53	Target=2.60	94.1	1145	
599.00 > 99.00	4.283	4.284	-0.001	1.144	51323		2.44(1.30-3.90)	94.1	134	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.308	0.011	1.255	2823529	42.8		85.5	11351	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.308	0.011	1.000	286638	5.92	Target=8.30	118	81.1	
563.00 > 169.00	4.319	4.308	0.011	1.000	33722		8.50(4.15-12.45)	118	245	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.320	0.011	1.259	447183	43.3		86.7	1432	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.331	4.332	-0.001	1.000	28242	4.93		98.7	153	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.403	4.404	-0.001	1.176	674951	4.90		104	3876	
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.550	-0.001	1.322	3126922	44.0		88.0	6374	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.549	4.550	-0.001	1.000	325214	5.09	Target=7.78	102	27.3	
613.00 > 169.00	4.549	4.550	-0.001	1.000	39812		8.17(3.89-11.67)	102	325	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.574	4.575	-0.001	1.123	37924	4.72		97.9	643	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.741	4.730	0.011	1.266	60868	4.60	Target=0.49	95.1	147	
699.00 > 99.00	4.741	4.730	0.011	1.266	133607		0.46(0.25-0.74)	95.1	604	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.778	0.0	1.050	291354	5.08	Target=5.37	102	25.7	
663.00 > 169.00	4.778	4.778	0.0	1.050	57989		5.02(2.68-8.05)	102	304	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.022	5.013	0.009	1.000	56948	4.87	Target=1.00	97.4	219	
713.00 > 219.00	5.013	5.013	0.0	0.998	58973		0.97(0.50-1.50)	97.4	520	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.022	5.013	0.009	1.460	4390949	44.9		89.7	9046	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.587	5.583	0.004	1.624	3980161	45.7		91.4	9546	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.587	5.583	0.004	1.000	403751	4.97	Target=5.39	99.5	17.0	
813.00 > 169.00	5.587	5.583	0.004	1.000	72858		5.54(2.70-8.09)	99.5	542	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	6.214	6.207	0.007	1.112	291577	4.87	Target=5.46	97.4	63.0	
913.00 > 169.00	6.214	6.207	0.007	1.112	53887		5.41(2.73-8.19)	97.4	628	

Reagents:

LCPFAS32-L3_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A019.d

Injection Date: 26-Jul-2019 11:10:16

Instrument ID: LC812

Lims ID: IC

Client ID:

Operator ID: lc812tech

ALS Bottle#: 5

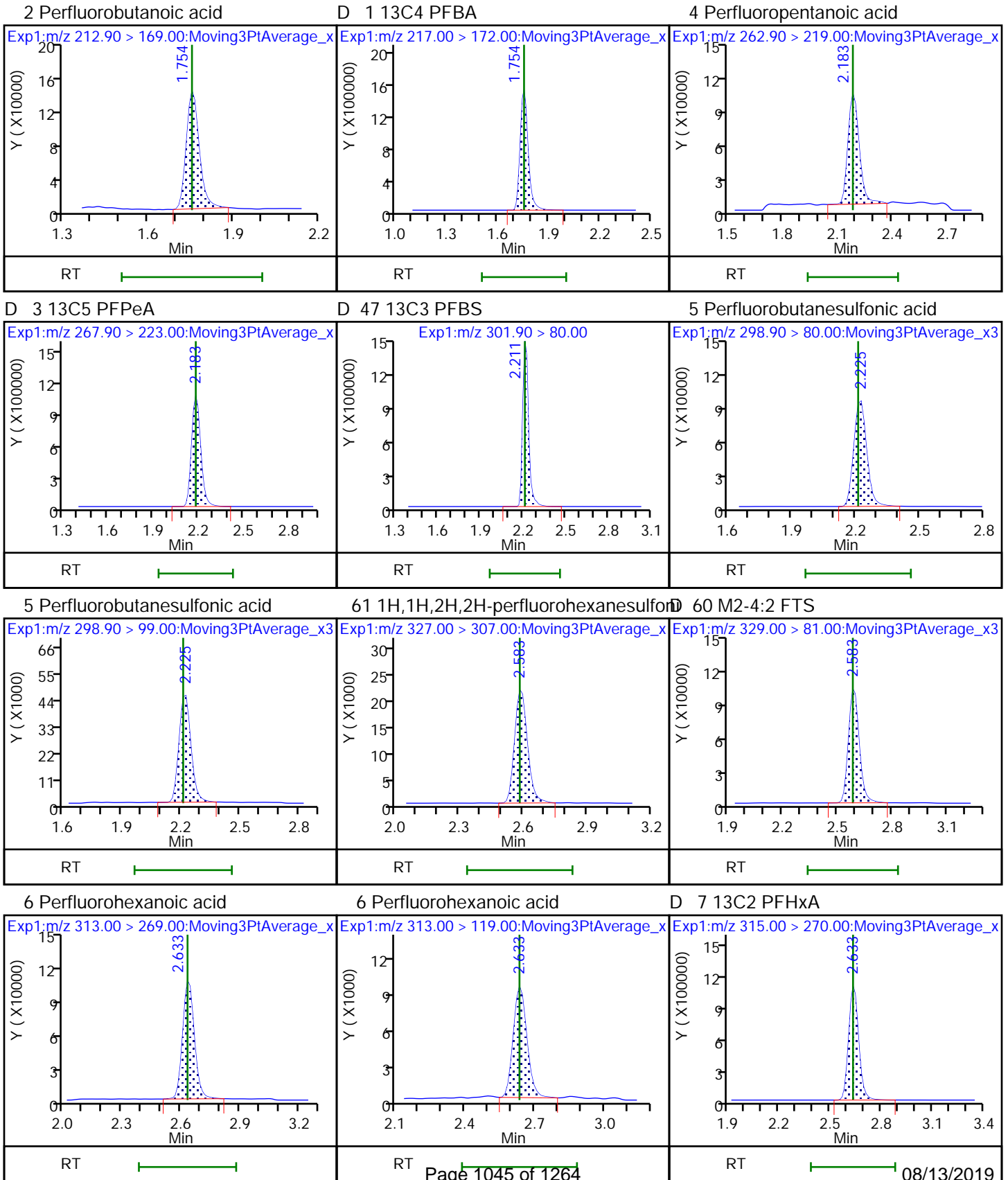
Worklist Smp#: 19

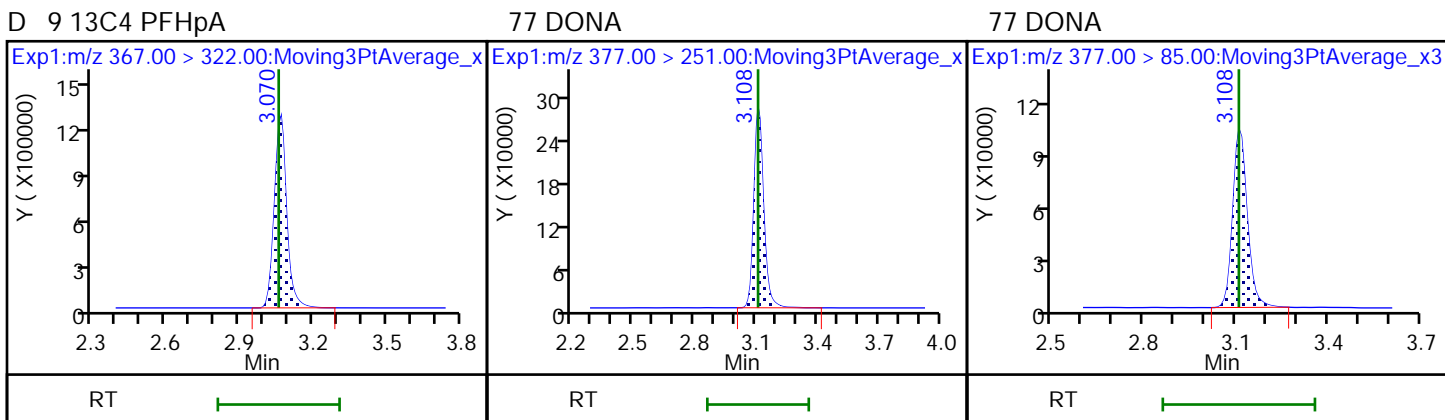
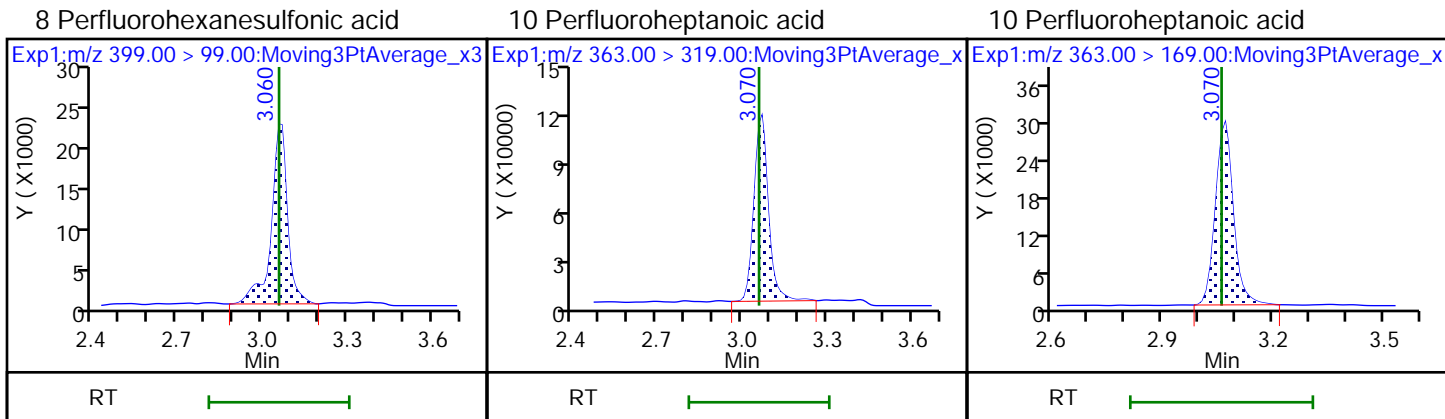
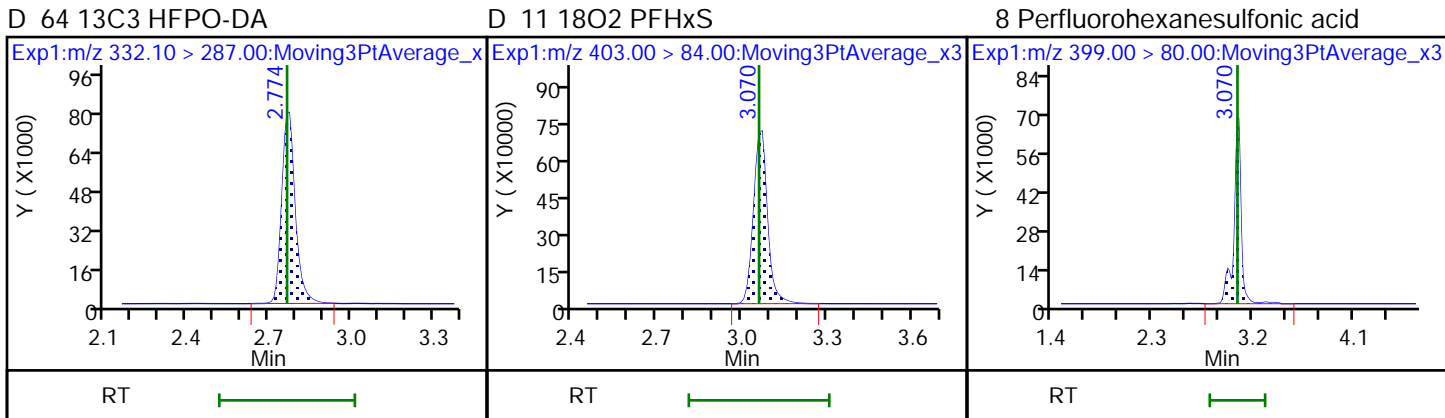
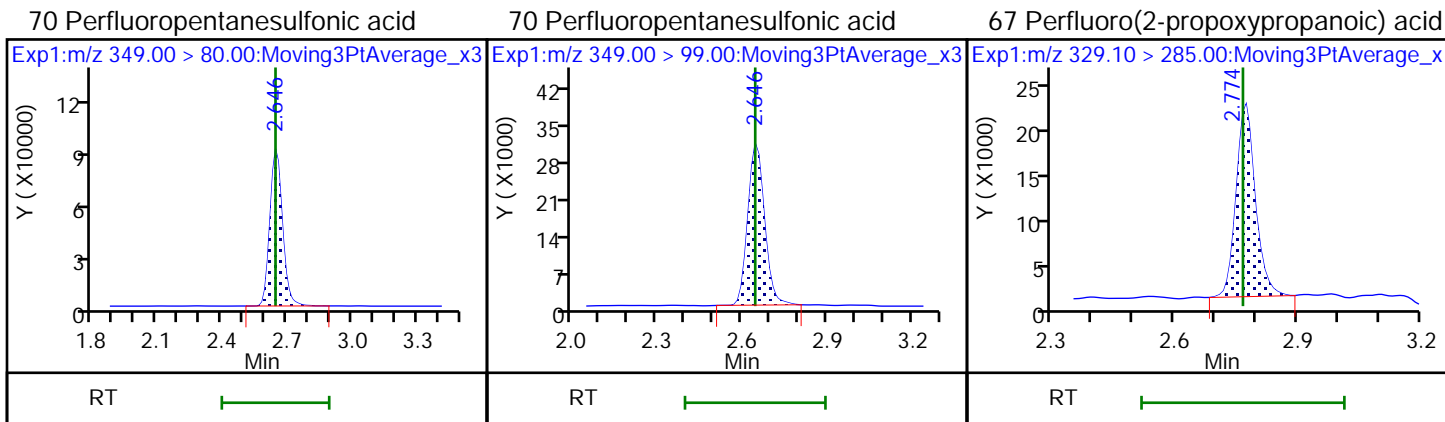
Injection Vol: 2.0 ul

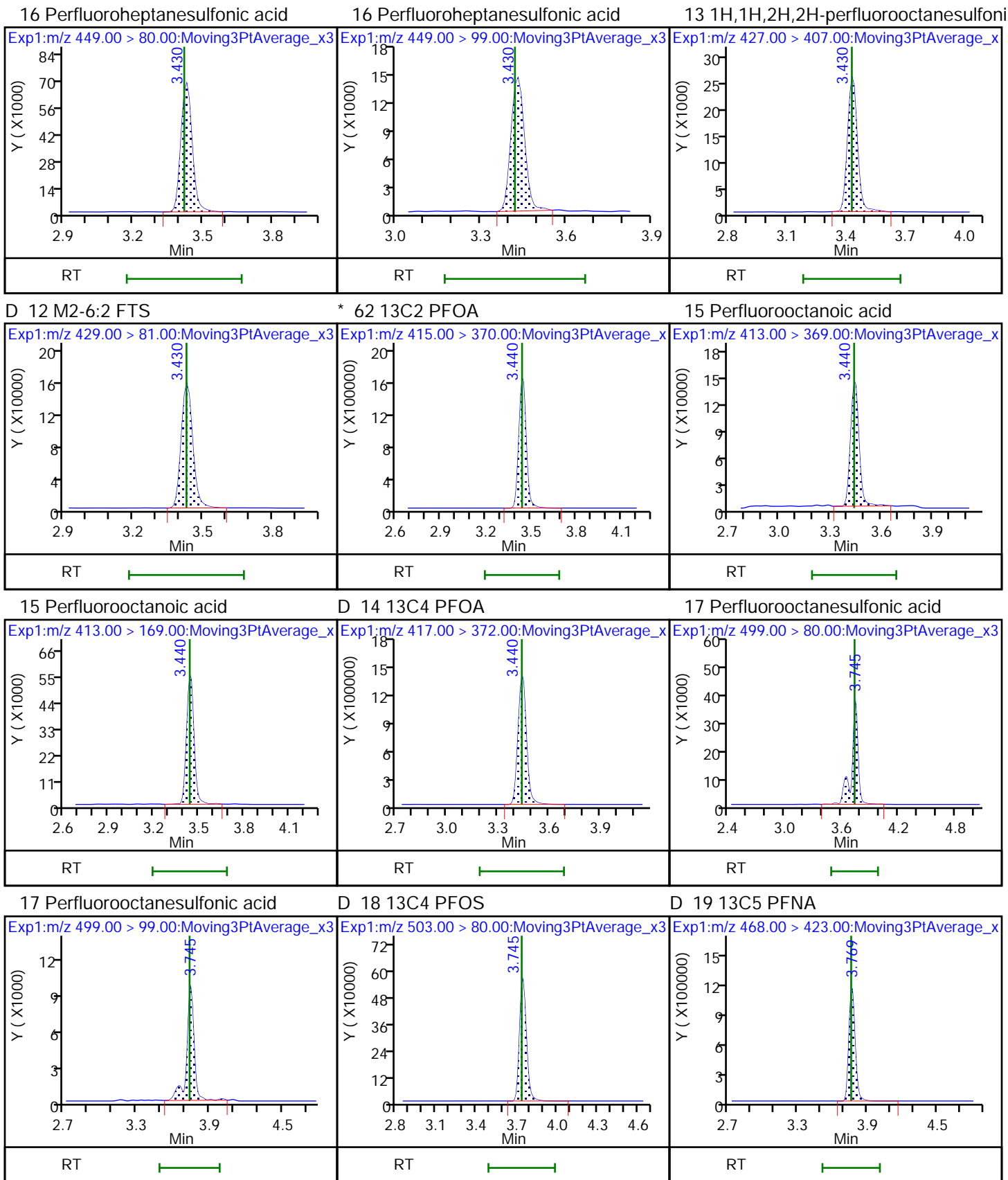
Dil. Factor: 1.0000

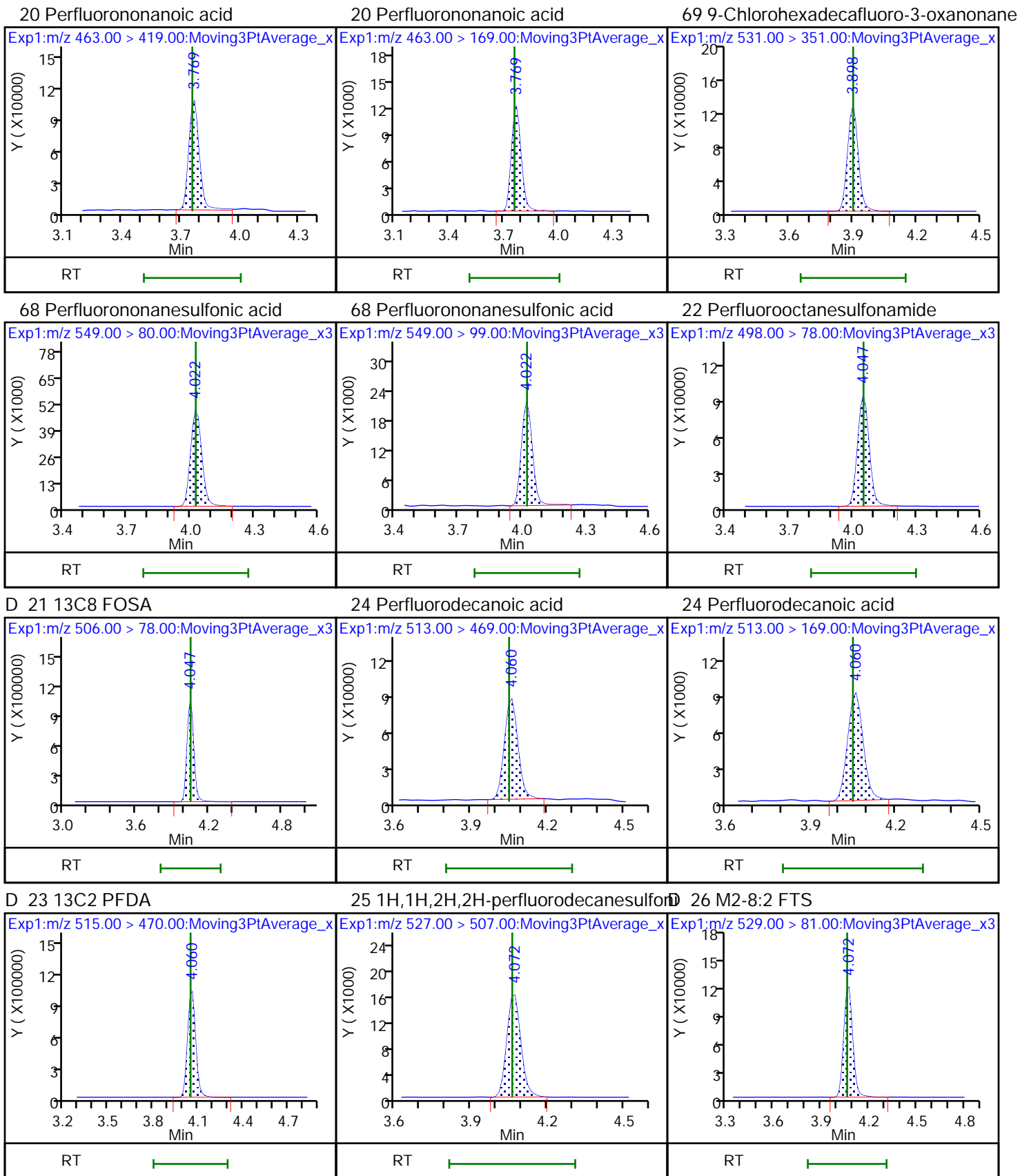
Method: PFC_LC812

Limit Group: LC_PFC_ICAL



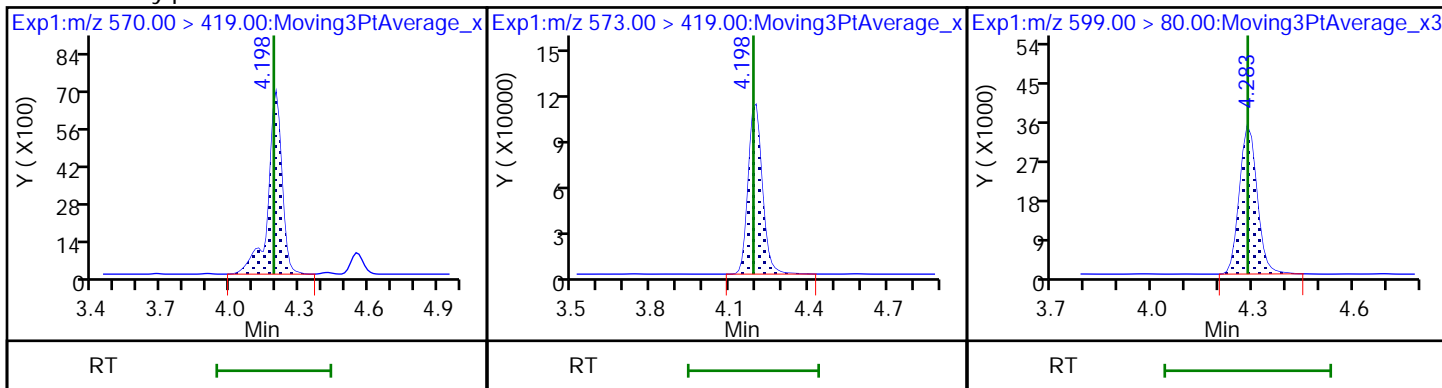






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

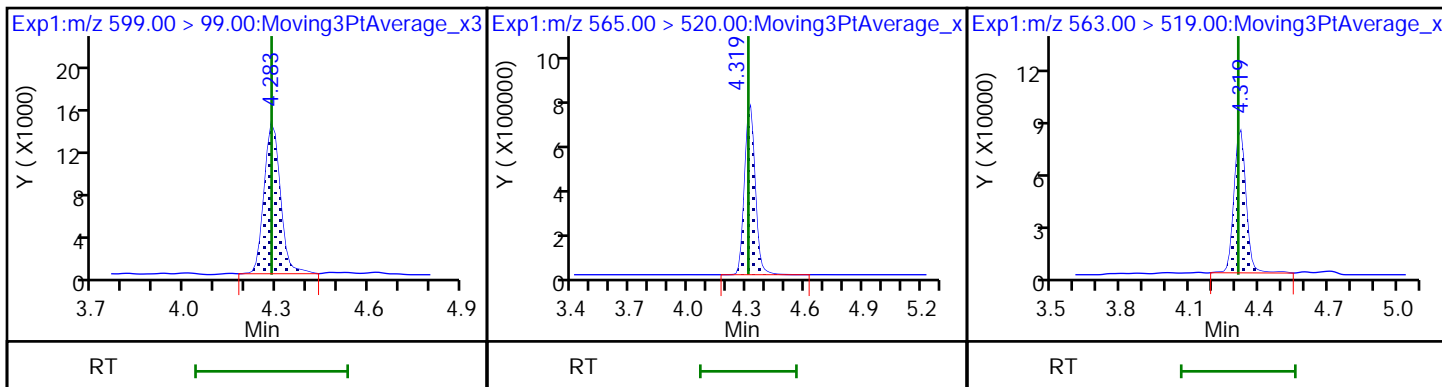
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

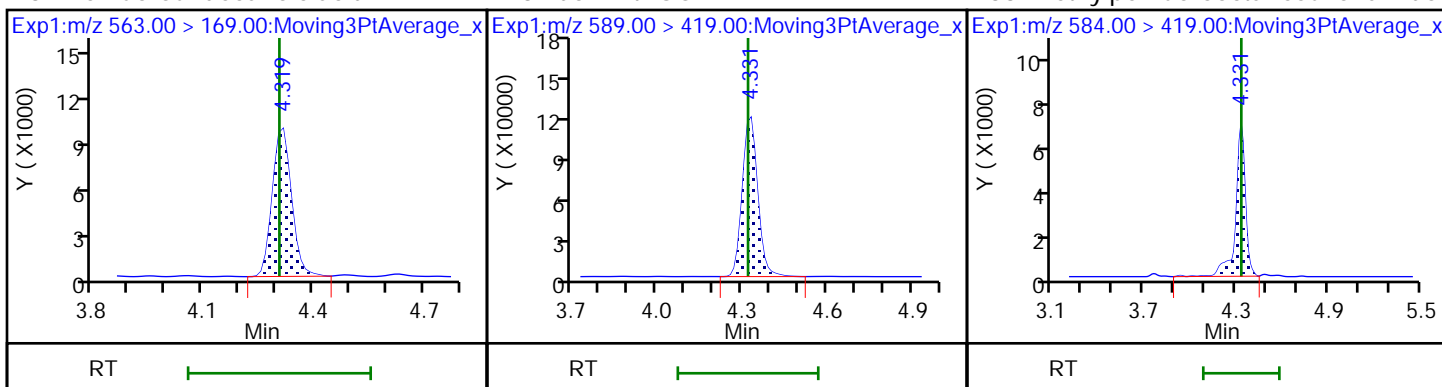
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

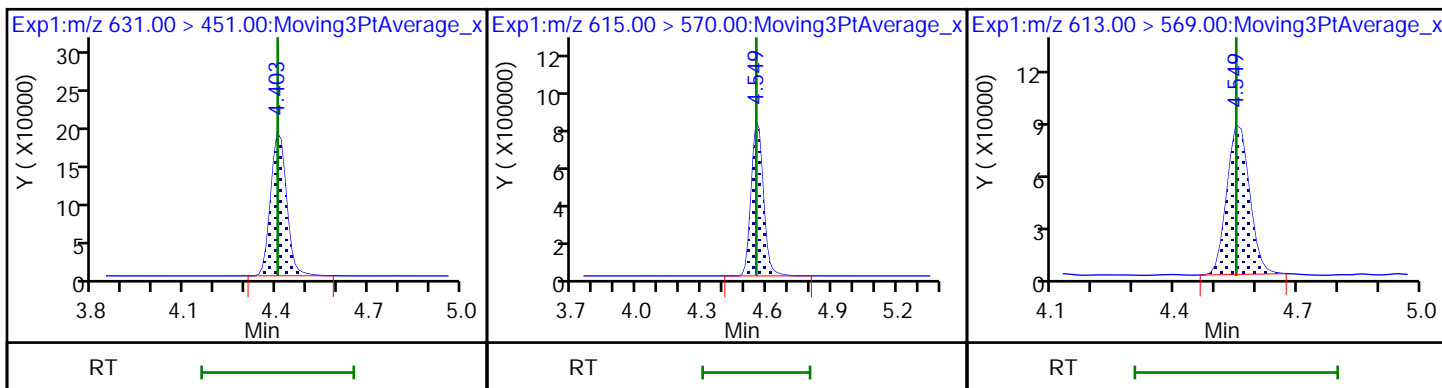
33 N-ethylperfluorooctanesulfonamidoa



66 11-Chloroeicosafluoro-3-oxaundecaD

36 13C2 PFDoA

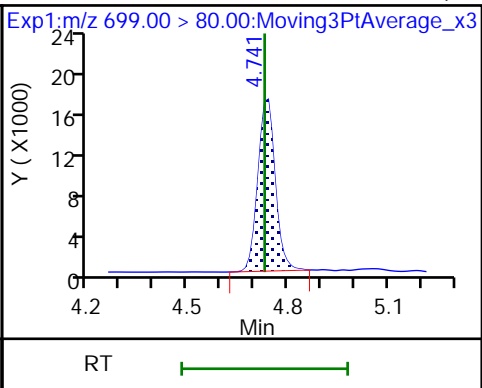
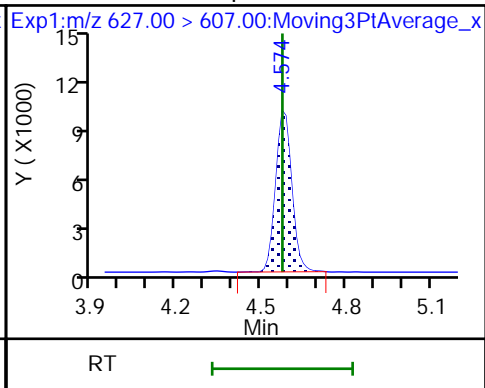
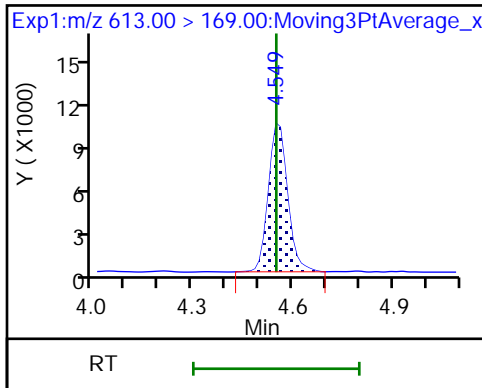
37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

74 1H,1H,2H,2H-perfluorododecanesulfo

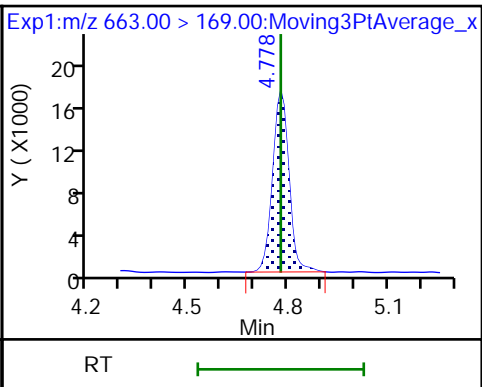
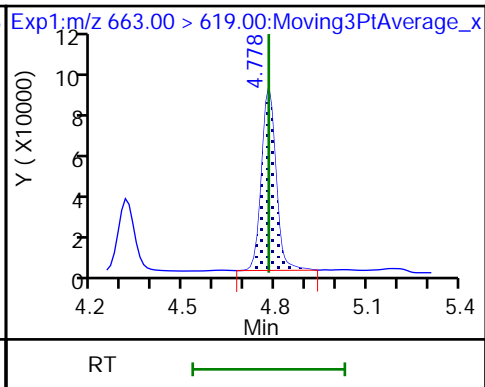
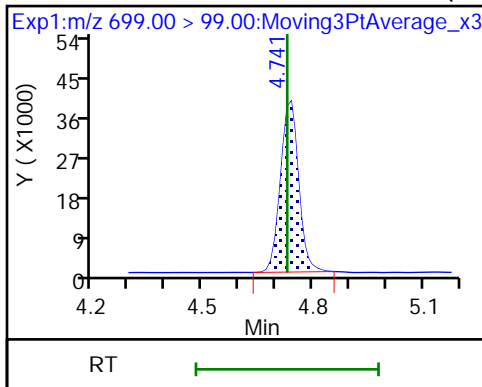
75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

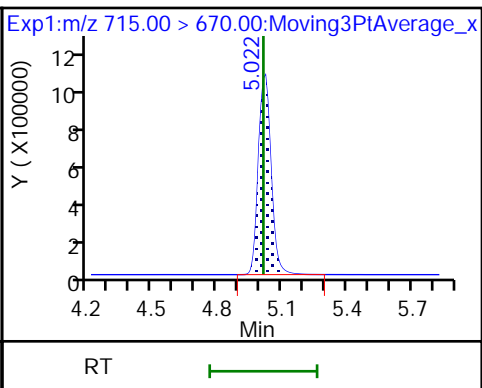
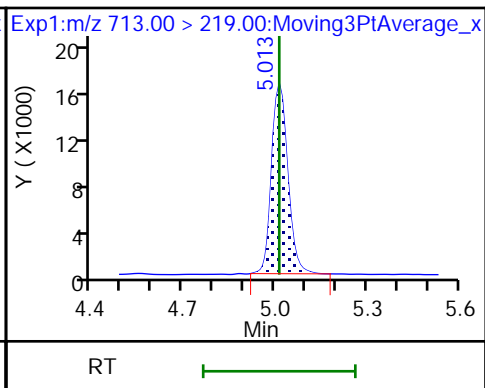
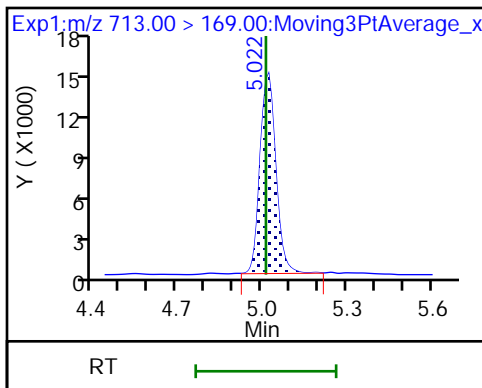
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

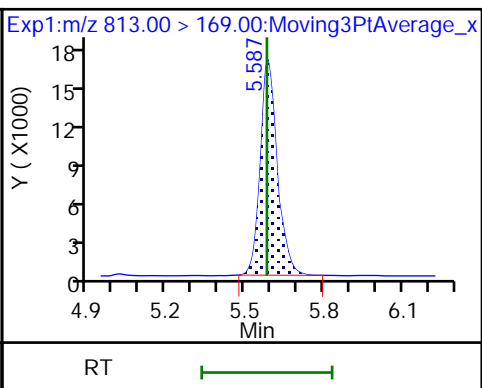
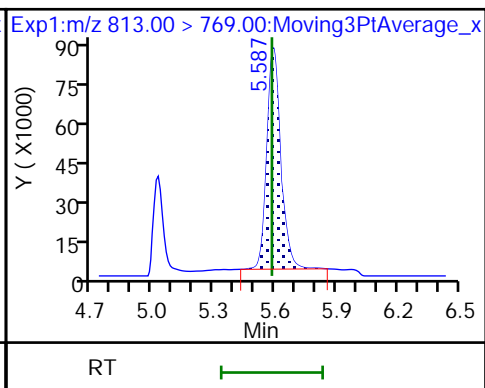
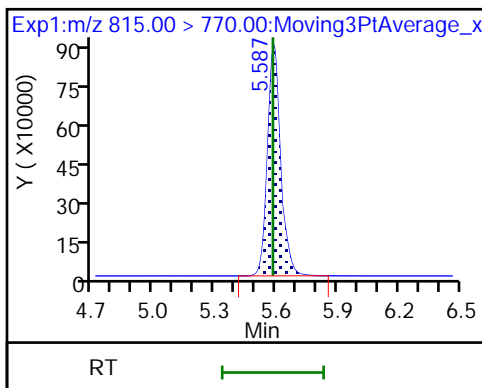
D 43 13C2 PFTeDA



D 44 13C2 PFHxDA

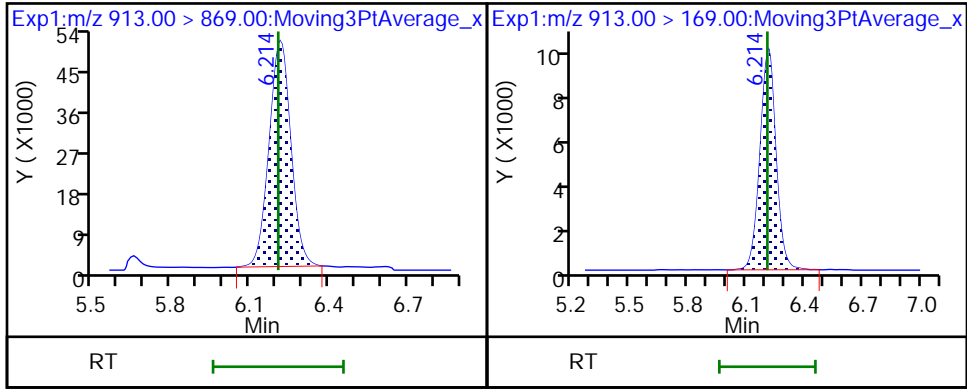
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A020.d
 Lims ID: ICIS
 Client ID:
 Sample Type: ICIS Calib Level: 4
 Inject. Date: 26-Jul-2019 11:18:18 ALS Bottle#: 6 Worklist Smp#: 20
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC4
 Misc. Info.: 200-0036970-020 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3
 Method: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 29-Jul-2019 17:49:33 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: chirgwinb Date: 26-Jul-2019 13:40:26

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.754	1.754	0.0	1.000	1729812	20.1		101	143	
D 1 13C4 PFBA										
217.00 > 172.00	1.754	1.754	0.0	0.510	4664130	46.9		93.9	10272	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.183	2.183	0.0	1.000	1735050	20.3		101	83.4	
D 3 13C5 PFPeA										
267.90 > 223.00	2.183	2.183	0.0	0.635	4425810	47.4		94.8	6656	
D 47 13C3 PFBS										
301.90 > 80.00	2.211	2.211	0.0	0.643	3985512	43.5		93.5	767179	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.211	2.211	0.0	1.000	1582927	18.2	Target=1.98	103	3932	
298.90 > 99.00	2.211	2.211	0.0	1.000	833086		1.90(0.99-2.97)	103	651	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.583	2.583	0.0	1.000	359555	18.5		99.2	1607	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.583	2.583	0.0	0.751	379441	42.8		91.6	389	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.633	2.633	0.0	1.000	1778549	20.0	Target=12.51	100	501	
313.00 > 119.00	2.633	2.633	0.0	1.000	134447		13.23(6.25-18.76)	100	199	
D 7 13C2 PFHxA										
315.00 > 270.00	2.633	2.633	0.0	0.766	4310528	46.5		93.0	12113	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.646	2.646	0.0	1.197	1415812	18.5	Target=2.77	98.4	3535	
349.00 > 99.00	2.646	2.646	0.0	1.197	518332		2.73(1.38-4.15)	98.4	879	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.766	2.766	0.0	1.000	246656	20.1		101	83.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.766	2.766	0.0	0.804	241116	40.5		81.1	1727	
D 11 18O2 PFHxS										
403.00 > 84.00	3.059	3.059	0.0	0.890	2378974	44.3		93.7	15281	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.059	3.059	0.0	1.000	1171156	17.7	Target=3.37	97.1	2372	
399.00 > 99.00	3.059	3.059	0.0	1.000	347354		3.37(1.68-5.05)	97.1	369	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.059	3.059	0.0	1.000	1631009	20.3	Target=3.74	101	183	
363.00 > 169.00	3.070	3.059	0.011	1.003	433240		3.76(1.87-5.62)	101	1545	
D 9 13C4 PFHpA										
367.00 > 322.00	3.059	3.059	0.0	0.890	4298357	47.3		94.7	11881	
77 DONA										
377.00 > 251.00	3.108	3.108	0.0	0.832	3725551	19.2	Target=2.75	102	5885	
377.00 > 85.00	3.108	3.108	0.0	0.832	1371921		2.72(1.37-4.12)	102	2109	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.419	3.419	0.0	0.915	932564	19.0	Target=4.99	99.5	3242	
449.00 > 99.00	3.419	3.419	0.0	0.915	194351		4.80(2.50-7.49)	99.5	750	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.429	3.429	0.0	1.000	341591	19.1		101	2722	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.429	3.429	0.0	0.997	496068	44.4		93.5	1259	
* 62 13C2 PFOA										
415.00 > 370.00	3.439	3.439	0.0		5272519	50.0			12876	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.439	3.439	0.0	1.000	1925196	19.5	Target=2.72	97.7	225	
413.00 > 169.00	3.439	3.439	0.0	1.000	678932		2.84(1.36-4.08)	97.7	2164	
D 14 13C4 PFOA										
417.00 > 372.00	3.439	3.439	0.0	1.000	4527918	47.2		94.4	13468	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.735	3.735	0.0	1.000	706916	18.3	Target=4.21	98.5	4028	
499.00 > 99.00	3.735	3.735	0.0	1.000	163364		4.33(2.10-6.31)	98.5	332	
D 18 13C4 PFOS										
503.00 > 80.00	3.735	3.735	0.0	1.086	1952787	43.7		91.3	7607	
D 19 13C5 PFNA										
468.00 > 423.00	3.758	3.758	0.0	1.093	4134912	47.3		94.5	17158	
20 Perfluorononanoic acid										
463.00 > 419.00	3.758	3.758	0.0	1.000	1444962	19.3	Target=8.52	96.4	290	
463.00 > 169.00	3.758	3.758	0.0	1.000	177197		8.15(4.26-12.79)	96.4	2505	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.899	3.899	0.0	1.044	1695158	19.1		102	4139	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.024	4.024	0.0	1.077	699858	20.3	Target=2.52	106	4608	
549.00 > 99.00	4.024	4.024	0.0	1.077	289193		2.42(1.26-3.78)	106	445	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.049	4.049	0.0	1.000	1379443	20.0		99.9	3759	
D 21 13C8 FOSA										
506.00 > 78.00	4.049	4.049	0.0	1.177	3780269	47.0		94.1	5955	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.049	4.049	0.0	1.000	1305700	19.6	Target=9.67	97.8	111	
513.00 > 169.00	4.049	4.049	0.0	1.000	136281		9.58(4.83-14.50)	97.8	364	
D 23 13C2 PFDA										
515.00 > 470.00	4.049	4.049	0.0	1.177	3448085	49.3		98.5	23139	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.061	4.061	0.0	1.000	247475	18.6		97.3	3885	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.061	4.061	0.0	1.181	475878	46.2		96.3	1830	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.189	4.189	0.0	1.000	124854	20.2		101	243	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.189	4.189	0.0	1.218	407992	45.6		91.3	1932	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.284	4.284	0.0	1.147	527069	19.5	Target=2.60	101	4976	
599.00 > 99.00	4.284	4.284	0.0	1.147	199655		2.64(1.30-3.90)	101	555	
D 30 13C2 PFUnA										
565.00 > 520.00	4.308	4.308	0.0	1.253	3031155	47.6		95.1	9865	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.308	4.308	0.0	1.000	970744	18.7	Target=8.30	93.3	225	
563.00 > 169.00	4.308	4.308	0.0	1.000	122095		7.95(4.15-12.45)	93.3	986	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.320	0.0	1.256	472168	47.4		94.8	1507	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.332	4.332	0.0	1.003	118045	19.5		97.7	558	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.404	4.404	0.0	1.179	2709425	20.0		106	11829	
D 36 13C2 PFDoA										
615.00 > 570.00	4.550	4.550	0.0	1.323	3180715	46.4		92.7	5411	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.550	4.550	0.0	1.000	1299068	20.0	Target=7.78	99.9	89.9	
613.00 > 169.00	4.550	4.550	0.0	1.000	173432		7.49(3.89-11.67)	99.9	1434	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.575	4.575	0.0	1.126	156858	18.7		96.8	2473	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.730	4.730	0.0	1.266	254267	19.6	Target=0.49	101	740	
699.00 > 99.00	4.730	4.730	0.0	1.266	504255		0.50(0.25-0.74)	101	2342	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.778	0.0	1.050	1239569	21.2	Target=5.37	106	92.5	
663.00 > 169.00	4.769	4.778	-0.009	1.048	217268		5.71(2.68-8.05)	106	908	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.013	5.013	0.0	1.000	230029	19.1	Target=1.00	95.6	674	
713.00 > 219.00	5.013	5.013	0.0	1.000	224464		1.02(0.50-1.50)	95.6	1209	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.013	5.013	0.0	1.458	4516809	47.8		95.6	7183	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.583	5.583	0.0	1.623	3632044	43.2		86.4	10945	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.583	5.583	0.0	1.000	1471103	21.0	Target=5.39	105	69.3	
813.00 > 169.00	5.583	5.583	0.0	1.000	281197		5.23(2.70-8.09)	105	2265	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	6.207	6.207	0.0	1.112	1203266	22.0	Target=5.46	110	265	
913.00 > 169.00	6.200	6.207	-0.007	1.111	214529		5.61(2.73-8.19)	110	1693	

Reagents:

LCPFAS32-L4_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A020.d

Injection Date: 26-Jul-2019 11:18:18

Instrument ID: LC812

Lims ID: ICIS

Client ID:

Operator ID: lc812tech

ALS Bottle#: 6

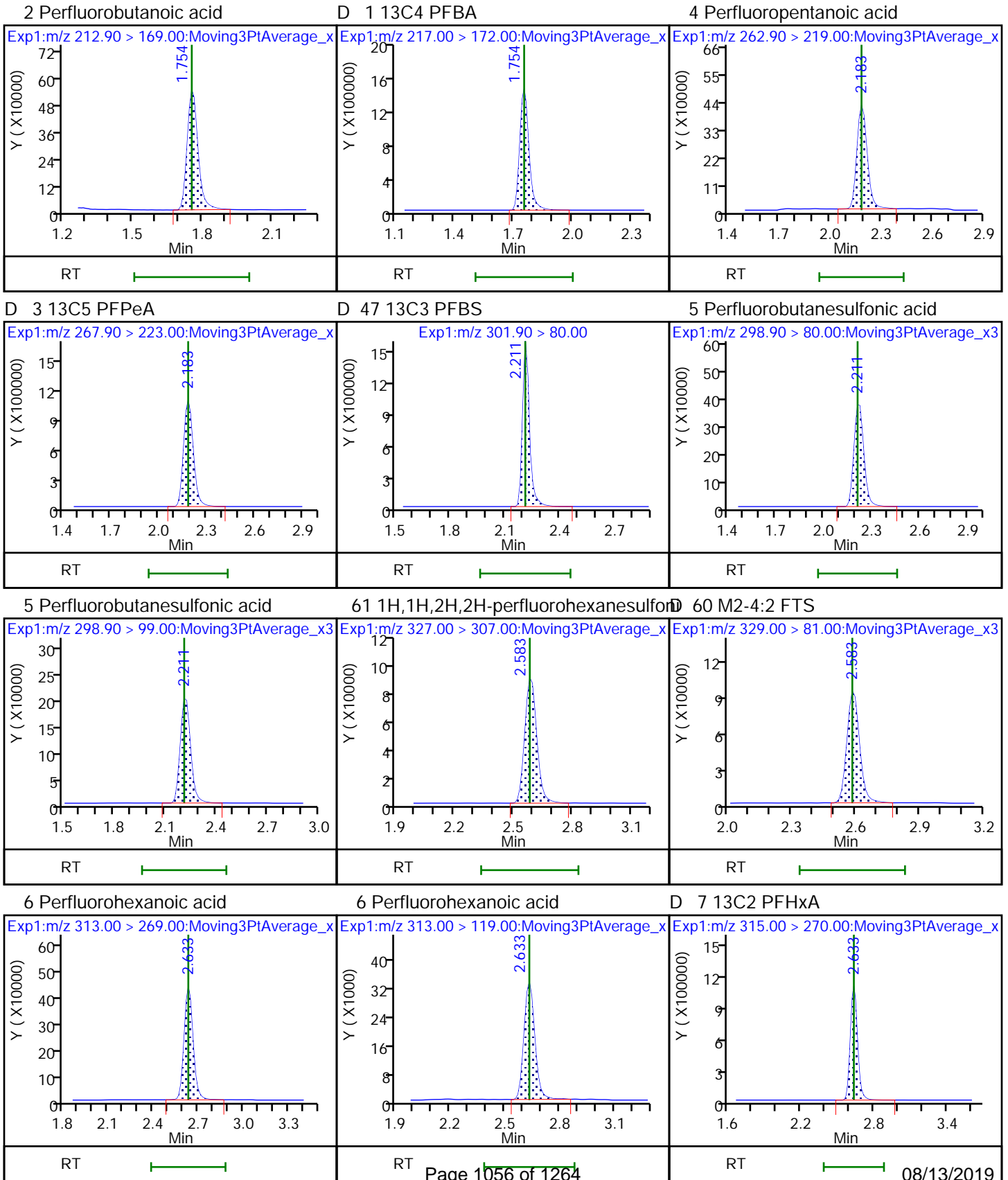
Worklist Smp#: 20

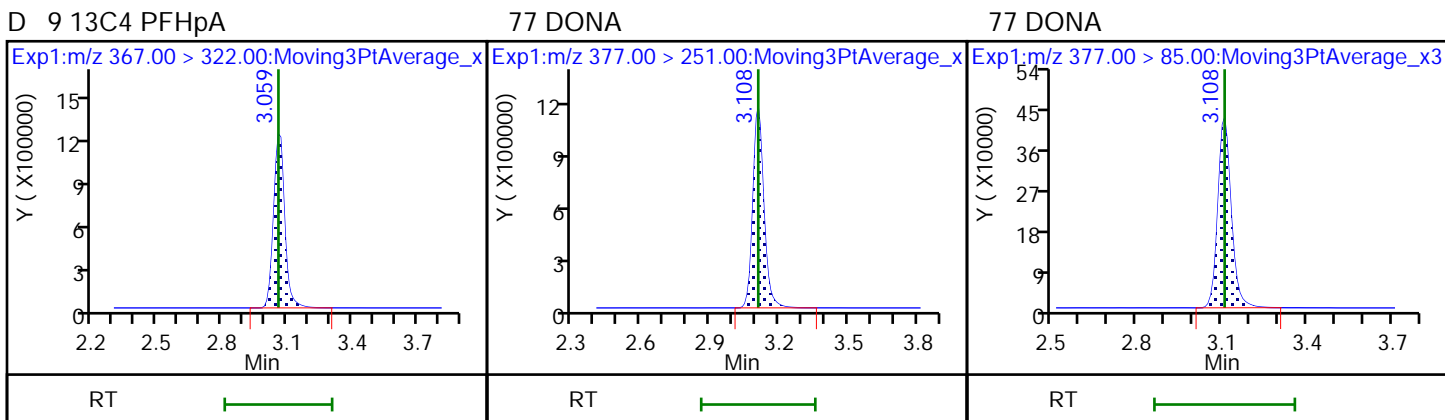
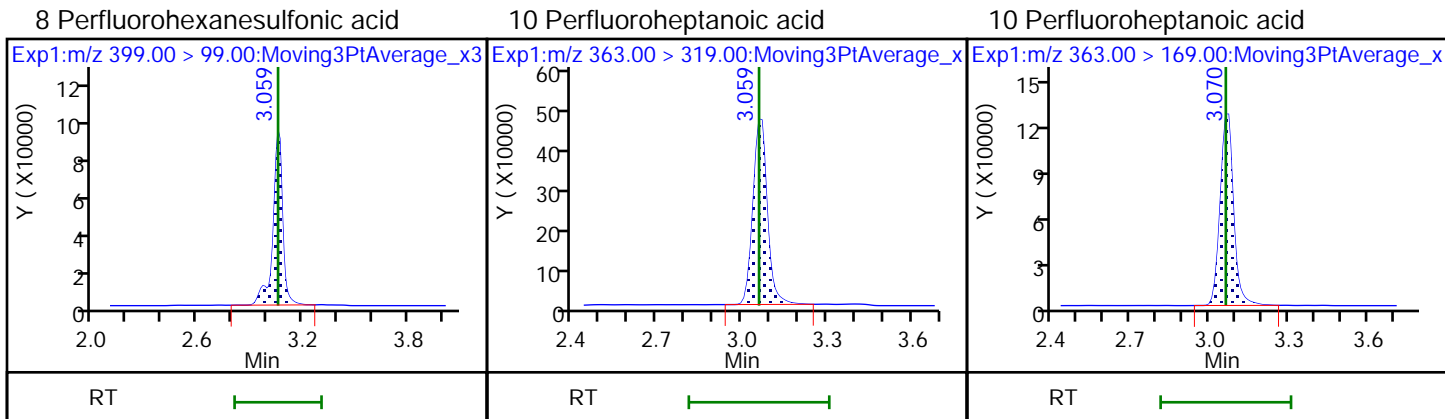
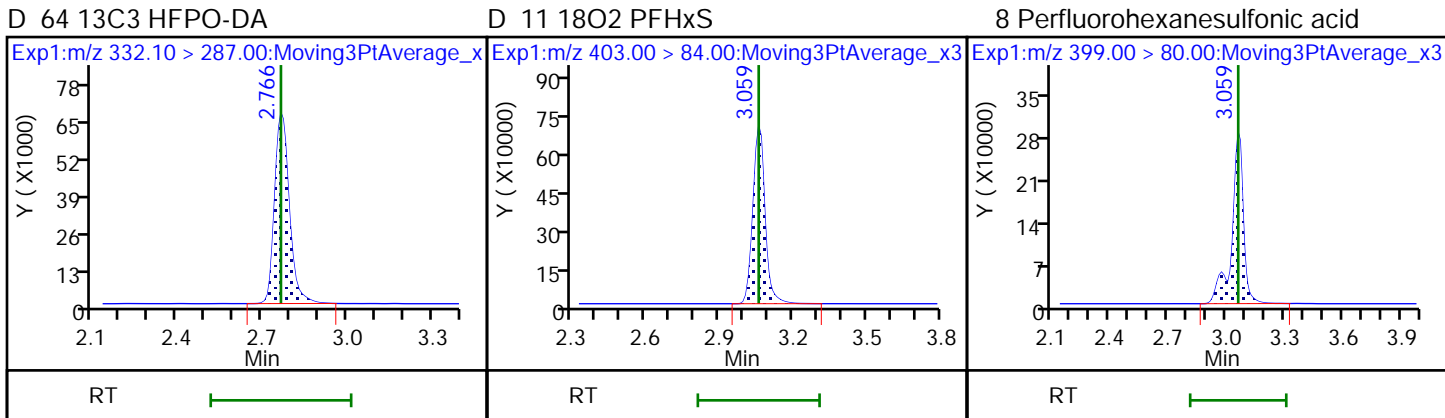
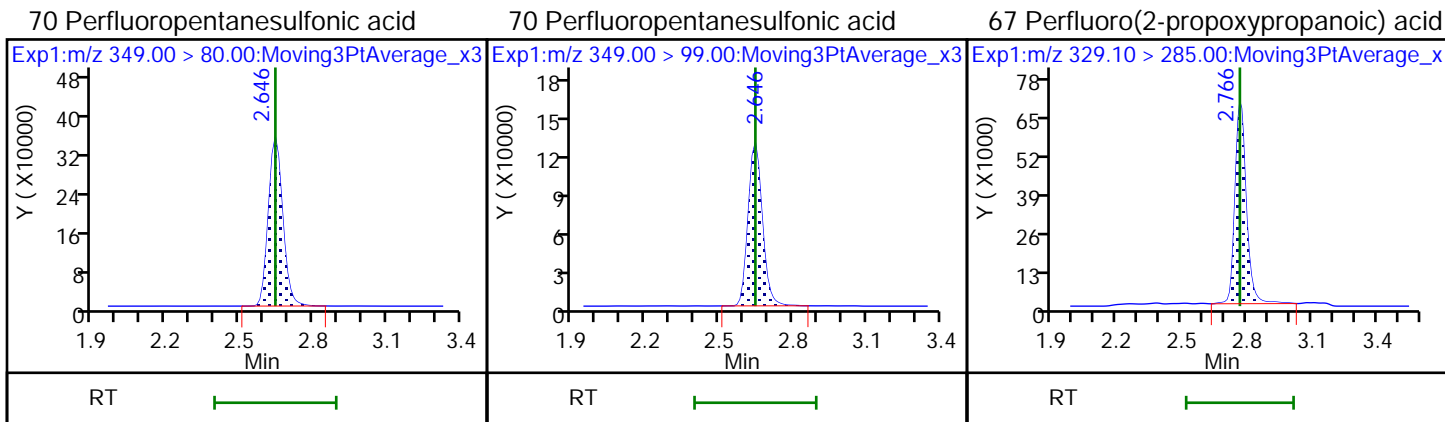
Injection Vol: 2.0 ul

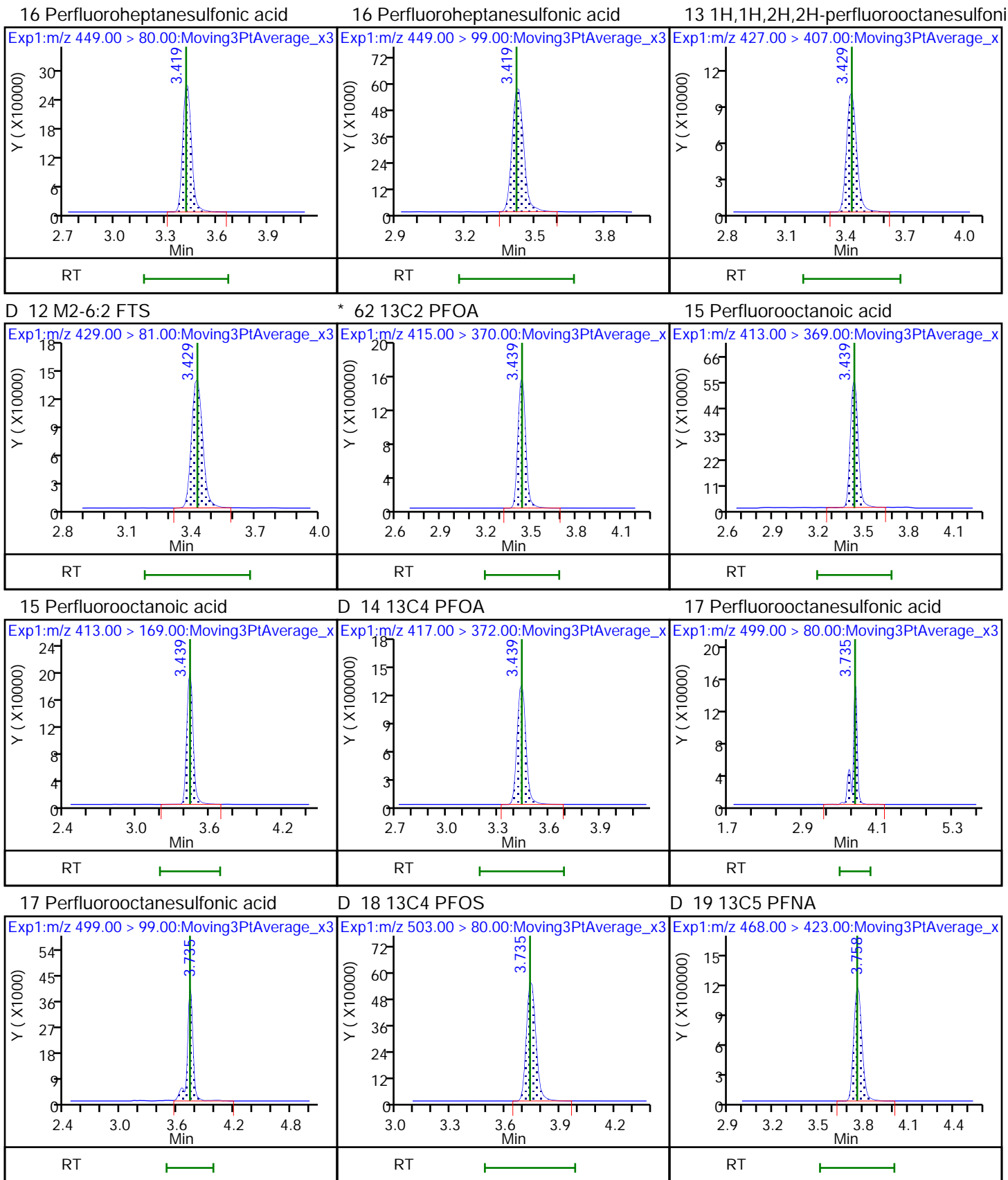
Dil. Factor: 1.0000

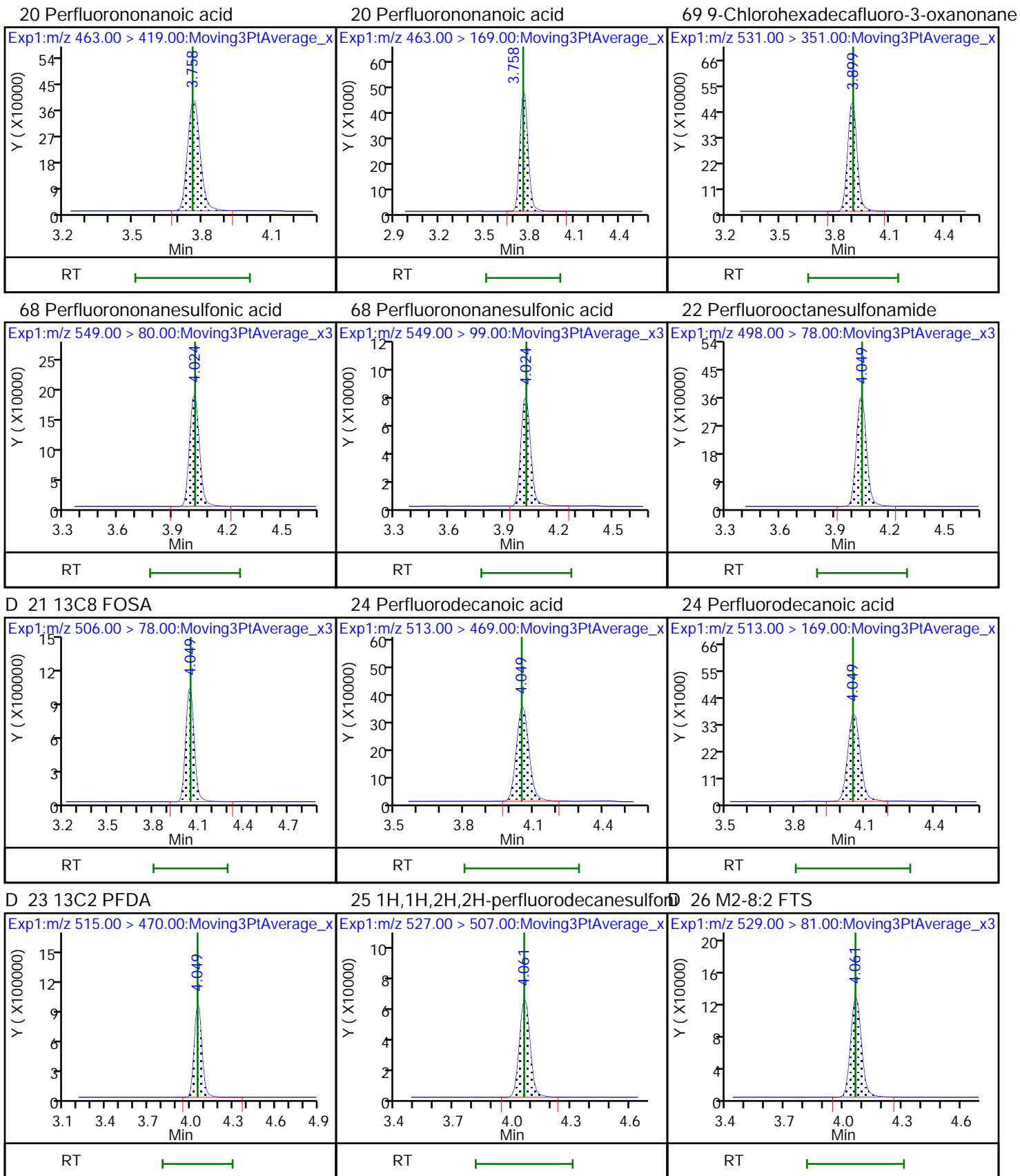
Method: PFC_LC812

Limit Group: LC_PFC_ICAL



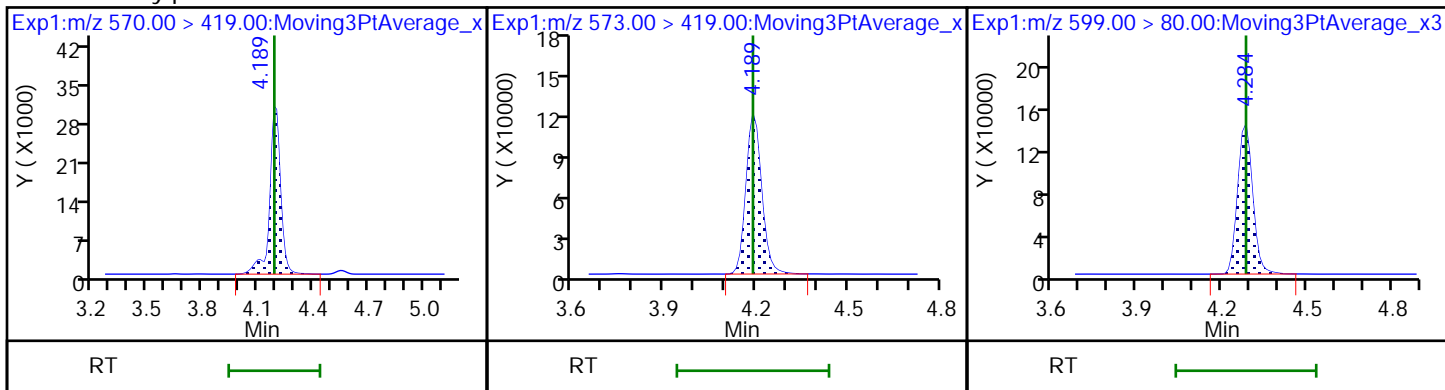






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

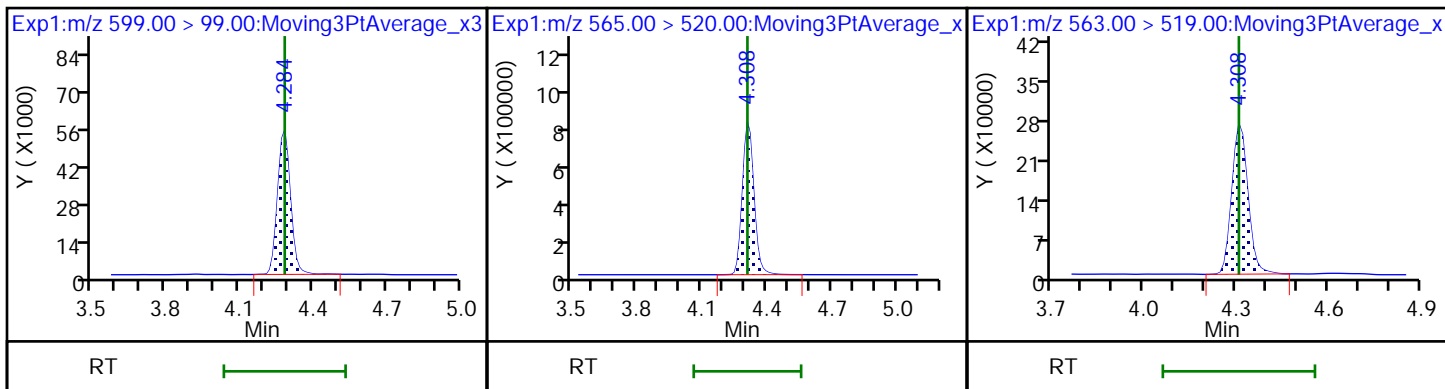
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

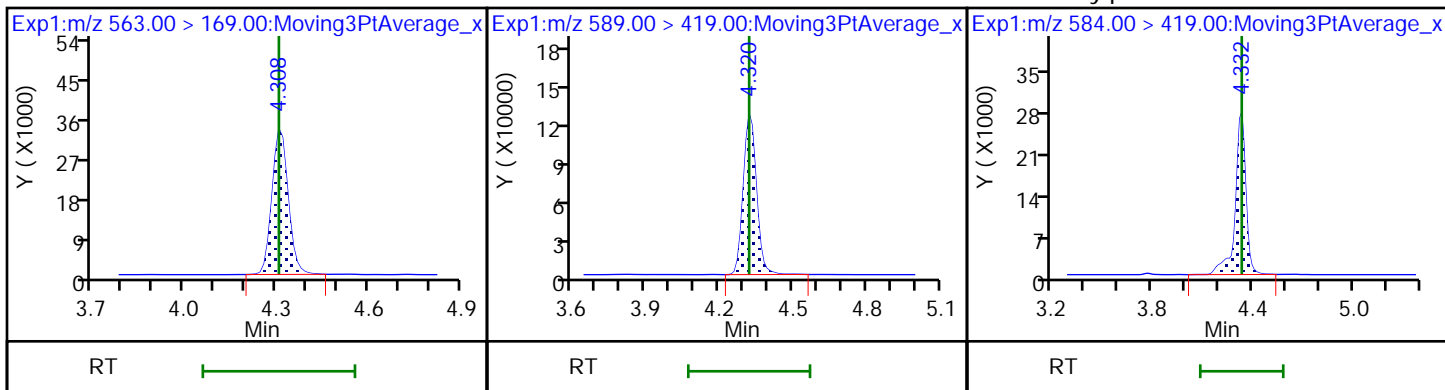
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

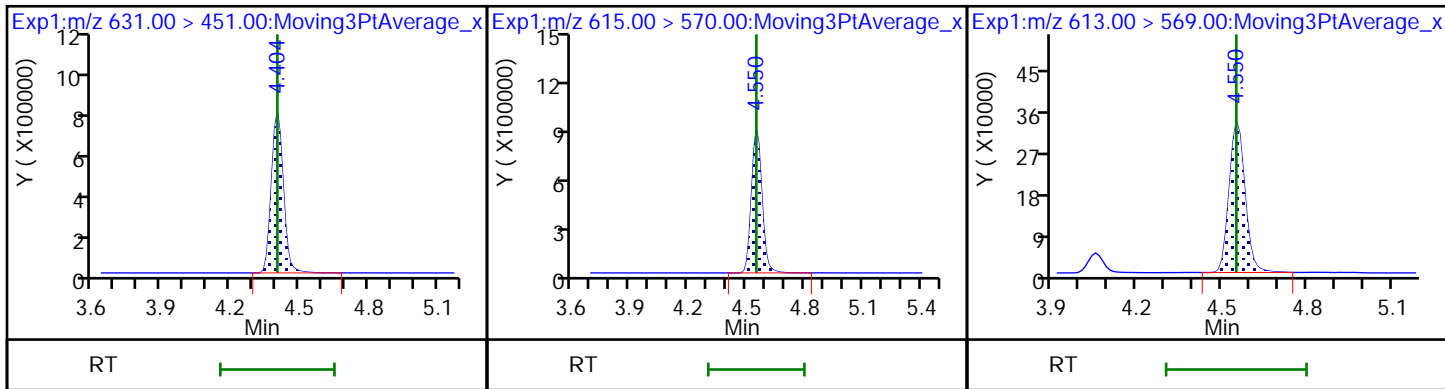
33 N-ethylperfluorooctanesulfonamidoa



66 11-Chloroeicosafluoro-3-oxaundecaD

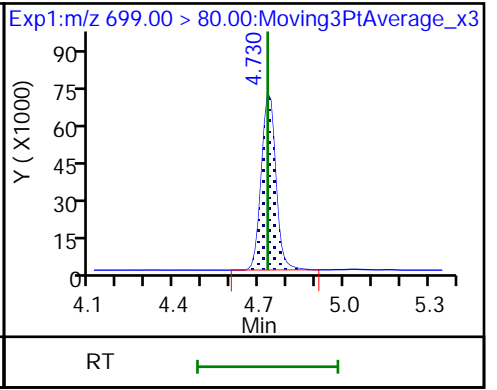
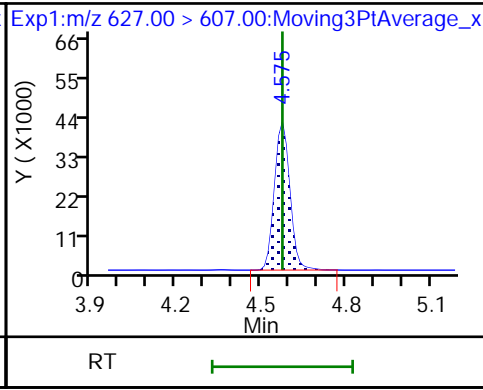
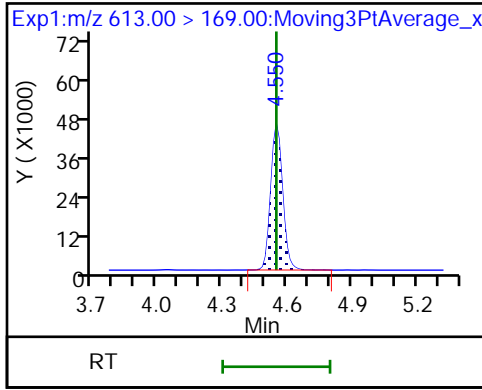
36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

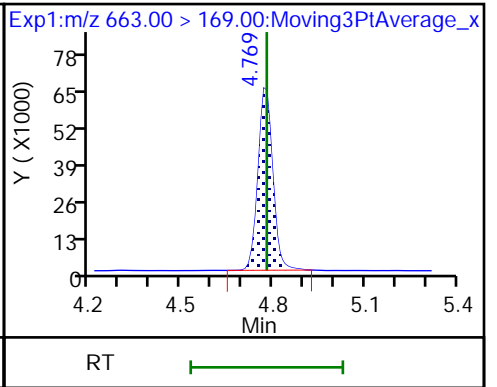
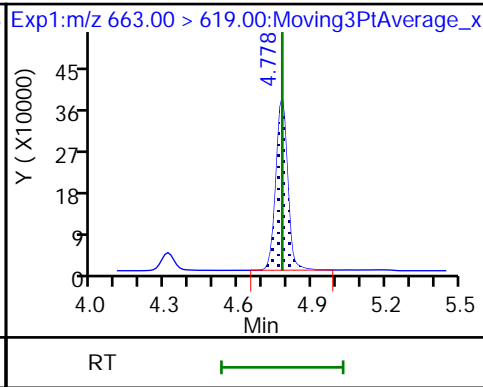
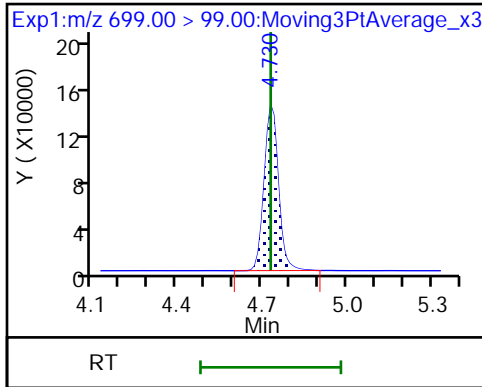
74 1H,1H,2H,2H-perfluorododecanesulfo 75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

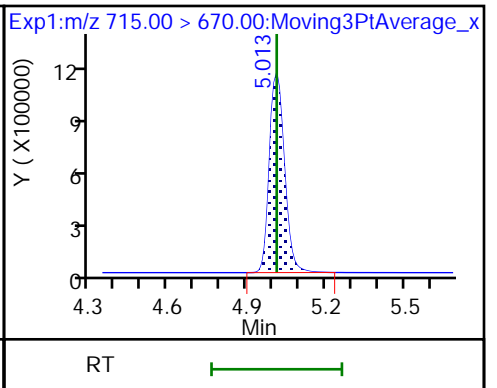
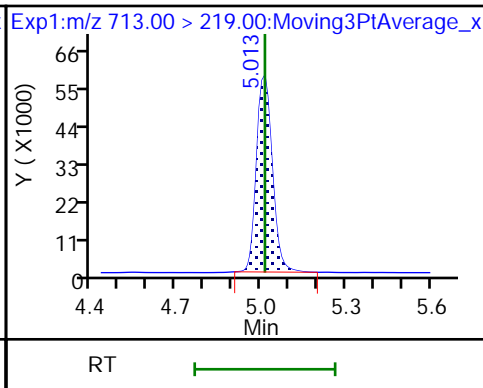
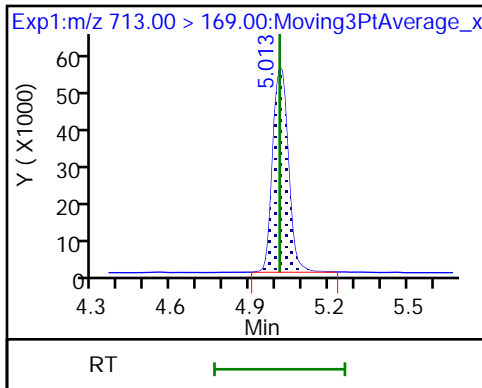
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

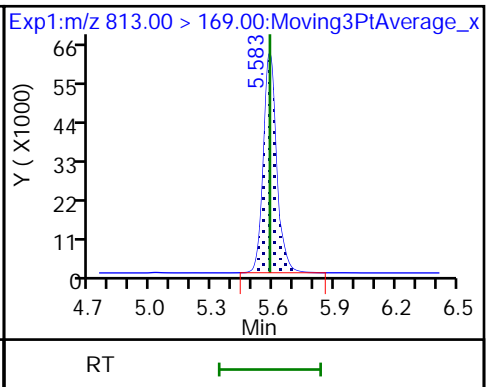
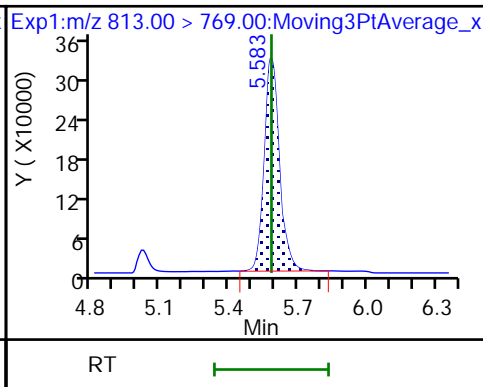
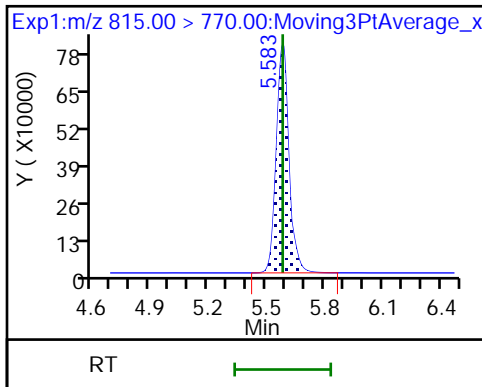
D 43 13C2 PFTeDA



D 44 13C2 PFHxDA

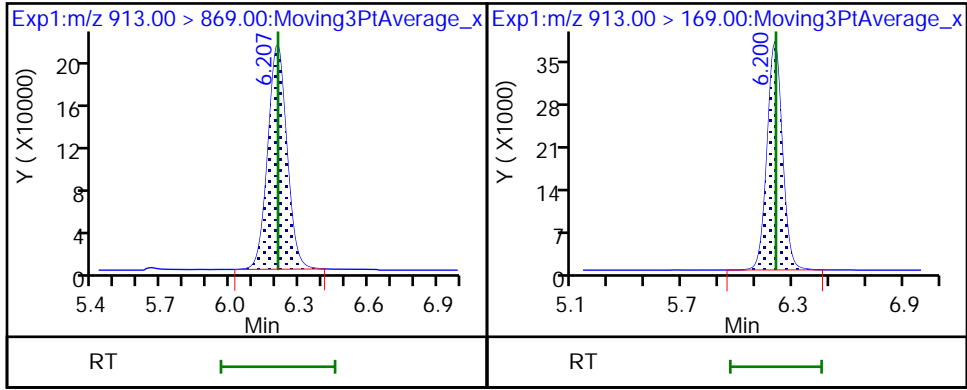
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A021.d
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 26-Jul-2019 11:26:20 ALS Bottle#: 7 Worklist Smp#: 21
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC5
 Misc. Info.: 200-0036970-021 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3
 Method: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 29-Jul-2019 17:49:46 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: chirgwinb Date: 26-Jul-2019 13:41:17

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.754	1.754	0.0	1.000	4228614	50.8		102	349	
D 1 13C4 PFBA										
217.00 > 172.00	1.754	1.754	0.0	0.511	4518898	59.9		120	9977	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.183	2.183	0.0	1.000	4139546	49.9		99.9	204	
D 3 13C5 PFPeA										
267.90 > 223.00	2.183	2.183	0.0	0.637	4283995	60.5		121	6212	
D 47 13C3 PFBS										
301.90 > 80.00	2.211	2.211	0.0	0.645	3815956	54.9		118	788681	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.211	2.211	0.0	1.000	3719539	44.6	Target=1.98	101	6646	
298.90 > 99.00	2.211	2.211	0.0	1.000	1903371		1.95(0.99-2.97)	101	1517	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.583	2.583	0.0	1.000	917729	44.3		94.8	6548	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.583	2.583	0.0	0.753	405087	60.2		129	359	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.633	2.633	0.0	1.000	4359274	49.4	Target=12.51	98.8	1059	
313.00 > 119.00	2.633	2.633	0.0	1.000	353566		12.33(6.25-18.76)	98.8	515	
D 7 13C2 PFHxA										
315.00 > 270.00	2.633	2.633	0.0	0.768	4285397	60.9		122	8534	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.646	2.646	0.0	1.197	3590630	48.9	Target=2.77	104	13128	
349.00 > 99.00	2.646	2.646	0.0	1.197	1276199		2.81(1.38-4.15)	104	2078	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.766	2.766	0.0	1.003	687657	45.8		91.5	215	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.758	2.766	-0.008	0.804	295558	65.5		131	2196	
D 11 18O2 PFHxS										
403.00 > 84.00	3.059	3.059	0.0	0.892	2314098	56.8		120	9424	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.059	3.059	0.0	1.000	2781849	43.1	Target=3.37	94.8	4214	
399.00 > 99.00	3.059	3.059	0.0	1.000	820245		3.39(1.68-5.05)	94.8	794	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.059	3.059	0.0	1.000	3800723	49.1	Target=3.74	98.1	472	
363.00 > 169.00	3.059	3.059	0.0	1.000	1007011		3.77(1.87-5.62)	98.1	2346	
D 9 13C4 PFHpA										
367.00 > 322.00	3.059	3.059	0.0	0.892	4135183	60.0		120	13976	
77 DONA										
377.00 > 251.00	3.100	3.108	-0.008	0.830	9553035	47.8	Target=2.75	101	17384	
377.00 > 85.00	3.100	3.108	-0.008	0.830	3338184		2.86(1.37-4.12)	101	4424	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.420	3.419	0.001	0.916	2439583	48.1	Target=4.99	101	5490	
449.00 > 99.00	3.420	3.419	0.001	0.916	473300		5.15(2.50-7.49)	101	1823	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.420	3.429	-0.009	1.000	813484	44.8		94.4	6208	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.420	3.429	-0.009	0.997	503377	59.4		125	1266	
* 62 13C2 PFOA										
415.00 > 370.00	3.430	3.439	-0.009		4000524	50.0			13240	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.430	3.439	-0.009	1.000	4778704	49.7	Target=2.72	99.4	640	
413.00 > 169.00	3.430	3.439	-0.009	1.000	1708944		2.80(1.36-4.08)	99.4	4166	
D 14 13C4 PFOA										
417.00 > 372.00	3.430	3.439	-0.009	1.000	4417613	60.7		121	12493	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.734	3.735	-0.001	1.000	1818452	45.7	Target=4.21	98.4	12416	
499.00 > 99.00	3.734	3.735	-0.001	1.000	396428		4.59(2.10-6.31)	98.4	1515	
D 18 13C4 PFOS										
503.00 > 80.00	3.734	3.735	-0.001	1.089	2011380	59.3		124	5599	
D 19 13C5 PFNA										
468.00 > 423.00	3.757	3.758	-0.001	1.095	3935423	59.3		119	29671	
20 Perfluorononanoic acid										
463.00 > 419.00	3.757	3.758	-0.001	1.000	3769472	52.9	Target=8.52	106	775	
463.00 > 169.00	3.757	3.758	-0.001	1.000	444163		8.49(4.26-12.79)	106	3113	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.886	3.899	-0.013	1.041	4493418	49.1		105	10898	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.022	4.024	-0.002	1.077	1607516	45.2	Target=2.52	94.2	8657	
549.00 > 99.00	4.022	4.024	-0.002	1.077	692063		2.32(1.26-3.78)	94.2	1098	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.047	4.049	-0.002	1.000	3437601	50.1		100	5637	
D 21 13C8 FOSA										
506.00 > 78.00	4.047	4.049	-0.002	1.180	2758489	41.6		123	4466	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.047	4.049	-0.002	1.000	3167025	48.5	Target=9.67	97.0	333	
513.00 > 169.00	4.047	4.049	-0.002	1.000	327489		9.67(4.83-14.50)	97.0	876	
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.049	-0.002	1.180	3371154	63.5		127	16884	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.059	4.061	-0.002	1.000	571112	42.0		87.6	7981	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.061	-0.002	1.184	487711	62.3		130	1868	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.187	4.189	-0.002	1.000	312259	52.2		104	616	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.189	-0.002	1.221	395443	58.3		117	780	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.283	4.284	-0.001	1.147	1373624	49.3	Target=2.60	102	7224	
599.00 > 99.00	4.283	4.284	-0.001	1.147	518657		2.65(1.30-3.90)	102	1097	
D 30 13C2 PFUnA										
565.00 > 520.00	4.307	4.308	-0.001	1.256	2979973	61.6		123	16223	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.307	4.308	-0.001	1.000	2294835	44.9	Target=8.30	89.7	584	
563.00 > 169.00	4.307	4.308	-0.001	1.000	278910		8.23(4.15-12.45)	89.7	1845	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.320	-0.001	1.259	474055	62.7		125	1343	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.331	4.332	-0.001	1.003	285259	47.0		94.0	753	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.403	4.404	-0.001	1.179	6198405	44.5		94.5	12857	
D 36 13C2 PFDoA										
615.00 > 570.00	4.549	4.550	-0.001	1.326	3207210	61.6		123	6970	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.549	4.550	-0.001	1.000	3310627	50.5	Target=7.78	101	250	
613.00 > 169.00	4.549	4.550	-0.001	1.000	426567		7.76(3.89-11.67)	101	2608	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.574	4.575	-0.001	1.127	386623	44.9		93.1	3174	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.729	4.730	-0.001	1.267	627811	47.0	Target=0.49	97.1	1108	
699.00 > 99.00	4.729	4.730	-0.001	1.267	1216088		0.52(0.25-0.74)	97.1	3310	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.769	4.778	-0.009	1.048	2785171	47.3	Target=5.37	94.6	191	
663.00 > 169.00	4.769	4.778	-0.009	1.048	536192		5.19(2.68-8.05)	94.6	1462	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.012	5.013	-0.001	1.000	590253	49.6	Target=1.00	99.3	2032	
713.00 > 219.00	5.002	5.013	-0.011	0.998	617321		0.96(0.50-1.50)	99.3	3652	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.012	5.013	-0.001	1.461	4466722	62.3		125	8002	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.573	5.583	-0.010	1.625	3799121	59.6		119	11980	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.573	5.583	-0.010	1.000	3600245	49.7	Target=5.39	99.5	169	
813.00 > 169.00	5.573	5.583	-0.010	1.000	684135		5.26(2.70-8.09)	99.5	4515	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	6.192	6.207	-0.015	1.111	2981594	52.2	Target=5.46	104	642	
913.00 > 169.00	6.185	6.207	-0.022	1.110	545165		5.47(2.73-8.19)	104	2696	

Reagents:

LCPFAS32-L5_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A021.d

Injection Date: 26-Jul-2019 11:26:20

Instrument ID: LC812

Lims ID: IC

Client ID:

Operator ID: lc812tech

ALS Bottle#: 7

Worklist Smp#: 21

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

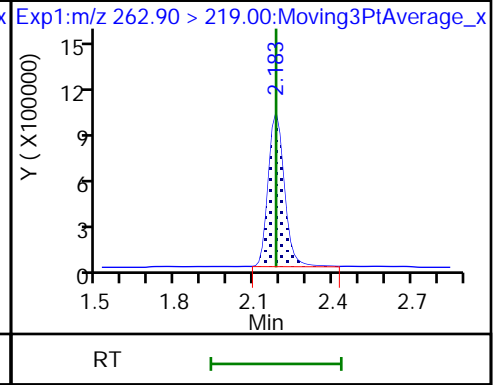
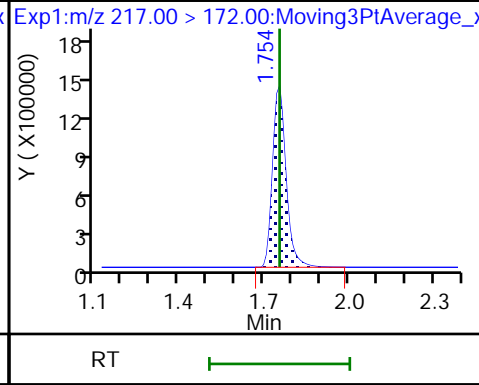
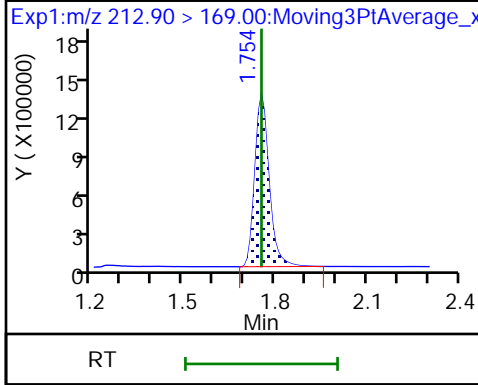
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

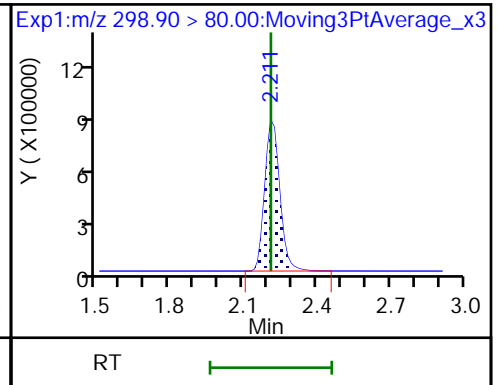
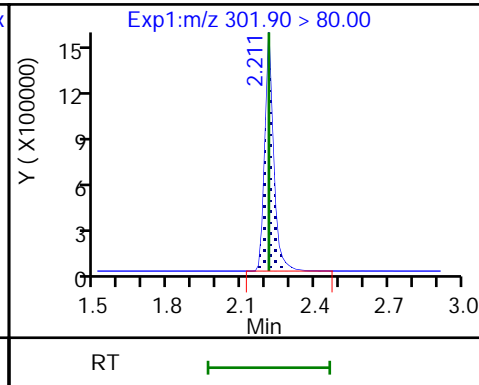
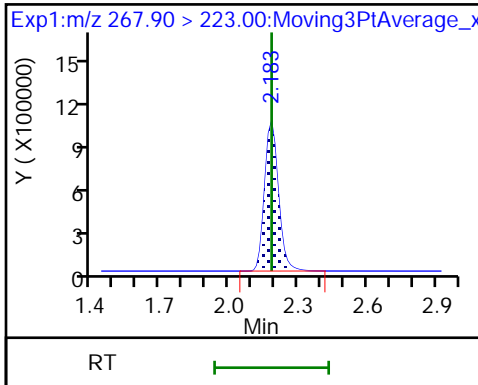
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

D 47 13C3 PFBS

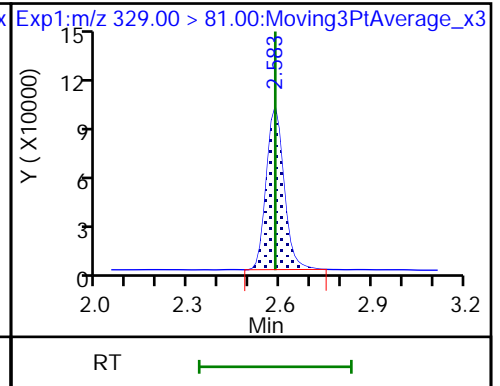
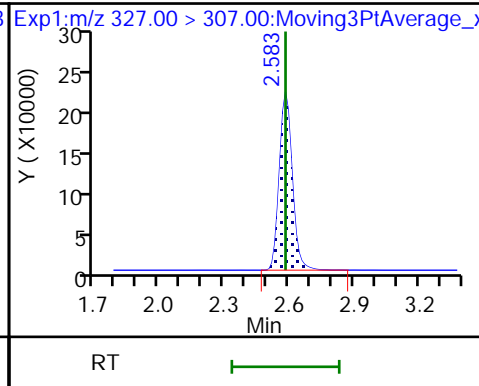
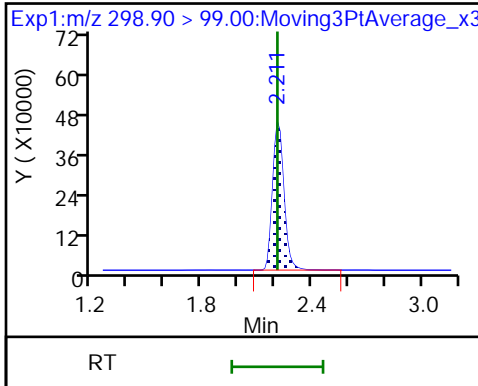
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

61 1H,1H,2H,2H-perfluorohexanesulfonate

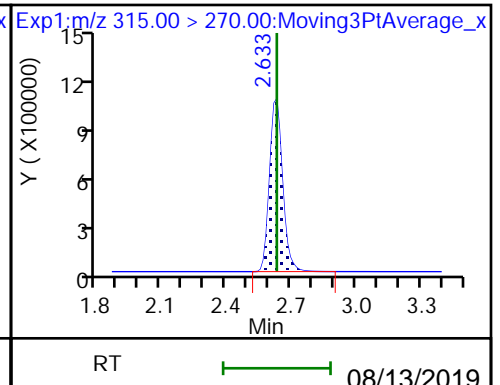
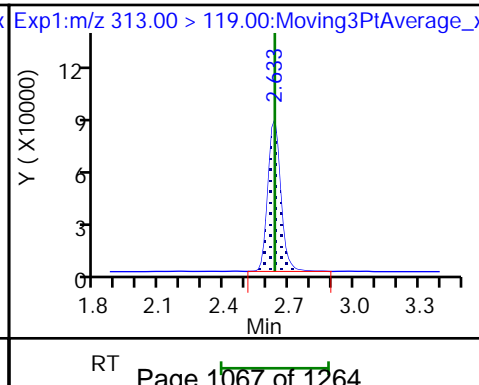
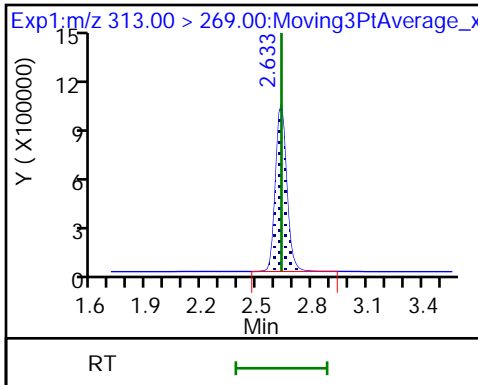
D 60 M2-4:2 FTS

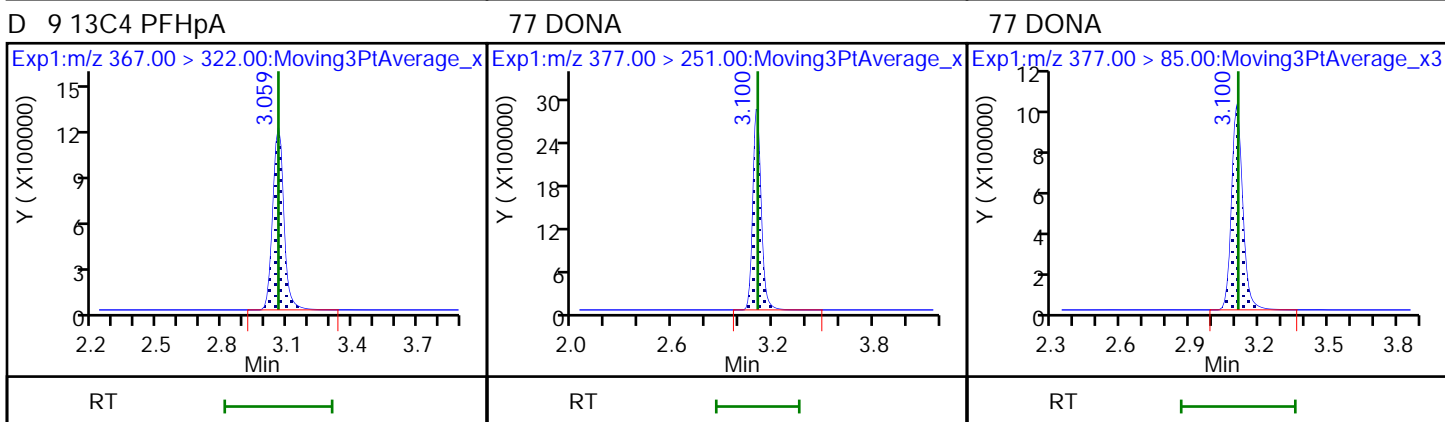
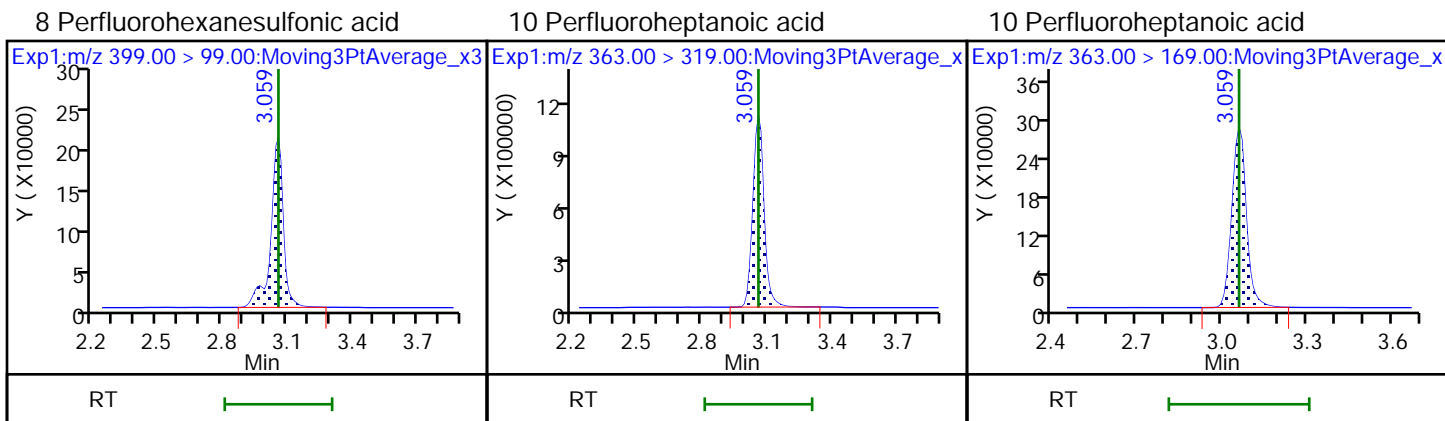
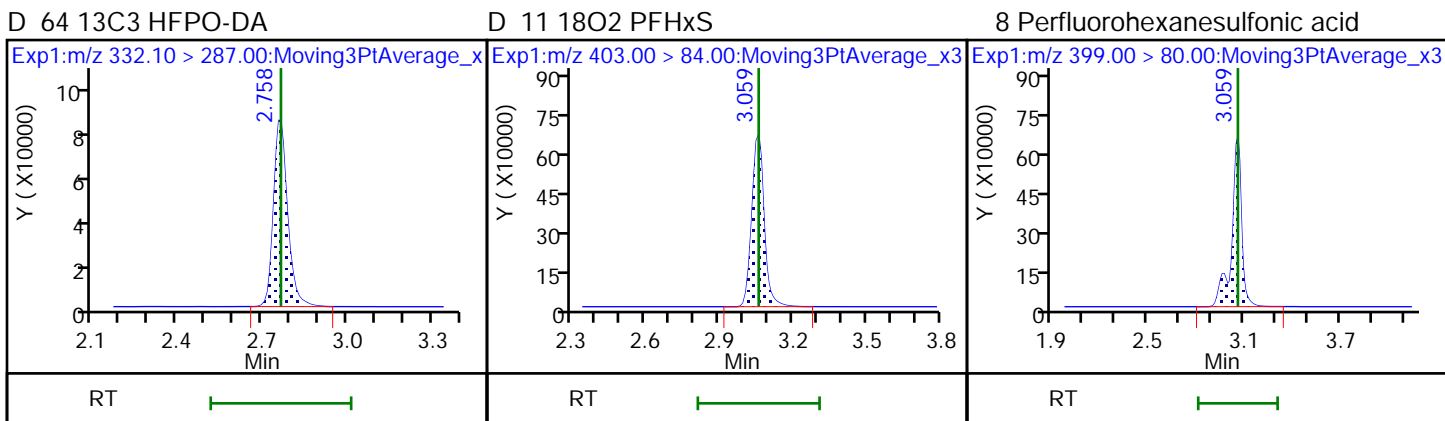
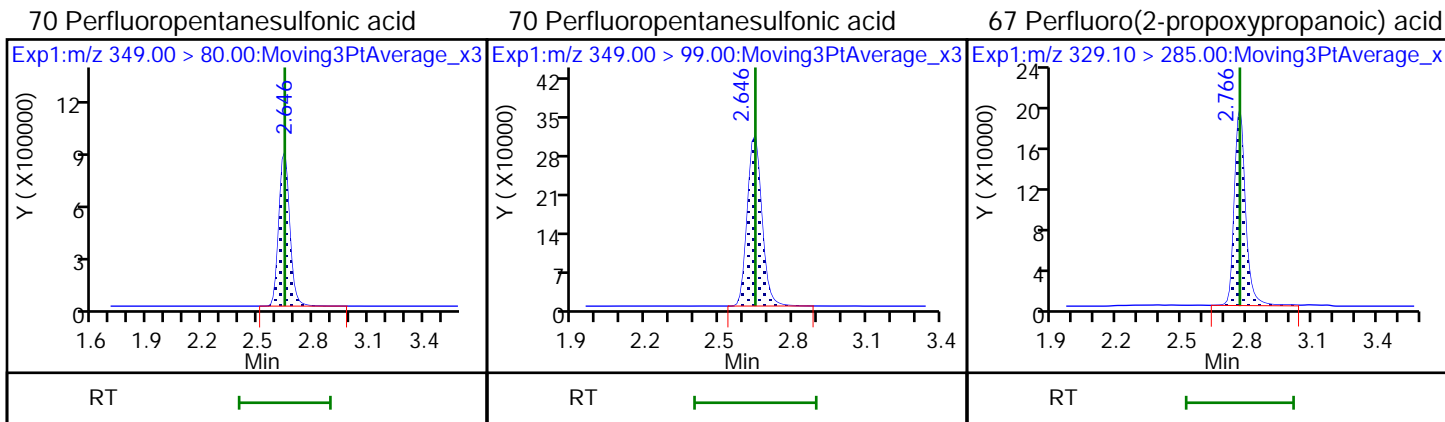


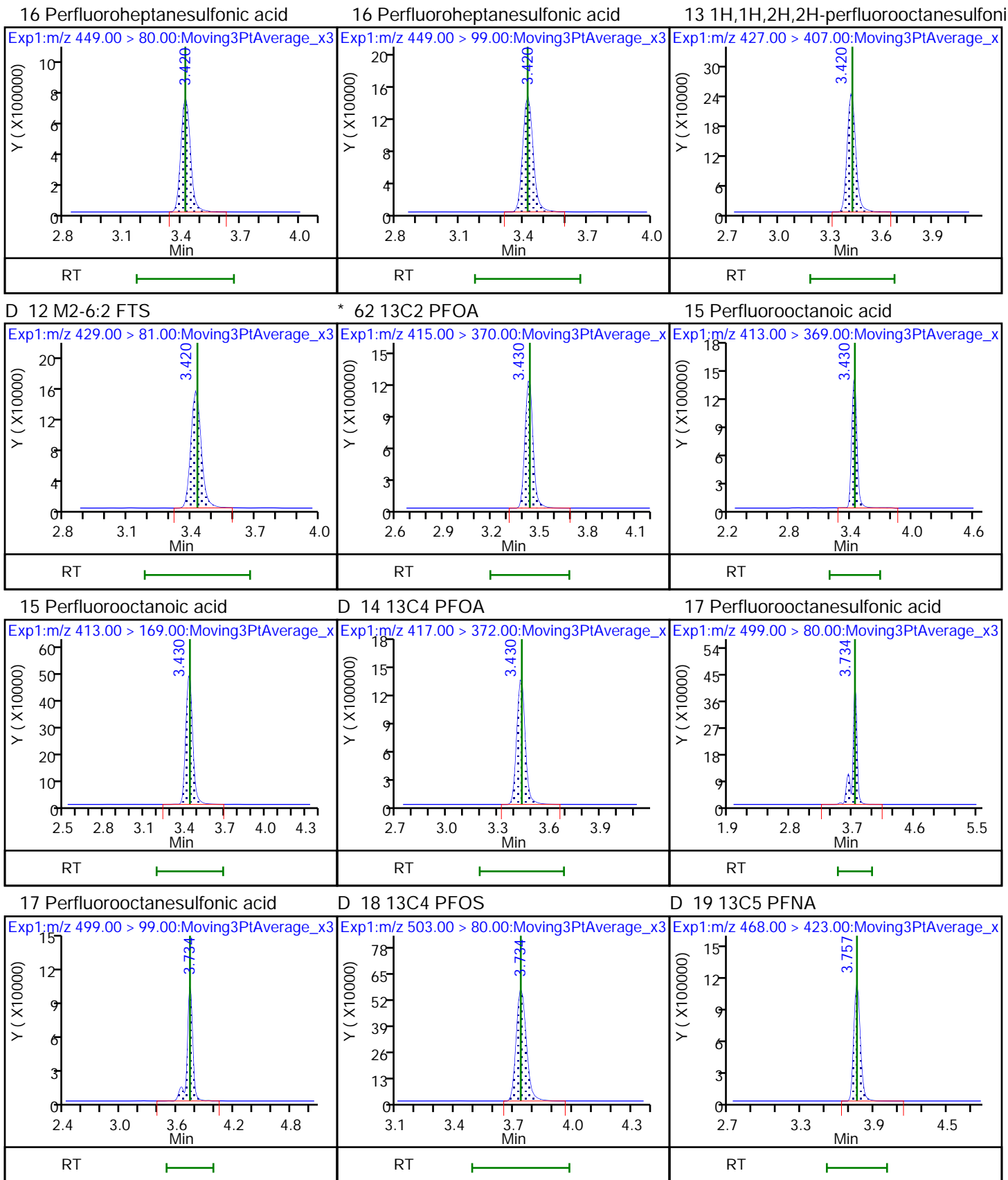
6 Perfluorohexanoic acid

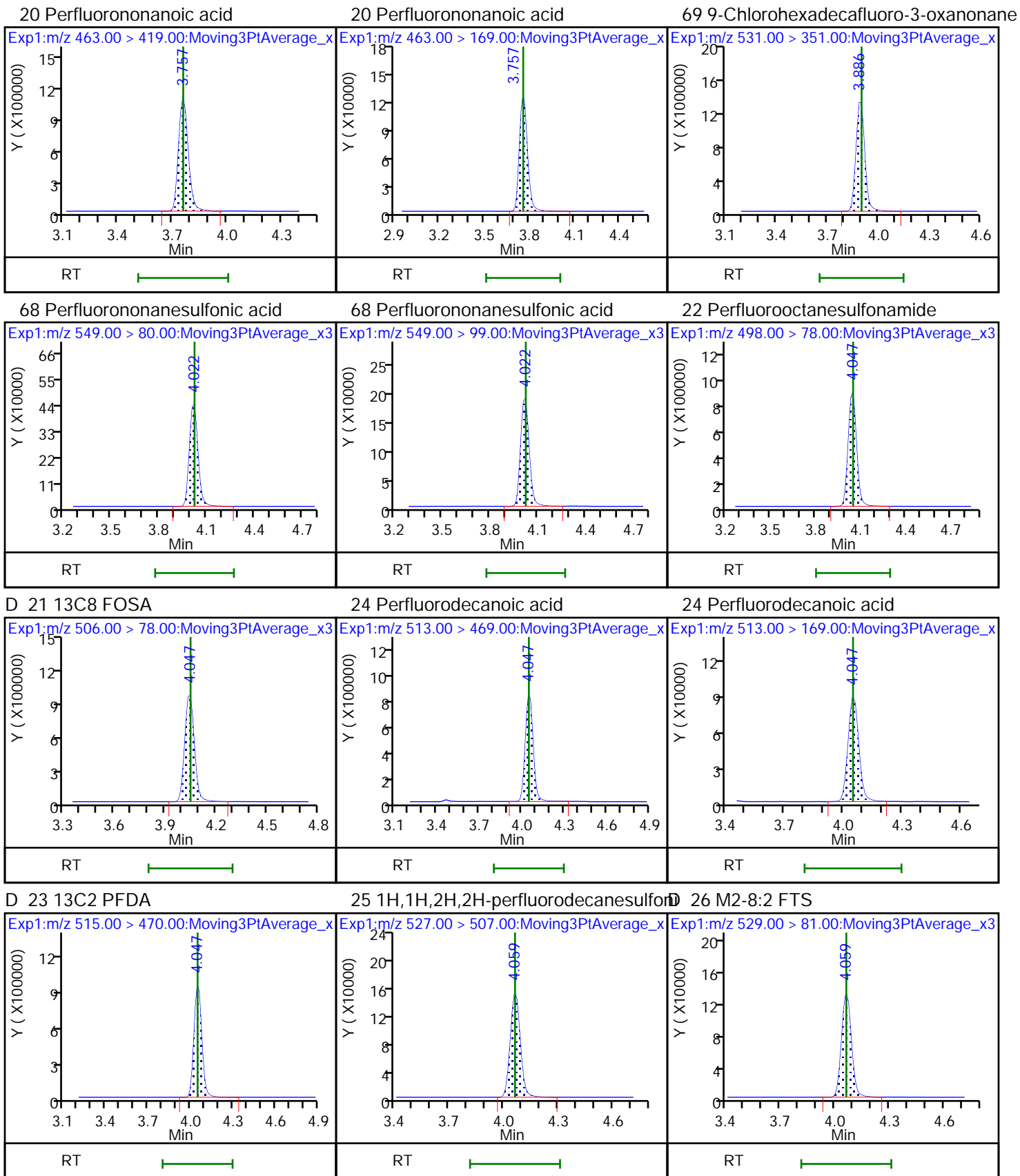
6 Perfluorohexanoic acid

D 7 13C2 PFHxA



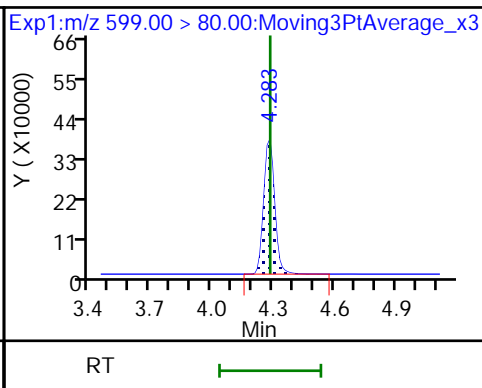
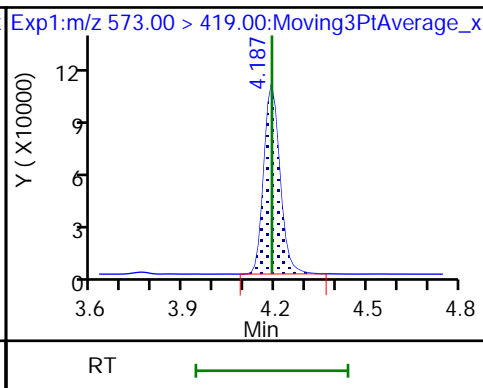
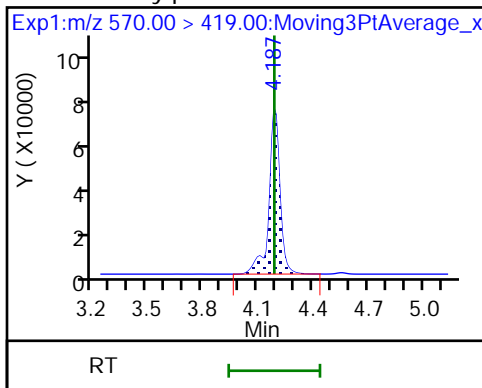






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

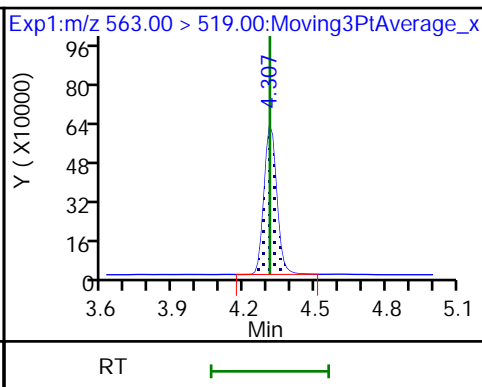
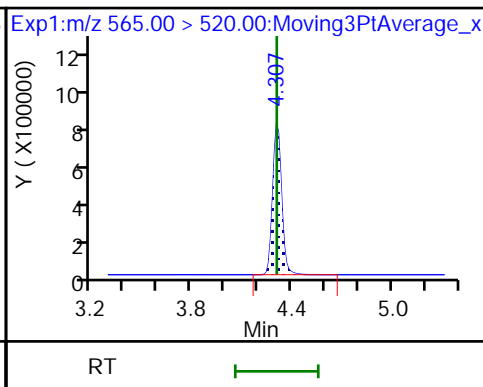
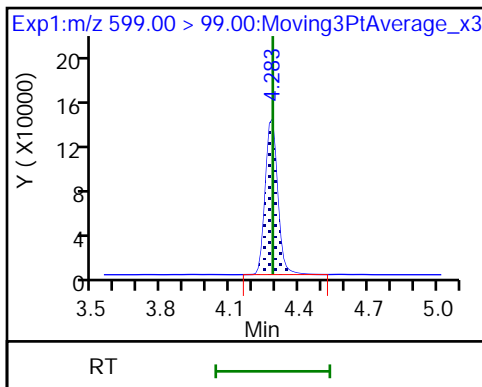
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

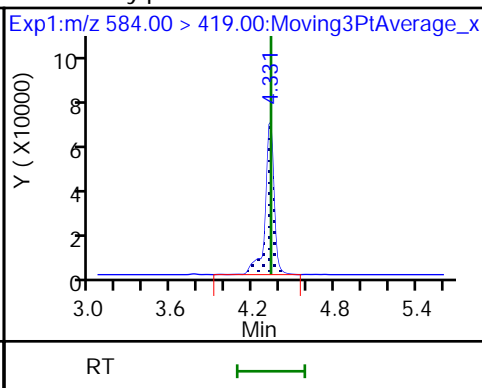
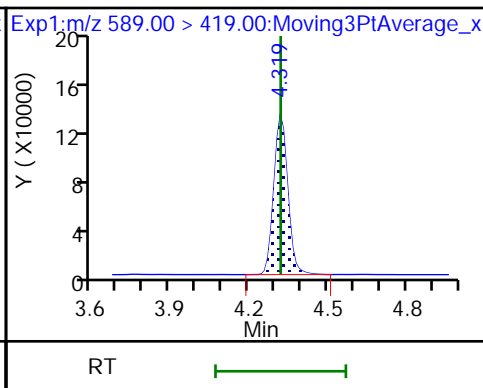
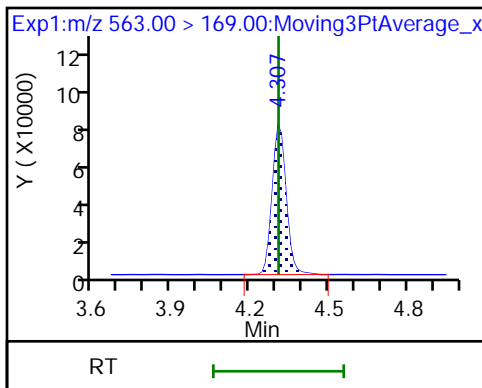
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

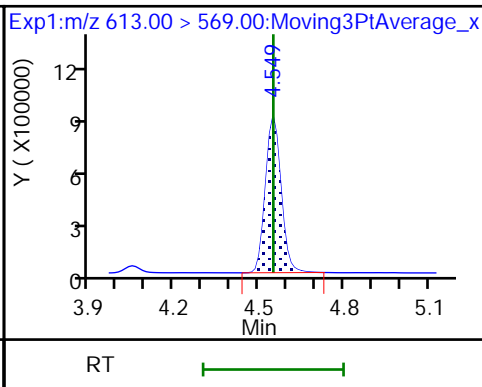
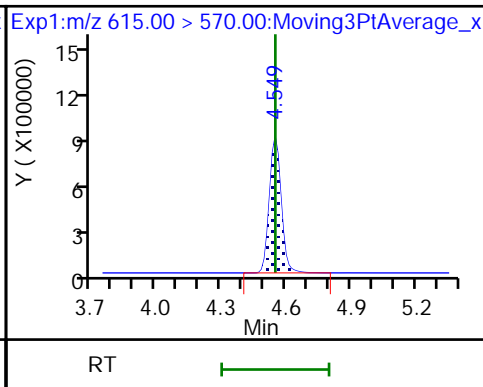
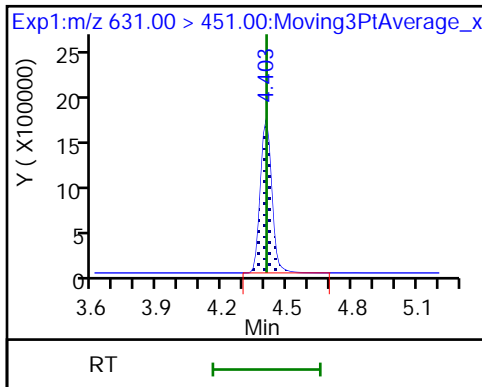
D 32 d5-NEtFOSAA

33 N-ethylperfluorooctanesulfonamidoa



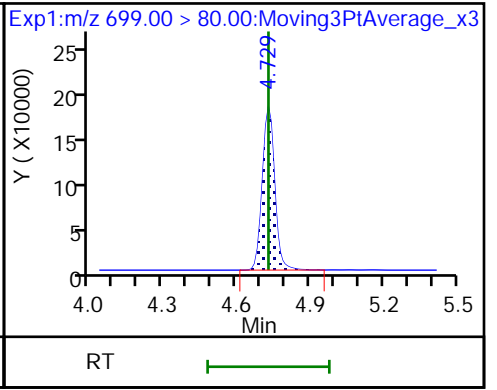
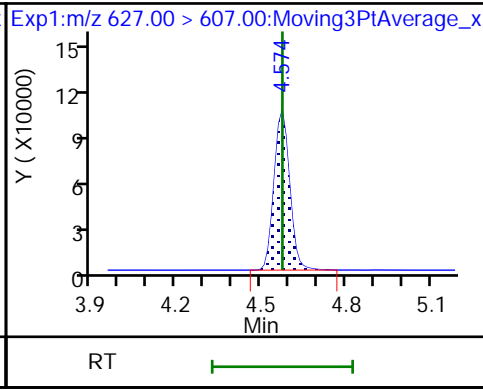
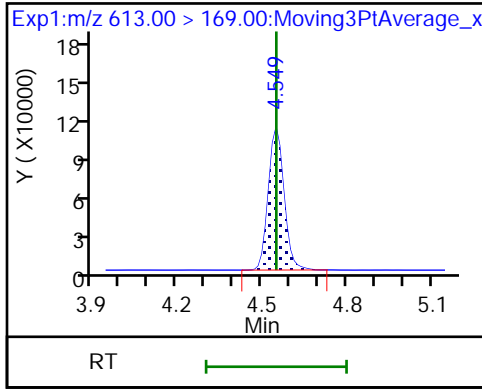
66 11-Chloroeicosafuoro-3-oxaundecaD 36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

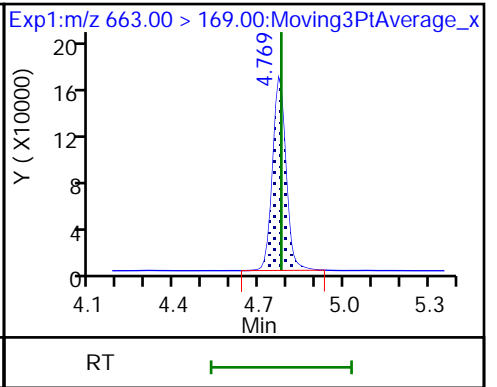
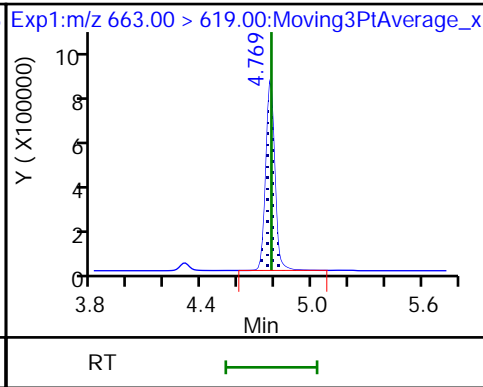
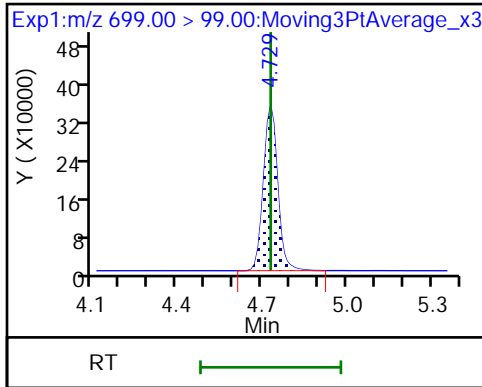
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

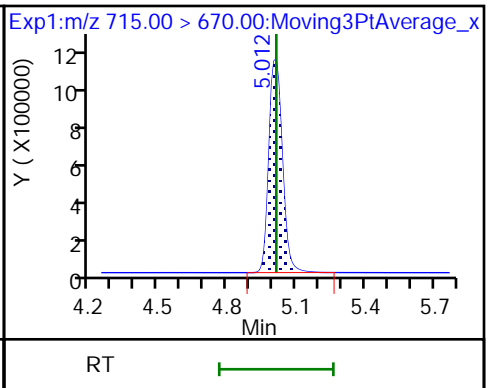
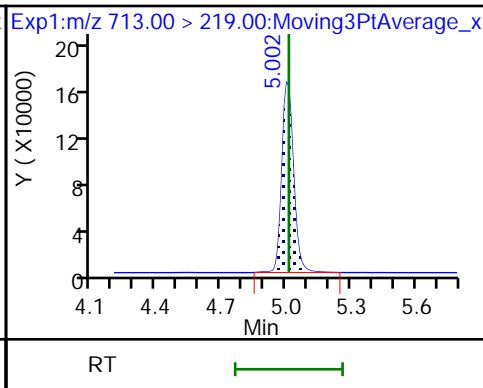
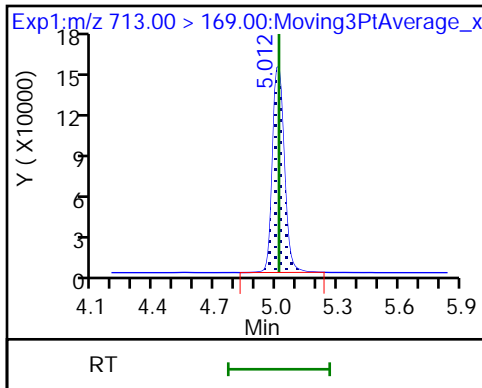
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

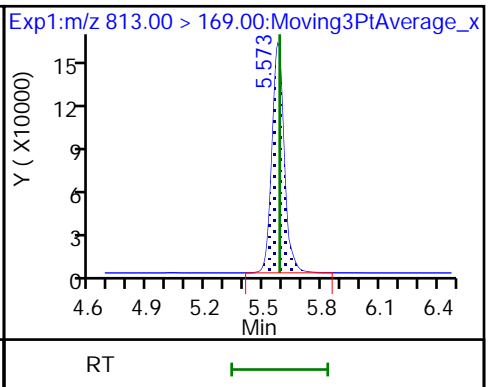
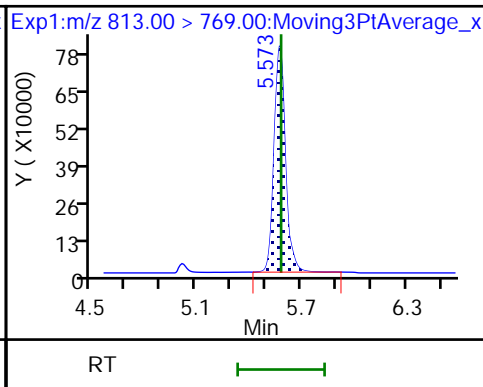
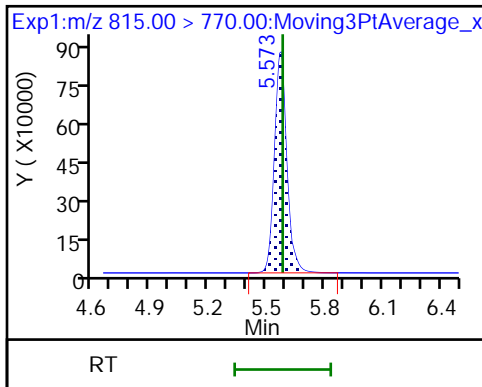
D 43 13C2 PFTeDA



D 44 13C2 PFHxDA

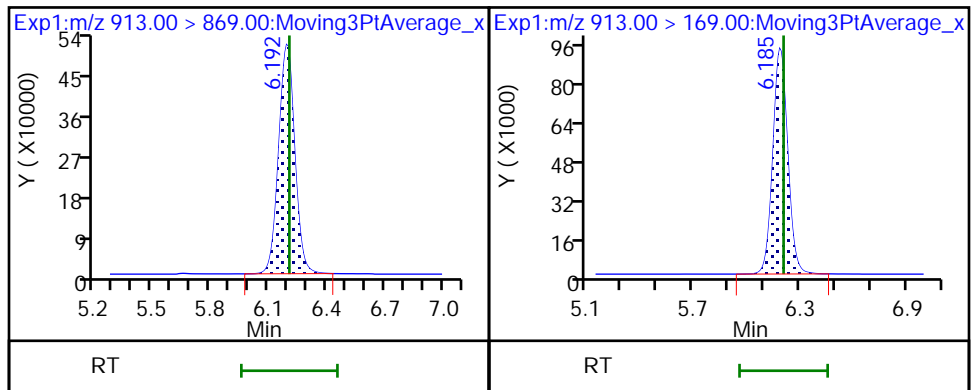
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Lims ID: IC
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 26-Jul-2019 11:34:21 ALS Bottle#: 8 Worklist Smp#: 22
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: IC6
 Misc. Info.: 200-0036970-022 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3

Method: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 29-Jul-2019 17:49:59 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: chirgwinb Date: 26-Jul-2019 13:41:50

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.754	1.754	0.0	1.000	16042972	198.3		99.2	1320	
D 1 13C4 PFBA										
217.00 > 172.00	1.754	1.754	0.0	0.510	4388965	53.8		108	9581	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.183	2.183	0.0	1.000	15297007	193.5		96.8	701	
D 3 13C5 PFPeA										
267.90 > 223.00	2.183	2.183	0.0	0.635	4083939	53.3		107	6111	
D 47 13C3 PFBS										
301.90 > 80.00	2.211	2.211	0.0	0.643	3898309	51.8		111	732056	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.211	2.211	0.0	1.000	14359485	168.5	Target=1.98	95.3	25778	
298.90 > 99.00	2.211	2.211	0.0	1.000	7494549		1.92(0.99-2.97)	95.3	5333	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.583	2.583	0.0	1.000	3480073	171.1		91.6	13500	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.583	2.583	0.0	0.751	397647	54.6		117	417	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.633	2.633	0.0	1.000	16070080	192.3	Target=12.51	96.2	3424	
313.00 > 119.00	2.633	2.633	0.0	1.000	1268592		12.67(6.25-18.76)	96.2	1258	
D 7 13C2 PFHxA										
315.00 > 270.00	2.633	2.633	0.0	0.766	4056783	53.3		107	7184	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.646	2.646	0.0	1.197	13617110	181.6	Target=2.77	96.8	23358	
349.00 > 99.00	2.646	2.646	0.0	1.197	5063281		2.69(1.38-4.15)	96.8	7263	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.766	2.766	0.0	1.000	2624870	197.8		98.9	845	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.766	2.766	0.0	0.804	261102	53.5		107	1677	
D 11 18O2 PFHxS										
403.00 > 84.00	3.059	3.059	0.0	0.890	2265919	51.4		109	5869	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.059	3.059	0.0	1.000	11013497	174.5	Target=3.37	95.9	15568	
399.00 > 99.00	3.059	3.059	0.0	1.000	3329427		3.31(1.68-5.05)	95.9	3096	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.059	3.059	0.0	1.000	13958091	184.3	Target=3.74	92.2	1723	
363.00 > 169.00	3.059	3.059	0.0	1.000	3865123		3.61(1.87-5.62)	92.2	9112	
D 9 13C4 PFHpA										
367.00 > 322.00	3.059	3.059	0.0	0.890	4041886	54.2		108	9965	
77 DONA										
377.00 > 251.00	3.108	3.108	0.0	0.832	32315396	177.6	Target=2.75	94.3	56294	
377.00 > 85.00	3.108	3.108	0.0	0.832	12956661		2.49(1.37-4.12)	94.3	23595	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.419	3.419	0.0	0.915	9543674	207.0	Target=4.99	109	8626	
449.00 > 99.00	3.419	3.419	0.0	0.915	1904250		5.01(2.50-7.49)	109	5139	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.429	3.429	0.0	1.000	2997907	188.3		99.3	30385	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.429	3.429	0.0	0.997	440938	48.1		101	1113	
* 62 13C2 PFOA										
415.00 > 370.00	3.439	3.439	0.0		4327273	50.0			11151	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.439	3.439	0.0	1.000	17012607	190.0	Target=2.72	95.0	1817	
413.00 > 169.00	3.439	3.439	0.0	1.000	6557780		2.59(1.36-4.08)	95.0	10948	
D 14 13C4 PFOA										
417.00 > 372.00	3.439	3.439	0.0	1.000	4115123	52.3		105	11536	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.735	3.735	0.0	1.000	6705110	185.1	Target=4.21	99.7	34091	
499.00 > 99.00	3.735	3.735	0.0	1.000	1573475		4.26(2.10-6.31)	99.7	5327	
D 18 13C4 PFOS										
503.00 > 80.00	3.735	3.735	0.0	1.086	1829286	49.8		104	3222	
D 19 13C5 PFNA										
468.00 > 423.00	3.758	3.758	0.0	1.093	3801723	53.0		106	20047	
20 Perfluorononanoic acid										
463.00 > 419.00	3.758	3.758	0.0	1.000	13762455	199.8	Target=8.52	99.9	2986	
463.00 > 169.00	3.758	3.758	0.0	1.000	1717054		8.02(4.26-12.79)	99.9	19215	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.900	3.899	0.001	1.044	15281982	183.6		98.5	61203	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.024	4.024	0.0	1.077	5874380	181.8	Target=2.52	94.7	10167	
549.00 > 99.00	4.024	4.024	0.0	1.077	2535101		2.32(1.26-3.78)	94.7	4160	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.049	4.049	0.0	1.000	12449793	203.3		102	24617	
D 21 13C8 FOSA										
506.00 > 78.00	4.049	4.049	0.0	1.177	2354736	50.9		102	7290	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.049	4.049	0.0	1.000	10684329	196.1	Target=9.67	98.1	959	
513.00 > 169.00	4.049	4.049	0.0	1.000	1175510		9.09(4.83-14.50)	98.1	2277	
D 23 13C2 PFDA										
515.00 > 470.00	4.049	4.049	0.0	1.177	2813650	49.0		98.0	11554	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.061	4.061	0.0	1.000	2141277	186.6		97.4	16213	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.061	4.061	0.0	1.181	411129	48.6		101	1251	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.189	4.189	0.0	1.000	1269712	199.7		99.8	23694	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.189	4.189	0.0	1.218	420217	57.3		115	304	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.284	4.284	0.0	1.147	4902732	193.3	Target=2.60	100	8858	
599.00 > 99.00	4.284	4.284	0.0	1.147	1967520		2.49(1.30-3.90)	100	7349	
D 30 13C2 PFUnA										
565.00 > 520.00	4.308	4.308	0.0	1.253	2746310	52.5		105	6540	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.308	4.308	0.0	1.000	8408507	178.4	Target=8.30	89.2	1976	
563.00 > 169.00	4.308	4.308	0.0	1.000	1057052		7.95(4.15-12.45)	89.2	5092	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.320	0.0	1.256	431348	52.8		106	1384	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.332	4.332	0.0	1.003	1069354	193.7		96.8	1699	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.404	4.404	0.0	1.179	22547771	178.0		94.5	20100	
D 36 13C2 PFDaA										
615.00 > 570.00	4.550	4.550	0.0	1.323	2955795	52.5		105	5094	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.550	4.550	0.0	1.000	12245212	202.6	Target=7.78	101	909	
613.00 > 169.00	4.550	4.550	0.0	1.000	1614917		7.58(3.89-11.67)	101	5788	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.575	4.575	0.0	1.126	1525462	210.0		109	7195	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.730	4.730	0.0	1.266	2377415	195.6	Target=0.49	101	6512	
699.00 > 99.00	4.730	4.730	0.0	1.266	4804145		0.49(0.25-0.74)	101	9679	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.778	0.0	1.050	10075759	185.7	Target=5.37	92.9	729	
663.00 > 169.00	4.778	4.778	0.0	1.050	1926998		5.23(2.68-8.05)	92.9	3656	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.013	5.013	0.0	1.000	2178886	192.8	Target=1.00	96.4	6370	
713.00 > 219.00	5.003	5.013	-0.011	0.998	2123215		1.03(0.50-1.50)	96.4	6388	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.013	5.013	0.0	1.458	4244420	54.7		109	10603	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.573	5.583	-0.010	1.621	3765979	54.6		109	10640	

Ratio Calibration: Average of Initial Calibration

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.578	5.583	-0.005	1.001	13681373	191.8	Target=5.39	95.9	481	
813.00 > 169.00	5.573	5.583	-0.010	1.000	2543086		5.38(2.70-8.09)	95.9	11649	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	6.185	6.207	-0.022	1.110	11072789	195.5	Target=5.46	97.8	1795	
913.00 > 169.00	6.185	6.207	-0.022	1.110	2008842		5.51(2.73-8.19)	97.8	17817	

Reagents:

LCPFAS32-L6_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d

Injection Date: 26-Jul-2019 11:34:21

Instrument ID: LC812

Lims ID: IC

Client ID:

Operator ID: lc812tech

ALS Bottle#: 8

Worklist Smp#: 22

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

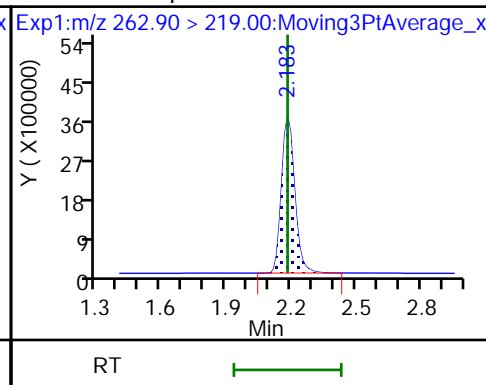
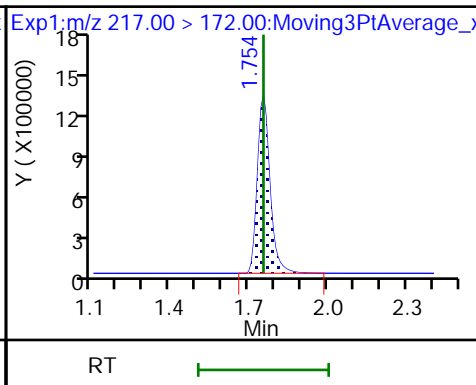
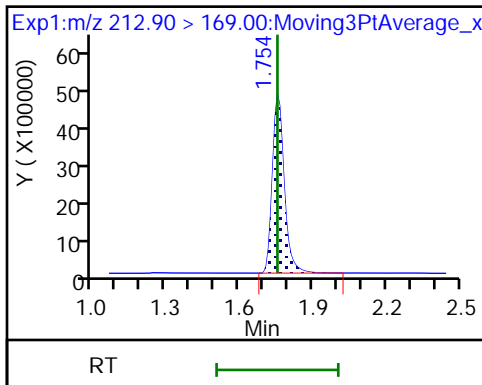
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

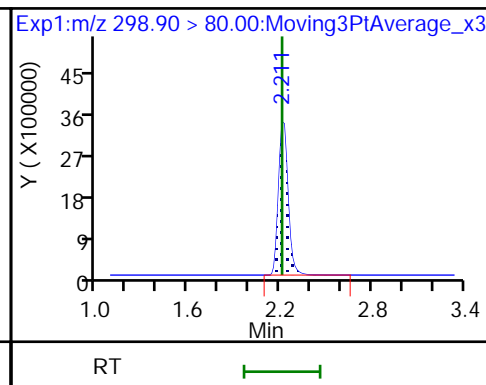
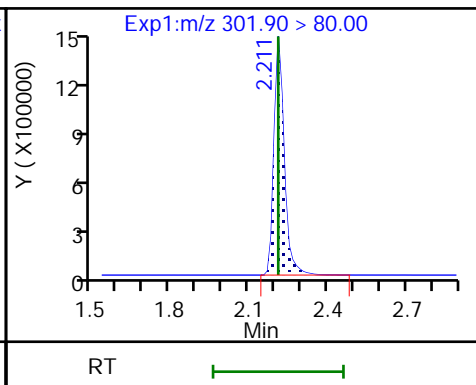
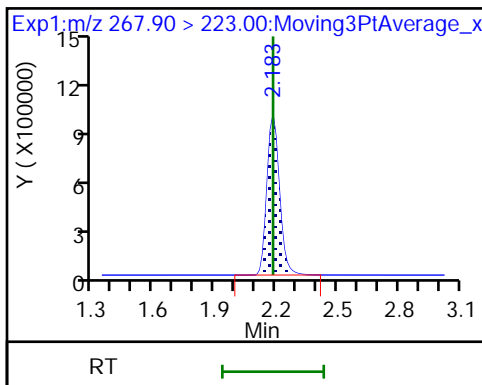
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

D 47 13C3 PFBS

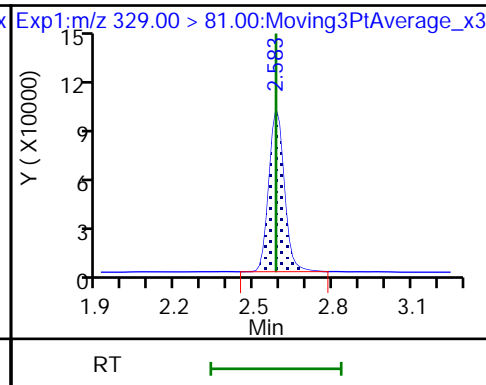
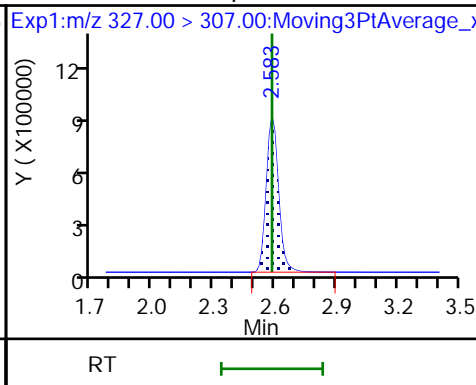
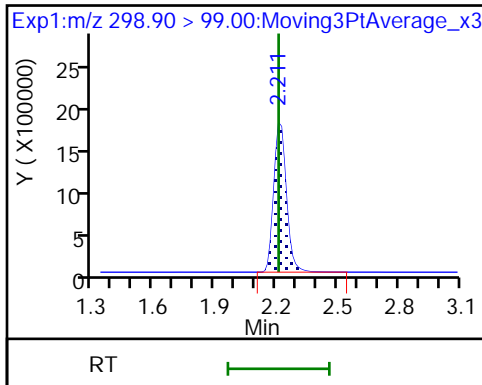
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

61 1H,1H,2H,2H-perfluorohexanesulfonate

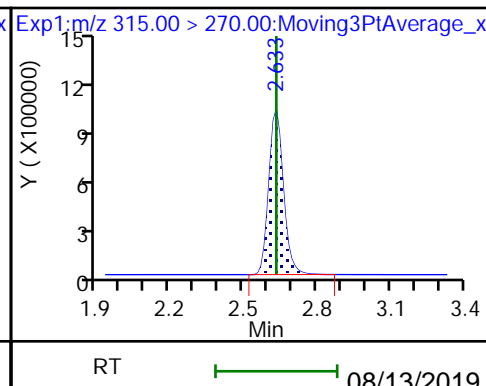
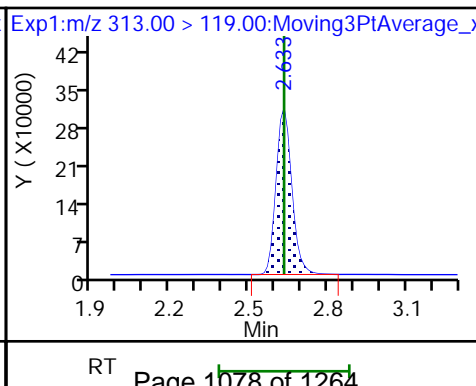
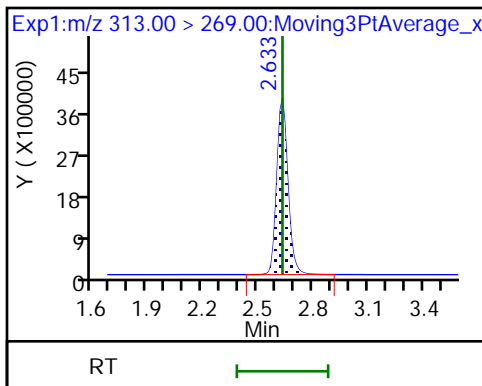
D 60 M2-4:2 FTS

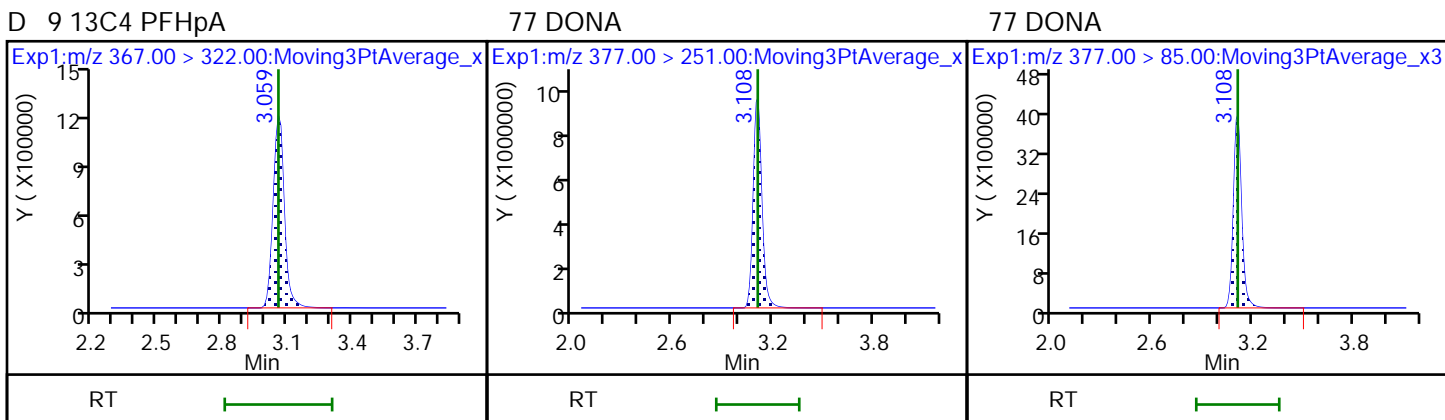
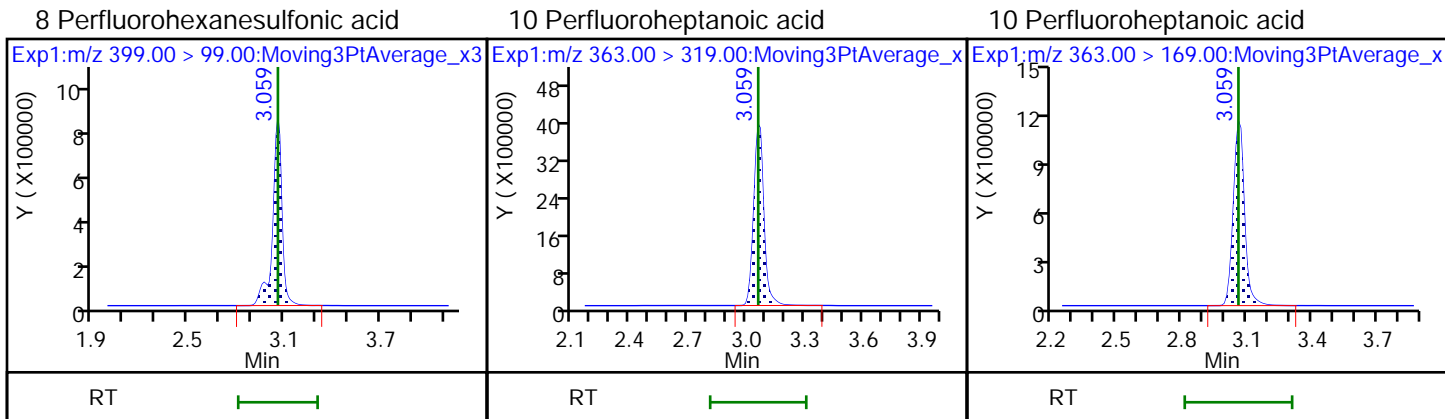
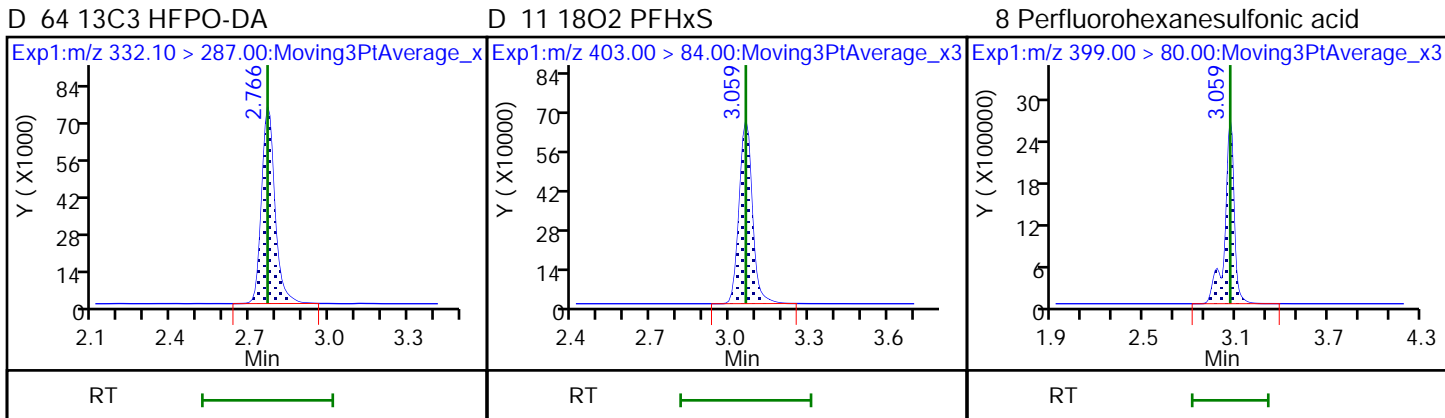
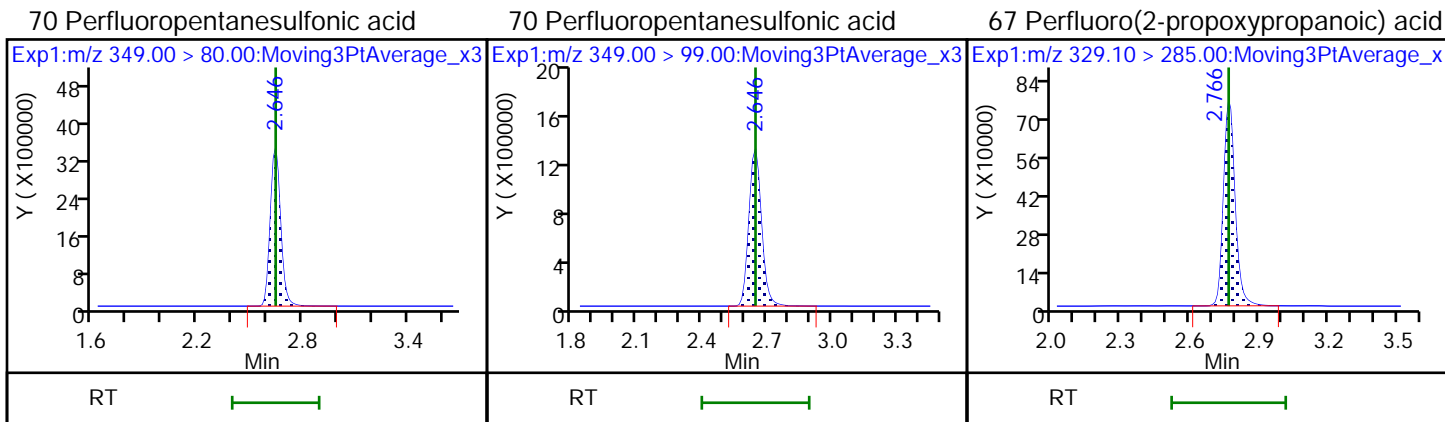


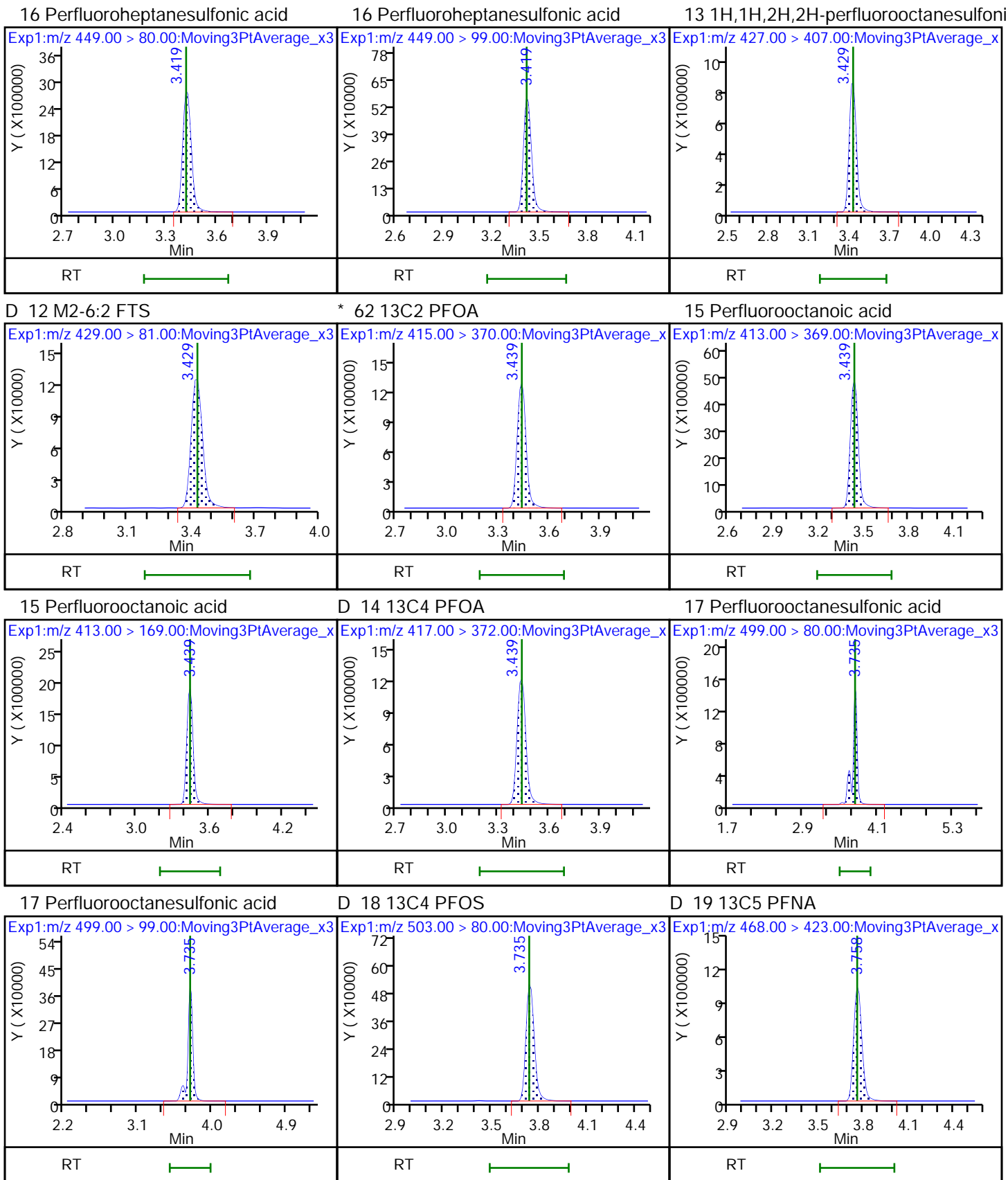
6 Perfluorohexanoic acid

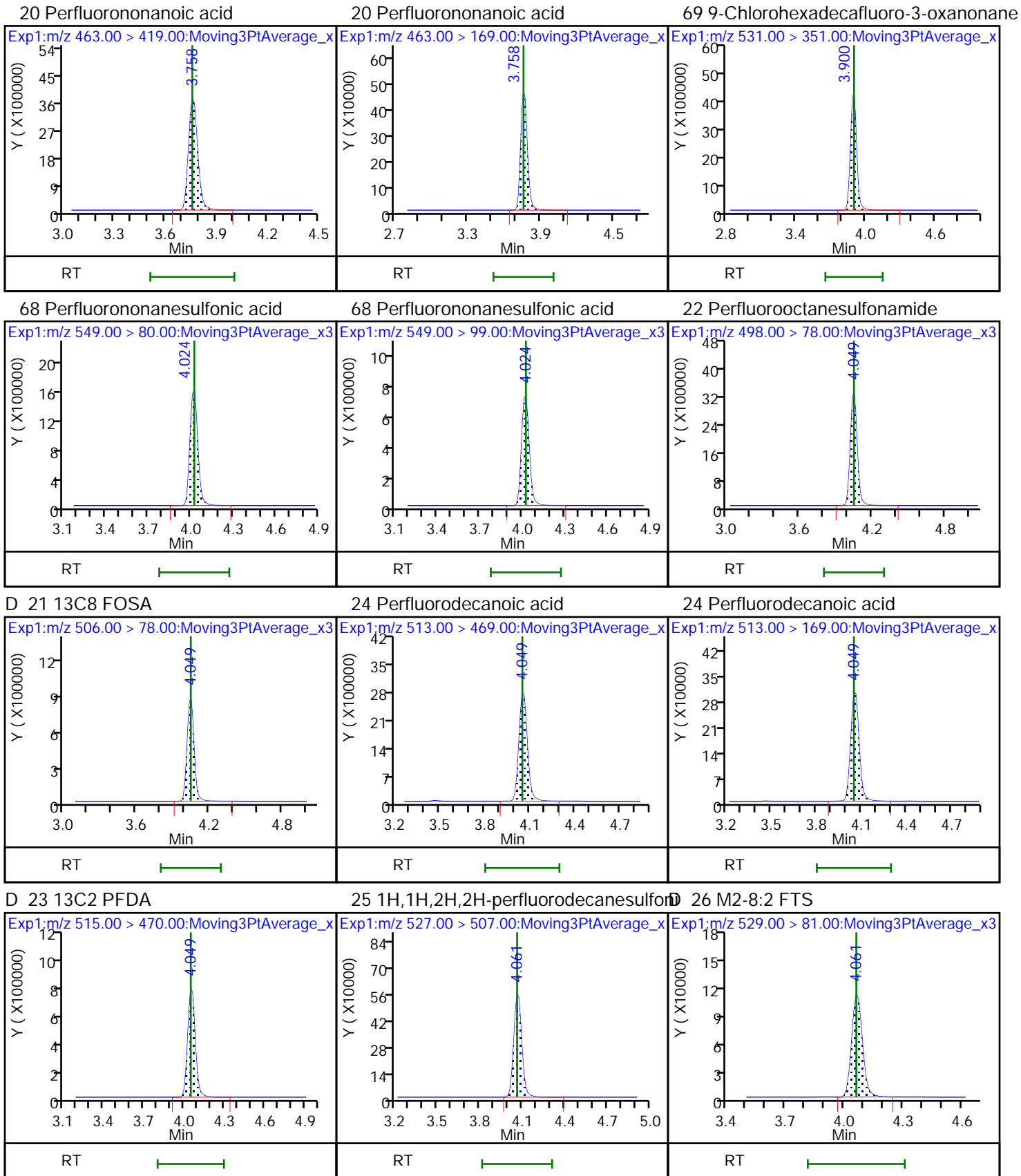
6 Perfluorohexanoic acid

D 7 13C2 PFHxA



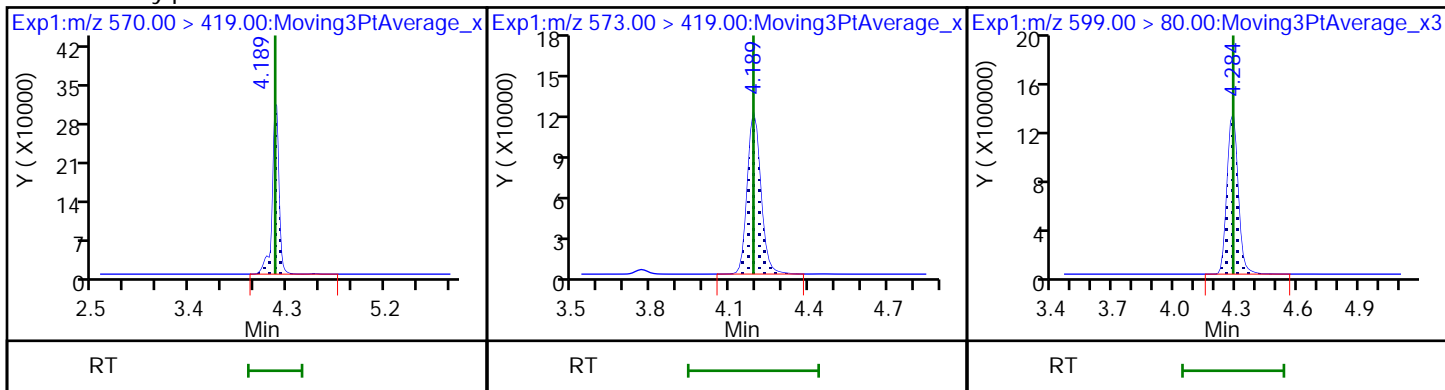






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

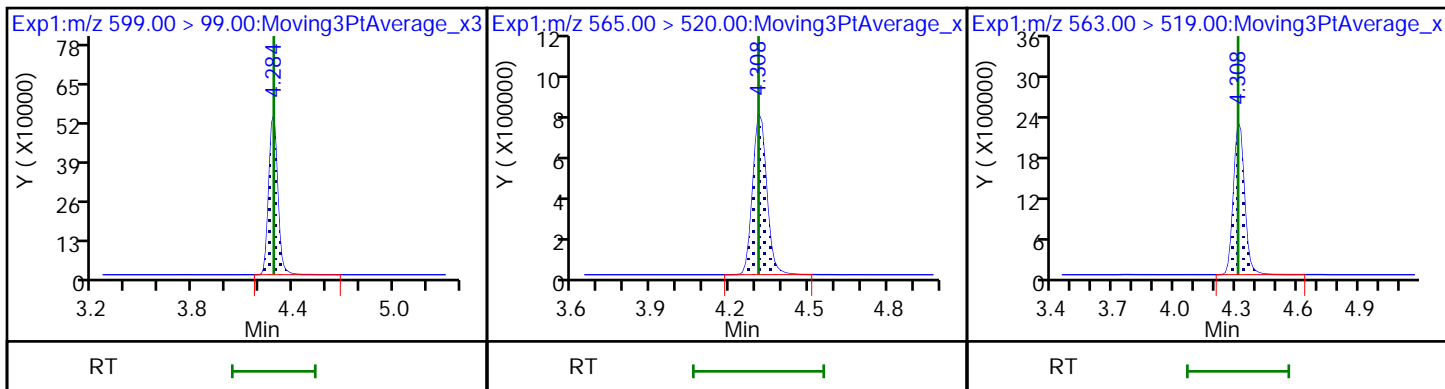
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

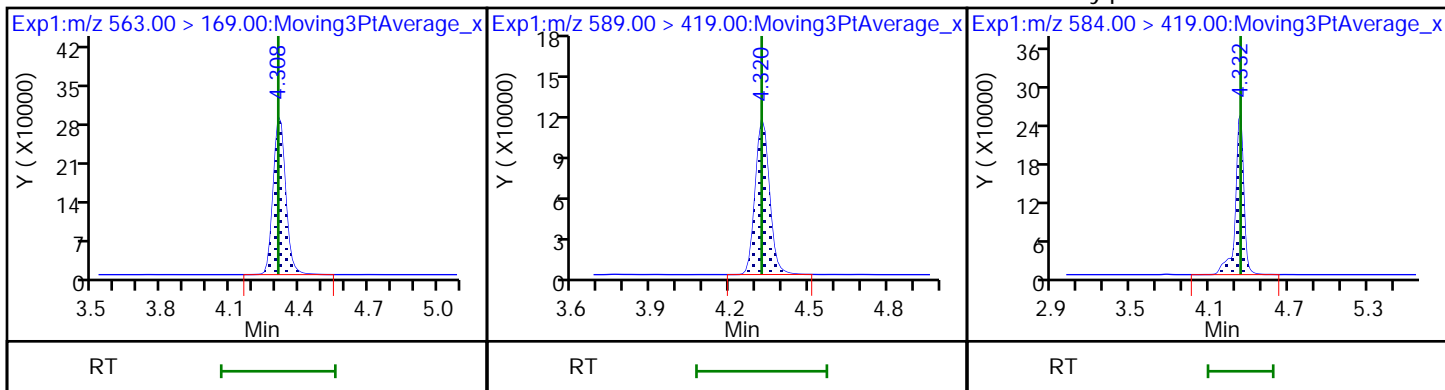
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

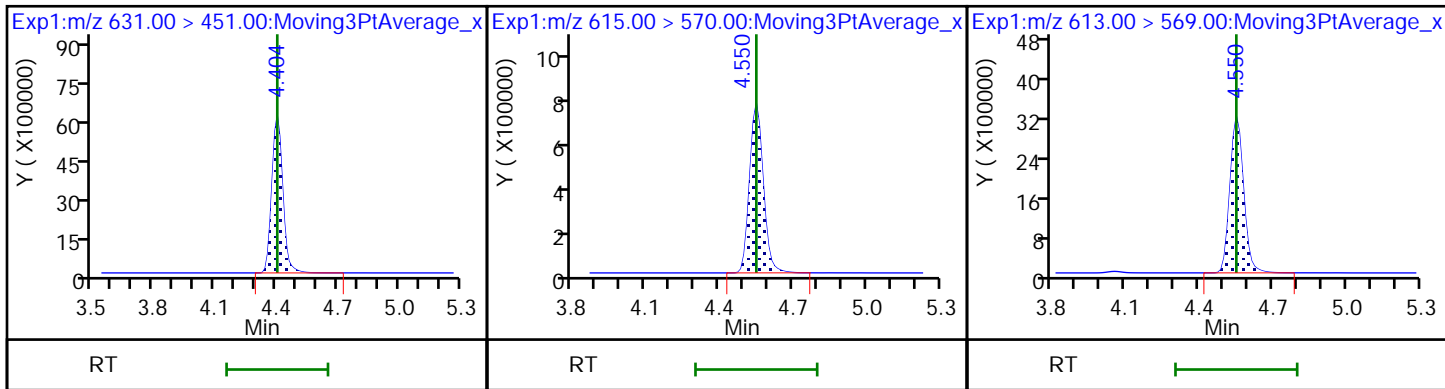
33 N-ethylperfluorooctanesulfonamidoa



66 11-Chloroeicosafuoro-3-oxaundecaD

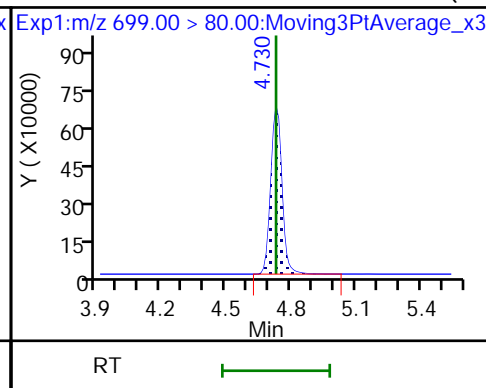
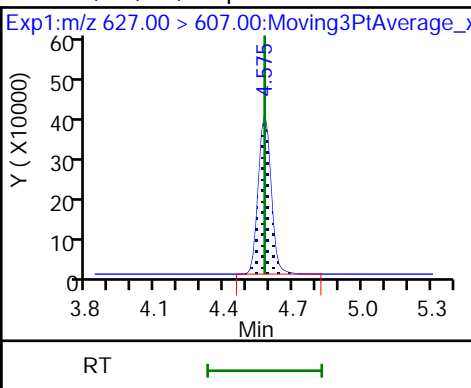
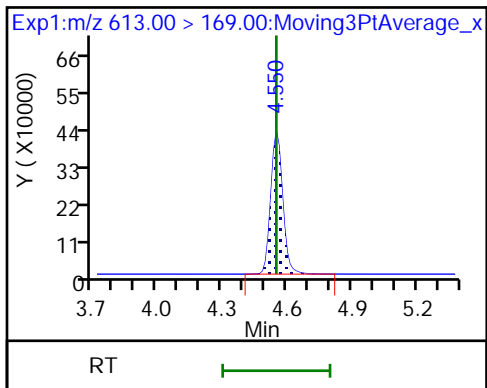
36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

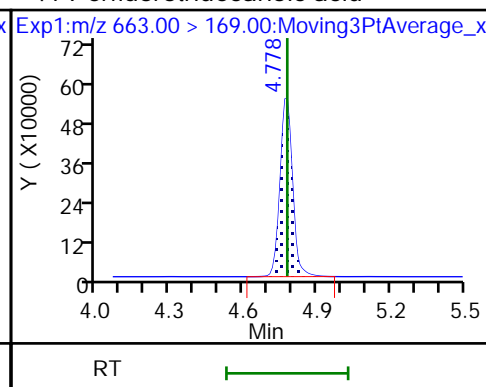
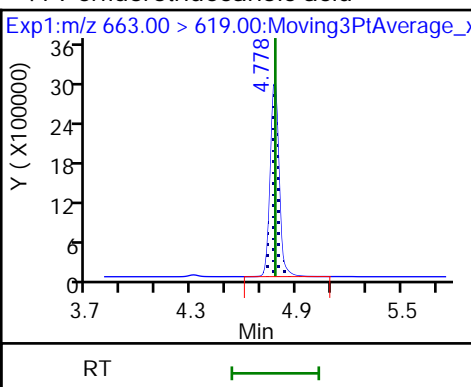
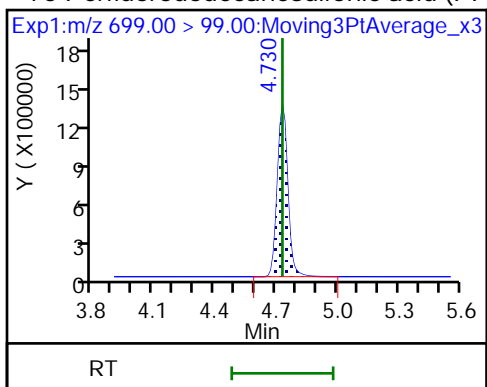
74 1H,1H,2H,2H-perfluorododecanesulfo 75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

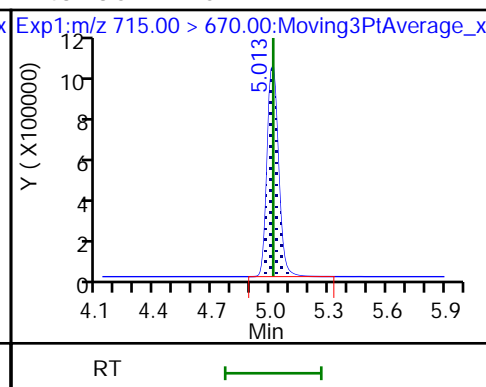
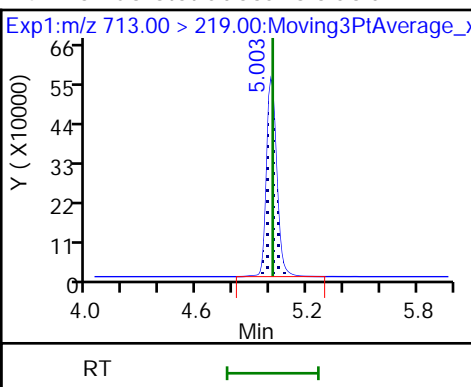
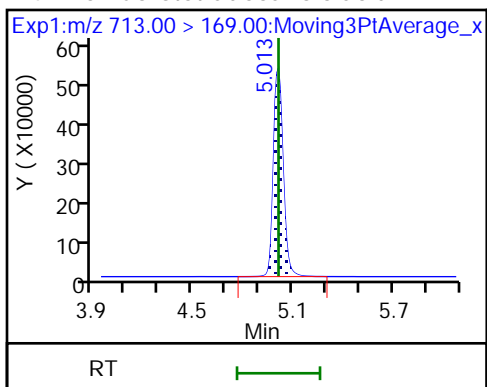
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

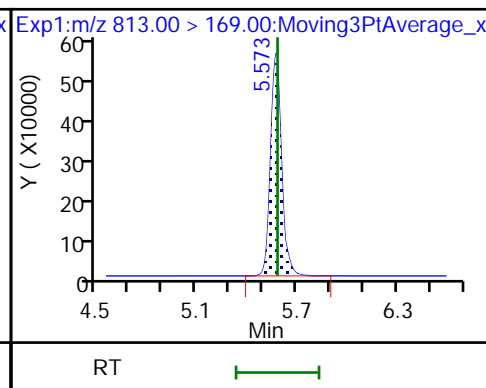
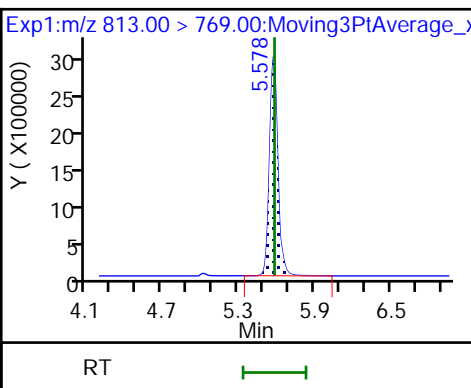
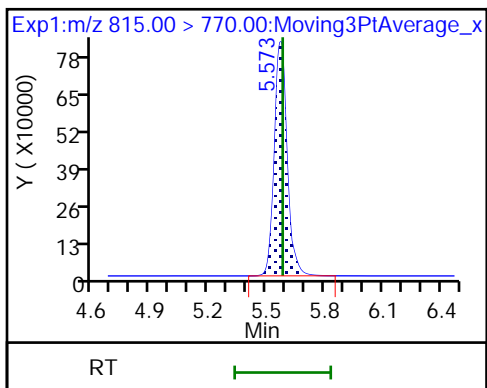
D 43 13C2 PFTeDA



D 44 13C2 PFHxDA

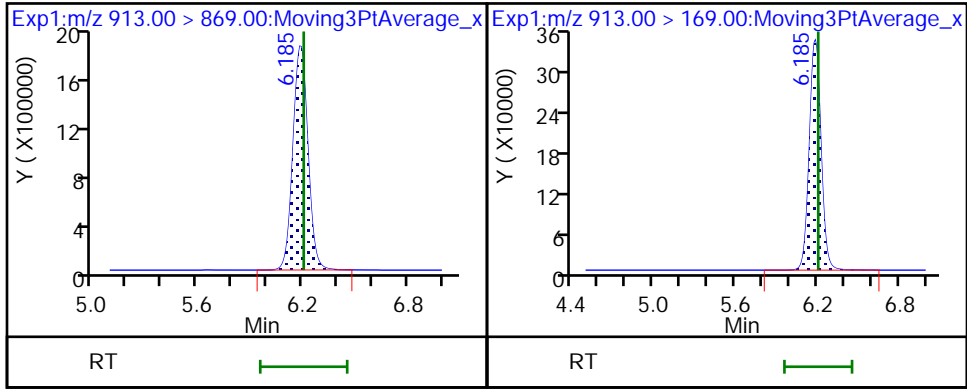
45 Perfluorohexadecanoic acid

45 Perfluorohexadecanoic acid



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: ICV 200-145525/24 Calibration Date: 07/26/2019 11:50
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC072619A024.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9217	0.9543		20700	20000	3.5	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9677	1.127		23500	20200	16.4	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.017	1.032		20300	20000	1.6	40.0
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.389	2.776		23200	20000	16.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.030	1.151		22600	20200	11.7	40.0
Perfluoropentanesulfonic acid	AveID	0.8944	0.9414		21000	20000	5.2	50.0
HFPO-DA	AveID	2.541	2.177		17300	20200	-14.3	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.318	1.153		17700	20200	-12.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9367	0.997		21300	20000	6.5	40.0
DONA	AveID	4.754	4.611		19400	20000	-3.0	50.0
6:2 FTS	AveID	1.715	1.745		20400	20000	1.8	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.205	1.319		21900	20000	9.5	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.088	1.146		21100	20000	5.3	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9465	0.9123		19500	20200	-3.6	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9059	1.033		22800	20000	14.0	40.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.174	2.001		18400	20000	-8.0	50.0
Perfluorononanesulfonic acid	AveID	0.8445	0.8000		19100	20200	-5.3	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.9129	0.9878		21600	20000	8.2	40.0
8:2 FTS	AveID	1.337	1.501		22700	20200	12.3	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9682	1.101		22700	20000	13.7	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7567	0.7901		20900	20000	4.4	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6627	0.6780		20700	20200	2.3	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8581	0.9084		21200	20000	5.9	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.6400	0.8316		26000	20000	29.9	40.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	3.310	3.277		19800	20000	-1.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.022	1.006		19700	20000	-1.6	40.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9176	0.9651		21000	20000	5.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1331	0.1414		21200	20000	6.2	40.0
13C4 PFBA	Ave	0.9423	0.9565		50800	50000	1.5	50.0
13C5 PFPeA	Ave	0.8851	0.8119		45900	50000	-8.3	50.0
13C3 PFBS	Ave	0.8694	0.8869		47400	46500	2.0	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: ICV 200-145525/24 Calibration Date: 07/26/2019 11:50
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC072619A024.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
M2-4:2 FTS	Ave	0.0841	0.0768		42700	46700	-8.7	50.0
13C2 PFHxA	Ave	0.8791	0.8618		49000	50000	-2.0	50.0
13C3 HFPO-DA	Ave	0.0564	0.0671		119000	100000	19.0	50.0
13C4 PFHpA	Ave	0.8611	0.8457		49100	50000	-1.8	50.0
18O2 PFHxS	Ave	0.5092	0.6186		57500	47300	21.5	50.0
M2-6:2 FTS	Ave	0.1060	0.1036		46400	47500	-2.3	50.0
13C4 PFOA	Ave	0.9094	0.8983		49400	50000	-1.2	50.0
13C4 PFOS	Ave	0.4242	0.4571		51500	47800	7.8	50.0
13C5 PFNA	Ave	0.8296	0.7938		47800	50000	-4.3	50.0
13C8 FOSA	Ave	0.7620	0.7712		50600	50000	1.2	50.0
13C2 PFDA	Ave	0.6637	0.6545		49300	50000	-1.4	50.0
M2-8:2 FTS	Ave	0.0978	0.0983		48200	47900	0.6	50.0
d3-NMeFOSAA	Ave	0.0848	0.0937		55300	50000	10.5	50.0
13C2 PFUnA	Ave	0.6045	0.5761		47600	50000	-4.7	50.0
d5-NEtFOSAA	Ave	0.0945	0.0890		47100	50000	-5.8	50.0
13C2 PFDoA	Ave	0.6507	0.6746		51800	50000	3.7	50.0
13C2 PFTeDA	Ave	0.8960	0.8886		49600	50000	-0.8	50.0
13C2 PFHxDA	Ave	0.7972	0.8216		51500	50000	3.1	50.0

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A024.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 26-Jul-2019 11:50:23 ALS Bottle#: 10 Worklist Smp#: 24
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: ICV
 Misc. Info.: 200-0036970-024 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub4
 Method: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 29-Jul-2019 11:20:36 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d

Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0320
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.764	1.754	0.010	1.000	1778343	20.7			158	
D 1 13C4 PFBA										
217.00 > 172.00	1.764	1.754	0.010	0.513	4659007	50.8		102	10572	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.183	2.183	0.0	1.000	1800109	23.5			83.7	
D 3 13C5 PFPeA										
267.90 > 223.00	2.183	2.183	0.0	0.635	3954915	45.9		91.7	6129	
D 47 13C3 PFBS										
301.90 > 80.00	2.211	2.211	0.0	0.643	4017672	47.4		102	1461050	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.225	2.211	0.014	1.006	1784181	20.3	Target=1.90		3578	
298.90 > 99.00	2.225	2.211	0.014	1.006	912930		1.95(0.95-2.85)		651	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.583	2.583	0.0	0.995	415480	23.2			2414	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.596	2.583	0.013	0.755	349481	42.7		91.3	297	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.633	2.633	0.0	1.000	1951328	22.6	Target=13.23		477	
313.00 > 119.00	2.633	2.633	0.0	1.000	142317		13.71(6.61-19.84)		181	
D 7 13C2 PFHxA										
315.00 > 270.00	2.633	2.633	0.0	0.766	4197964	49.0		98.0	12066	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.646	2.646	0.0	1.197	1626689	21.0	Target=2.73		4001	
349.00 > 99.00	2.646	2.646	0.0	1.197	584579		2.78(1.37-4.10)		1026	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.774	2.766	0.008	1.000	287631	17.3			93.0	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.774	2.766	0.008	0.807	653969	119.0		119	3590	
D 11 18O2 PFHxS										
403.00 > 84.00	3.059	3.059	0.0	0.890	2850234	57.5		121	11720	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	3.059	3.059	0.0	1.000	1403786	17.7	Target=3.37		3702	
399.00 > 99.00	3.059	3.059	0.0	1.000	394769		3.56(1.69-5.06)		403	
10 Perfluoroheptanoic acid										
363.00 > 319.00	3.070	3.059	0.011	1.003	1643028	21.3	Target=3.76		188	
363.00 > 169.00	3.059	3.059	0.0	1.000	471972		3.48(1.88-5.65)		2085	
D 9 13C4 PFHpA										
367.00 > 322.00	3.059	3.059	0.0	0.890	4119371	49.1		98.2	14587	
77 DONA										
377.00 > 251.00	3.108	3.108	0.0	0.832	4107228	19.4	Target=2.72		5409	
377.00 > 85.00	3.108	3.108	0.0	0.832	1473114		2.79(1.36-4.07)		2164	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.429	3.419	0.010	0.918	1175081	21.9	Target=4.80		2500	
449.00 > 99.00	3.419	3.419	0.0	0.915	249037		4.72(2.40-7.20)		1003	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.429	3.429	0.0	1.000	352292	20.4			3549	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.429	3.429	0.0	0.997	479353	46.4		97.7	1141	
* 62 13C2 PFOA										
415.00 > 370.00	3.439	3.439	0.0		4870975	50.0			12061	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.439	3.439	0.0	1.000	2005828	21.1	Target=2.84		257	
413.00 > 169.00	3.439	3.439	0.0	1.000	778664		2.58(1.42-4.25)		1474	
D 14 13C4 PFOA										
417.00 > 372.00	3.439	3.439	0.0	1.000	4375666	49.4		98.8	9357	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.746	3.735	0.011	1.003	820634	19.5	Target=4.33		5207	
499.00 > 99.00	3.735	3.735	0.0	1.000	183648		4.47(2.16-6.49)		642	
D 18 13C4 PFOS										
503.00 > 80.00	3.735	3.735	0.0	1.086	2128672	51.5		108	6785	
D 19 13C5 PFNA										
468.00 > 423.00	3.758	3.758	0.0	1.093	3866492	47.8		95.7	12642	
20 Perfluorononanoic acid										
463.00 > 419.00	3.758	3.758	0.0	1.000	1597602	22.8	Target=8.15		296	
463.00 > 169.00	3.758	3.758	0.0	1.000	192739		8.29(4.08-12.23)		1917	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.900	3.899	0.001	1.044	1782151	18.4			6259	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.024	4.024	0.0	1.077	719665	19.1	Target=2.42		4658	
549.00 > 99.00	4.024	4.024	0.0	1.077	289299		2.49(1.21-3.63)		452	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.049	4.049	0.0	1.000	1484106	21.6			2975	
D 21 13C8 FOSA										
506.00 > 78.00	4.049	4.049	0.0	1.177	2754075	50.6		101	7764	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.061	4.049	0.012	1.000	1404415	22.7	Target=9.58		116	
513.00 > 169.00	4.061	4.049	0.012	1.000	151482		9.27(4.79-14.37)		360	
D 23 13C2 PFDA										
515.00 > 470.00	4.061	4.049	0.012	1.181	3188191	49.3		98.6	14157	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.061	4.061	0.0	1.000	290467	22.7			2899	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.061	4.061	0.0	1.181	458869	48.2		101	1299	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.200	4.189	0.011	1.000	144207	20.9			144	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.200	4.189	0.011	1.221	456308	55.3		111	1548	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.284	4.284	0.0	1.147	609871	20.7	Target=2.64		3305	
599.00 > 99.00	4.284	4.284	0.0	1.147	234049		2.61(1.32-3.96)		643	
D 30 13C2 PFUnA										
565.00 > 520.00	4.320	4.308	0.012	1.256	2806136	47.6		95.3	11078	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.320	4.308	0.012	1.000	1019627	21.2	Target=7.95		269	
563.00 > 169.00	4.320	4.308	0.012	1.000	120026		8.50(3.98-11.93)		829	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.332	4.320	0.012	1.260	433342	47.1		94.2	1980	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.332	4.332	0.0	1.000	144141	26.0			1054	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.404	4.404	0.0	1.179	2918719	19.8			7273	
D 36 13C2 PFDoA										
615.00 > 570.00	4.550	4.550	0.0	1.323	3285981	51.8		104	6221	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.550	4.550	0.0	1.000	1322673	19.7	Target=7.49		76.1	
613.00 > 169.00	4.550	4.550	0.0	1.000	177223		7.46(3.75-11.24)		1390	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.778	4.778	0.0	1.050	1268526	21.0	Target=5.71		96.1	
663.00 > 169.00	4.778	4.778	0.0	1.050	233254		5.44(2.85-8.56)		877	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	5.013	5.013	0.0	1.000	244725	21.2	Target=1.02		442	
713.00 > 219.00	5.013	5.013	0.0	1.000	244860		1.00(0.51-1.54)		287	
D 43 13C2 PFTeDA										
715.00 > 670.00	5.013	5.013	0.0	1.458	4328362	49.6		99.2	6629	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.574	5.583	-0.009	1.621	4001902	51.5		103	11947	

Reagents:

LCPFAS27ISICV_00004

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A024.d

Injection Date: 26-Jul-2019 11:50:23

Instrument ID: LC812

Lims ID: ICV

Client ID:

Operator ID: lc812tech

ALS Bottle#: 10

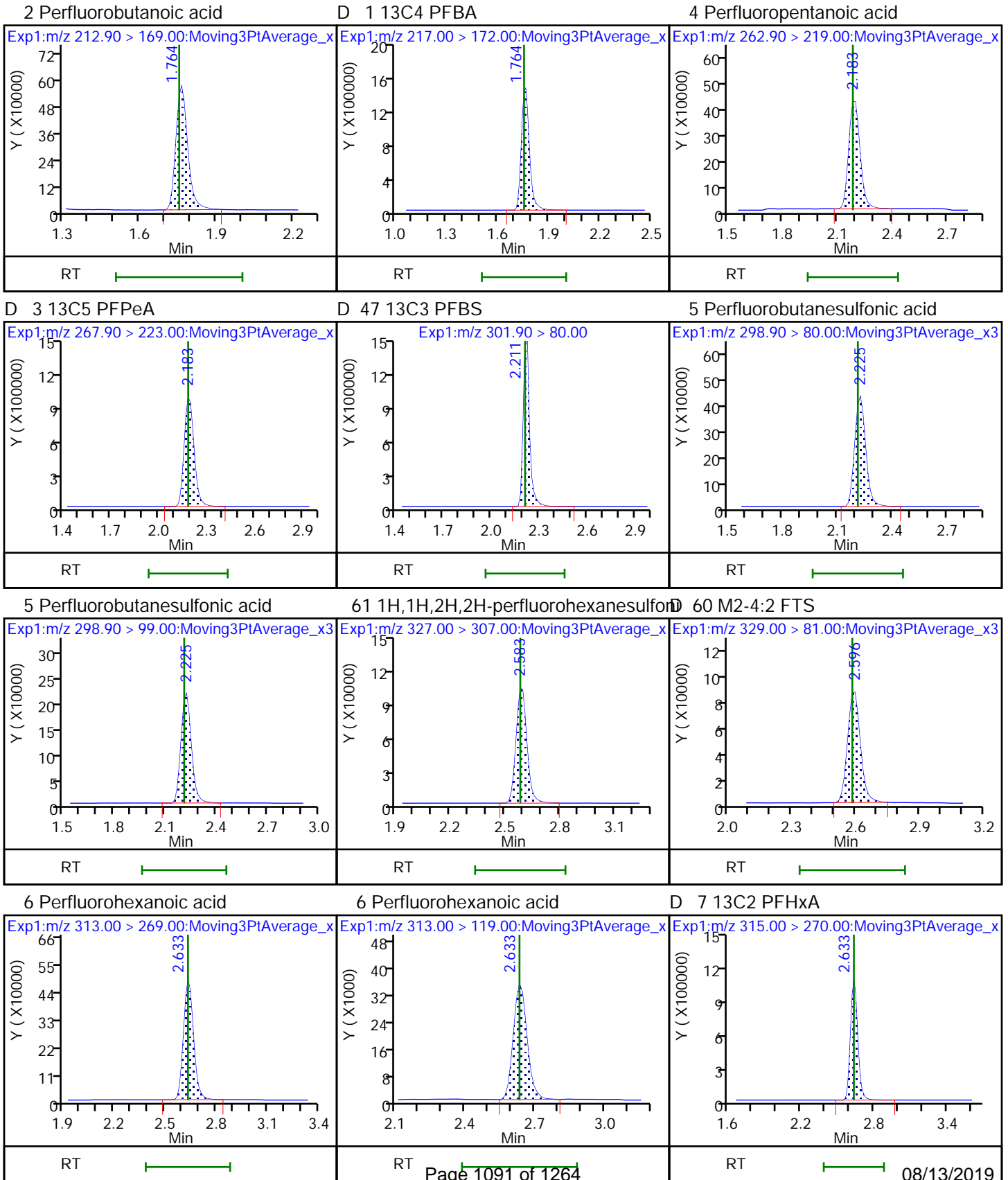
Worklist Smp#: 24

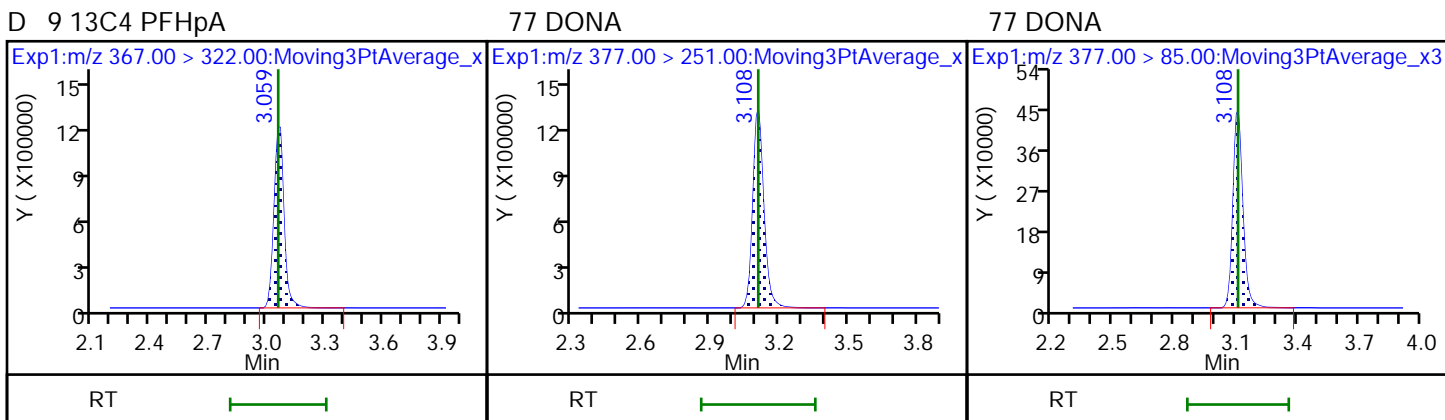
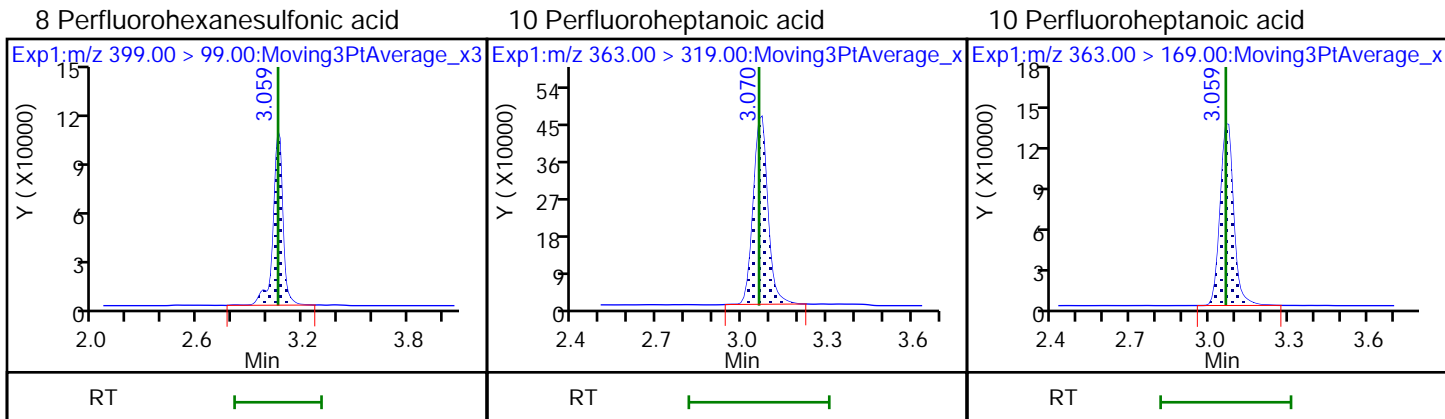
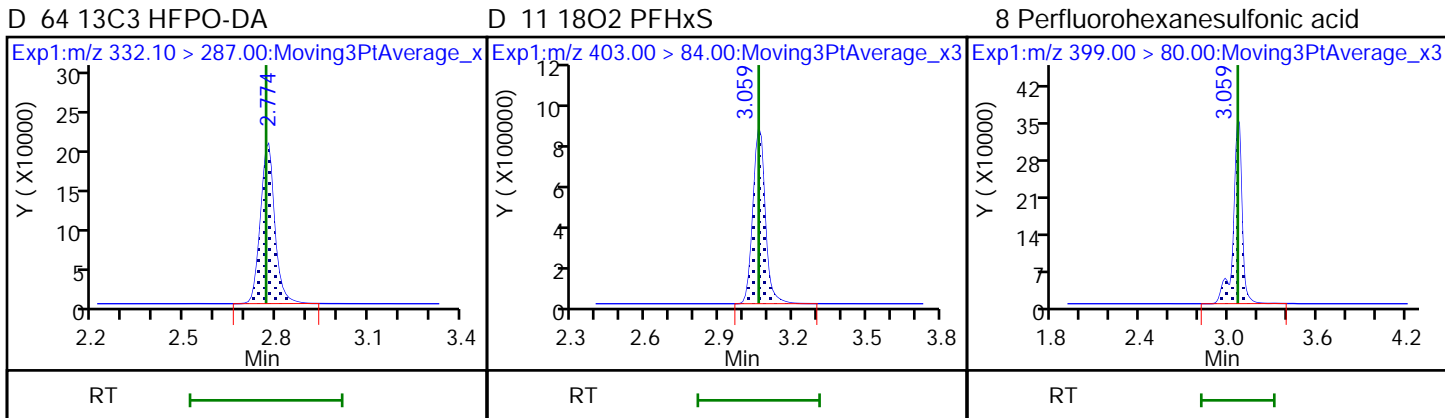
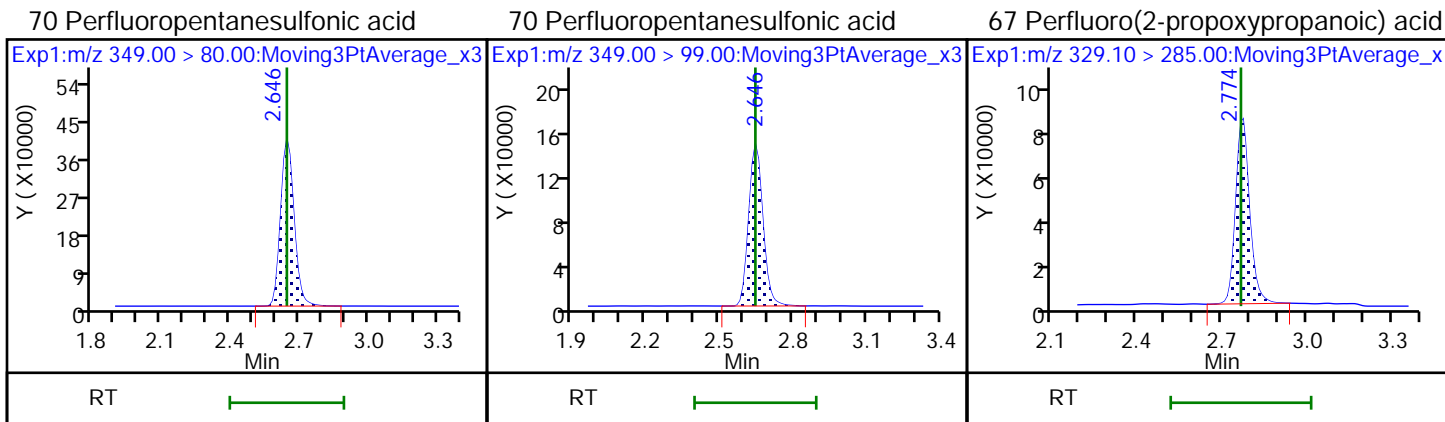
Injection Vol: 2.0 ul

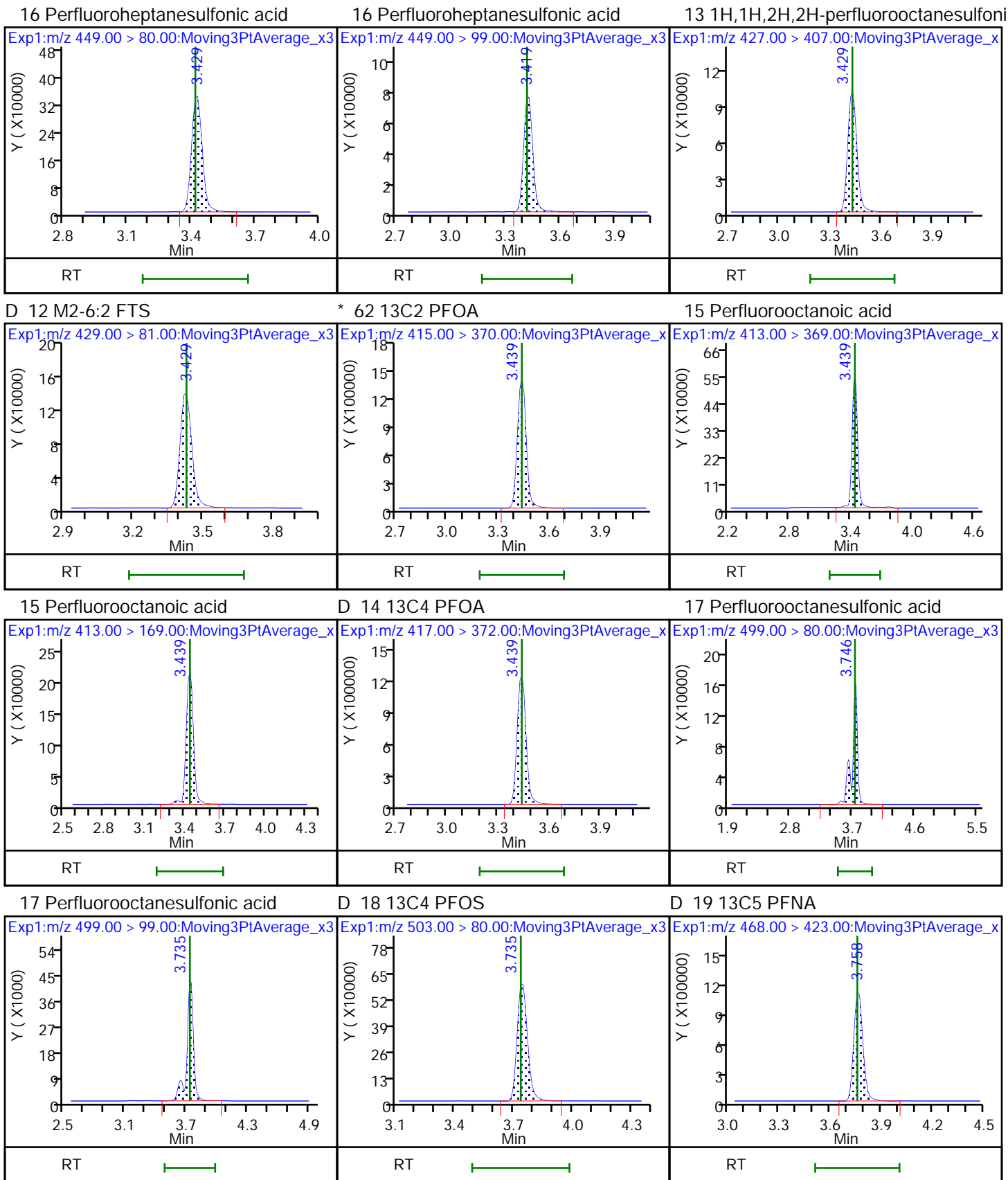
Dil. Factor: 1.0000

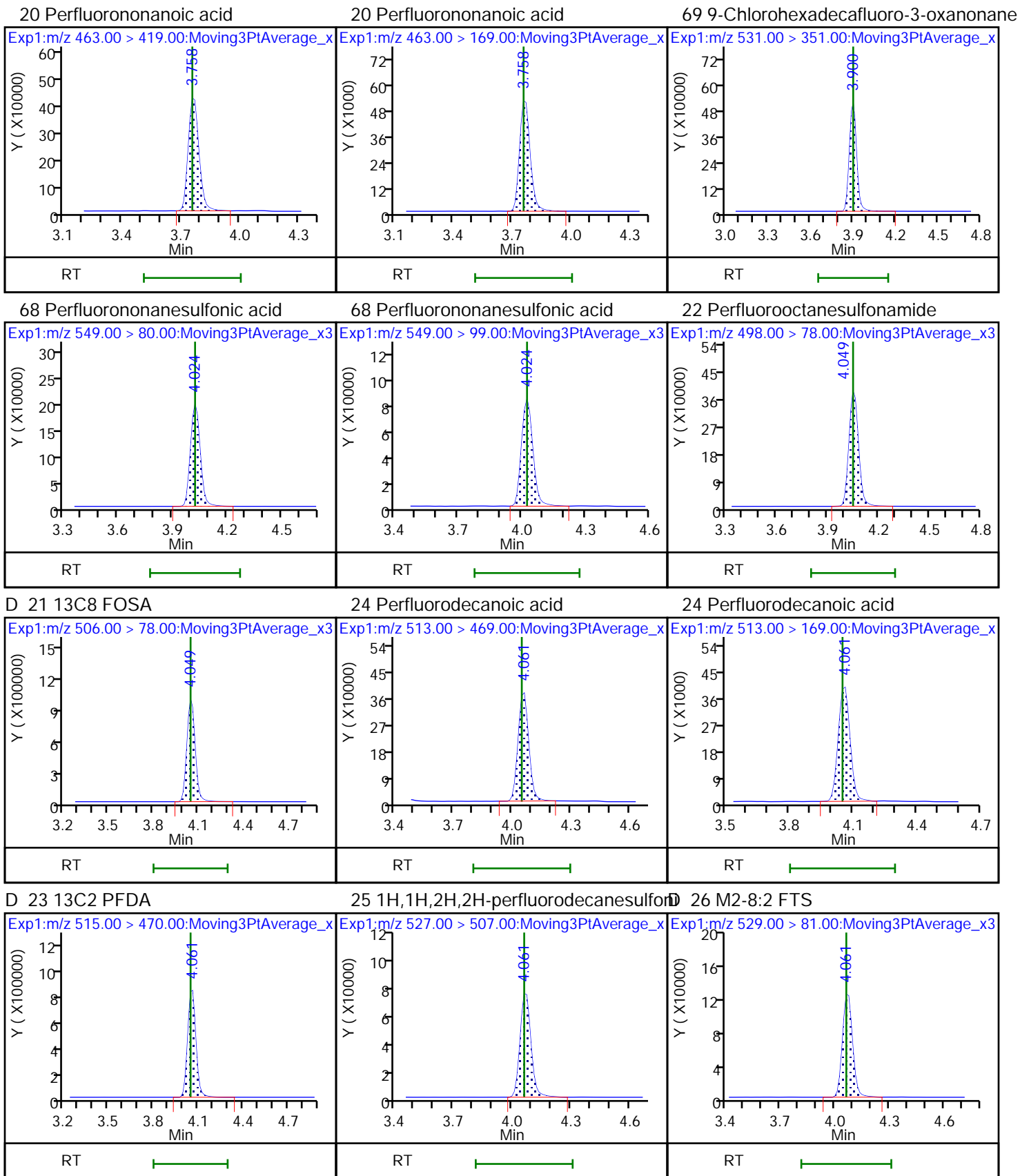
Method: PFC_LC812

Limit Group: LC_PFC_ICAL



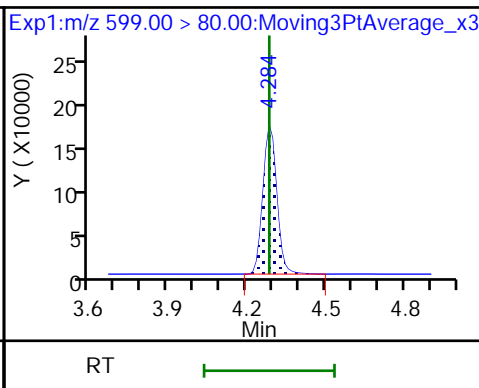
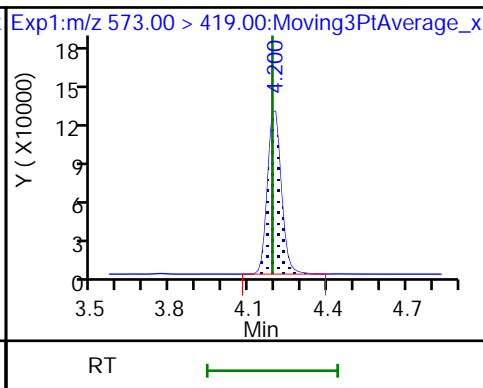
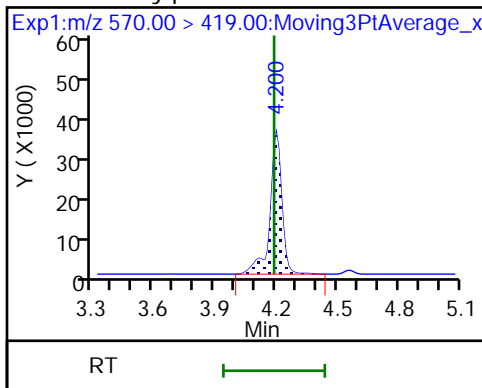






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

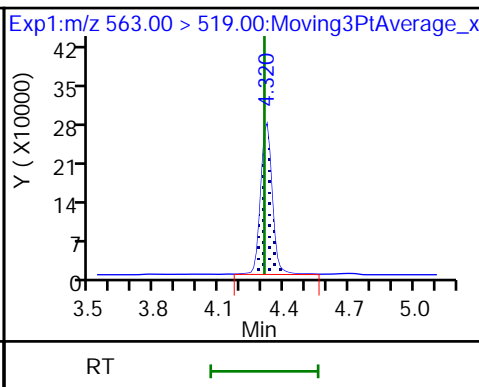
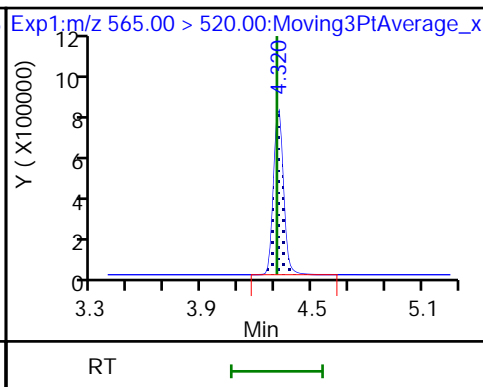
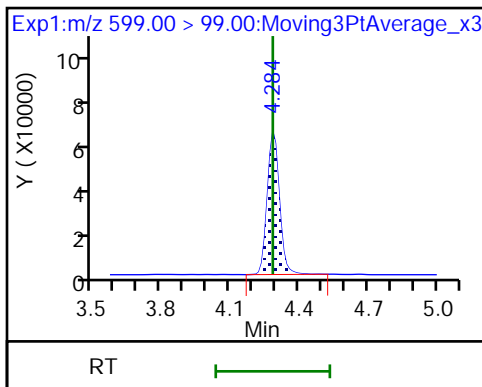
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

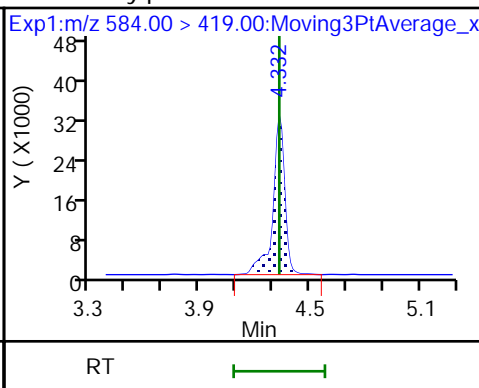
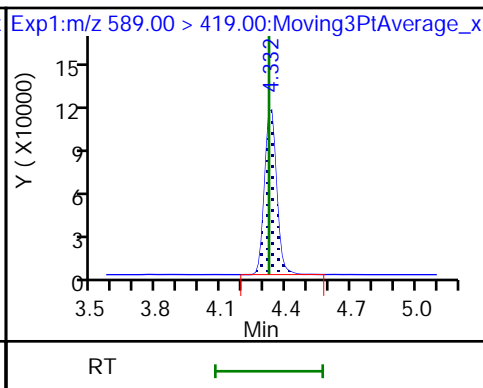
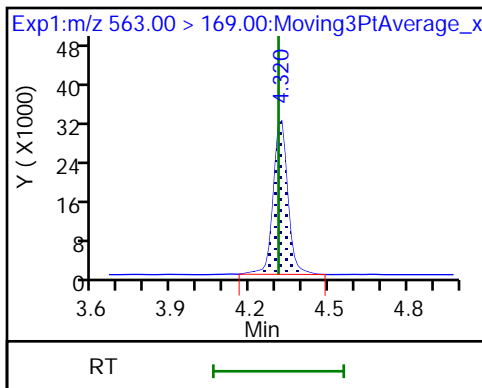
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

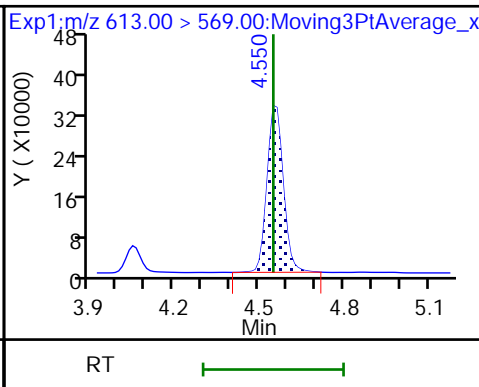
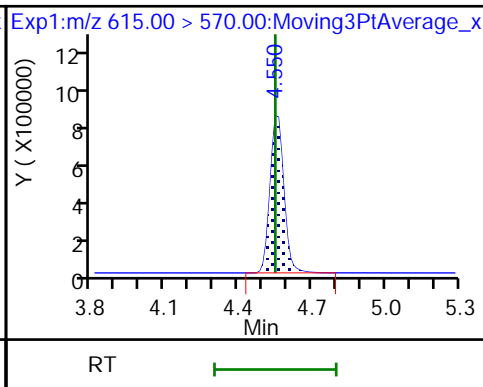
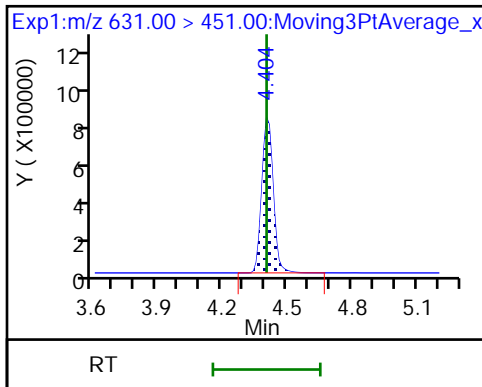
33 N-ethylperfluorooctanesulfonamidoa



66 11-Chloroeicosafuoro-3-oxaundecaD

36 13C2 PFDoA

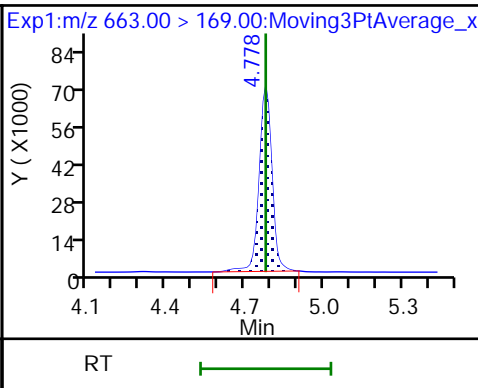
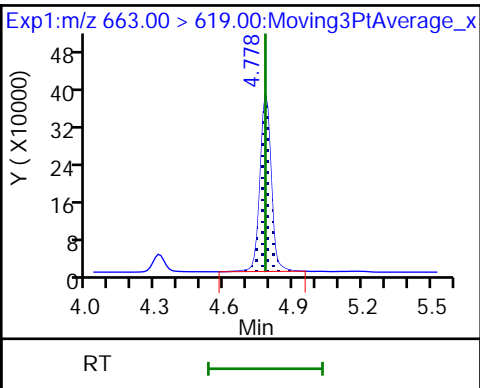
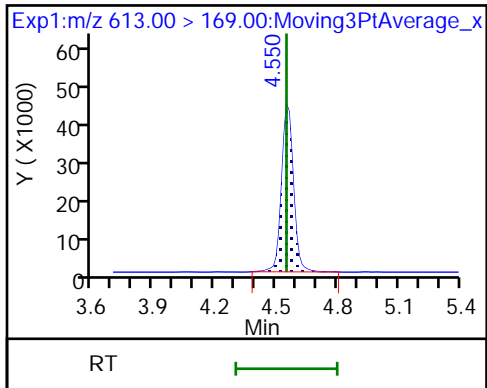
37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

41 Perfluorotridecanoic acid

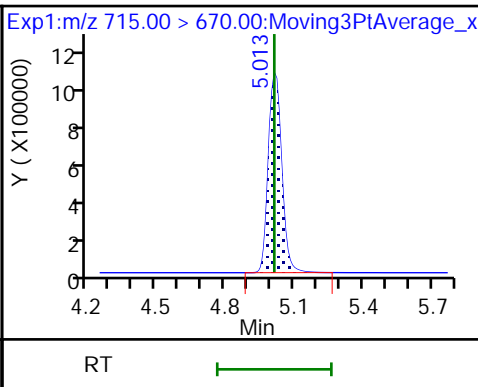
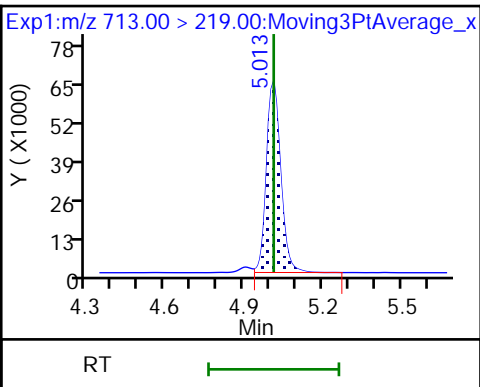
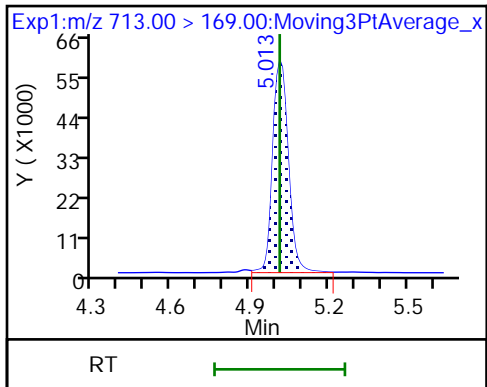
41 Perfluorotridecanoic acid



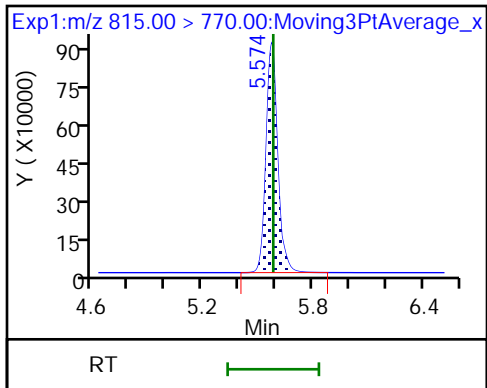
42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

D 43 13C2 PFTeDA



D 44 13C2 PFHxDA



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVL 200-145757/2 Calibration Date: 08/01/2019 14:26
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119A002.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9217	0.9303		1010	1000	0.9	50.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9677	1.025		1060	1000	6.0	50.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.017	1.061		923	884	4.4	50.0
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.389	2.129		8320	9340	-10.9	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.030	1.120		1090	1000	8.8	50.0
Perfluoropentanesulfonic acid	AveID	0.8944	0.8752		918	938	-2.2	50.0
HFPO-DA	AveID	2.541	3.193		1260	1000	25.6	50.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.318	1.449		1000	910	9.9	50.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9367	1.020		1090	1000	8.9	50.0
DONA	AveID	4.754	4.855		962	942	2.1	50.0
6:2 FTS	AveID	1.715	1.409		7790	9480	-17.8	50.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.205	1.309		1030	952	8.7	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.088	1.290		1190	1000	18.5	50.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9465	1.049		1030	928	10.8	50.0
Perfluorononanoic acid (PFNA)	AveID	0.9059	0.9231		1020	1000	1.9	50.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.174	2.014		863	932	-7.4	50.0
Perfluorononanesulfonic acid	AveID	0.8445	1.050		1190	960	24.3	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9682	1.057		1090	1000	9.2	50.0
8:2 FTS	AveID	1.337	1.053		7540	9580	-21.3	50.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.9129	0.8601		942	1000	-5.8	50.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7567	0.7847		10400	10000	3.7	50.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6627	0.7199		1050	964	8.6	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8581	0.8468		987	1000	-1.3	50.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.6400	0.6242		9750	10000	-2.5	50.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	3.310	2.913		829	942	-12.0	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.022	1.110		1090	1000	8.6	50.0
10:2 FTS	AveID	0.8462	0.6424		7320	9640	-24.1	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.3176	0.4113		1250	968	29.5	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9176	0.9237		1010	1000	0.7	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1331	0.1719		1290	1000	29.1	50.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCVL 200-145757/2 Calibration Date: 08/01/2019 14:26
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119A002.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.380		1070	1000	6.8	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7518	0.6414		853	1000	-14.7	50.0
13C4 PFBA	Ave	0.9423	0.9601		50900	50000	1.9	50.0
13C5 PFPeA	Ave	0.8851	0.8516		48100	50000	-3.8	50.0
13C3 PFBS	Ave	0.8694	0.8248		44100	46500	-5.1	50.0
M2-4:2 FTS	Ave	0.0841	0.0993		55100	46700	18.1	50.0
13C2 PFHxA	Ave	0.8791	0.8651		49200	50000	-1.6	50.0
13C3 HFPO-DA	Ave	0.0564	0.0462		40900	50000	-18.2	50.0
13C4 PFHpA	Ave	0.8611	0.8195		47600	50000	-4.8	50.0
18O2 PFHxS	Ave	0.5092	0.4565		42400	47300	-10.3	50.0
M2-6:2 FTS	Ave	0.1060	0.1081		48500	47500	2.0	50.0
13C4 PFOA	Ave	0.9094	0.7927		43600	50000	-12.8	50.0
13C4 PFOS	Ave	0.4242	0.3572		40300	47800	-15.8	50.0
13C5 PFNA	Ave	0.8296	0.7769		46800	50000	-6.4	50.0
13C2 PFDA	Ave	0.6637	0.7209		54300	50000	8.6	50.0
M2-8:2 FTS	Ave	0.0978	0.1051		51500	47900	7.4	50.0
13C8 FOSA	Ave	0.7620	0.7862		51600	50000	3.2	50.0
d3-NMeFOSAA	Ave	0.0848	0.0655		38600	50000	-22.8	50.0
13C2 PFUnA	Ave	0.6045	0.6009		49700	50000	-0.6	50.0
d5-NEtFOSAA	Ave	0.0945	0.0726		38400	50000	-23.2	50.0
13C2 PFDoA	Ave	0.6507	0.6432		49400	50000	-1.2	50.0
13C2 PFTeDA	Ave	0.8960	0.6715		37500	50000	-25.1	50.0
13C2 PFHxDA	Ave	0.7972	0.7197		45100	50000	-9.7	50.0

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A002.d
 Lims ID: CCVL
 Client ID:
 Sample Type: CCVL
 Inject. Date: 01-Aug-2019 14:26:16 ALS Bottle#: 2 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCVL
 Misc. Info.: 200-0037090-002 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 07-Aug-2019 15:09:35 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: chirgwinb Date: 01-Aug-2019 14:39:11

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.683	1.678	0.005	1.003	88125	1.01		101	23.0	
D 1 13C4 PFBA										
217.00 > 172.00	1.678	1.678	0.0	0.510	4736314	50.9		102	17196	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.034	2.034	0.0	1.000	86159	1.06		106	4.9	
D 3 13C5 PFPeA										
267.90 > 223.00	2.034	2.034	0.0	0.618	4201347	48.1		96.2	10711	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.055	2.054	0.001	1.000	76321	0.9225	Target=1.90	104	409	
298.90 > 99.00	2.055	2.054	0.001	1.000	36939		2.07(0.95-2.85)		60.0	
D 47 13C3 PFBS										
301.90 > 80.00	2.055	2.054	0.001	0.625	3784284	44.1		94.9	808122	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.381	2.371	0.010	1.000	194850	8.32		89.1	1877	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.381	2.371	0.010	0.724	457615	55.1		118	692	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.417	2.408	0.009	1.000	95613	1.09	Target=13.23	109	37.4	
313.00 > 119.00	2.417	2.408	0.009	1.000	6862		13.93(6.61-19.84)		15.9	
D 7 13C2 PFHxA										
315.00 > 270.00	2.417	2.408	0.009	0.735	4267777	49.2		98.4	9505	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.426	2.417	0.009	1.181	66808	0.9178	Target=2.73	97.8	401	
349.00 > 99.00	2.426	2.417	0.009	1.181	23270		2.87(1.37-4.10)		72.7	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.546	2.545	0.001	1.000	14545	1.26		126	3.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.546	2.545	0.001	0.774	227745	40.9		81.8	1196	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.862	2.851	0.011	1.000	59377	1.00	Target=3.37	110	74.0	M
399.00 > 99.00	2.862	2.851	0.011	1.000	17068		3.48(1.69-5.06)		24.1	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.872	2.851	0.021	1.004	82510	1.09	Target=3.76	109	23.9	
363.00 > 169.00	2.872	2.851	0.021	1.004	21724		3.80(1.88-5.65)		131	
D 9 13C4 PFHpA										
367.00 > 322.00	2.862	2.851	0.011	0.870	4042847	47.6		95.2	6729	
D 11 18O2 PFHxS										
403.00 > 84.00	2.862	2.851	0.011	0.870	2130410	42.4		89.7	4905	
77 DONA										
377.00 > 251.00	2.917	2.905	0.012	0.800	161192	0.9620	Target=2.72	102	139	
377.00 > 85.00	2.917	2.905	0.012	0.800	65681		2.45(1.36-4.07)		107	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.281	3.270	0.011	0.899	43915	1.03	Target=4.80	109	295	
449.00 > 99.00	3.281	3.270	0.011	0.899	8053		5.45(2.40-7.20)		50.0	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.281	3.270	0.011	1.000	142516	7.79		82.2	890	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.281	3.270	0.011	0.997	506757	48.5		102	1398	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.290	3.279	0.011	1.000	100853	1.19	Target=2.84	119	12.6	
413.00 > 169.00	3.290	3.279	0.011	1.000	38688		2.61(1.42-4.25)		139	
* 62 13C2 PFOA										
415.00 > 370.00	3.290	3.279	0.011		4933248	50.0			9637	
D 14 13C4 PFOA										
417.00 > 372.00	3.290	3.279	0.011	1.000	3910541	43.6		87.2	12971	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.648	3.640	0.008	1.000	34300	1.03	Target=4.33	111	177	M
499.00 > 99.00	3.648	3.640	0.008	1.000	7530		4.56(2.16-6.49)		51.3	M
D 18 13C4 PFOS										
503.00 > 80.00	3.648	3.640	0.008	1.109	1684762	40.3		84.2	7795	
20 Perfluorononanoic acid										
463.00 > 419.00	3.665	3.657	0.008	1.000	70752	1.02	Target=8.15	102	28.4	
463.00 > 169.00	3.665	3.657	0.008	1.000	8634		8.19(4.08-12.23)		184	
D 19 13C5 PFNA										
468.00 > 423.00	3.665	3.657	0.008	1.114	3832503	46.8		93.6	29798	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.818	3.819	-0.001	1.047	66159	0.8632		92.6	261	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.953	3.954	-0.001	1.084	35522	1.19	Target=2.42	124	532	
549.00 > 99.00	3.953	3.954	-0.001	1.084	15580		2.28(1.21-3.63)		47.0	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.986	3.987	-0.001	1.000	75198	1.09	Target=9.58	109	45.1	
513.00 > 169.00	3.986	3.987	-0.001	1.000	7983		9.42(4.79-14.37)		55.4	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	3.998	3.987	0.011	1.000	104504	7.54	78.7	1265	
D 26 M2-8:2 FTS	529.00 > 81.00	3.998	3.987	0.011	1.215	496453	51.5	107	1446	
D 23 13C2 PFDA	515.00 > 470.00	3.986	3.987	-0.001	1.211	3556133	54.3	109	11668	
D 21 13C8 FOSA	506.00 > 78.00	4.010	4.011	-0.001	1.219	3878509	51.6	103	9620	
22 Perfluorooctanesulfonamide	498.00 > 78.00	4.022	4.011	0.011	1.003	66715	0.9421	94.2	455	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	4.133	4.135	-0.002	1.000	50682	10.4	104	110	
D 27 d3-NMeFOSAA	573.00 > 419.00	4.133	4.135	-0.002	1.256	322948	38.6	77.2	3653	
29 Perfluorodecanesulfonic acid	599.00 > 80.00	4.234	4.235	-0.001	1.161	24460	1.05	Target=2.64	109	305
	599.00 > 99.00	4.234	4.235	-0.001	1.161	9887		2.47(1.32-3.96)		43.3
31 Perfluoroundecanoic acid	563.00 > 519.00	4.258	4.260	-0.002	1.000	50203	0.9869	Target=7.95	98.7	20.2
	563.00 > 169.00	4.258	4.260	-0.002	1.000	6791		7.39(3.98-11.93)		74.5
D 30 13C2 PFUnA	565.00 > 520.00	4.258	4.260	-0.002	1.294	2964326	49.7	99.4	12426	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	4.283	4.272	0.011	1.003	44702	9.75	97.5	419	
D 32 d5-NEtFOSAA	589.00 > 419.00	4.270	4.272	-0.002	1.298	358081	38.4	76.8	1280	
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	4.355	4.356	-0.001	1.194	96719	0.8290	88.0	946	
37 Perfluorododecanoic acid	613.00 > 569.00	4.499	4.512	-0.013	1.000	70437	1.09	Target=7.49	109	12.3
	613.00 > 169.00	4.511	4.512	-0.001	1.003	11984		5.88(3.75-11.24)		199
D 36 13C2 PFDaA	615.00 > 570.00	4.499	4.512	-0.013	1.367	3173098	49.4	98.8	7489	
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	4.524	4.524	0.0	1.132	64183	7.32	75.9	1572	
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.685	4.685	0.0	1.284	14031	1.25	Target=0.50	129	23.8
	699.00 > 99.00	4.685	4.685	0.0	1.284	26525		0.53(0.25-0.76)		194
41 Perfluorotridecanoic acid	663.00 > 619.00	4.730	4.730	0.0	1.051	58622	1.01	Target=5.71	101	7.2
	663.00 > 169.00	4.719	4.730	-0.012	1.049	11836		4.95(2.85-8.56)		119
42 Perfluorotetradecanoic acid	713.00 > 169.00	4.932	4.939	-0.007	1.000	11388	1.29	Target=1.02	129	130
	713.00 > 219.00	4.932	4.939	-0.007	1.000	10942		1.04(0.51-1.54)		167
D 43 13C2 PFTeDA	715.00 > 670.00	4.932	4.939	-0.007	1.499	3312813	37.5	74.9	9022	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.367	5.359	0.008	1.001	98002	1.07	Target=5.23	107	35.7	
813.00 > 169.00	5.359	5.359	0.0	1.000	21135		4.64(2.62-7.85)		406	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.359	5.359	0.0	1.629	3550558	45.1		90.3	6372	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.796	5.796	0.0	1.082	45546	0.8531	Target=5.61	85.3	43.6	
913.00 > 169.00	5.796	5.796	0.0	1.082	10624		4.29(2.80-8.41)		218	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFAS32-LOQV_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A002.d

Injection Date: 01-Aug-2019 14:26:16

Instrument ID: LC812

Lims ID: CCVL

Client ID:

Operator ID: lc812tech

ALS Bottle#: 2

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

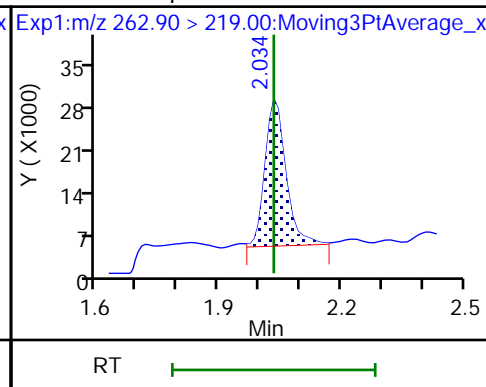
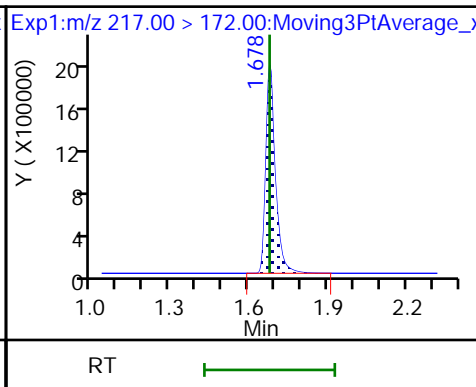
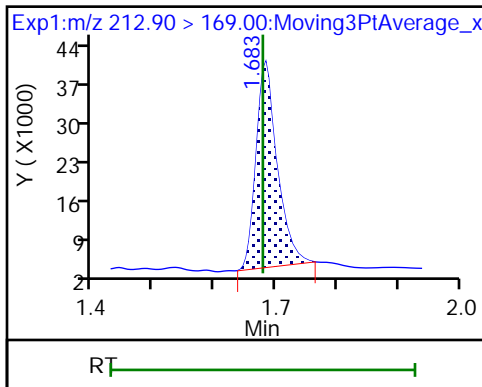
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

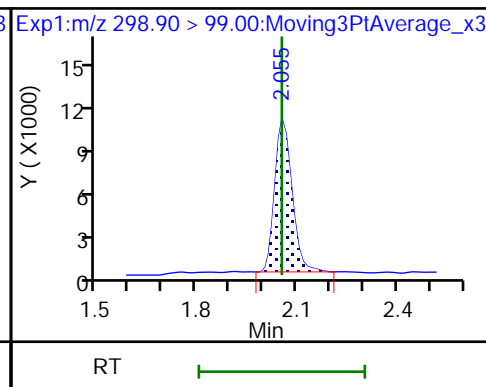
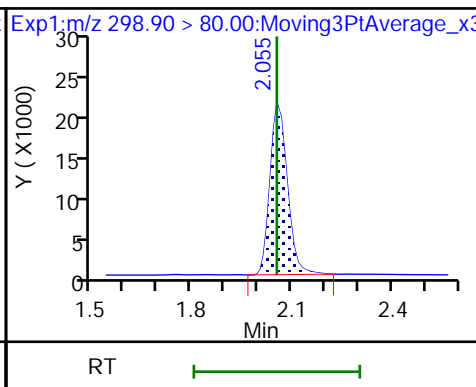
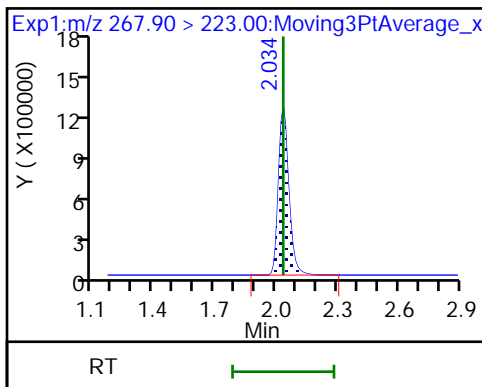
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

5 Perfluorobutanesulfonic acid

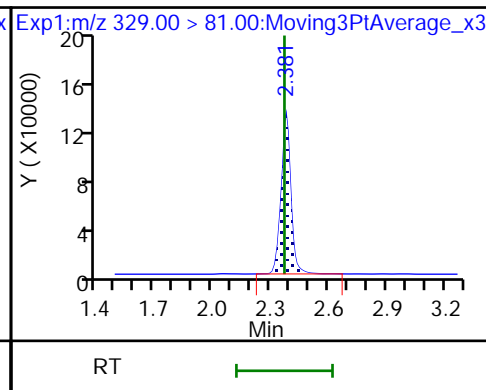
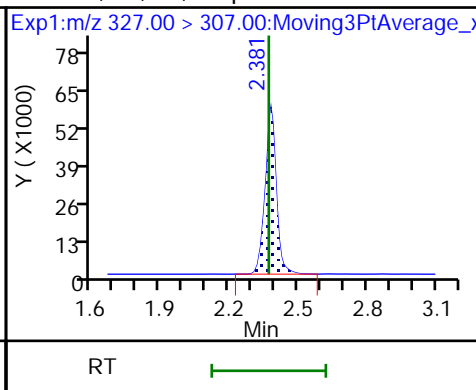
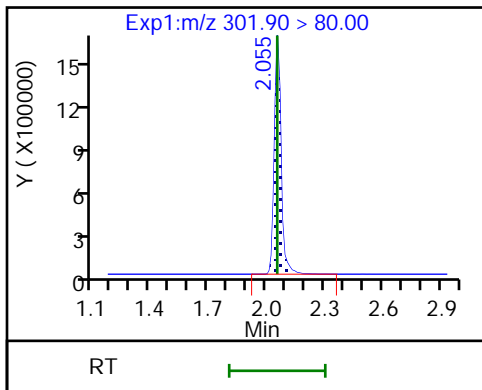
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

61 1H,1H,2H,2H-perfluorohexanesulfonate

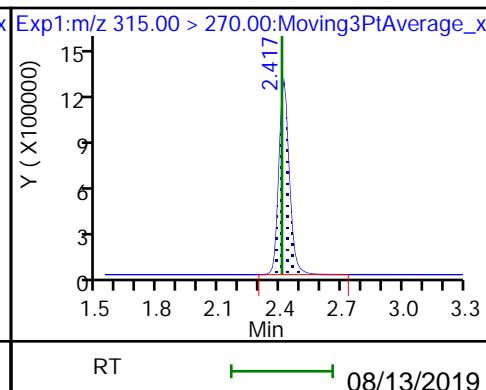
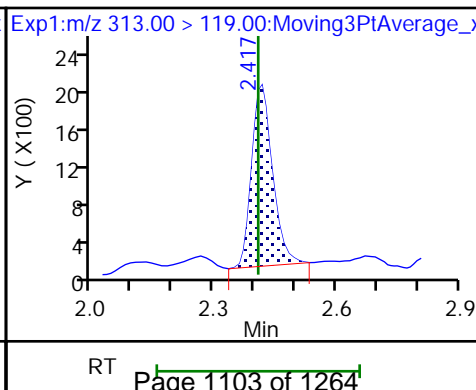
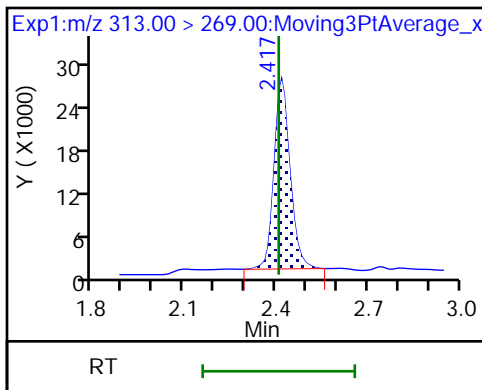
D 60 M2-4:2 FTS

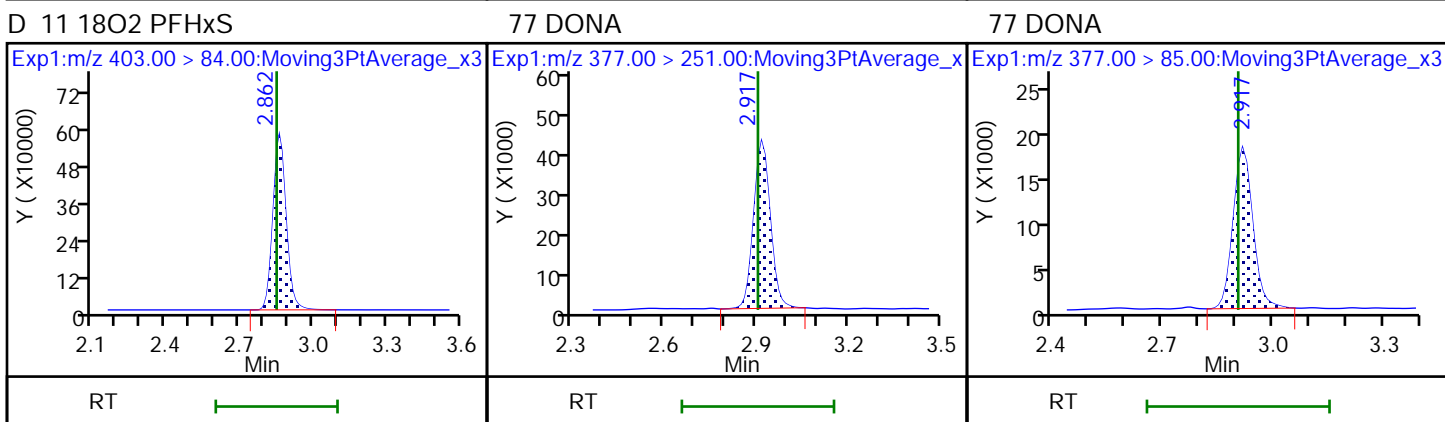
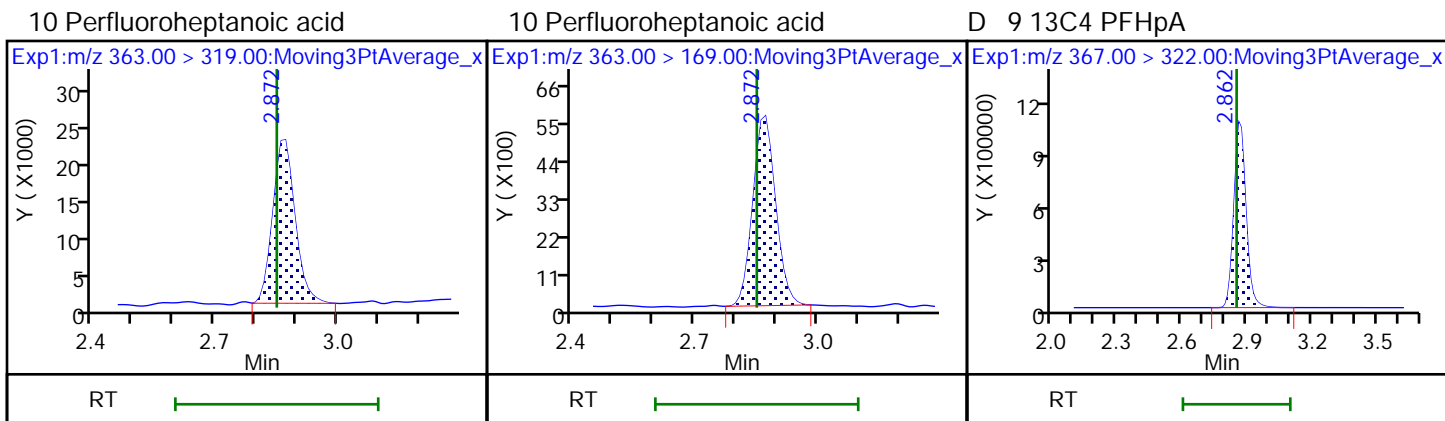
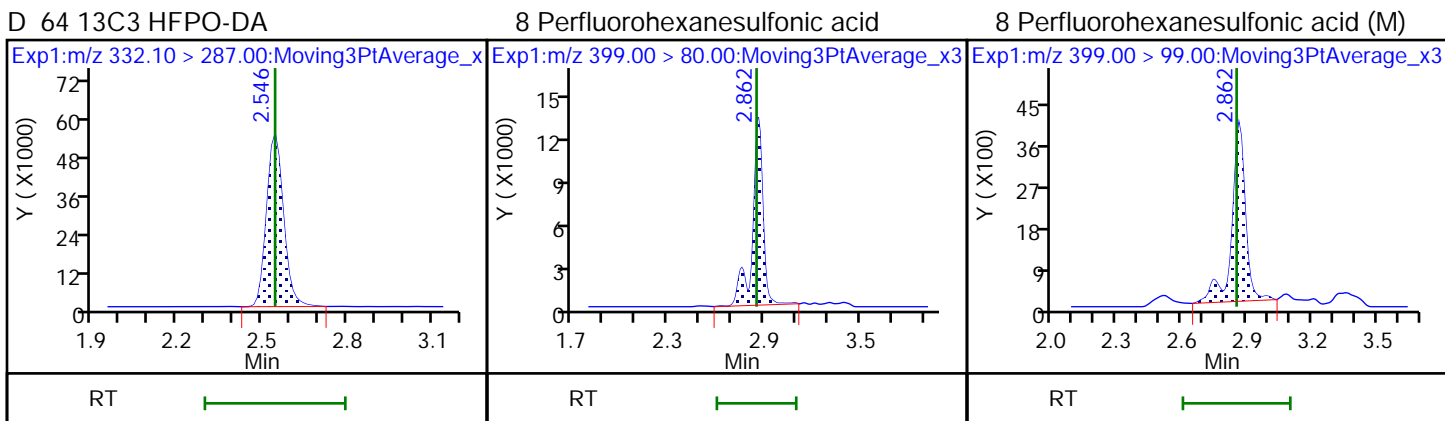
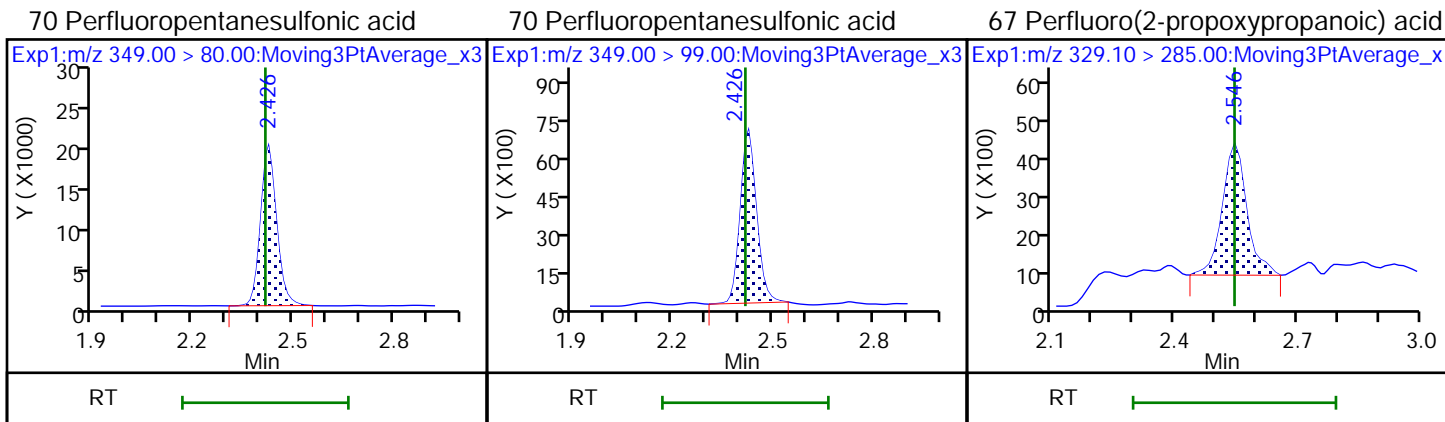


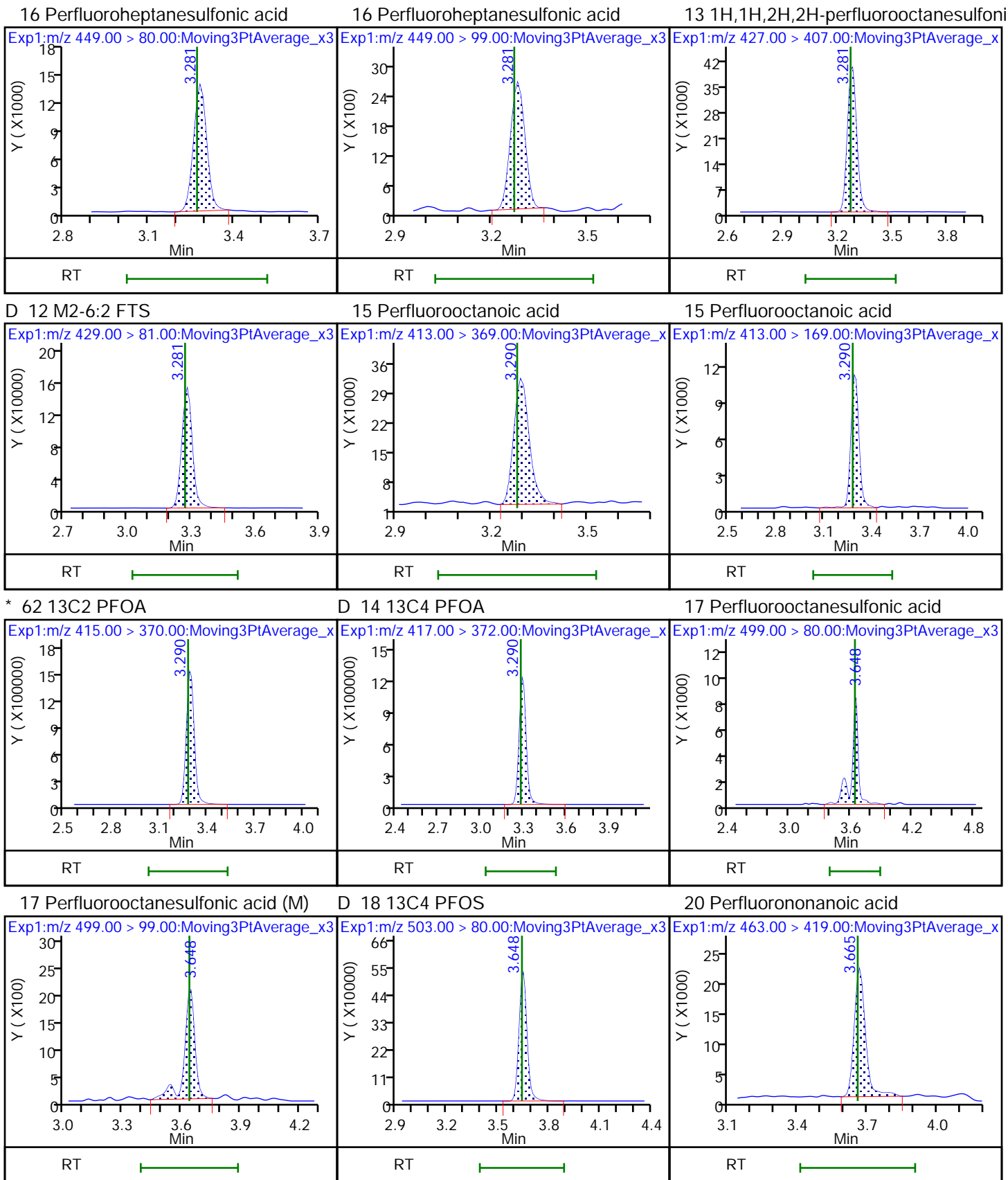
6 Perfluorohexanoic acid

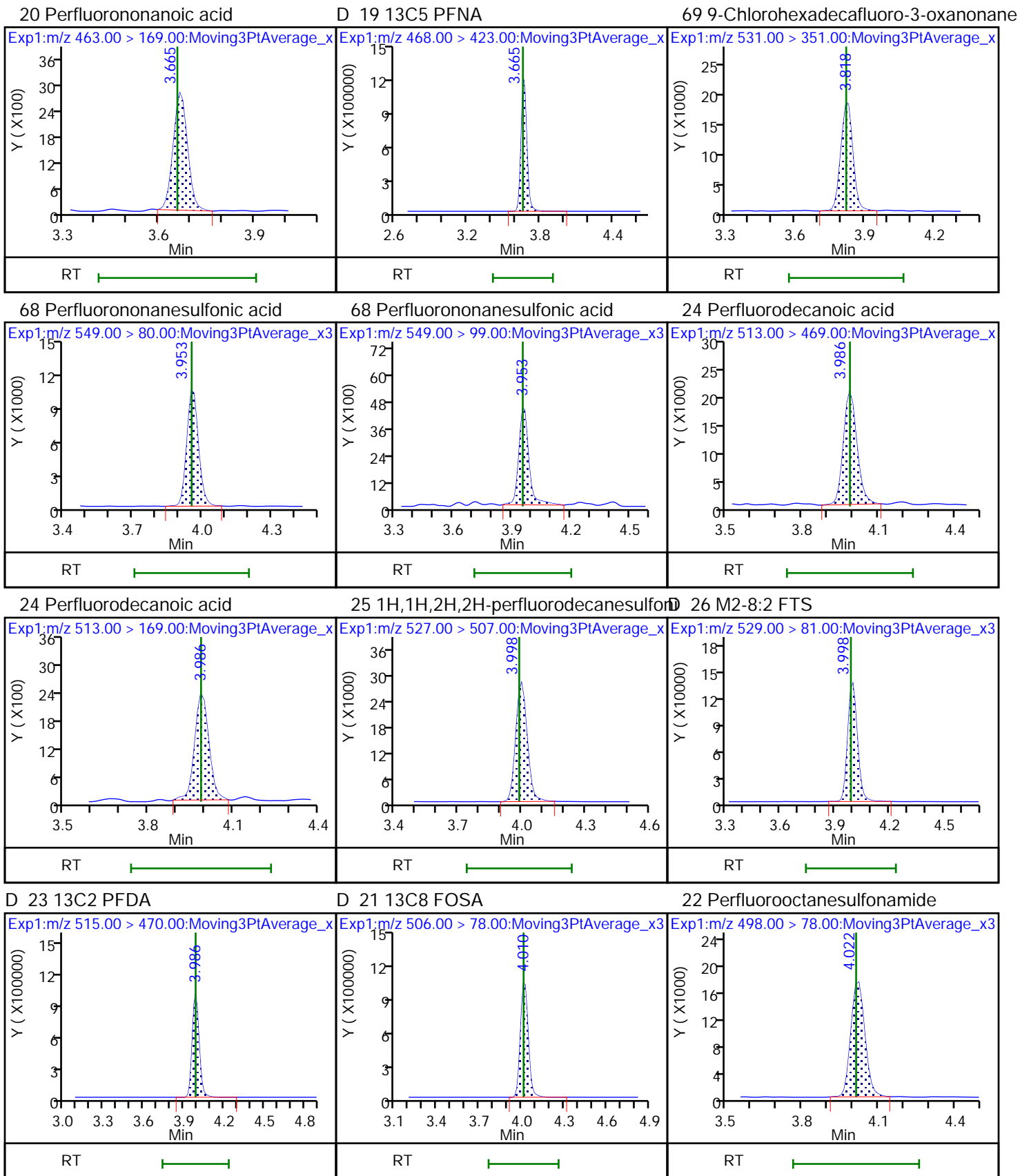
6 Perfluorohexanoic acid

D 7 13C2 PFHxA



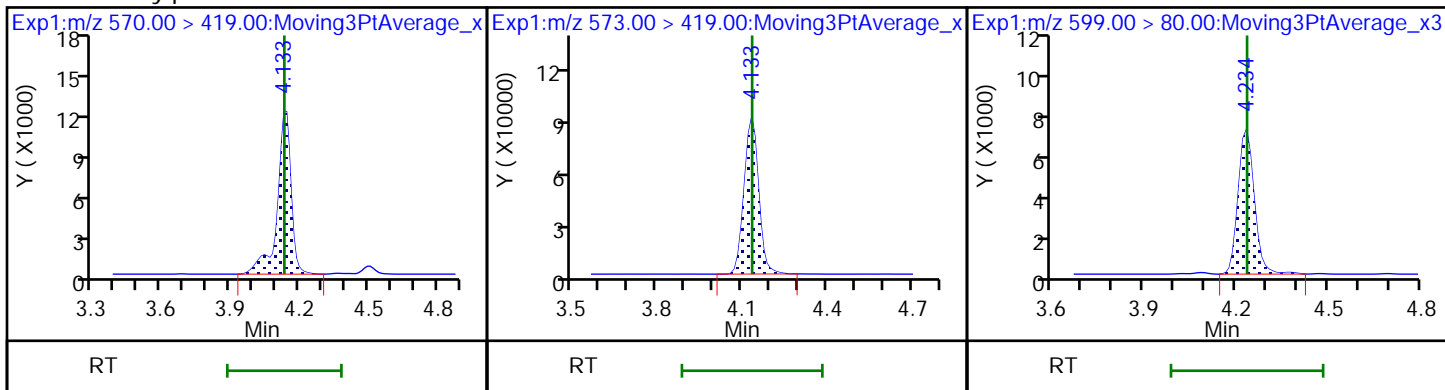






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

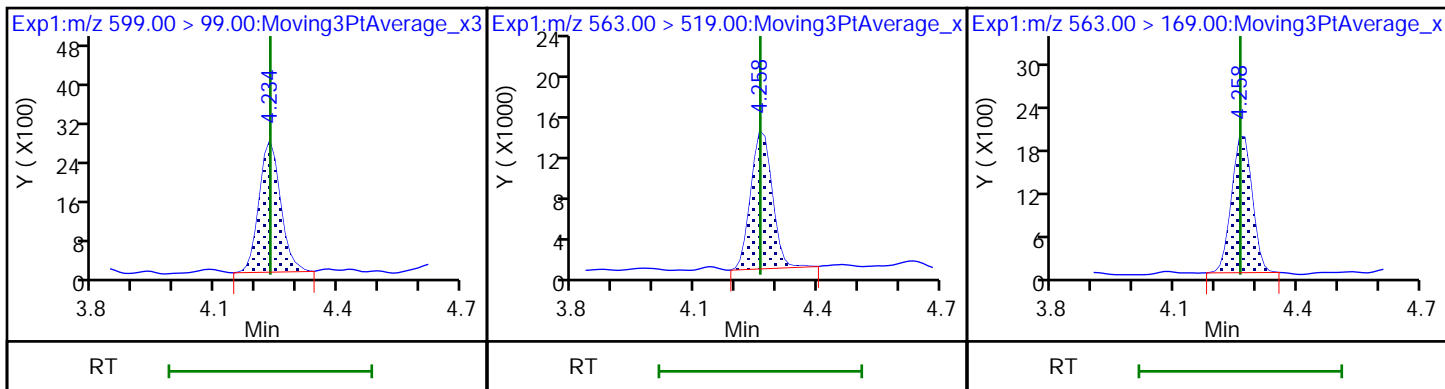
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

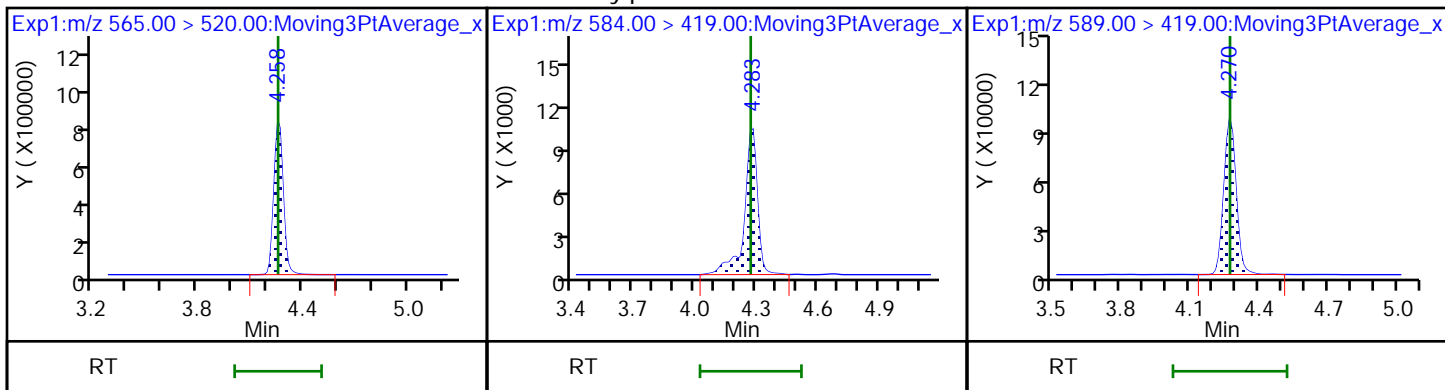
31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid



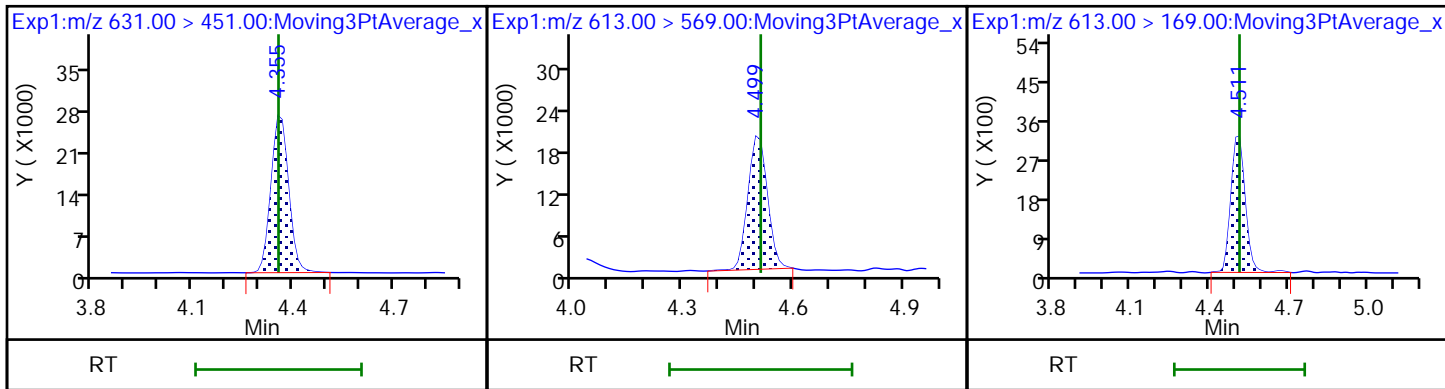
D 30 13C2 PFUnA

33 N-ethylperfluorooctanesulfonamidD 32 d5-NEtFOSAA



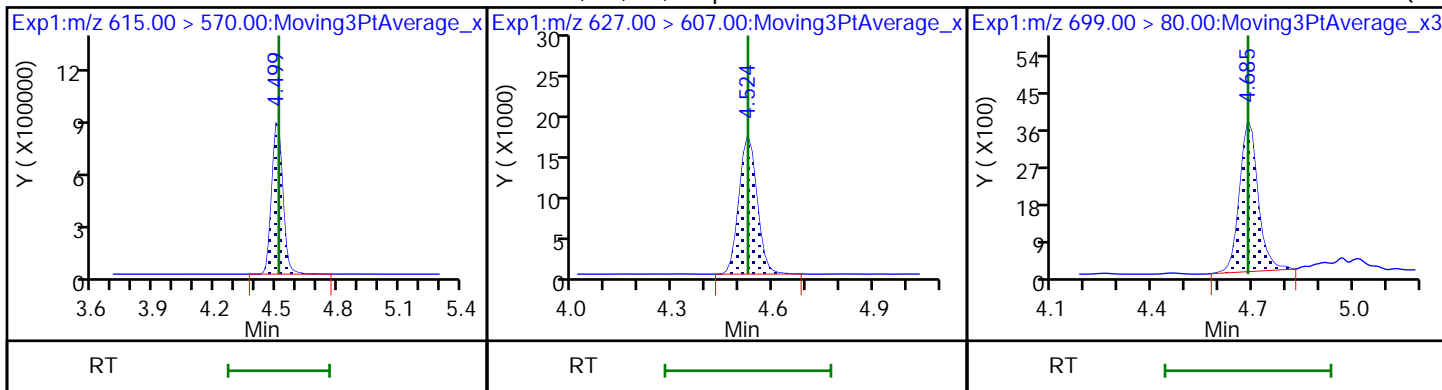
66 11-Chloroeicosafuoro-3-oxaundecan 37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



D 36 13C2 PFDaA

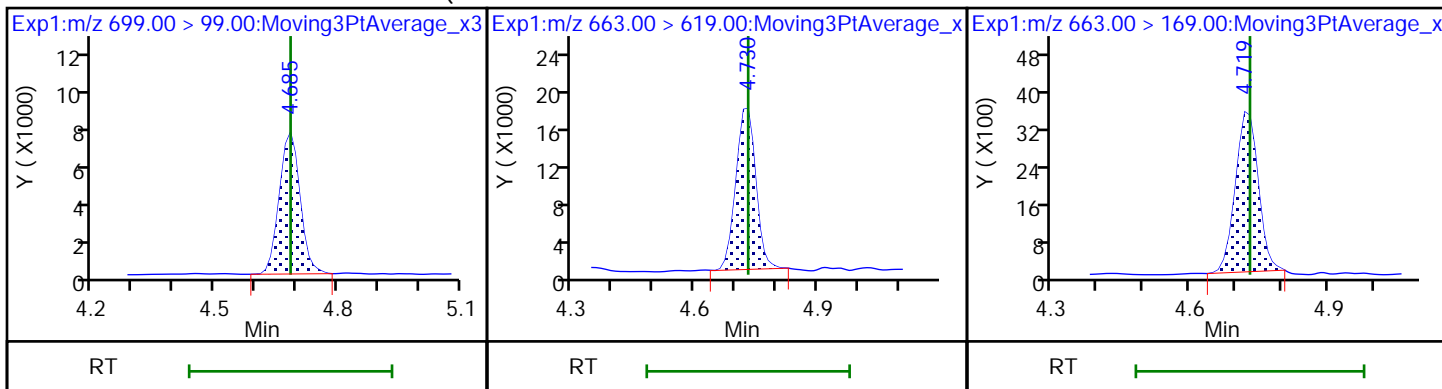
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF (M)



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

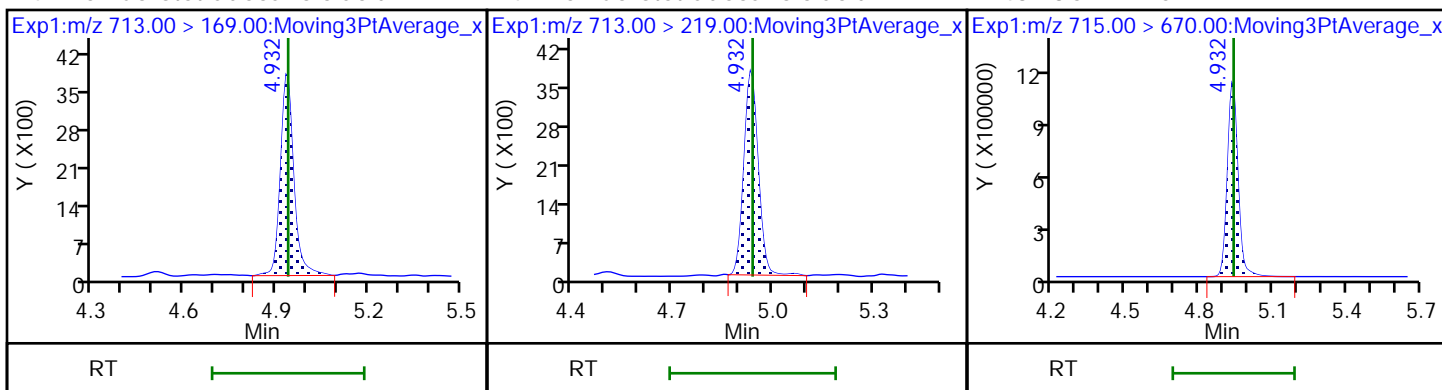
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

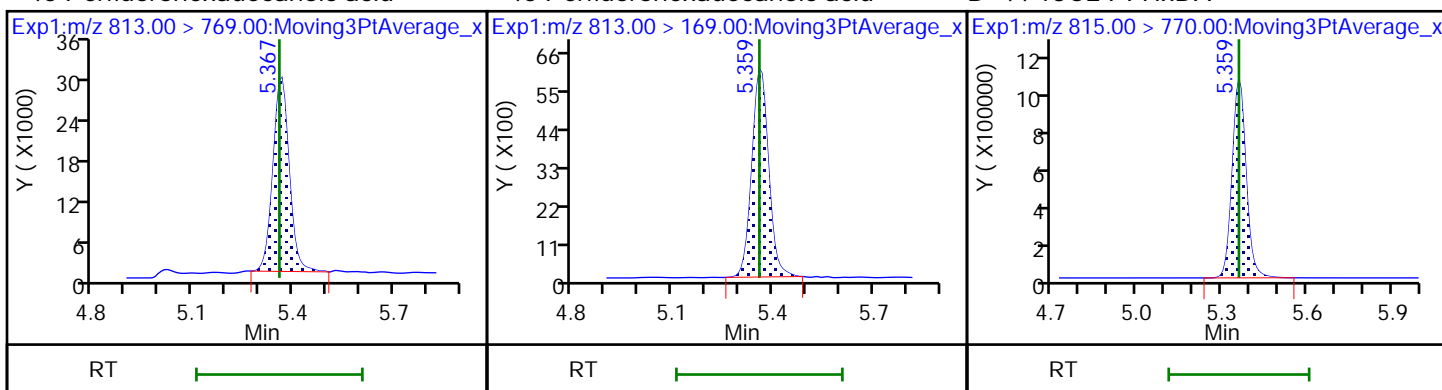
D 43 13C2 PFTeDA



45 Perfluorohexadecanoic acid

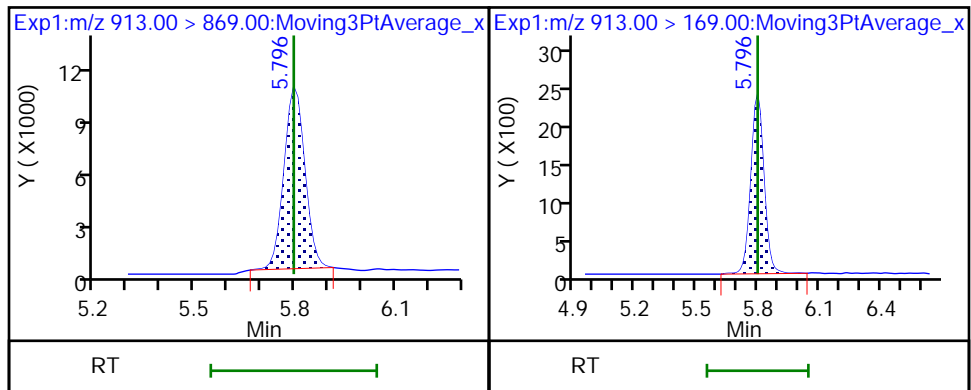
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

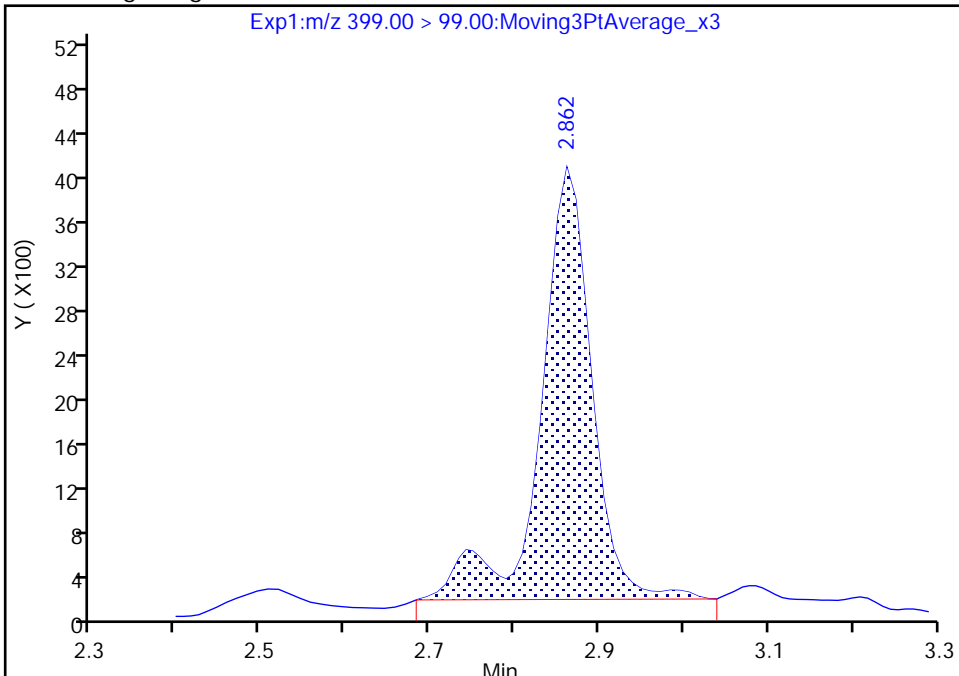
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A002.d
Injection Date: 01-Aug-2019 14:26:16 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

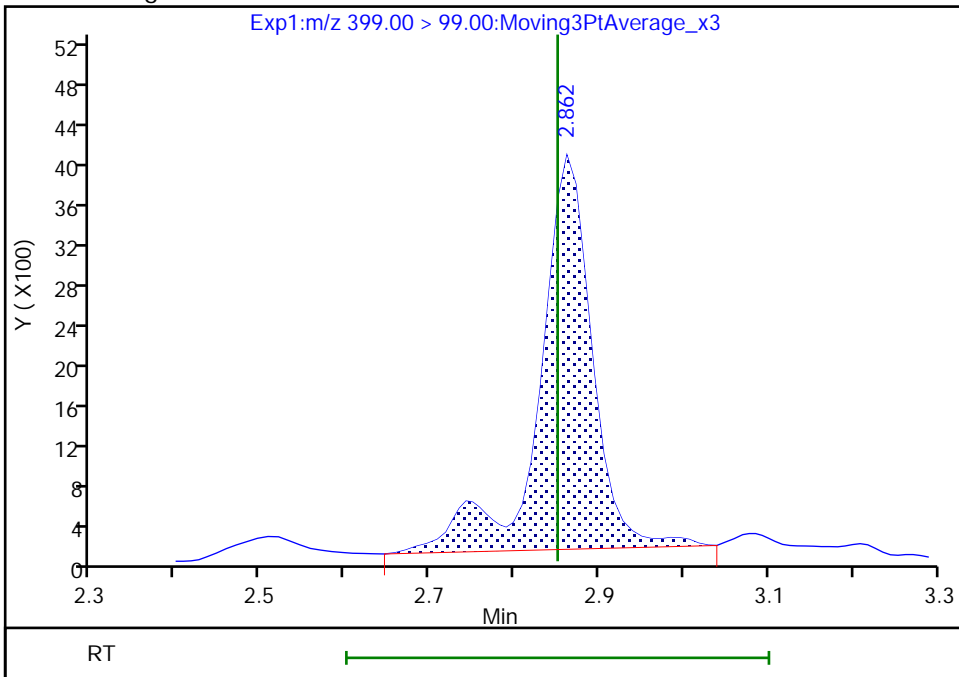
RT: 2.86
Area: 16297
Amount: 1.000391
Amount Units: ng/ml

Processing Integration Results



RT: 2.86
Area: 17068
Amount: 1.000391
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 01-Aug-2019 14:37:04
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

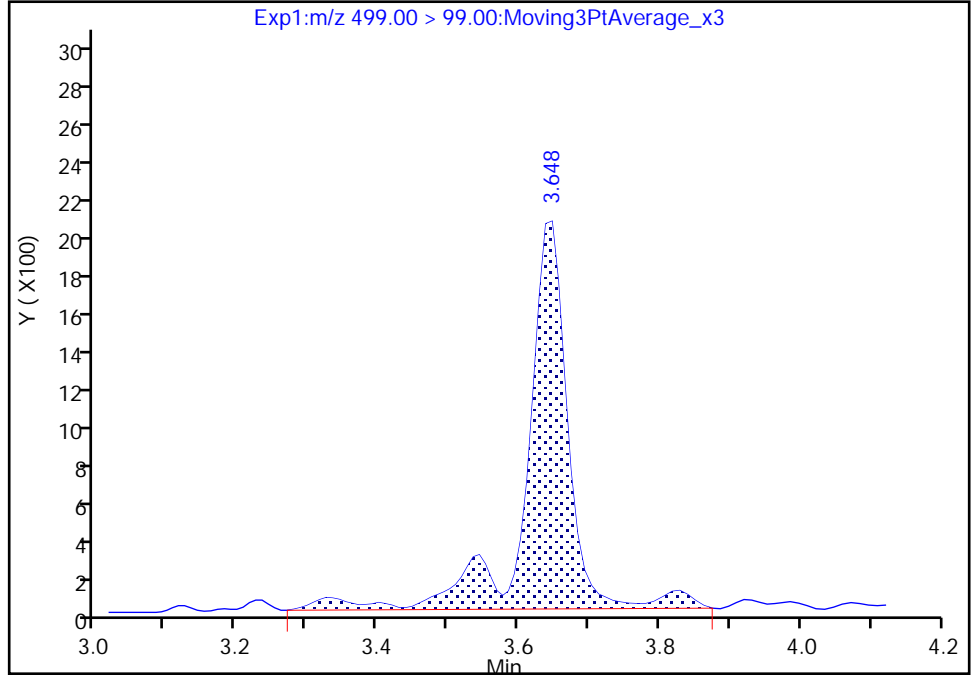
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A002.d
Injection Date: 01-Aug-2019 14:26:16 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

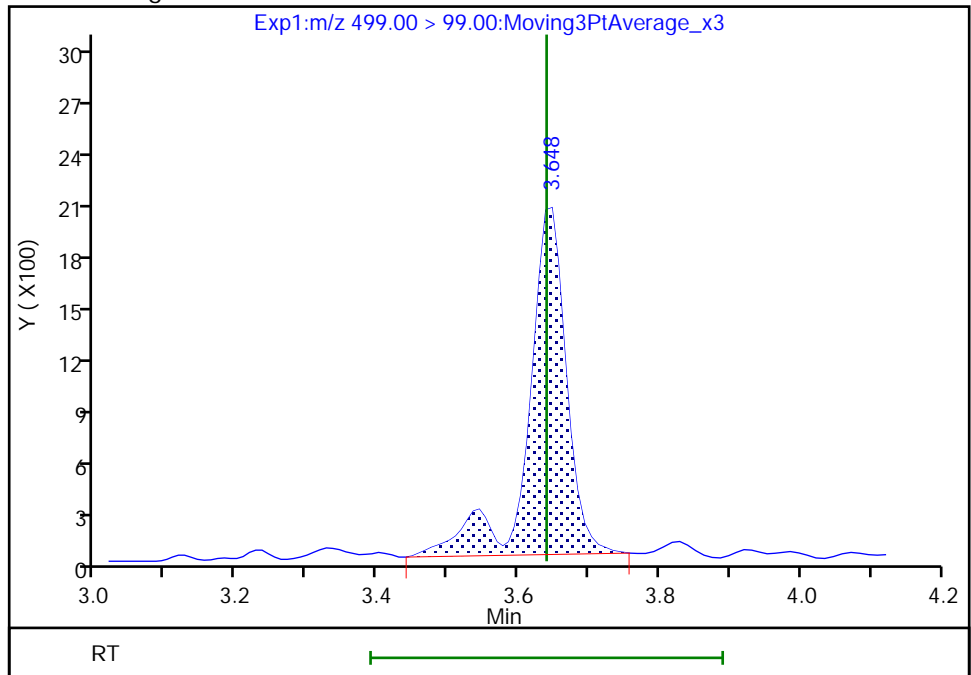
RT: 3.65
Area: 8533
Amount: 1.028147
Amount Units: ng/ml

Processing Integration Results



RT: 3.65
Area: 7530
Amount: 1.028147
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 01-Aug-2019 14:37:25
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

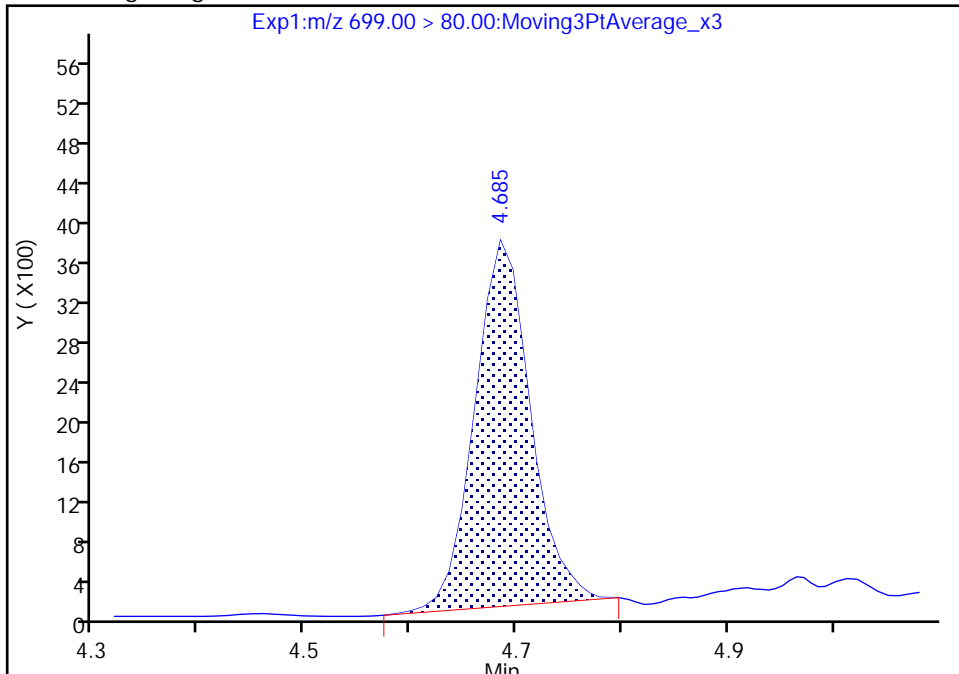
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A002.d
Injection Date: 01-Aug-2019 14:26:16 Instrument ID: LC812
Lims ID: CCVL
Client ID:
Operator ID: lc812tech ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

75 Perfluorododecanesulfonic acid (PFDoS), CAS: 79780-39-5

Signal: 1

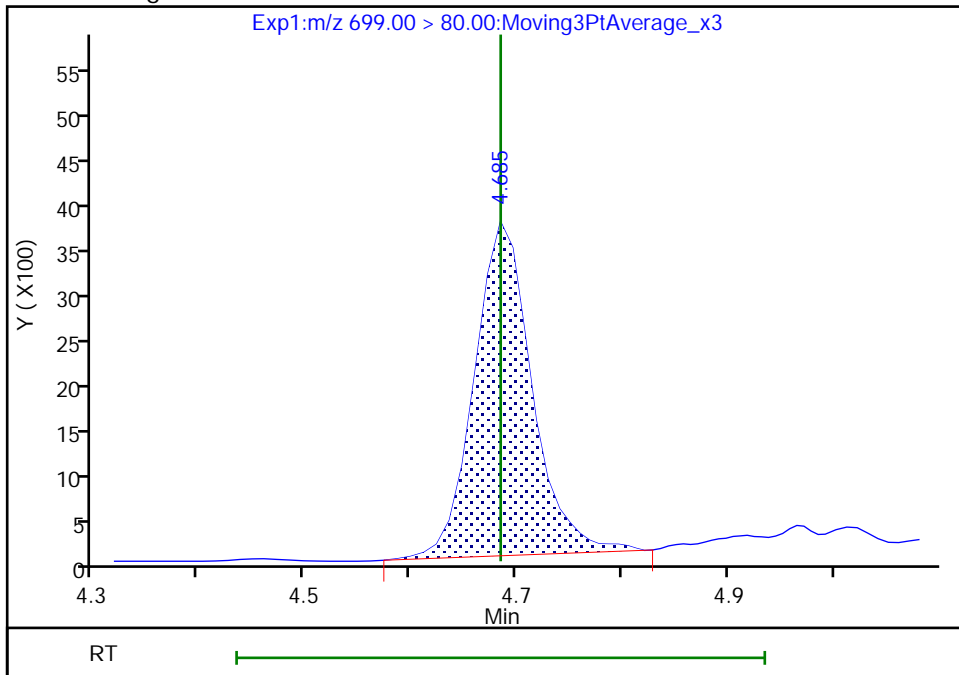
RT: 4.68
Area: 13456
Amount: 1.202153
Amount Units: ng/ml

Processing Integration Results



RT: 4.68
Area: 14031
Amount: 1.253523
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 01-Aug-2019 14:38:03
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145757/3 Calibration Date: 08/01/2019 14:34
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119A003.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9217	0.9326		20200	20000	1.2	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9677	0.9454		19500	20000	-2.3	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.017	1.062		18500	17700	4.4	40.0
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.389	2.121		16600	18700	-11.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.030	1.039		20200	20000	0.9	40.0
Perfluoropentanesulfonic acid	AveID	0.8944	0.9428		19800	18800	5.4	50.0
HFPO-DA	AveID	2.541	2.029		16000	20000	-20.2	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9367	0.9318		19900	20000	-0.5	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.318	1.293		17900	18200	-1.9	40.0
DONA	AveID	4.754	4.746		18800	18800	-0.2	50.0
6:2 FTS	AveID	1.715	1.426		15800	19000	-16.9	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.205	1.237		19500	19000	2.7	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.088	1.032		19000	20000	-5.2	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9465	0.9479		18600	18600	0.1	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9059	0.9498		21000	20000	4.8	40.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.174	1.874		16100	18600	-13.8	50.0
Perfluorononanesulfonic acid	AveID	0.8445	0.8940		20300	19200	5.9	50.0
8:2 FTS	AveID	1.337	0.9698		13900	19200	-27.5	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9682	0.9944		20500	20000	2.7	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.9129	0.8970		19700	20000	-1.7	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7567	0.8407		22200	20000	11.1	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6627	0.7670		22300	19300	15.7	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8581	0.8664		20200	20000	1.0	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.6400	0.5805		18100	20000	-9.3	40.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	3.310	2.762		15700	18800	-16.6	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.022	1.104		21600	20000	8.0	40.0
10:2 FTS	AveID	0.8462	0.6122		13900	19300	-27.7	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.3176	0.3454		21100	19400	8.8	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9176	0.8985		19600	20000	-2.1	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1331	0.1567		23500	20000	17.7	40.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145757/3 Calibration Date: 08/01/2019 14:34
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119A003.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9936		20600	20000	3.2	40.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7518	0.6881		18300	20000	-8.5	50.0
13C4 PFBA	Ave	0.9423	0.9715		51500	50000	3.1	50.0
13C5 PFPeA	Ave	0.8851	0.8858		50000	50000	0.0	50.0
13C3 PFBS	Ave	0.8694	0.7954		42500	46500	-8.5	50.0
M2-4:2 FTS	Ave	0.0841	0.0954		53000	46700	13.4	50.0
13C2 PFHxA	Ave	0.8791	0.8427		47900	50000	-4.1	50.0
13C3 HFPO-DA	Ave	0.0564	0.0595		52700	50000	5.4	50.0
13C4 PFHpA	Ave	0.8611	0.8479		49200	50000	-1.5	50.0
18O2 PFHxS	Ave	0.5092	0.4713		43800	47300	-7.4	50.0
M2-6:2 FTS	Ave	0.1060	0.1060		47500	47500	-0.0	50.0
13C4 PFOA	Ave	0.9094	0.8528		46900	50000	-6.2	50.0
13C4 PFOS	Ave	0.4242	0.3843		43300	47800	-9.4	50.0
13C5 PFNA	Ave	0.8296	0.7973		48100	50000	-3.9	50.0
13C2 PFDA	Ave	0.6637	0.6754		50900	50000	1.8	50.0
M2-8:2 FTS	Ave	0.0978	0.1068		52300	47900	9.3	50.0
13C8 FOSA	Ave	0.7620	0.8027		52700	50000	5.3	50.0
d3-NMeFOSAA	Ave	0.0848	0.0642		37900	50000	-24.3	50.0
13C2 PFUnA	Ave	0.6045	0.5958		49300	50000	-1.4	50.0
d5-NEtFOSAA	Ave	0.0945	0.0745		39400	50000	-21.2	50.0
13C2 PFDoA	Ave	0.6507	0.6171		47400	50000	-5.2	50.0
13C2 PFTeDA	Ave	0.8960	0.6844		38200	50000	-23.6	50.0
13C2 PFHxDA	Ave	0.7972	0.6760		42400	50000	-15.2	50.0

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A003.d
 Lims ID: CCV L4
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 01-Aug-2019 14:34:18 ALS Bottle#: 3 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L4
 Misc. Info.: 200-0037090-003 Plate: 1 Rack: 2
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 07-Aug-2019 15:09:39 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0306

First Level Reviewer: chirgwinb Date: 01-Aug-2019 14:44:59

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
2 Perfluorobutanoic acid										
212.90 > 169.00	1.678	1.678	0.0	1.000	1818629	20.2		101	485	
D 1 13C4 PFBA										
217.00 > 172.00	1.678	1.678	0.0	0.512	4875121	51.5		103	17947	
4 Perfluoropentanoic acid										
262.90 > 219.00	2.034	2.034	0.0	1.000	1680777	19.5		97.7	97.2	
D 3 13C5 PFPeA										
267.90 > 223.00	2.034	2.034	0.0	0.620	4444713	50.0		100	10260	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.054	2.054	0.0	1.000	1498272	18.5	Target=1.90	104	4870	
298.90 > 99.00	2.054	2.054	0.0	1.000	781375		1.92(0.95-2.85)		1053	
D 47 13C3 PFBS										
301.90 > 80.00	2.054	2.054	0.0	0.626	3711844	42.5		91.5	748415	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.371	2.371	0.0	1.000	379330	16.6		88.8	3061	
D 60 M2-4:2 FTS										
329.00 > 81.00	2.371	2.371	0.0	0.723	447111	53.0		113	627	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.408	2.408	0.0	1.000	1757886	20.2	Target=13.23	101	670	
313.00 > 119.00	2.408	2.408	0.0	1.000	139548		12.60(6.61-19.84)		370	
D 7 13C2 PFHxA										
315.00 > 270.00	2.408	2.408	0.0	0.734	4228661	47.9		95.9	9596	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.417	2.417	0.0	1.176	1411840	19.8	Target=2.73	105	3829	
349.00 > 99.00	2.417	2.417	0.0	1.176	490959		2.88(1.37-4.10)		1447	
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.545	2.545	0.0	1.000	242155	16.0		79.8	62.7	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 64 13C3 HFPO-DA										
332.10 > 287.00	2.545	2.545	0.0	0.776	298343	52.7		105	1689	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.851	2.851	0.0	1.000	1113280	17.9	Target=3.37	98.1	1241	M
399.00 > 99.00	2.851	2.851	0.0	1.000	309005		3.60(1.69-5.06)		437	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.851	2.851	0.0	1.000	1585743	19.9	Target=3.76	99.5	431	
363.00 > 169.00	2.851	2.851	0.0	1.000	424883		3.73(1.88-5.65)		1982	
D 9 13C4 PFHpA										
367.00 > 322.00	2.851	2.851	0.0	0.869	4254676	49.2		98.5	8017	
D 11 18O2 PFHxS										
403.00 > 84.00	2.851	2.851	0.0	0.869	2237164	43.8		92.6	6447	
77 DONA										
377.00 > 251.00	2.905	2.905	0.0	0.798	3448154	18.8	Target=2.72	99.8	2396	
377.00 > 85.00	2.905	2.905	0.0	0.798	1306068		2.64(1.36-4.07)		1724	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.270	3.270	0.0	0.898	908007	19.5	Target=4.80	103	3218	
449.00 > 99.00	3.270	3.270	0.0	0.898	175913		5.16(2.40-7.20)		1041	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.270	3.270	0.0	1.000	287492	15.8		83.1	2141	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.270	3.270	0.0	0.997	505175	47.5		100	1500	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.279	3.279	0.0	1.000	1765764	19.0	Target=2.84	94.8	226	
413.00 > 169.00	3.279	3.279	0.0	1.000	685563		2.58(1.42-4.25)		2582	
* 62 13C2 PFOA										
415.00 > 370.00	3.279	3.279	0.0		5017980	50.0			7960	
D 14 13C4 PFOA										
417.00 > 372.00	3.279	3.279	0.0	1.000	4279389	46.9		93.8	10333	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.640	3.640	0.0	1.000	678486	18.6	Target=4.33	100	1962	M
499.00 > 99.00	3.640	3.640	0.0	1.000	143861		4.72(2.16-6.49)		626	M
D 18 13C4 PFOS										
503.00 > 80.00	3.640	3.640	0.0	1.110	1843508	43.3		90.6	7583	
20 Perfluorononanoic acid										
463.00 > 419.00	3.657	3.657	0.0	1.000	1519941	21.0	Target=8.15	105	614	
463.00 > 169.00	3.657	3.657	0.0	1.000	180652		8.41(4.08-12.23)		1922	
D 19 13C5 PFNA										
468.00 > 423.00	3.657	3.657	0.0	1.115	4000894	48.1		96.1	12749	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.819	3.819	0.0	1.049	1347017	16.1		86.2	5469	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	3.954	3.954	0.0	1.086	661995	20.3	Target=2.42	106	3895	
549.00 > 99.00	3.954	3.954	0.0	1.086	278208		2.38(1.21-3.63)		665	
24 Perfluorodecanoic acid										
513.00 > 469.00	3.987	3.987	0.0	1.000	1347984	20.5	Target=9.58	103	758	
513.00 > 169.00	3.987	3.987	0.0	1.000	154283		8.74(4.79-14.37)		1077	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
25 1H,1H,2H,2H-perfluorodecanesulfoni	527.00 > 507.00	3.987	3.987	0.0	1.000	199248	13.9	72.5	2474	
D 26 M2-8:2 FTS	529.00 > 81.00	3.987	3.987	0.0	1.216	513624	52.3	109	1506	
D 23 13C2 PFDA	515.00 > 470.00	3.987	3.987	0.0	1.216	3389096	50.9	102	10948	
D 21 13C8 FOSA	506.00 > 78.00	4.011	4.011	0.0	1.223	4027991	52.7	105	7418	
22 Perfluorooctanesulfonamide	498.00 > 78.00	4.011	4.011	0.0	1.000	1445310	19.7	98.3	4230	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	4.135	4.135	0.0	1.000	108298	22.2	111	220	
D 27 d3-NMeFOSAA	573.00 > 419.00	4.135	4.135	0.0	1.261	322059	37.9	75.7	960	
29 Perfluorodecanesulfonic acid	599.00 > 80.00	4.235	4.235	0.0	1.164	570285	22.3	Target=2.64	116	4670
	599.00 > 99.00	4.235	4.235	0.0	1.164	221336		2.58(1.32-3.96)		1307
31 Perfluoroundecanoic acid	563.00 > 519.00	4.260	4.260	0.0	1.000	1036039	20.2	Target=7.95	101	499
	563.00 > 169.00	4.260	4.260	0.0	1.000	142120		7.29(3.98-11.93)		1490
D 30 13C2 PFUnA	565.00 > 520.00	4.260	4.260	0.0	1.299	2989615	49.3	98.6	5806	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	4.272	4.272	0.0	1.000	86750	18.1	90.7	678	
D 32 d5-NEtFOSAA	589.00 > 419.00	4.272	4.272	0.0	1.303	373573	39.4	78.8	1812	
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	4.356	4.356	0.0	1.197	2007055	15.7	83.4	9238	
37 Perfluorododecanoic acid	613.00 > 569.00	4.512	4.512	0.0	1.000	1367742	21.6	Target=7.49	108	249
	613.00 > 169.00	4.512	4.512	0.0	1.000	199128		6.87(3.75-11.24)		2197
D 36 13C2 PFDaA	615.00 > 570.00	4.512	4.512	0.0	1.376	3096620	47.4	94.8	8209	
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	4.524	4.524	0.0	1.135	126564	13.9	72.3	1456	
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.685	4.685	0.0	1.287	257893	21.1	Target=0.50	109	575
	699.00 > 99.00	4.685	4.685	0.0	1.287	487675		0.53(0.25-0.76)		1708
41 Perfluorotridecanoic acid	663.00 > 619.00	4.730	4.730	0.0	1.048	1112942	19.6	Target=5.71	97.9	85.6
	663.00 > 169.00	4.730	4.730	0.0	1.048	241282		4.61(2.85-8.56)		1274
42 Perfluorotetradecanoic acid	713.00 > 169.00	4.939	4.939	0.0	1.000	215210	23.5	Target=1.02	118	2210
	713.00 > 219.00	4.939	4.939	0.0	1.000	212923		1.01(0.51-1.54)		2217
D 43 13C2 PFTeDA	715.00 > 670.00	4.939	4.939	0.0	1.506	3434395	38.2	76.4	11856	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.359	5.359	0.0	1.000	1348189	20.6	Target=5.23	103	472	
813.00 > 169.00	5.359	5.359	0.0	1.000	297157		4.54(2.62-7.85)		4143	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.359	5.359	0.0	1.634	3392186	42.4		84.8	8785	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.796	5.796	0.0	1.082	933674	18.3	Target=5.61	91.5	745	
913.00 > 169.00	5.784	5.796	-0.012	1.079	220841		4.23(2.80-8.41)		2378	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFAS32-L4_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A003.d

Injection Date: 01-Aug-2019 14:34:18

Instrument ID: LC812

Lims ID: CCV L4

Client ID:

Operator ID: lc812tech

ALS Bottle#: 3

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

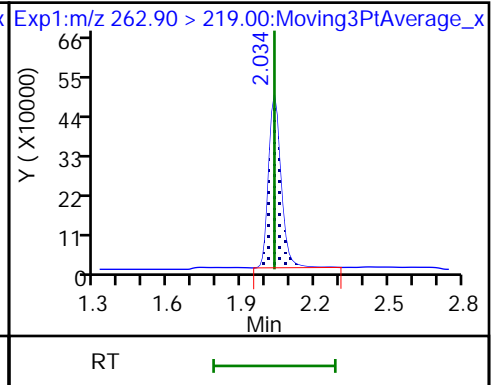
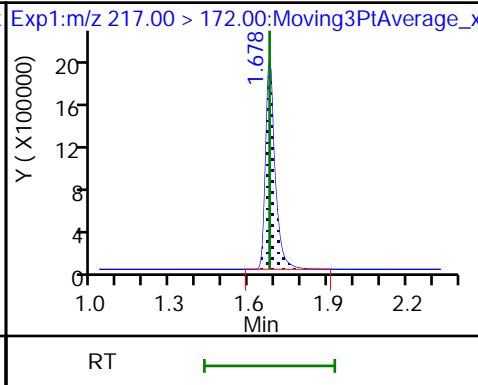
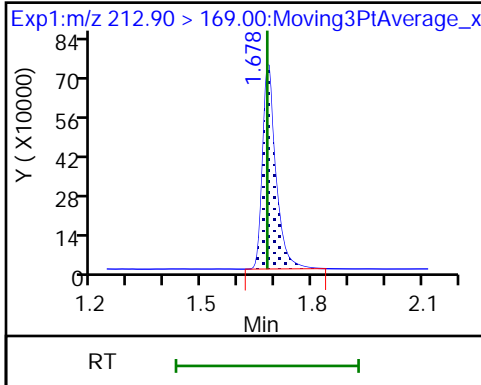
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

2 Perfluorobutanoic acid

D 1 13C4 PFBA

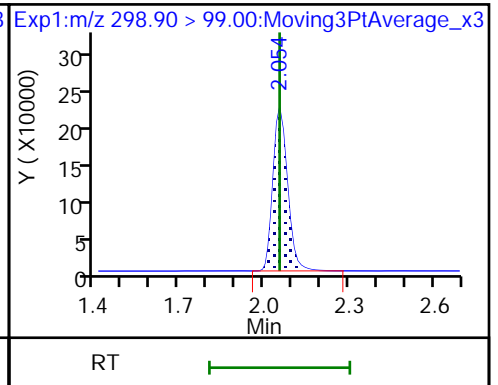
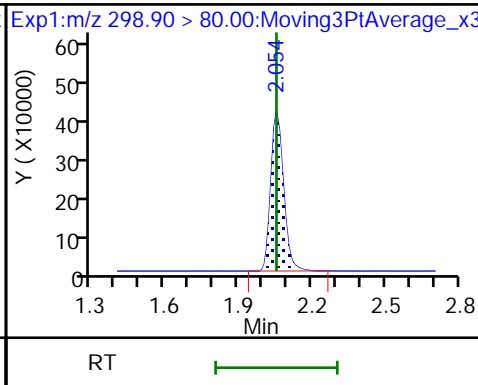
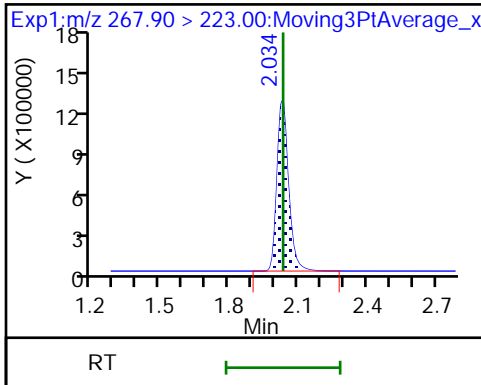
4 Perfluoropentanoic acid



D 3 13C5 PFPeA

5 Perfluorobutanesulfonic acid

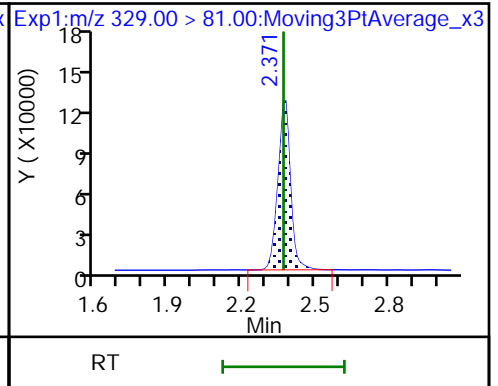
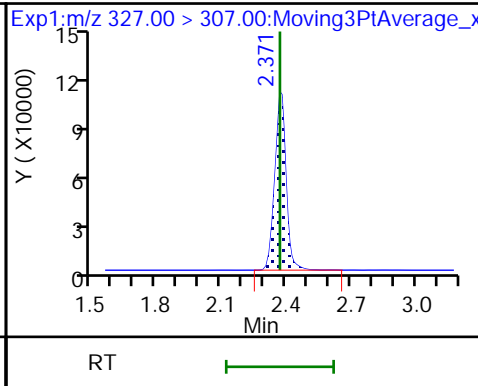
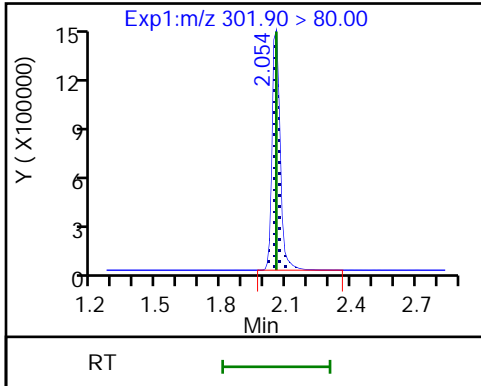
5 Perfluorobutanesulfonic acid



D 47 13C3 PFBS

61 1H,1H,2H,2H-perfluorohexanesulfonate

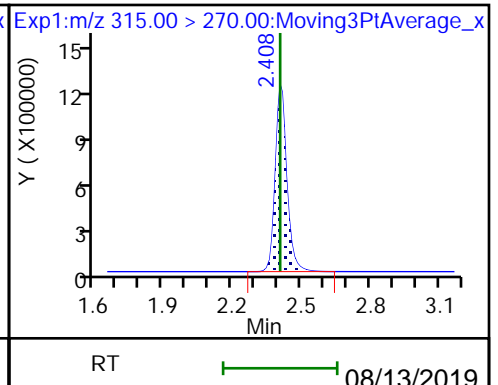
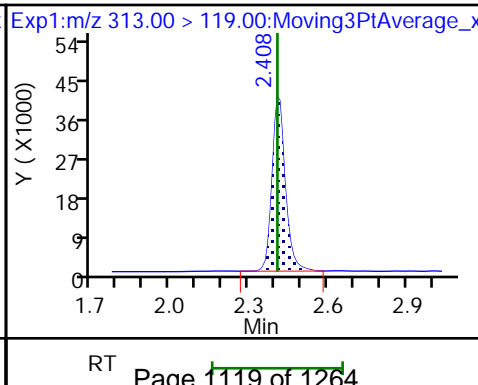
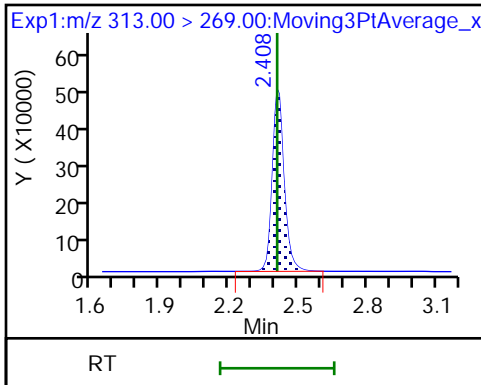
D 60 M2-4:2 FTS

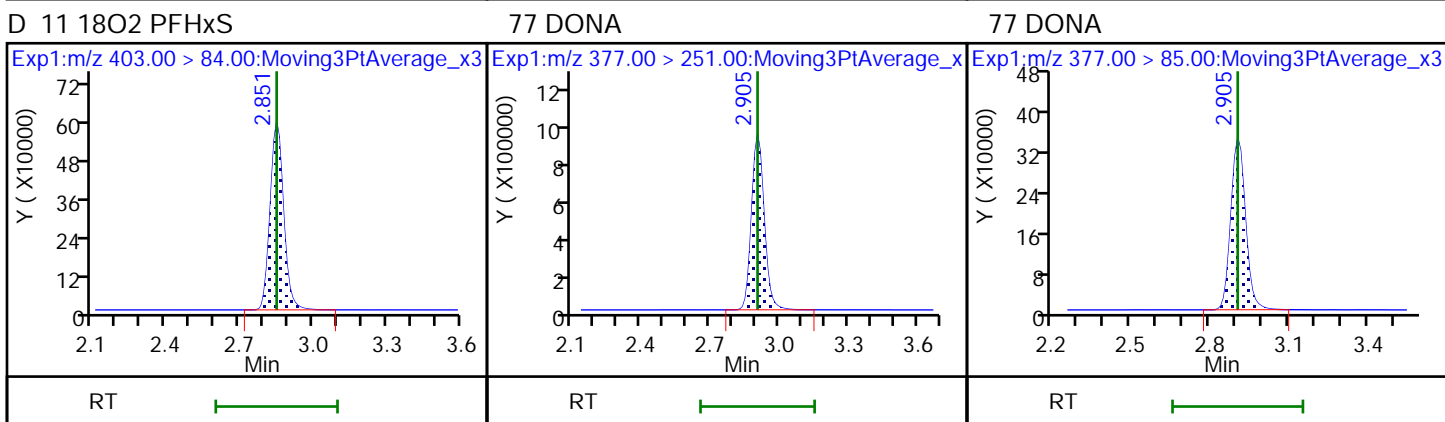
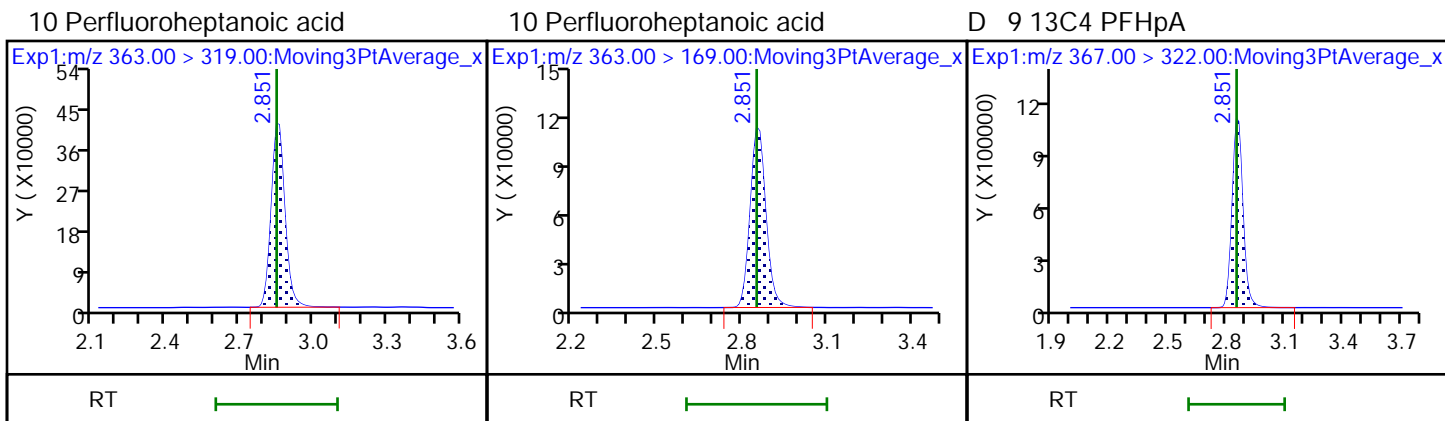
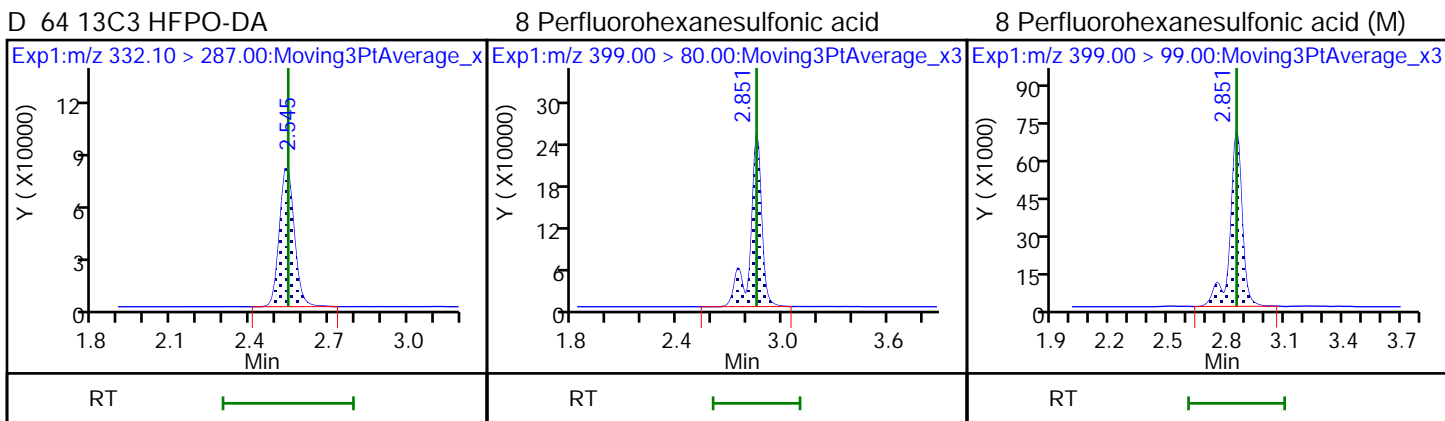
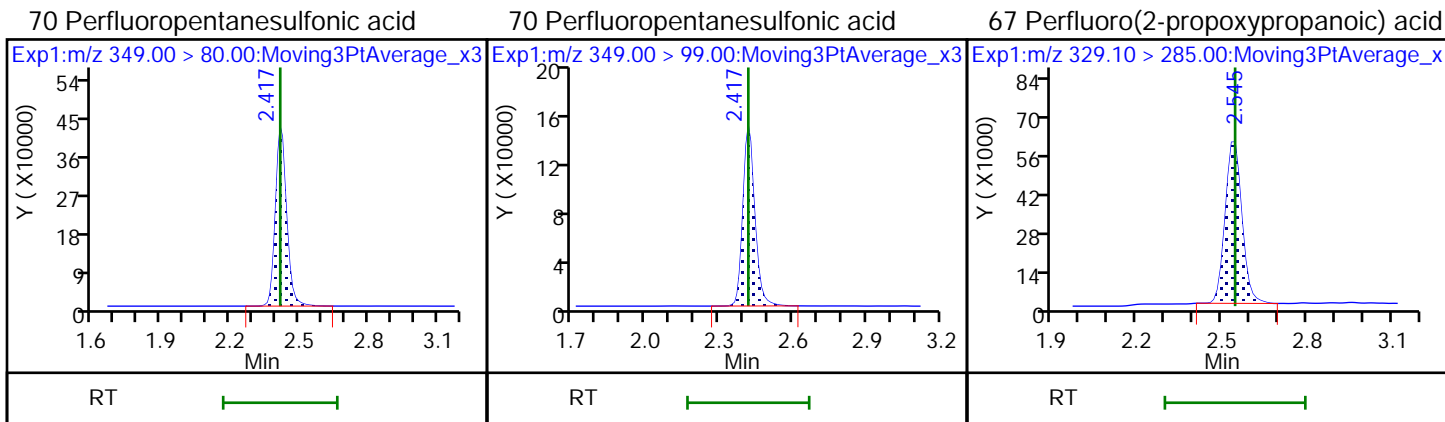


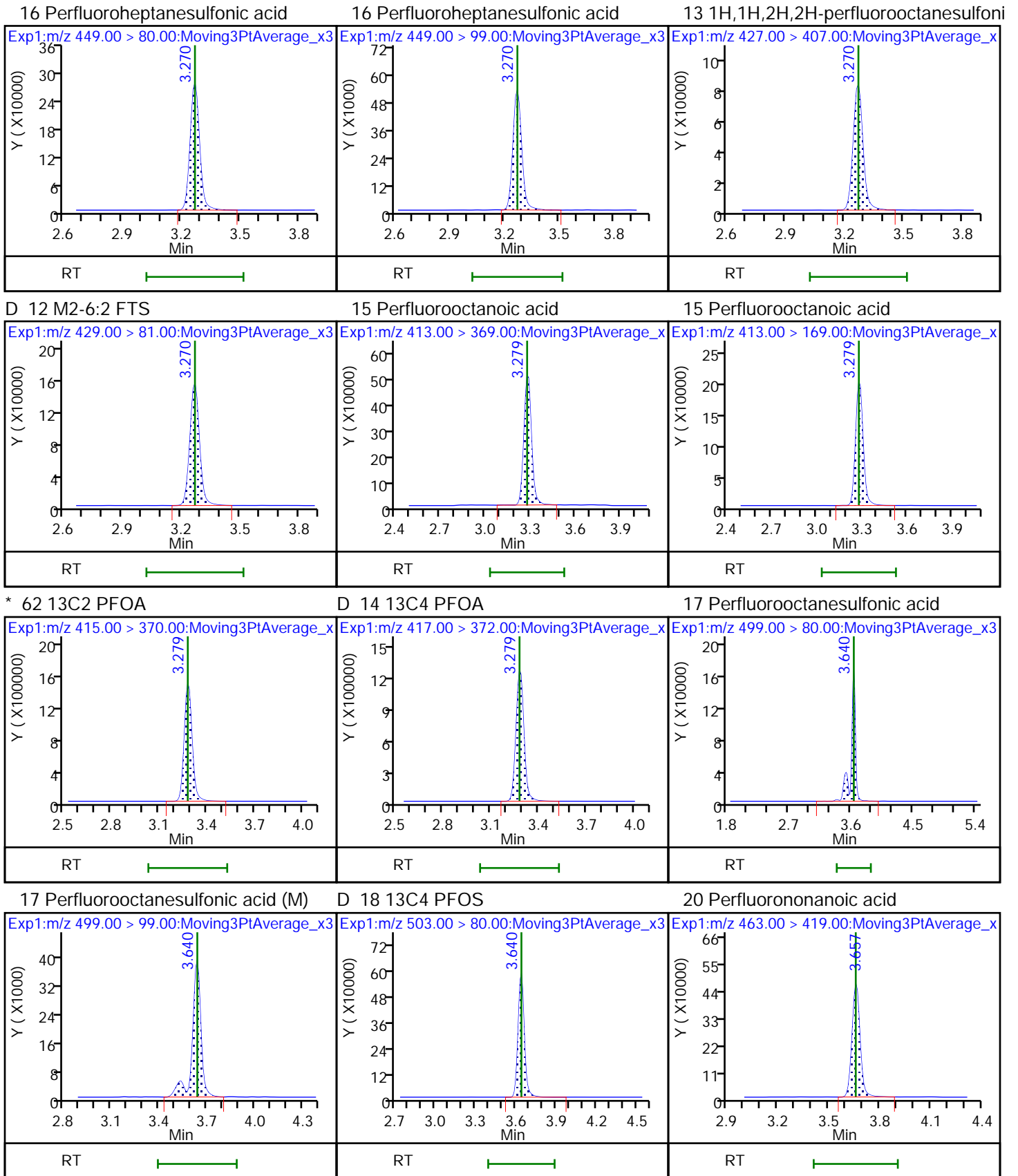
6 Perfluorohexanoic acid

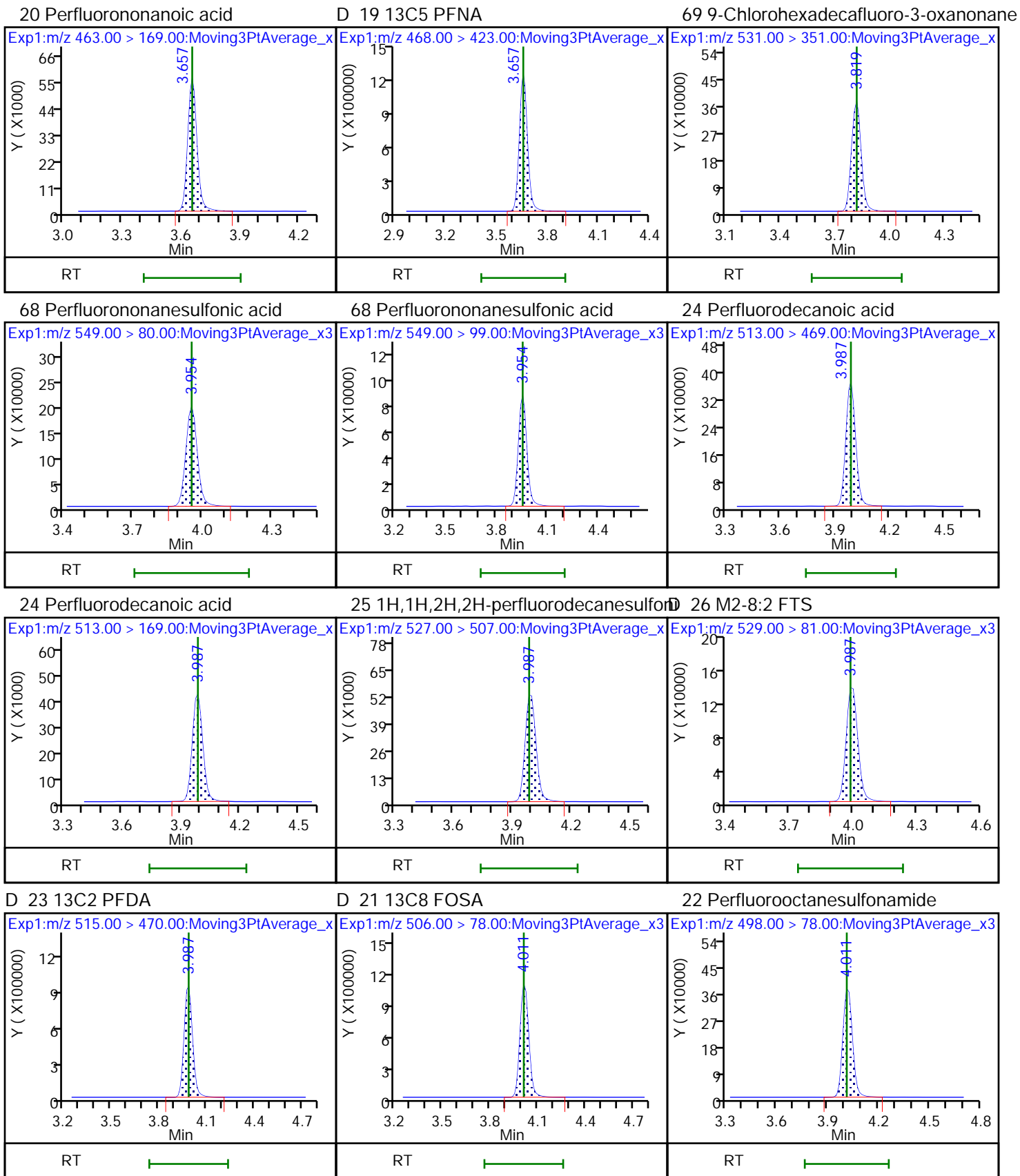
6 Perfluorohexanoic acid

D 7 13C2 PFHxA



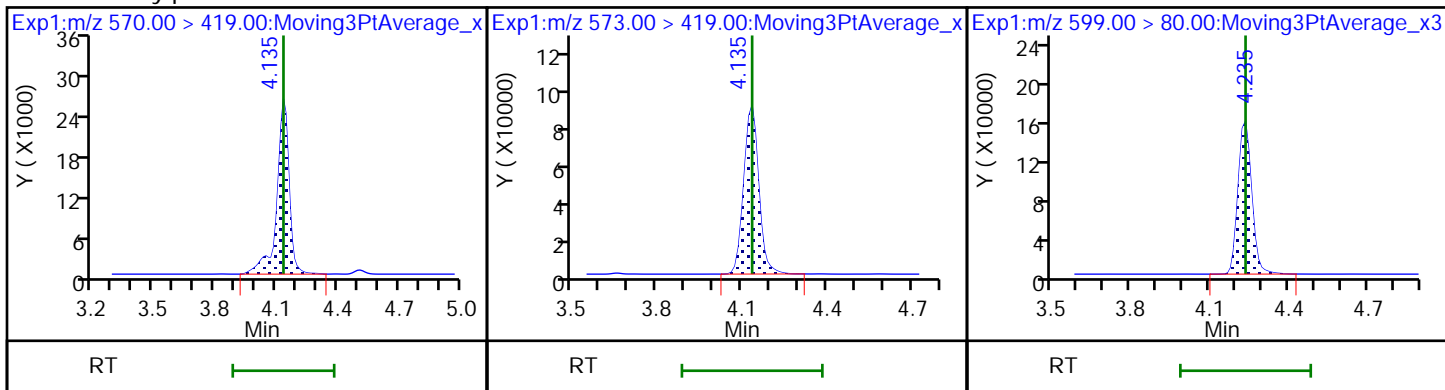






28 N-methylperfluorooctanesulfonamidD 27 d3-NMeFOSAA

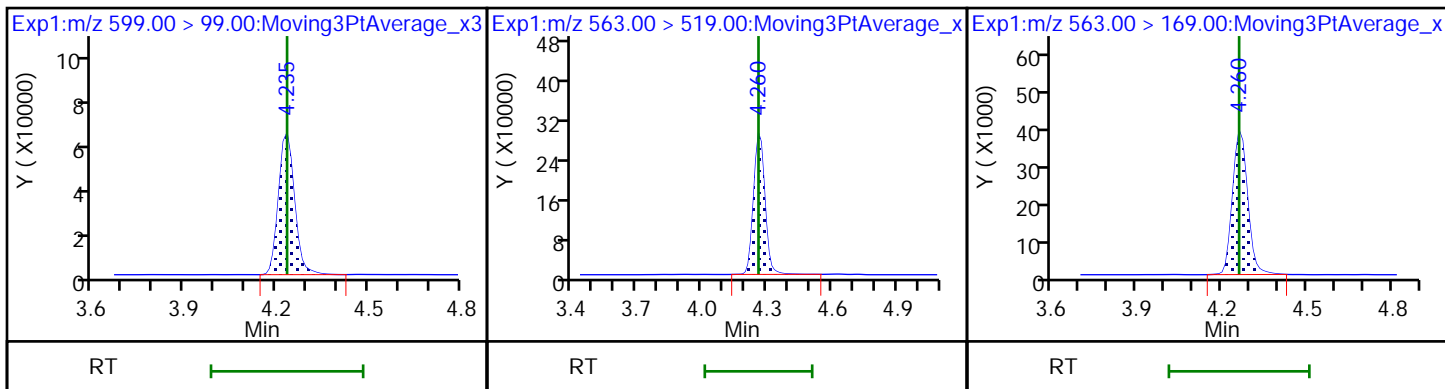
29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

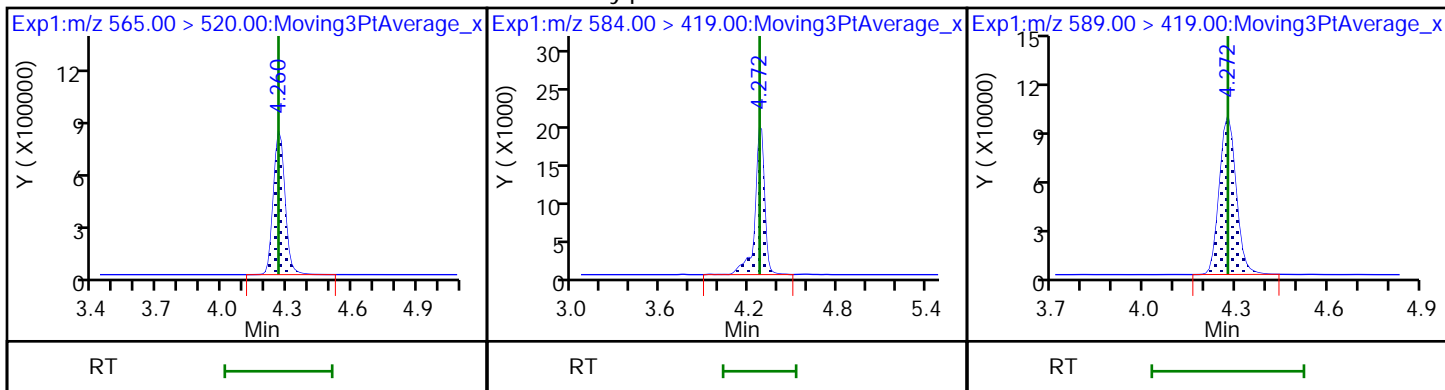
31 Perfluoroundecanoic acid

31 Perfluoroundecanoic acid



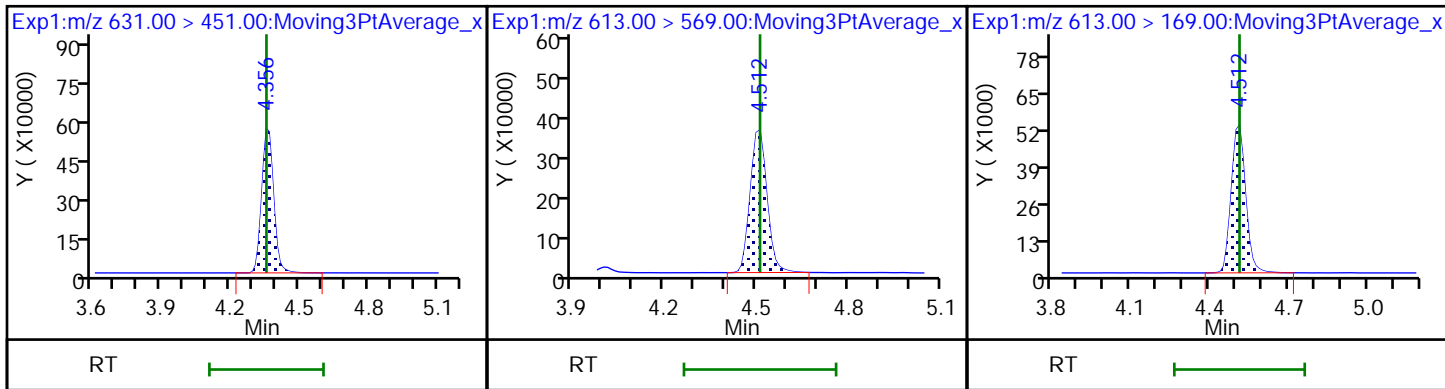
D 30 13C2 PFUnA

33 N-ethylperfluorooctanesulfonamidD 32 d5-NEtFOSAA



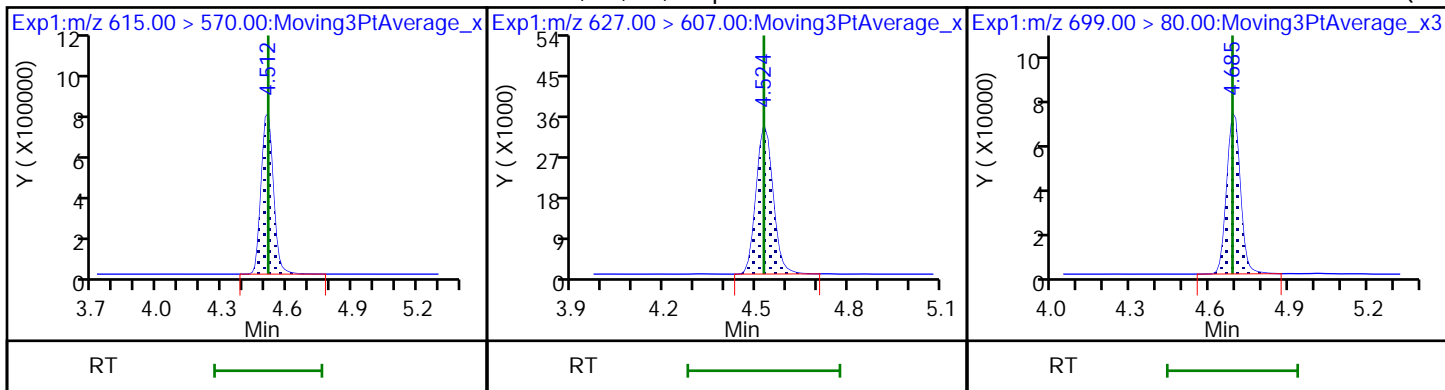
66 11-Chloroeicosafluoro-3-oxaundecan 37 Perfluorododecanoic acid

37 Perfluorododecanoic acid



D 36 13C2 PFDoA

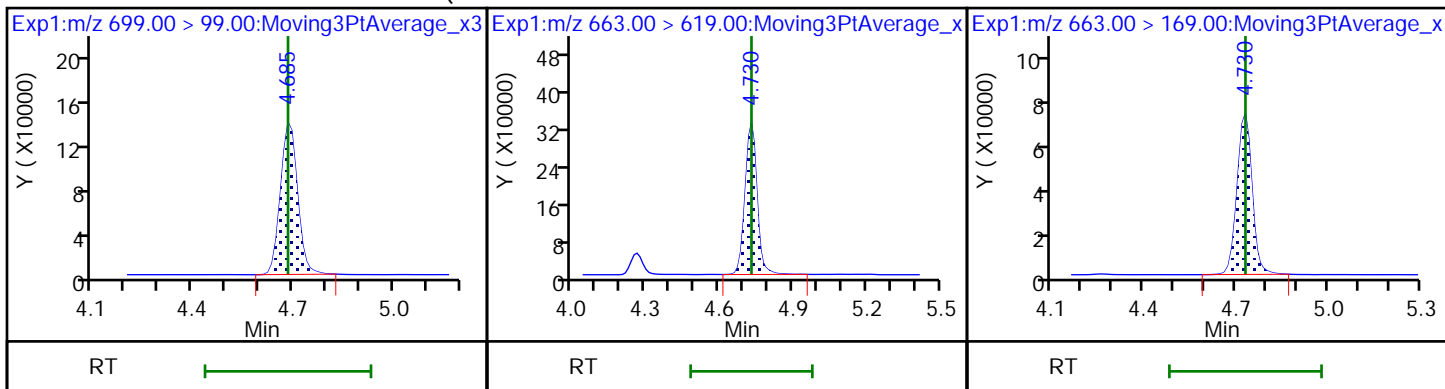
74 1H,1H,2H,2H-perfluorododecanesulfo75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

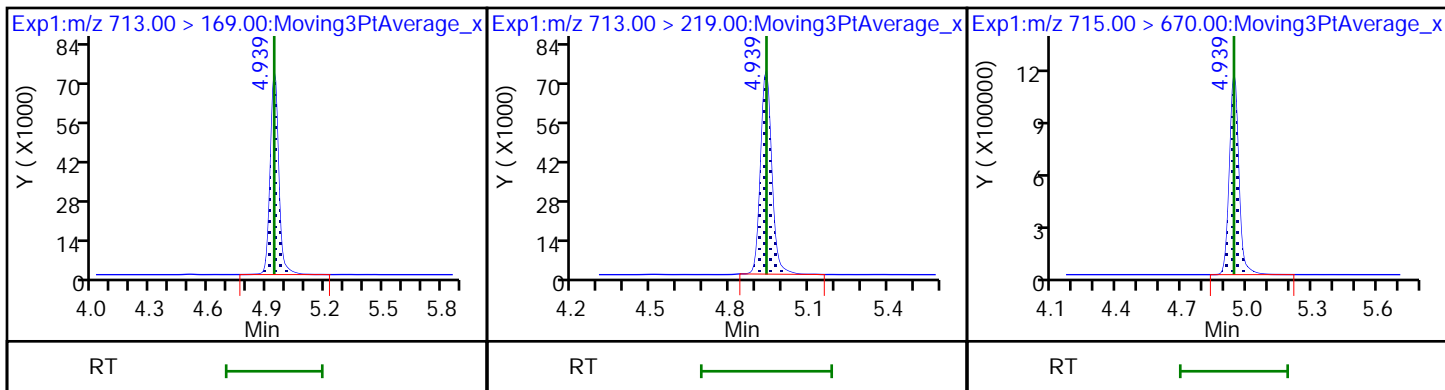
41 Perfluorotridecanoic acid



42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid

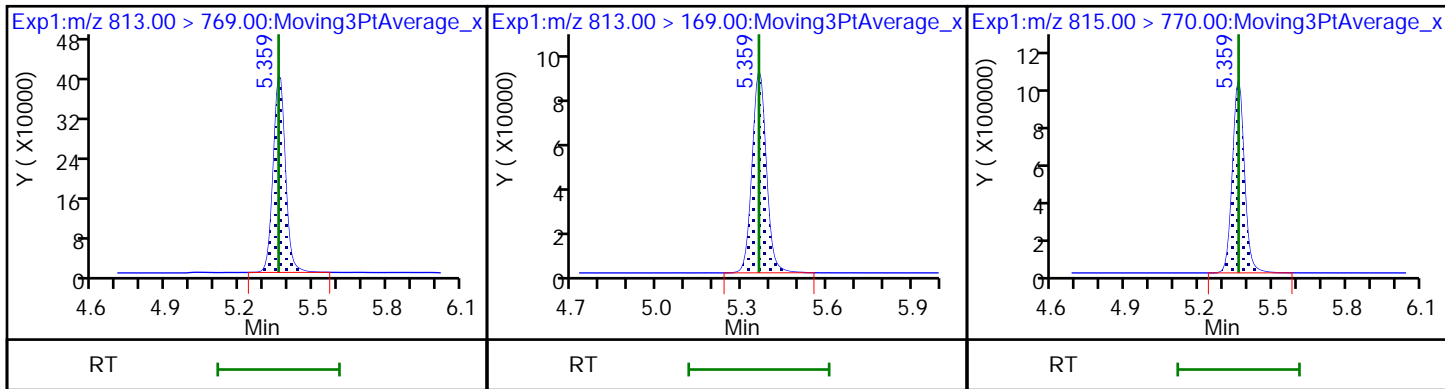
D 43 13C2 PFTeDA



45 Perfluorohexadecanoic acid

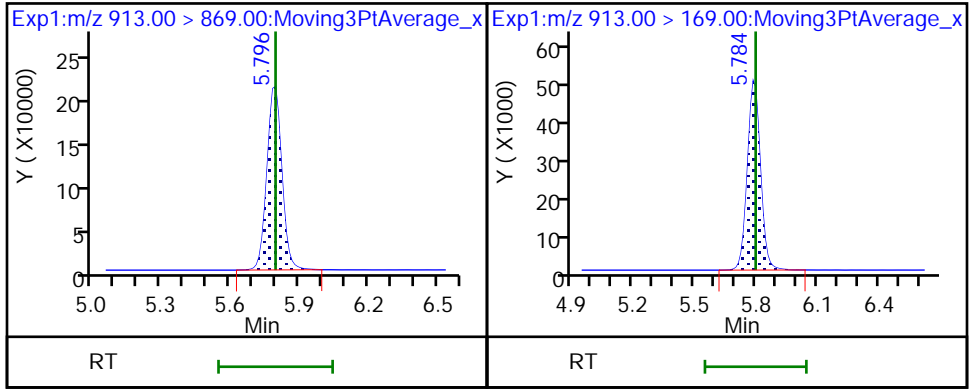
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

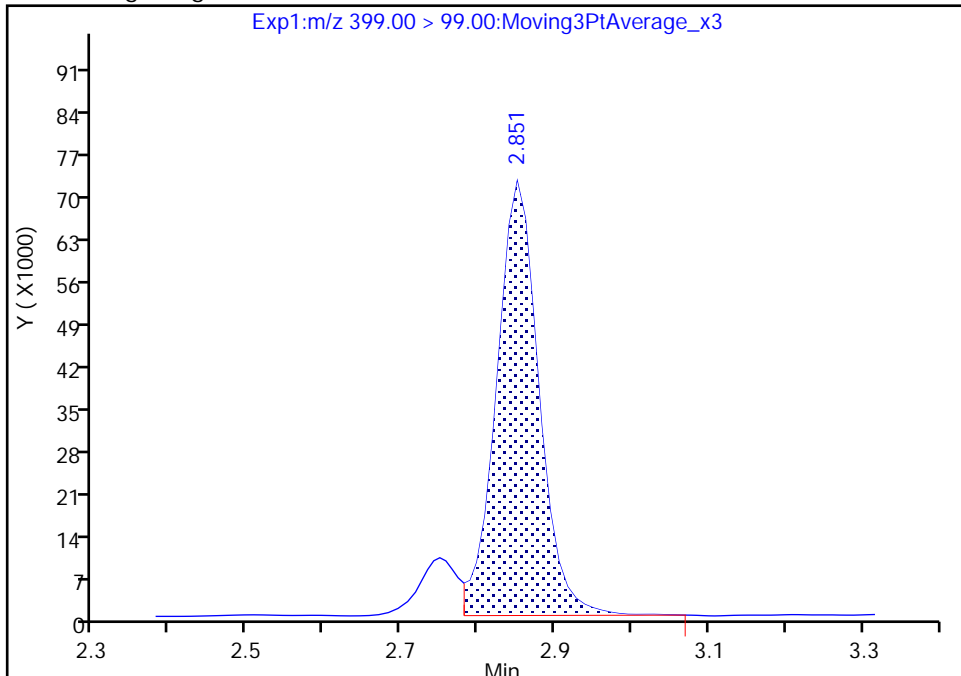
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A003.d
Injection Date: 01-Aug-2019 14:34:18 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

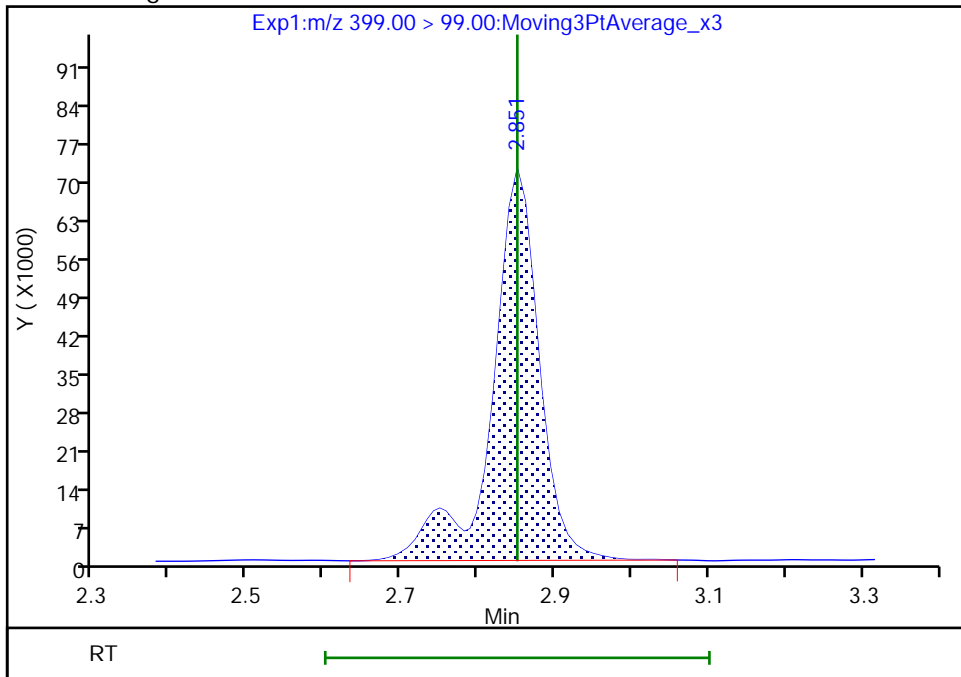
RT: 2.85
Area: 276345
Amount: 17.861631
Amount Units: ng/ml

Processing Integration Results



RT: 2.85
Area: 309005
Amount: 17.861631
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 01-Aug-2019 14:44:30
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

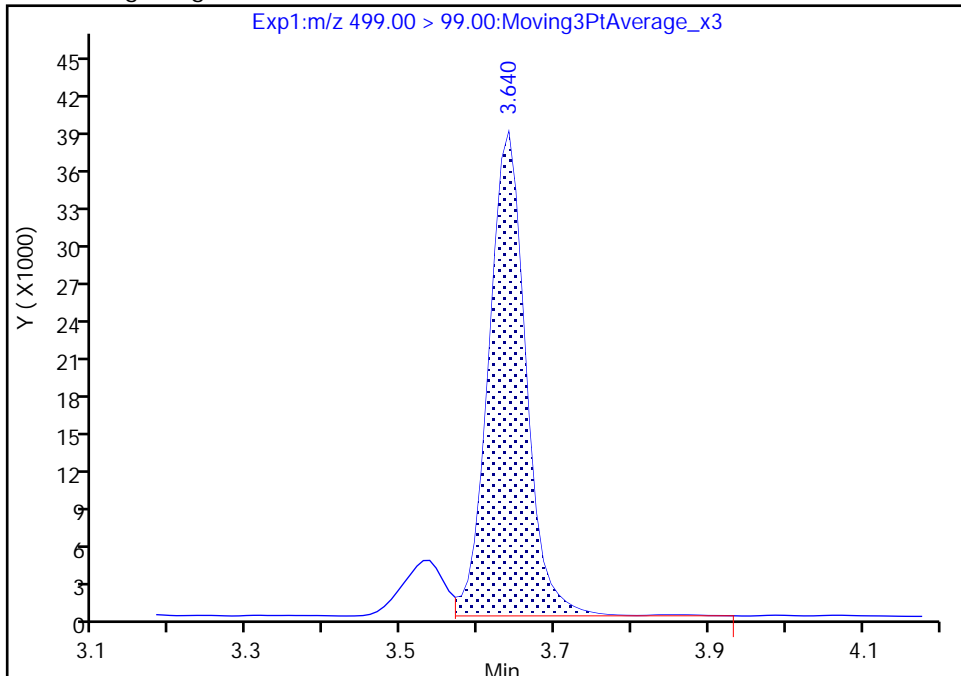
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37090.b\SC080119A003.d
Injection Date: 01-Aug-2019 14:34:18 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

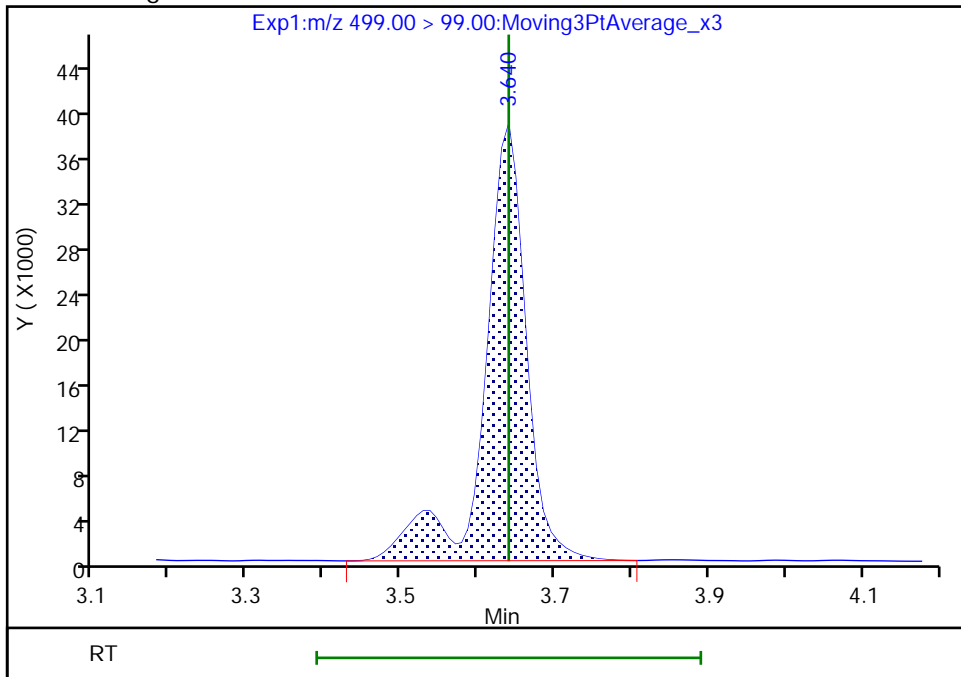
RT: 3.64
Area: 128038
Amount: 18.586416
Amount Units: ng/ml

Processing Integration Results



RT: 3.64
Area: 143861
Amount: 18.586416
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 01-Aug-2019 14:44:18
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145761/1 Calibration Date: 08/02/2019 03:49
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119E001.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9217	0.9464		20500	20000	2.7	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9677	0.9711		20100	20000	0.4	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.017	1.001		17400	17700	-1.5	40.0
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.389	1.990		15600	18700	-16.7	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.030	1.022		19800	20000	-0.8	40.0
Perfluoropentanesulfonic acid	AveID	0.8944	0.8693		18200	18800	-2.8	50.0
HFPO-DA	AveID	2.541	2.282		18000	20000	-10.2	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9367	1.000		21400	20000	6.8	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.318	1.243		17200	18200	-5.7	40.0
DONA	AveID	4.754	4.526		17900	18800	-4.8	50.0
6:2 FTS	AveID	1.715	1.471		16300	19000	-14.2	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.205	1.148		18100	19000	-4.7	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.088	1.081		19900	20000	-0.7	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9465	0.9268		18200	18600	-2.1	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9059	0.8934		19700	20000	-1.4	40.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.174	1.864		16000	18600	-14.3	50.0
Perfluorononanesulfonic acid	AveID	0.8445	0.9365		21300	19200	10.9	50.0
8:2 FTS	AveID	1.337	0.7978		11400	19200	-40.3*	40.0
Perfluorodecanoic acid (PFDA)	AveID	0.9682	0.9630		19900	20000	-0.5	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.9129	0.9382		20600	20000	2.8	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7567	0.7208		19100	20000	-4.7	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6627	0.6986		20300	19300	5.4	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8581	0.8677		20200	20000	1.1	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.6400	0.5977		18700	20000	-6.6	40.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	3.310	2.470		14100	18800	-25.4	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.022	0.9637		18900	20000	-5.7	40.0
10:2 FTS	AveID	0.8462	0.6233		14200	19300	-26.3	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.3176	0.3283		20000	19400	3.4	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9176	0.8387		18300	20000	-8.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1331	0.1570		23600	20000	17.9	40.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145761/1 Calibration Date: 08/02/2019 03:49
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119E001.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		1.038		21600	20000	7.8	40.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7518	0.7259		19300	20000	-3.4	50.0
13C4 PFBA	Ave	0.9423	0.999		53000	50000	6.0	50.0
13C5 PFPeA	Ave	0.8851	0.8924		50400	50000	0.8	50.0
13C3 PFBS	Ave	0.8694	0.8288		44300	46500	-4.7	50.0
M2-4:2 FTS	Ave	0.0841	0.0838		46600	46700	-0.3	50.0
13C2 PFHxA	Ave	0.8791	0.8834		50200	50000	0.5	50.0
13C3 HFPO-DA	Ave	0.0564	0.0536		47500	50000	-4.9	50.0
13C4 PFHpA	Ave	0.8611	0.8363		48600	50000	-2.9	50.0
1802 PFHxS	Ave	0.5092	0.4944		45900	47300	-2.9	50.0
M2-6:2 FTS	Ave	0.1060	0.1034		46400	47500	-2.4	50.0
13C4 PFOA	Ave	0.9094	0.8527		46900	50000	-6.2	50.0
13C4 PFOS	Ave	0.4242	0.4076		45900	47800	-3.9	50.0
13C5 PFNA	Ave	0.8296	0.8411		50700	50000	1.4	50.0
13C2 PFDA	Ave	0.6637	0.6840		51500	50000	3.1	50.0
M2-8:2 FTS	Ave	0.0978	0.1155		56600	47900	18.1	50.0
13C8 FOSA	Ave	0.7620	0.7837		51400	50000	2.8	50.0
d3-NMeFOSAA	Ave	0.0848	0.0750		44200	50000	-11.6	50.0
13C2 PFUnA	Ave	0.6045	0.6134		50700	50000	1.5	50.0
d5-NEtFOSAA	Ave	0.0945	0.0766		40500	50000	-18.9	50.0
13C2 PFDoA	Ave	0.6507	0.7102		54600	50000	9.1	50.0
13C2 PFTeDA	Ave	0.8960	0.7177		40100	50000	-19.9	50.0
13C2 PFHxDA	Ave	0.7972	0.6608		41400	50000	-17.1	50.0

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E001.d
 Lims ID: CCV L4
 Client ID:
 Sample Type: CCV
 Inject. Date: 02-Aug-2019 03:49:20 ALS Bottle#: 48 Worklist Smp#: 1
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L4
 Misc. Info.: 200-0037095-001 Plate: 1 Rack: 4
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3

Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d

Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: chirgwinb Date: 02-Aug-2019 17:26:08

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.506	4731092	53.0	106	14508	
2 Perfluorobutanoic acid	212.90 > 169.00	1.699	1.699	0.0	1.000	1791010	20.5	103	347	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.616	4227133	50.4	101	9441	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	1641917	20.1	100	98.4	
D 47 13C3 PFBS	301.90 > 80.00	2.080	2.080	0.0	0.620	3650943	44.3	95.3	710096	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.006	1390164	17.4	Target=1.90	98.5	4489
	298.90 > 99.00	2.093	2.093	0.0	1.006	720591		1.93(0.95-2.85)		921
D 60 M2-4:2 FTS	329.00 > 81.00	2.417	2.417	0.0	0.720	370931	46.6	99.7	541	
61 1H,1H,2H,2H-perfluorohexanesulfoni	327.00 > 307.00	2.417	2.417	0.0	1.000	295258	15.6	83.3	2128	
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.733	4184424	50.2	100	7428	
6 Perfluorohexanoic acid	313.00 > 269.00	2.459	2.459	0.0	1.000	1710106	19.8	Target=13.23	99.2	574
	313.00 > 119.00	2.459	2.459	0.0	1.000	142330		12.02(6.61-19.84)		185
70 Perfluoropentanesulfonic acid	349.00 > 80.00	2.470	2.470	0.0	1.188	1280470	18.2	Target=2.73	97.2	3615
	349.00 > 99.00	2.470	2.470	0.0	1.188	447273		2.86(1.37-4.10)		1079
D 64 13C3 HFPO-DA	332.10 > 287.00	2.596	2.596	0.0	0.774	254033	47.5	95.1	1569	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.596	2.596	0.0	1.000	231905	18.0		89.8	72.5	
D 11 18O2 PFHxS										
403.00 > 84.00	2.928	2.916	0.012	0.873	2215402	45.9		97.1	7560	
D 9 13C4 PFHpA										
367.00 > 322.00	2.928	2.928	0.0	0.873	3961299	48.6		97.1	8300	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.928	2.928	0.0	1.000	1059567	17.2	Target=3.37	94.3	1155	M
399.00 > 99.00	2.928	2.928	0.0	1.000	291885		3.63(1.69-5.06)		396	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.928	2.928	0.0	1.000	1584791	21.4	Target=3.76	107	508	
363.00 > 169.00	2.928	2.928	0.0	1.000	416173		3.81(1.88-5.65)		1348	
77 DONA										
377.00 > 251.00	2.973	2.973	0.0	0.803	3293101	17.9	Target=2.72	95.2	2436	
377.00 > 85.00	2.973	2.973	0.0	0.803	1290057		2.55(1.36-4.07)		1647	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.345	3.335	0.010	0.997	465436	46.4		97.6	1132	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.336	3.336	0.0	0.997	273359	16.3		85.8	460	
D 14 13C4 PFOA										
417.00 > 372.00	3.355	3.344	0.011	1.000	4039061	46.9		93.8	10668	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.345	3.345	0.0	0.903	843779	18.1	Target=4.80	95.3	2945	
449.00 > 99.00	3.345	3.345	0.0	0.903	165232		5.11(2.40-7.20)		960	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.355	3.355	0.0	1.000	1745761	19.9	Target=2.84	99.3	230	
413.00 > 169.00	3.355	3.355	0.0	1.000	671637		2.60(1.42-4.25)		2013	
* 62 13C2 PFOA										
415.00 > 370.00	3.355	3.355	0.0		4736674	50.0			14104	
D 18 13C4 PFOS										
503.00 > 80.00	3.703	3.695	0.008	1.104	1845863	45.9		96.1	7991	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.703	3.703	0.0	1.000	664246	18.2	Target=4.33	97.9	7405	
499.00 > 99.00	3.703	3.703	0.0	1.000	140965		4.71(2.16-6.49)		612	
D 19 13C5 PFNA										
468.00 > 423.00	3.723	3.715	0.008	1.110	3983909	50.7		101	22387	
20 Perfluorononanoic acid										
463.00 > 419.00	3.723	3.723	0.0	1.000	1423737	19.7	Target=8.15	98.6	628	
463.00 > 169.00	3.723	3.723	0.0	1.000	186161		7.65(4.08-12.23)		2445	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.875	3.875	0.0	1.046	1341432	16.0		85.7	5638	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.010	4.010	0.0	1.083	694330	21.3	Target=2.42	111	5039	
549.00 > 99.00	4.010	4.010	0.0	1.083	276433		2.51(1.21-3.63)		801	
D 23 13C2 PFDA										
515.00 > 470.00	4.035	4.036	-0.001	1.203	3239744	51.5		103	15629	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.047	4.036	0.011	1.206	5239831	56.6		118	13508	M

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.047	4.047	0.0	1.003	1247884	19.9	Target=9.58	99.5	573	
513.00 > 169.00	4.047	4.047	0.0	1.003	145131		8.60(4.79-14.37)		1117	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.047	4.047	0.0	1.000	167201	11.4		59.7	2814	M
D 21 13C8 FOSA										
506.00 > 78.00	4.072	4.061	0.011	1.214	3712028	51.4		103	6004	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.072	4.072	0.0	1.000	1393080	20.6		103	5172	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.178	0.009	1.248	355040	44.2		88.4	1890	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.187	4.187	0.0	1.000	102361	19.1		95.3	144	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.283	4.283	0.0	1.156	520139	20.3	Target=2.64	105	4887	
599.00 > 99.00	4.283	4.283	0.0	1.156	199474		2.61(1.32-3.96)		1191	
D 30 13C2 PFUnA										
565.00 > 520.00	4.307	4.296	0.011	1.284	2905379	50.7		101	7352	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.307	4.307	0.0	1.000	1008408	20.2	Target=7.95	101	449	
563.00 > 169.00	4.307	4.307	0.0	1.000	137217		7.35(3.98-11.93)		1293	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.308	0.011	1.287	362714	40.5		81.1	1253	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.319	4.319	0.0	1.000	86724	18.7		93.4	1028	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.403	4.403	0.0	1.189	1797225	14.1		74.6	7284	
D 36 13C2 PFDaA										
615.00 > 570.00	4.549	4.537	0.012	1.356	3363773	54.6		109	9540	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.549	4.549	0.0	1.000	1296683	18.9	Target=7.49	94.3	82.9	
613.00 > 169.00	4.549	4.549	0.0	1.000	207494		6.25(3.75-11.24)		2044	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.562	4.562	0.0	1.127	131434	14.2		73.7	2902	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.718	4.718	0.0	1.274	245442	20.0	Target=0.50	103	436	
699.00 > 99.00	4.718	4.718	0.0	1.274	505801		0.49(0.25-0.76)		2487	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.760	4.760	0.0	1.046	1128439	18.3	Target=5.71	91.4	93.7	
663.00 > 169.00	4.760	4.760	0.0	1.046	244949		4.61(2.85-8.56)		1328	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.965	4.965	0.0	1.480	3399703	40.1		80.1	9896	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.972	4.972	0.0	1.001	213465	23.6	Target=1.02	118	1432	
713.00 > 219.00	4.965	4.972	-0.007	1.000	212029		1.01(0.51-1.54)		2141	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.390	5.390	0.0	1.000	1299124	21.6	Target=5.23	108	365	
813.00 > 169.00	5.390	5.390	0.0	1.000	294654		4.41(2.62-7.85)		2684	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.390	5.390	0.0	1.607	3130153	41.4		82.9	6752	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.832	5.832	0.0	1.082	908927	19.3	Target=5.61	96.6	702	
913.00 > 169.00	5.820	5.832	-0.012	1.080	211761		4.29(2.80-8.41)		2085	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFAS32-L4_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E001.d

Injection Date: 02-Aug-2019 03:49:20

Instrument ID: LC812

Lims ID: CCV L4

Client ID:

Operator ID: lc812tech

ALS Bottle#: 48

Worklist Smp#: 1

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

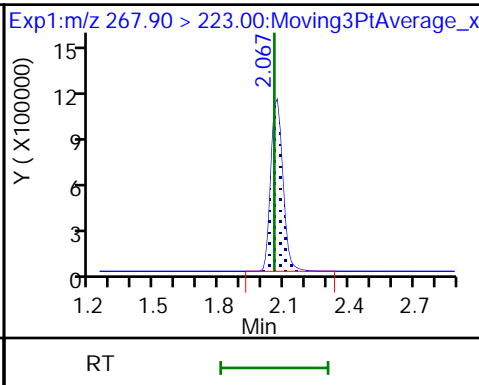
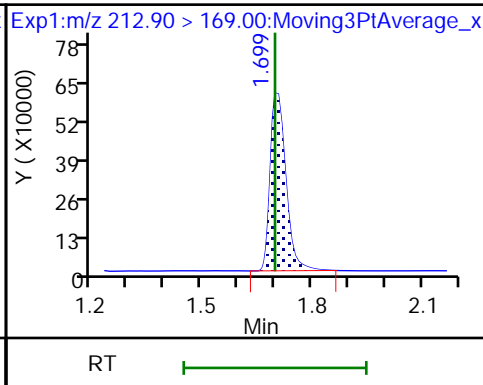
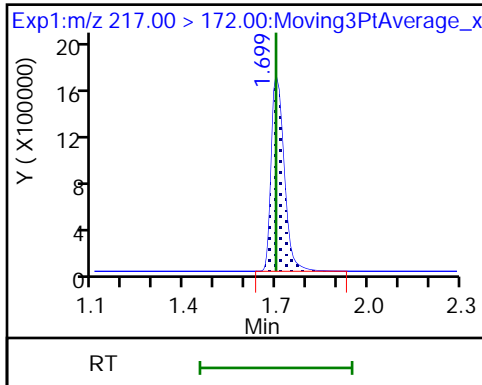
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

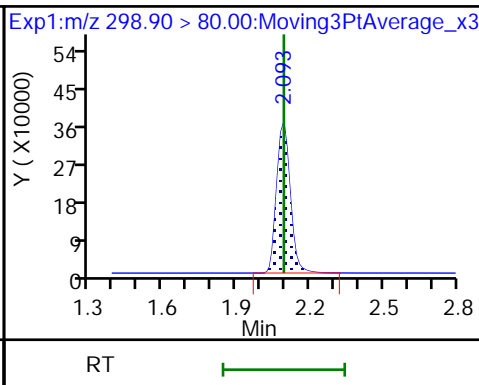
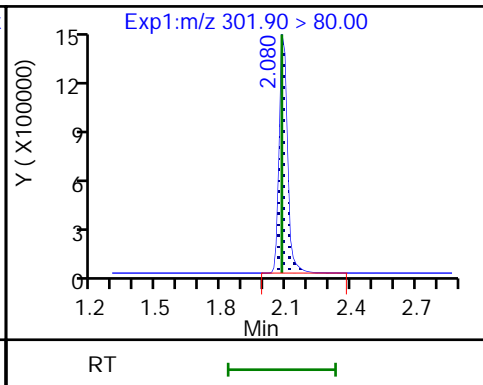
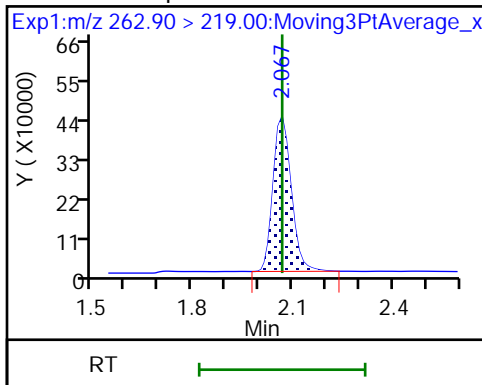
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

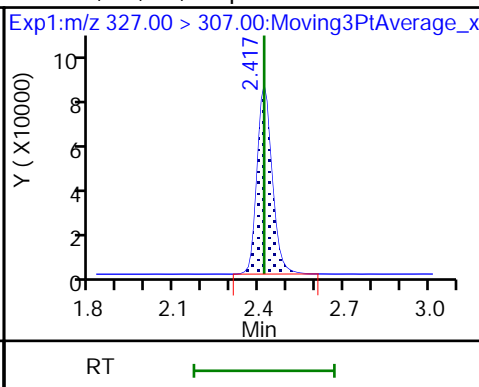
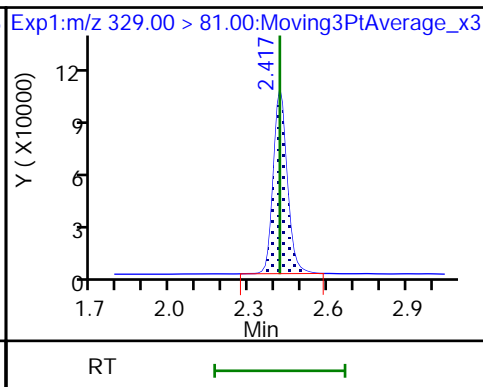
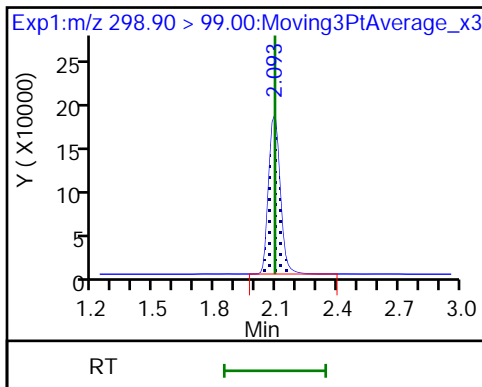
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

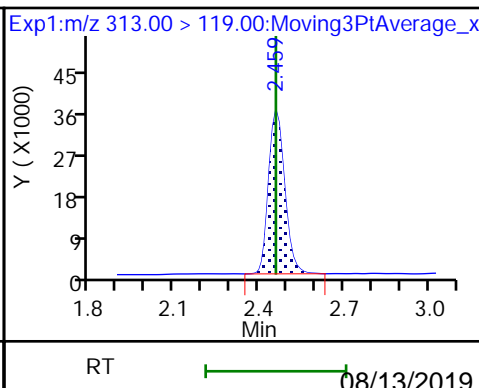
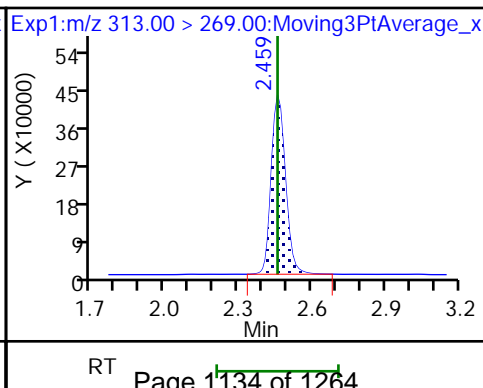
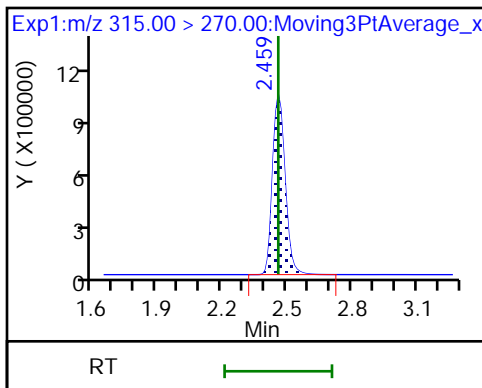
61 1H,1H,2H,2H-perfluorohexanesulfoni

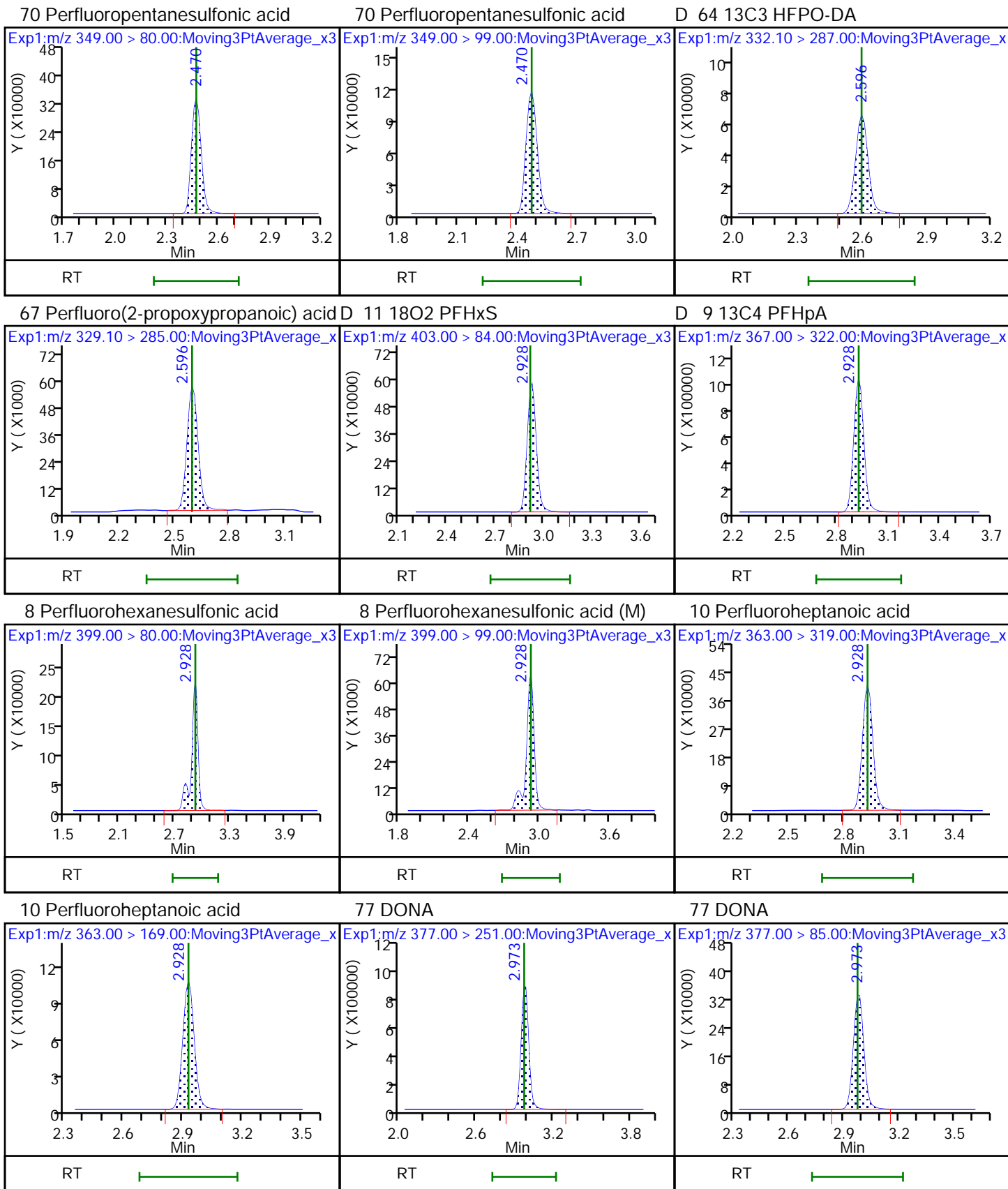


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

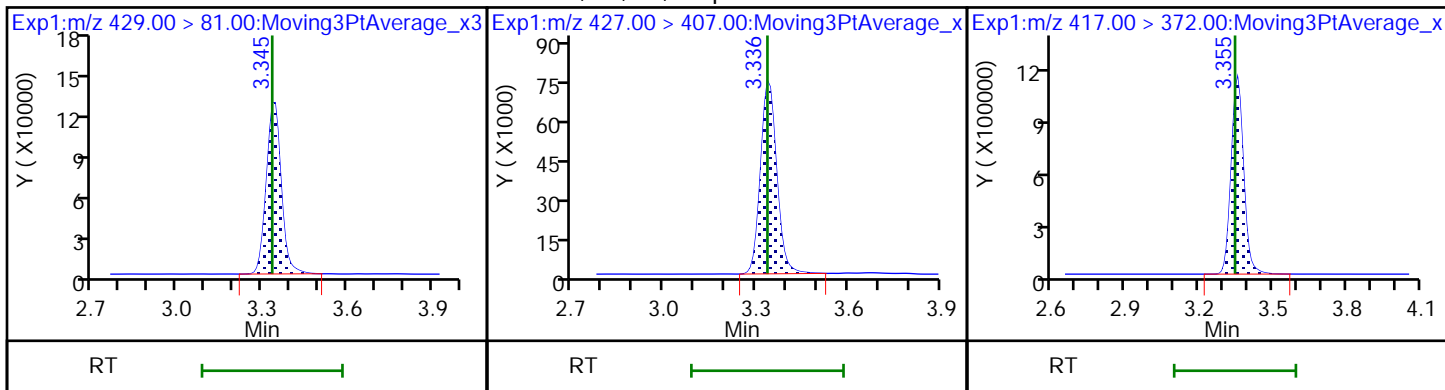
6 Perfluorohexanoic acid





D 12 M2-6:2 FTS

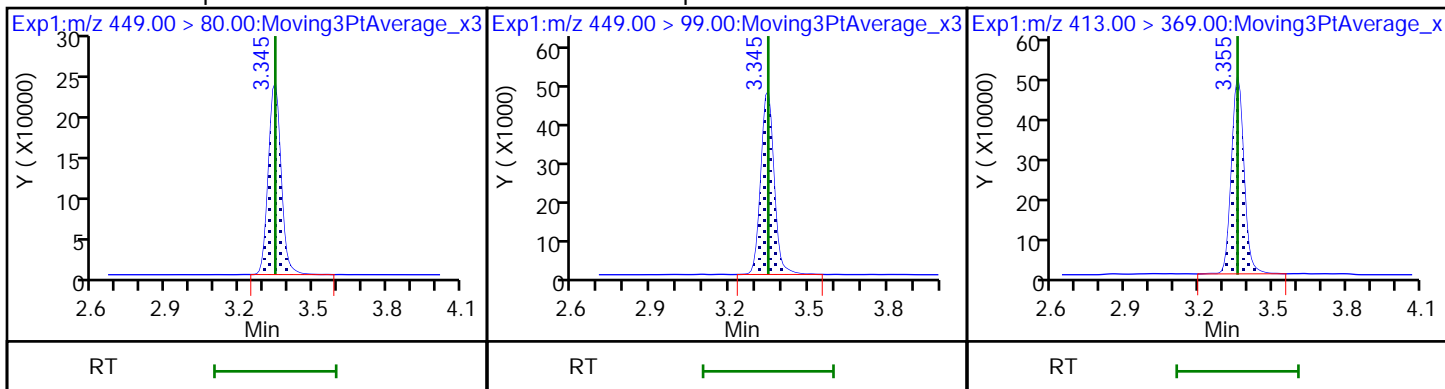
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid

16 Perfluoroheptanesulfonic acid

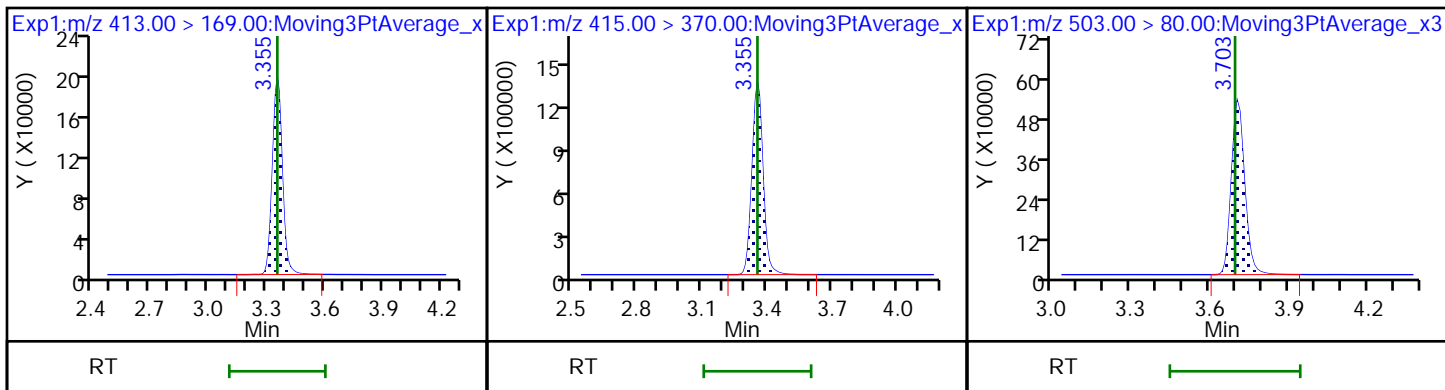
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

* 62 13C2 PFOA

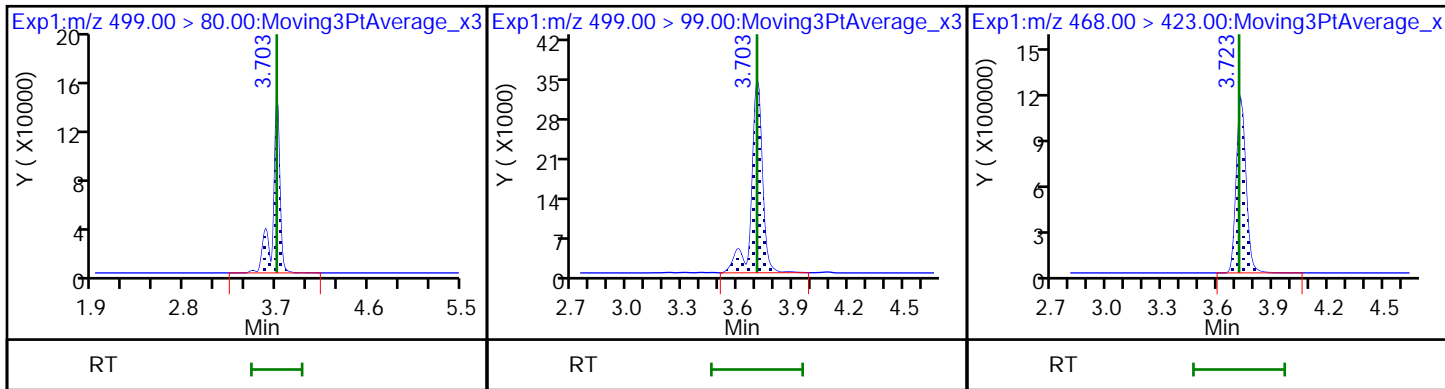
D 18 13C4 PFOS

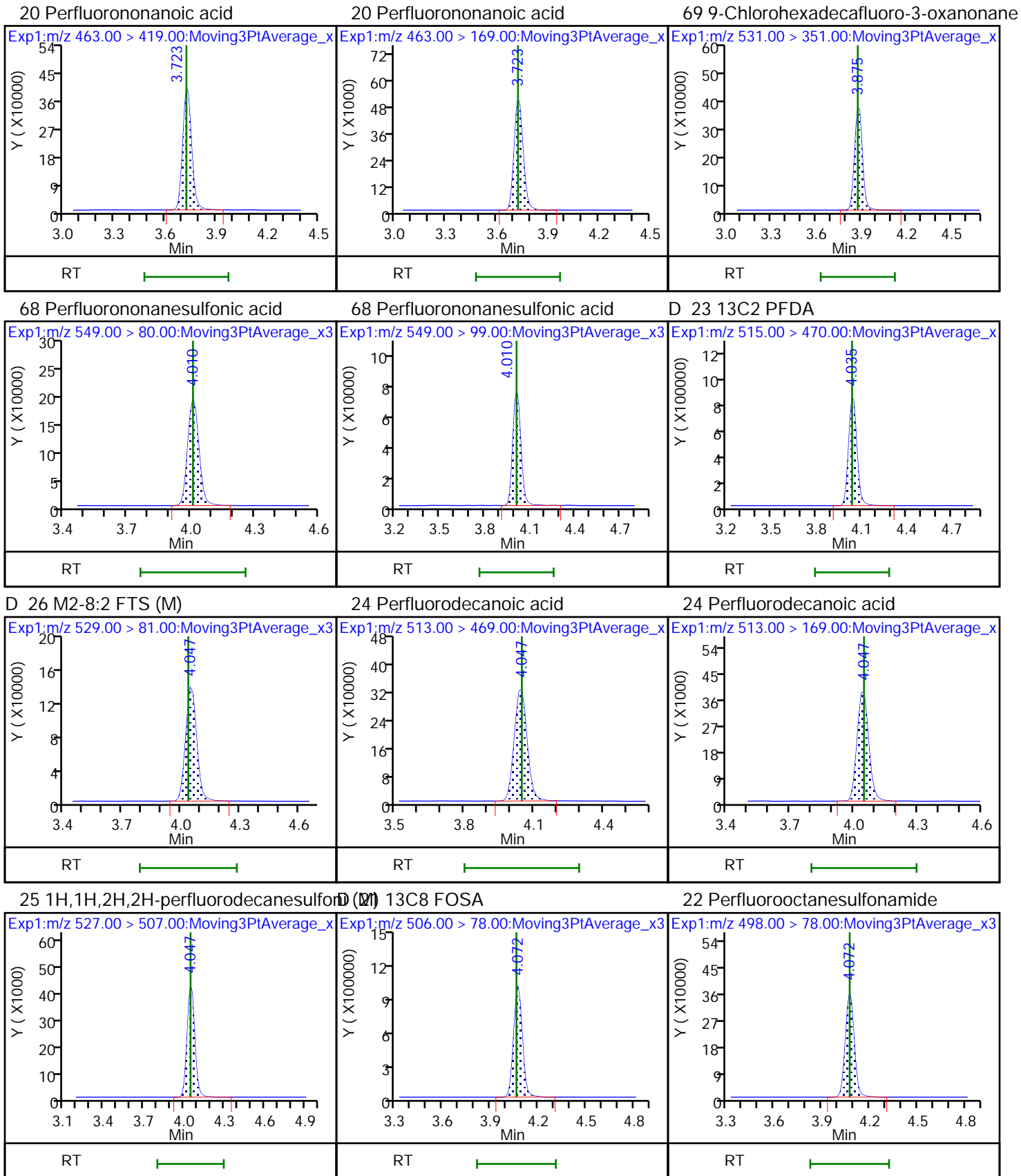


17 Perfluorooctanesulfonic acid

17 Perfluorooctanesulfonic acid

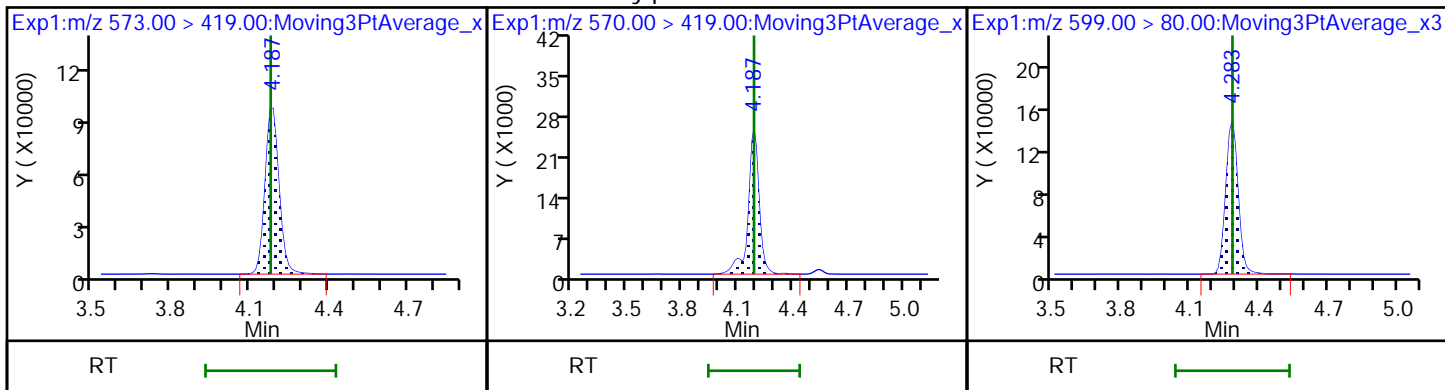
D 19 13C5 PFNA





D 27 d3-NMeFOSAA

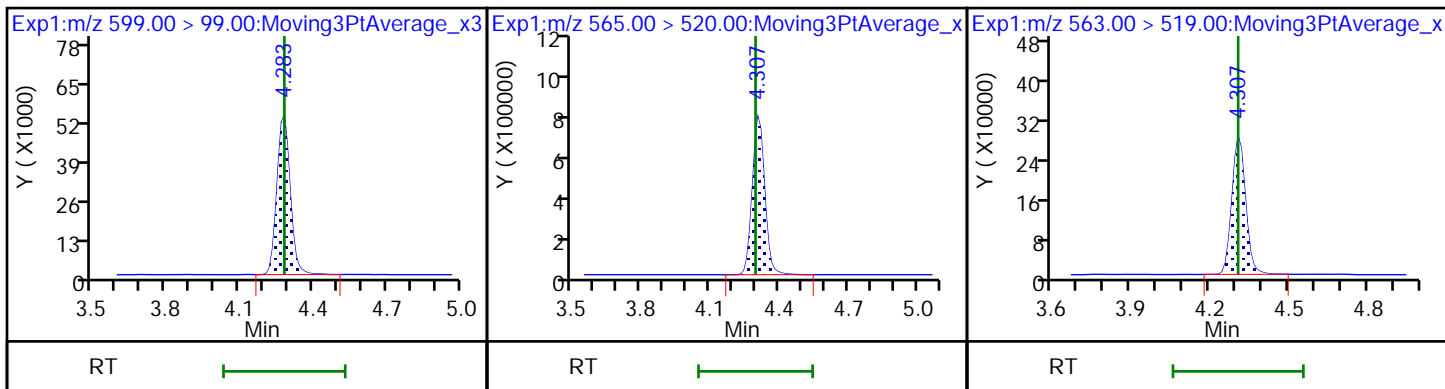
28 N-methylperfluorooctanesulfonamido 29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

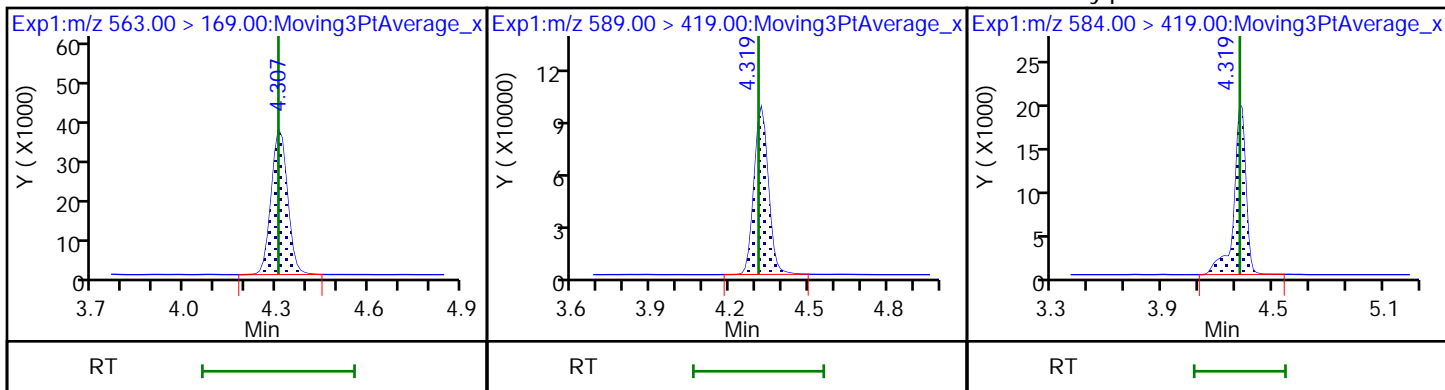
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

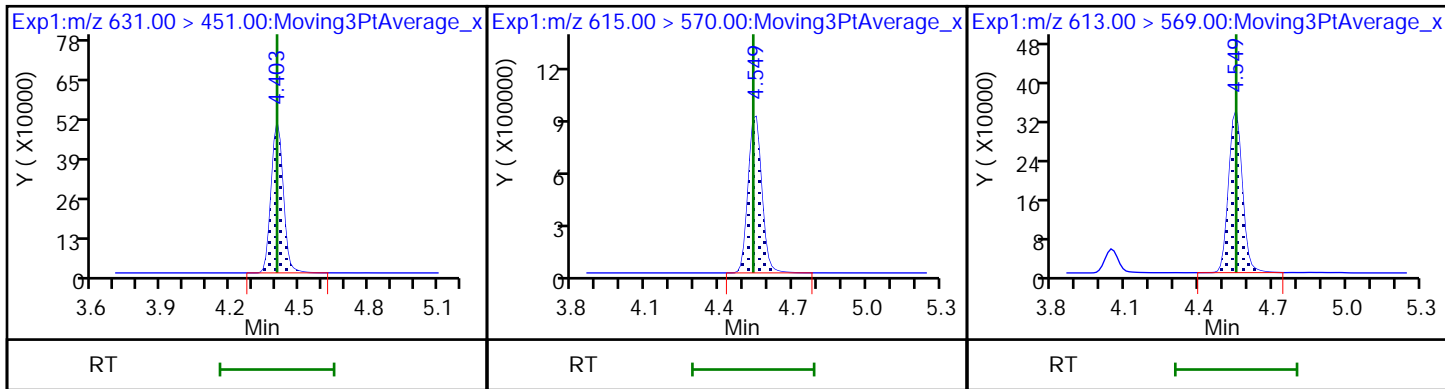
33 N-ethylperfluorooctanesulfonamido



66 11-Chloroeicosafluoro-3-oxaundeca

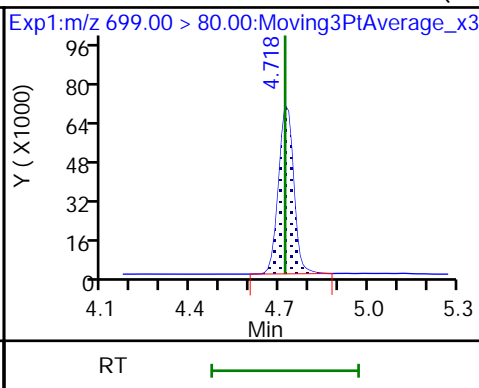
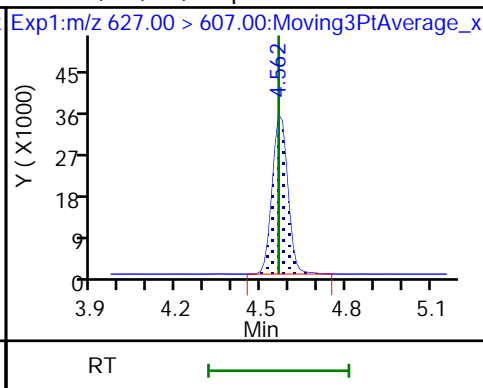
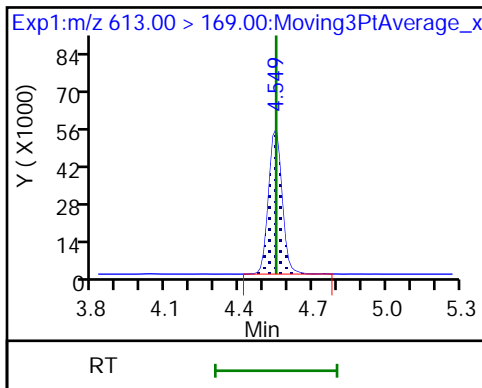
D 36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

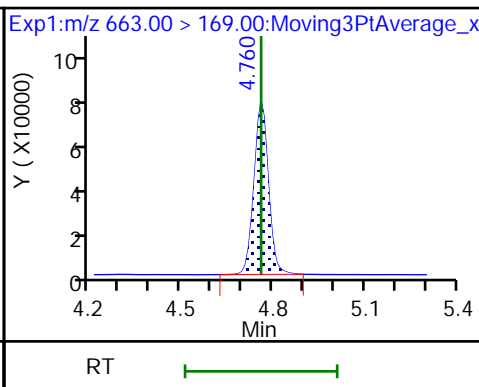
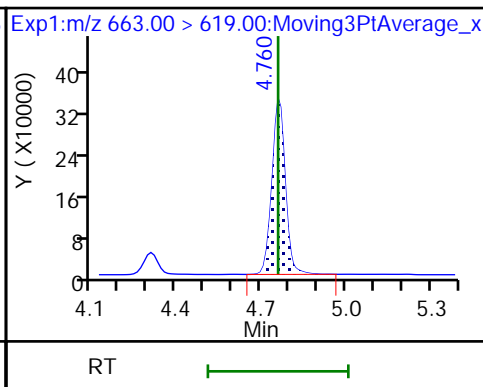
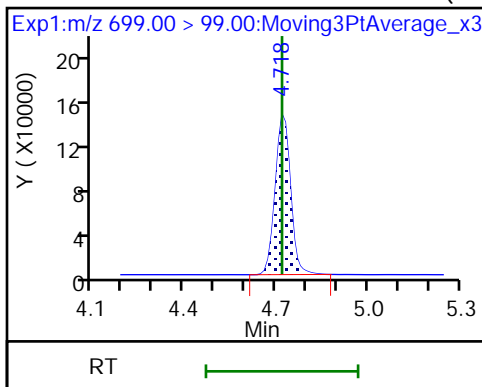
74 1H,1H,2H,2H-perfluorododecanesulfo 75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

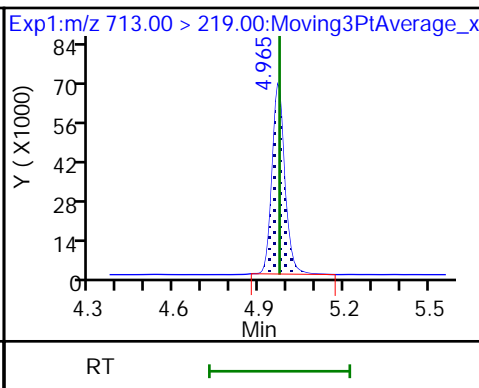
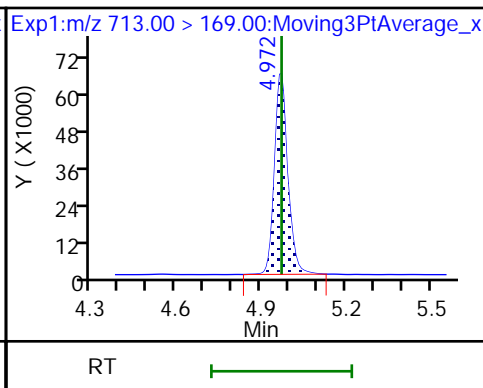
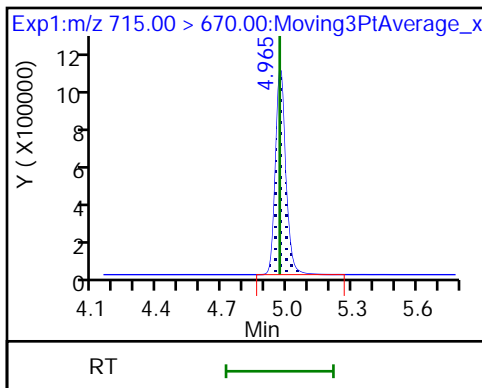
41 Perfluorotridecanoic acid



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

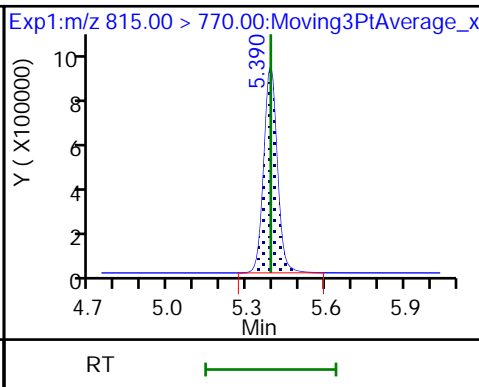
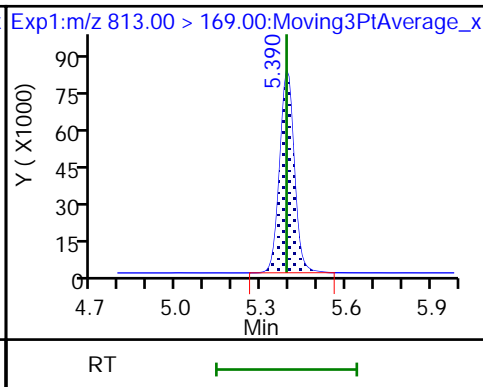
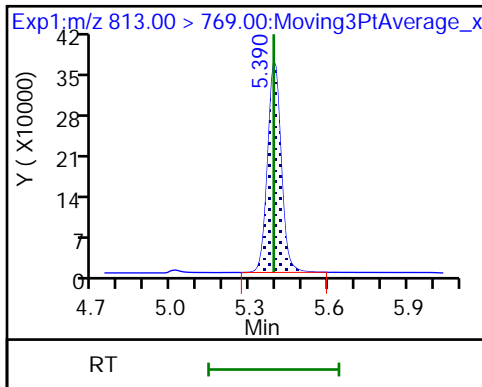
42 Perfluorotetradecanoic acid



45 Perfluorohexadecanoic acid

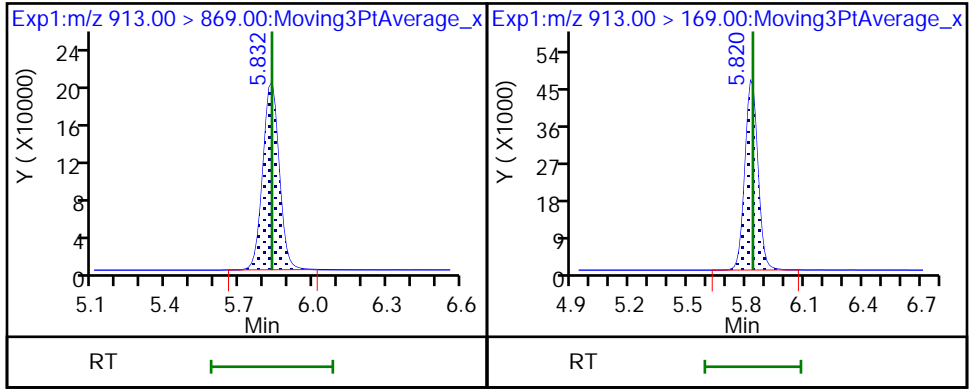
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

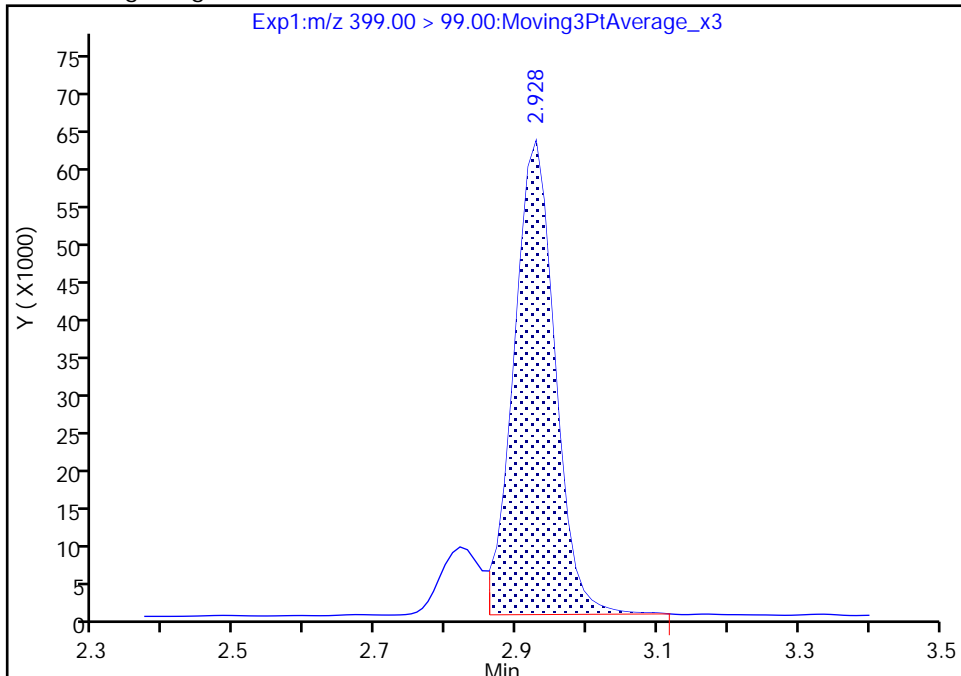
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E001.d
Injection Date: 02-Aug-2019 03:49:20 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 48 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

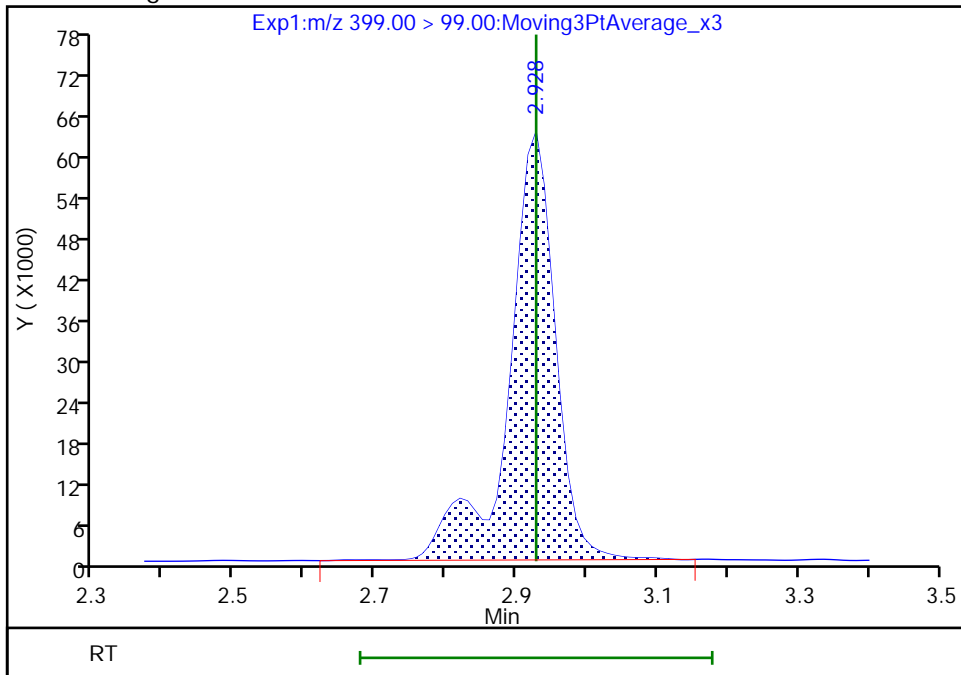
RT: 2.93
Area: 254189
Amount: 17.166842
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 291885
Amount: 17.166842
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 02-Aug-2019 17:25:53
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

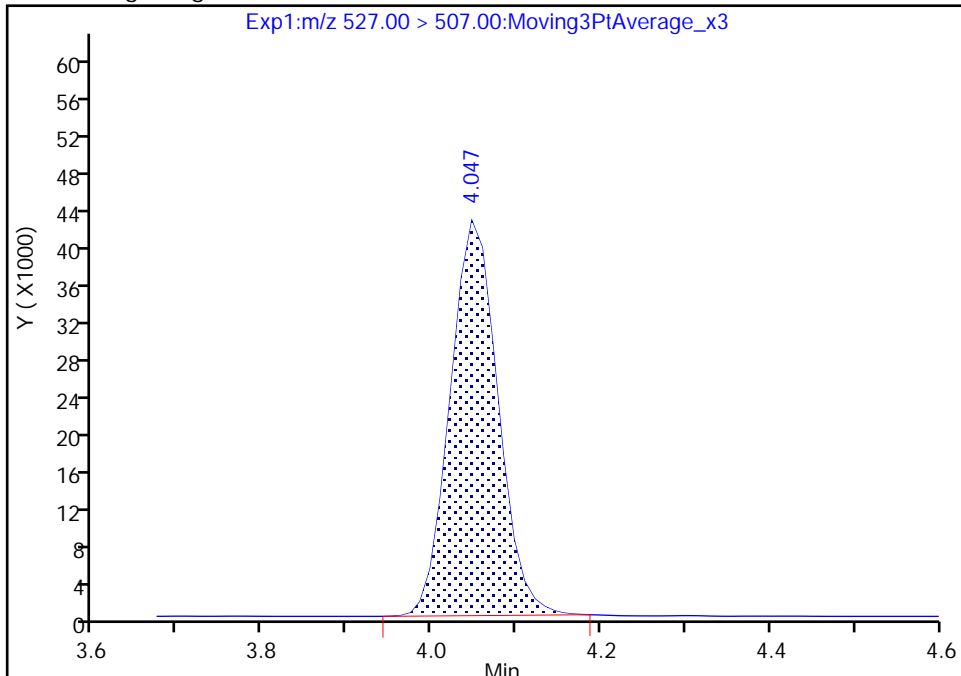
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E001.d
Injection Date: 02-Aug-2019 03:49:20 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 48 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

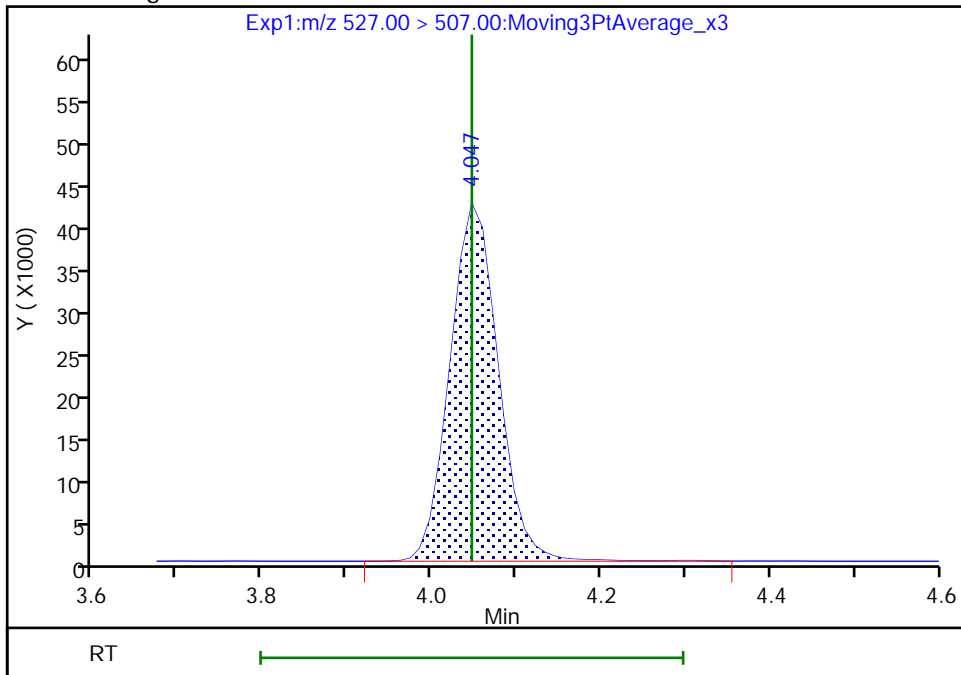
RT: 4.05
Area: 165340
Amount: 11.306096
Amount Units: ng/ml

Processing Integration Results



RT: 4.05
Area: 167201
Amount: 11.435208
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 05-Aug-2019 18:28:27
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

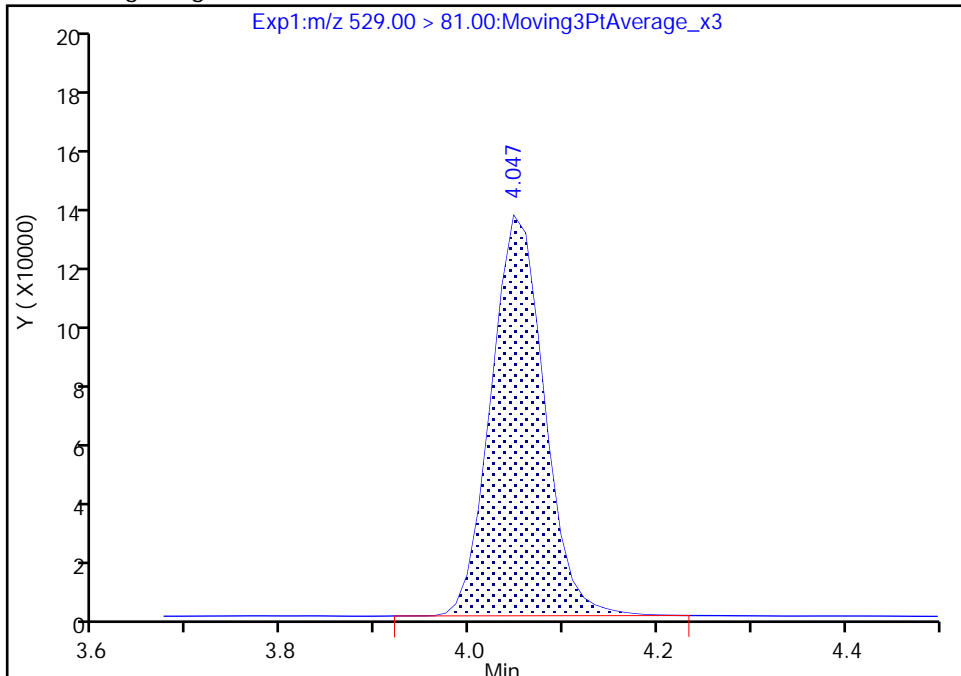
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E001.d
Injection Date: 02-Aug-2019 03:49:20 Instrument ID: LC812
Lims ID: CCV L4
Client ID:
Operator ID: lc812tech ALS Bottle#: 48 Worklist Smp#: 1
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

D 26 M2-8:2 FTS, CAS: STL02280

Signal: 1

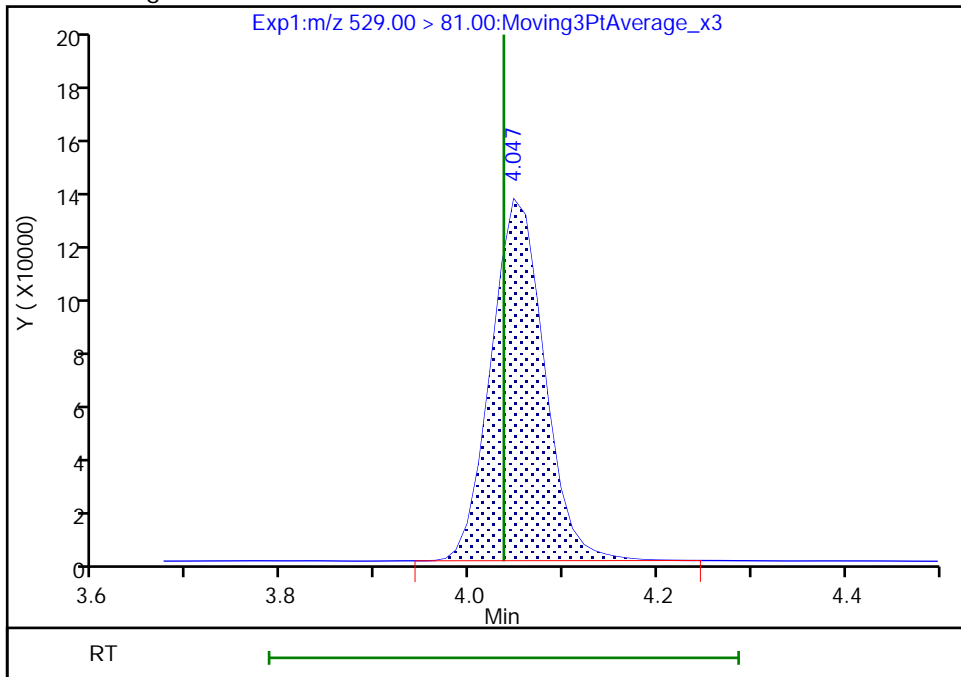
RT: 4.05
Area: 524019
Amount: 56.567856
Amount Units: ng/ml

Processing Integration Results



RT: 4.05
Area: 523934
Amount: 56.558680
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 05-Aug-2019 18:23:17
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145761/12 Calibration Date: 08/02/2019 05:17
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119E012.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9217	0.9270		50300	50000	0.6	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9677	0.9760		50400	50000	0.9	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.017	0.9736		42300	44200	-4.2	40.0
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.389	1.882		36800	46700	-21.2	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.030	1.016		49300	50000	-1.3	40.0
Perfluoropentanesulfonic acid	AveID	0.8944	0.8422		44200	46900	-5.8	50.0
HFPO-DA	AveID	2.541	2.378		46800	50000	-6.4	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9367	0.9584		51200	50000	2.3	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.318	1.355		46800	45500	2.8	40.0
DONA	AveID	4.754	4.493		44500	47100	-5.5	50.0
6:2 FTS	AveID	1.715	1.436		39700	47400	-16.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.205	1.146		45300	47600	-4.9	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.088	1.056		48500	50000	-2.9	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9465	0.9534		46700	46400	0.7	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9059	0.9342		51600	50000	3.1	40.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.174	1.664		35700	46600	-23.5	50.0
Perfluorononanesulfonic acid	AveID	0.8445	0.8559		48600	48000	1.3	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9682	0.9252		47800	50000	-4.4	40.0
8:2 FTS	AveID	1.337	0.9489		34000	47900	-29.0	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.9129	0.8998		49300	50000	-1.4	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7567	0.7318		48400	50000	-3.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6627	0.7230		52600	48200	9.1	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8581	0.8225		47900	50000	-4.1	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.6400	0.6073		47400	50000	-5.1	40.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	3.310	2.248		32000	47100	-32.1	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.022	1.119		54700	50000	9.4	40.0
10:2 FTS	AveID	0.8462	0.6052		34500	48200	-28.5	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.3176	0.3077		46900	48400	-3.1	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9176	0.9662		52600	50000	5.3	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1331	0.1565		58800	50000	17.6	40.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145761/12 Calibration Date: 08/02/2019 05:17
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119E012.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9459		49700	50000	-0.7	40.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7518	0.6770		45000	50000	-10.0	50.0
13C4 PFBA	Ave	0.9423	1.039		55100	50000	10.2	50.0
13C5 PFPeA	Ave	0.8851	0.8933		50500	50000	0.9	50.0
13C3 PFBS	Ave	0.8694	0.9115		48800	46500	4.8	50.0
M2-4:2 FTS	Ave	0.0841	0.0973		54000	46700	15.7	50.0
13C2 PFHxA	Ave	0.8791	0.9011		51200	50000	2.5	50.0
13C3 HFPO-DA	Ave	0.0564	0.0659		58400	50000	16.8	50.0
13C4 PFHpA	Ave	0.8611	0.8821		51200	50000	2.4	50.0
1802 PFHxS	Ave	0.5092	0.4861		45200	47300	-4.5	50.0
M2-6:2 FTS	Ave	0.1060	0.1086		48700	47500	2.5	50.0
13C4 PFOA	Ave	0.9094	0.9162		50400	50000	0.7	50.0
13C4 PFOS	Ave	0.4242	0.4433		50000	47800	4.5	50.0
13C5 PFNA	Ave	0.8296	0.8545		51500	50000	3.0	50.0
13C2 PFDA	Ave	0.6637	0.7396		55700	50000	11.4	50.0
M2-8:2 FTS	Ave	0.0978	0.1114		54500	47900	13.9	50.0
13C8 FOSA	Ave	0.7620	0.8505		55800	50000	11.6	50.0
d3-NMeFOSAA	Ave	0.0848	0.0758		44700	50000	-10.6	50.0
13C2 PFUnA	Ave	0.6045	0.6139		50800	50000	1.6	50.0
d5-NEtFOSAA	Ave	0.0945	0.0838		44300	50000	-11.3	50.0
13C2 PFDoA	Ave	0.6507	0.6420		49300	50000	-1.3	50.0
13C2 PFTeDA	Ave	0.8960	0.7504		41900	50000	-16.2	50.0
13C2 PFHxDA	Ave	0.7972	0.7362		46200	50000	-7.7	50.0

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E012.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 02-Aug-2019 05:17:43 ALS Bottle#: 5 Worklist Smp#: 12
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: 200-0037095-012 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3

Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d

Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: chirgwinb Date: 02-Aug-2019 17:26:43

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.505	4699423	55.1	110	13822	
2 Perfluorobutanoic acid	212.90 > 169.00	1.709	1.699	0.010	1.005	4356535	50.3	101	816	
D 3 13C5 PFPeA	267.90 > 223.00	2.068	2.054	0.014	0.615	4040813	50.5	101	8853	
4 Perfluoropentanoic acid	262.90 > 219.00	2.068	2.067	0.001	1.000	3943848	50.4	101	227	
D 47 13C3 PFBS	301.90 > 80.00	2.094	2.080	0.014	0.623	3834647	48.8	105	815823	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.094	2.093	0.001	1.000	3548648	42.3	Target=1.90	95.8	8264
	298.90 > 99.00	2.094	2.093	0.001	1.000	1721840		2.06(0.95-2.85)		2022
D 60 M2-4:2 FTS	329.00 > 81.00	2.418	2.417	0.001	0.719	411205	54.0	116	602	
61 1H,1H,2H,2H-perfluorohexanesulfoni	327.00 > 307.00	2.427	2.417	0.010	1.004	773815	36.8	78.8	7815	
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.732	4076110	51.2	102	9409	
6 Perfluorohexanoic acid	313.00 > 269.00	2.471	2.459	0.012	1.005	4142621	49.3	Target=13.23	98.7	1260
	313.00 > 119.00	2.459	2.459	0.0	1.000	338524		12.24(6.61-19.84)		484
70 Perfluoropentanesulfonic acid	349.00 > 80.00	2.471	2.470	0.001	1.180	3257109	44.2	Target=2.73	94.2	6030
	349.00 > 99.00	2.471	2.470	0.001	1.180	1105979		2.95(1.37-4.10)		2681
D 64 13C3 HFPO-DA	332.10 > 287.00	2.596	2.596	0.0	0.772	298128	58.4	117	1942	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.596	2.596	0.0	1.000	708964	46.8		93.6	229	
D 11 18O2 PFHxS										
403.00 > 84.00	2.928	2.916	0.012	0.871	2080084	45.2		95.5	6542	
D 9 13C4 PFHpA										
367.00 > 322.00	2.928	2.928	0.0	0.871	3990462	51.2		102	6383	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.928	2.928	0.0	1.000	2711090	46.8	Target=3.37	103	2964	
399.00 > 99.00	2.928	2.928	0.0	1.000	744706		3.64(1.69-5.06)		1085	
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.928	2.928	0.0	1.000	3824551	51.2	Target=3.76	102	1075	
363.00 > 169.00	2.928	2.928	0.0	1.000	1042994		3.67(1.88-5.65)		3170	
77 DONA										
377.00 > 251.00	2.985	2.973	0.012	0.804	8487326	44.5	Target=2.72	94.5	5480	
377.00 > 85.00	2.985	2.973	0.012	0.804	3232994		2.63(1.36-4.07)		4539	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.344	3.335	0.009	0.994	466888	48.7		103	1406	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.344	3.336	0.008	1.000	668912	39.7		83.7	1357	
D 14 13C4 PFOA										
417.00 > 372.00	3.362	3.344	0.018	1.000	4144506	50.4		101	12898	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.353	3.345	0.008	0.903	2188134	45.3	Target=4.80	95.1	5109	
449.00 > 99.00	3.353	3.345	0.008	0.903	419177		5.22(2.40-7.20)		2255	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.362	3.355	0.007	1.000	4377726	48.5	Target=2.84	97.1	580	
413.00 > 169.00	3.362	3.355	0.007	1.000	1663037		2.63(1.42-4.25)		4851	
* 62 13C2 PFOA										
415.00 > 370.00	3.362	3.355	0.007		4523669	50.0			9294	
D 18 13C4 PFOS										
503.00 > 80.00	3.712	3.695	0.017	1.104	1917238	50.0		105	6394	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.712	3.703	0.009	1.000	1774316	46.7	Target=4.33	101	10322	
499.00 > 99.00	3.712	3.703	0.009	1.000	355029		5.00(2.16-6.49)		1380	
D 19 13C5 PFNA										
468.00 > 423.00	3.733	3.715	0.017	1.110	3865509	51.5		103	11074	
20 Perfluorononanoic acid										
463.00 > 419.00	3.733	3.723	0.009	1.000	3611242	51.6	Target=8.15	103	1334	
463.00 > 169.00	3.733	3.723	0.009	1.000	453684		7.96(4.08-12.23)		6872	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.885	3.875	0.010	1.047	3110545	35.7		76.5	10454	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.021	4.010	0.011	1.083	1647850	48.6	Target=2.42	101	6174	
549.00 > 99.00	4.021	4.010	0.011	1.083	626483		2.63(1.21-3.63)		2106	
D 23 13C2 PFDA										
515.00 > 470.00	4.045	4.036	0.009	1.203	3345828	55.7		111	12859	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.058	4.036	0.022	1.207	482589	54.5		114	1392	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.045	4.047	-0.002	1.000	3095544	47.8	Target=9.58	95.6	1383	
513.00 > 169.00	4.045	4.047	-0.002	1.000	363787		8.51(4.79-14.37)		3520	
25 1H,1H,2H,2H-perfluorodecanesulfo										
527.00 > 507.00	4.058	4.047	0.011	1.000	457913	34.0		71.0	3632	
D 21 13C8 FOSA										
506.00 > 78.00	4.083	4.061	0.022	1.214	3847191	55.8		112	5754	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.083	4.072	0.011	1.000	3461608	49.3		98.6	6226	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.185	4.178	0.007	1.245	342906	44.7		89.4	850	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.197	4.187	0.010	1.003	250950	48.4		96.7	696	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.281	4.283	-0.002	1.153	1397736	52.6	Target=2.64	109	5649	
599.00 > 99.00	4.281	4.283	-0.002	1.153	536973		2.60(1.32-3.96)		2014	
D 30 13C2 PFUnA										
565.00 > 520.00	4.317	4.296	0.021	1.284	2777269	50.8		102	8829	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.317	4.307	0.010	1.000	2284156	47.9	Target=7.95	95.9	943	
563.00 > 169.00	4.317	4.307	0.010	1.000	315148		7.25(3.98-11.93)		3507	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.329	4.308	0.021	1.288	378860	44.3		88.7	1353	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.329	4.319	0.010	1.000	230065	47.4		94.9	2032	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.413	4.403	0.010	1.189	4246395	32.0		67.9	15021	
D 36 13C2 PFDaA										
615.00 > 570.00	4.548	4.537	0.011	1.353	2904316	49.3		98.7	7467	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.548	4.549	-0.001	1.000	3248656	54.7	Target=7.49	109	221	
613.00 > 169.00	4.548	4.549	-0.001	1.000	443339		7.33(3.75-11.24)		2882	
74 1H,1H,2H,2H-perfluorododecanesulfo										
627.00 > 607.00	4.573	4.562	0.011	1.127	293878	34.5		71.5	5182	
75 Perfluorododecanesulfonic acid (PF										
699.00 > 80.00	4.728	4.718	0.010	1.274	597336	46.9	Target=0.50	96.9	1208	
699.00 > 99.00	4.728	4.718	0.010	1.274	1225124		0.49(0.25-0.76)		4599	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.769	4.760	0.009	1.049	2806052	52.6	Target=5.71	105	250	
663.00 > 169.00	4.769	4.760	0.009	1.049	622833		4.51(2.85-8.56)		3111	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.479	3394649	41.9		83.8	9631	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.972	4.972	0.0	1.000	531408	58.8	Target=1.02	118	3727	
713.00 > 219.00	4.972	4.972	0.0	1.000	532596		1.00(0.51-1.54)		6431	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.398	5.390	0.008	1.001	3150149	49.7	Target=5.23	99.3	780	
813.00 > 169.00	5.398	5.390	0.008	1.001	739377		4.26(2.62-7.85)		5167	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.390	5.390	0.0	1.603	3330162	46.2		92.3	5780	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.832	5.832	0.0	1.082	2254458	45.0	Target=5.61	90.0	1315	
913.00 > 169.00	5.832	5.832	0.0	1.082	531405		4.24(2.80-8.41)		4415	

Reagents:

LCPFAS32-L5_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E012.d

Injection Date: 02-Aug-2019 05:17:43

Instrument ID: LC812

Lims ID: CCV L5

Client ID:

Operator ID: lc812tech

ALS Bottle#: 5

Worklist Smp#: 12

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

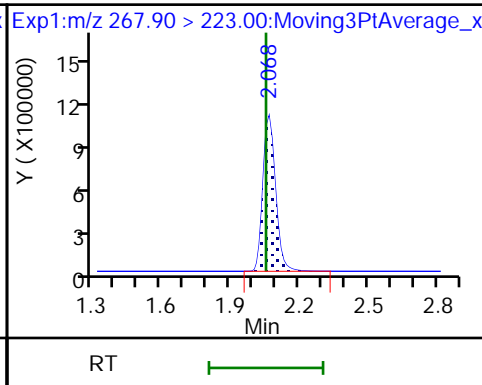
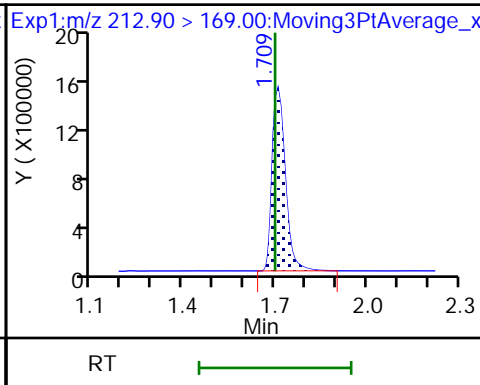
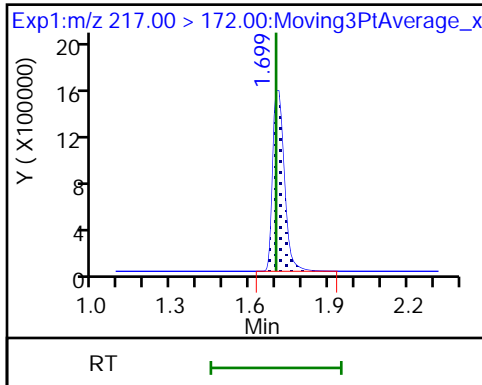
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

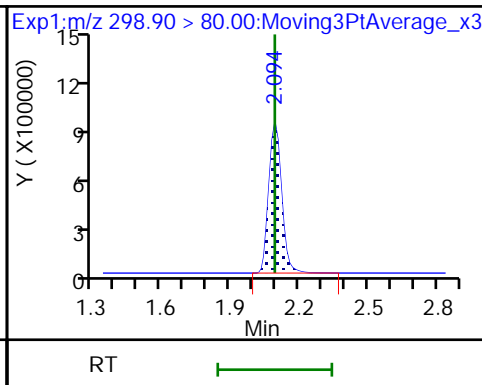
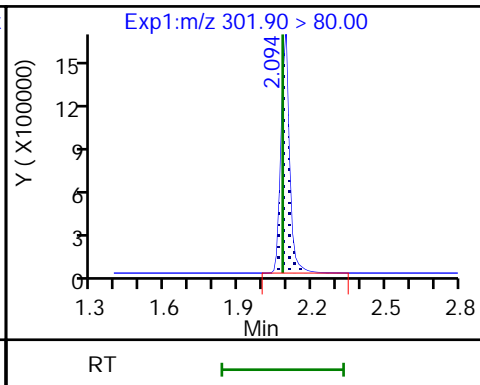
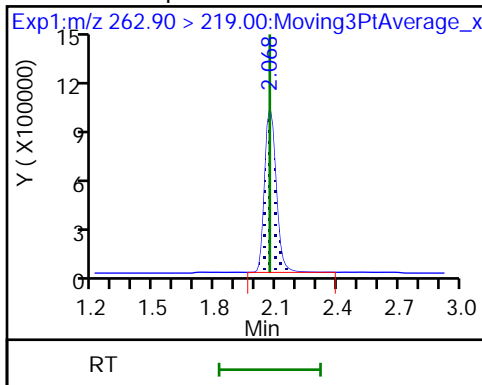
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

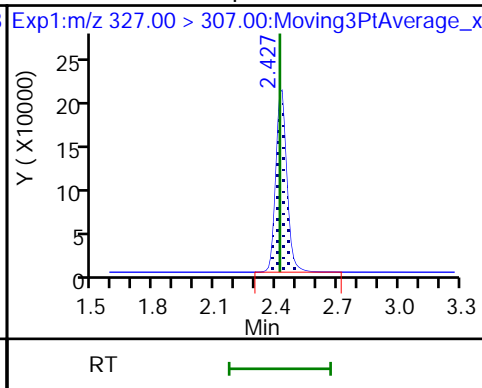
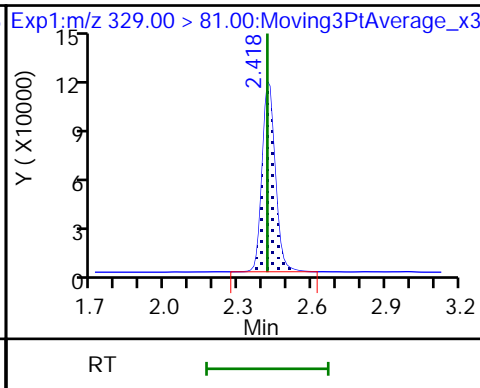
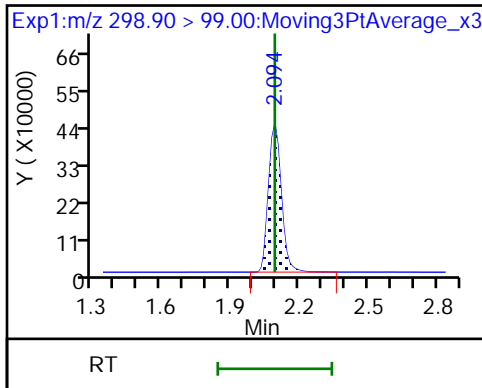
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

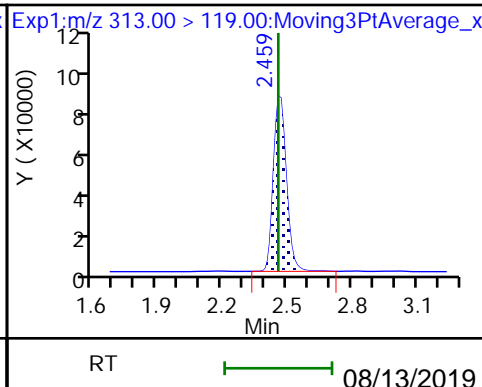
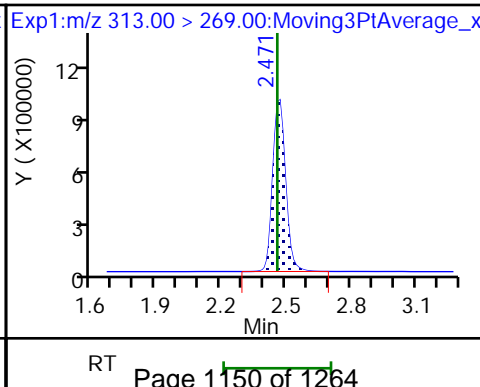
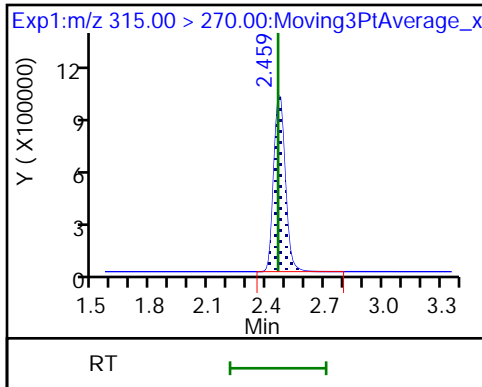
61 1H,1H,2H,2H-perfluorohexanesulfoni

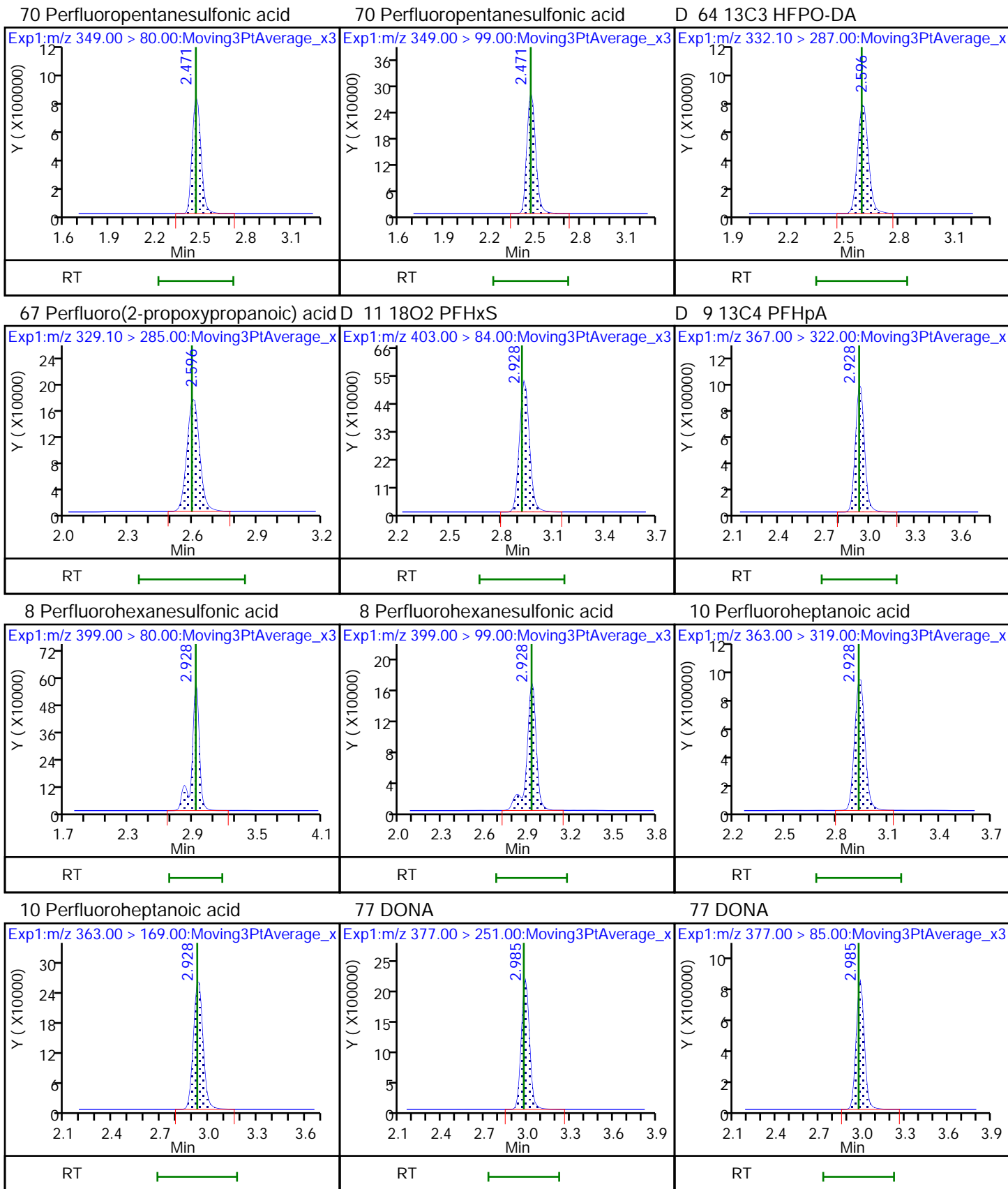


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

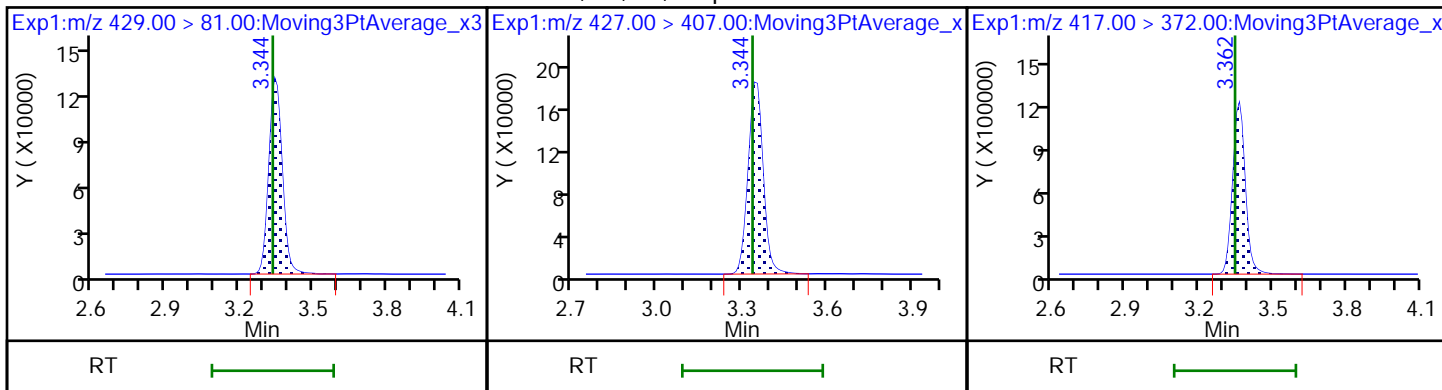
6 Perfluorohexanoic acid





D 12 M2-6:2 FTS

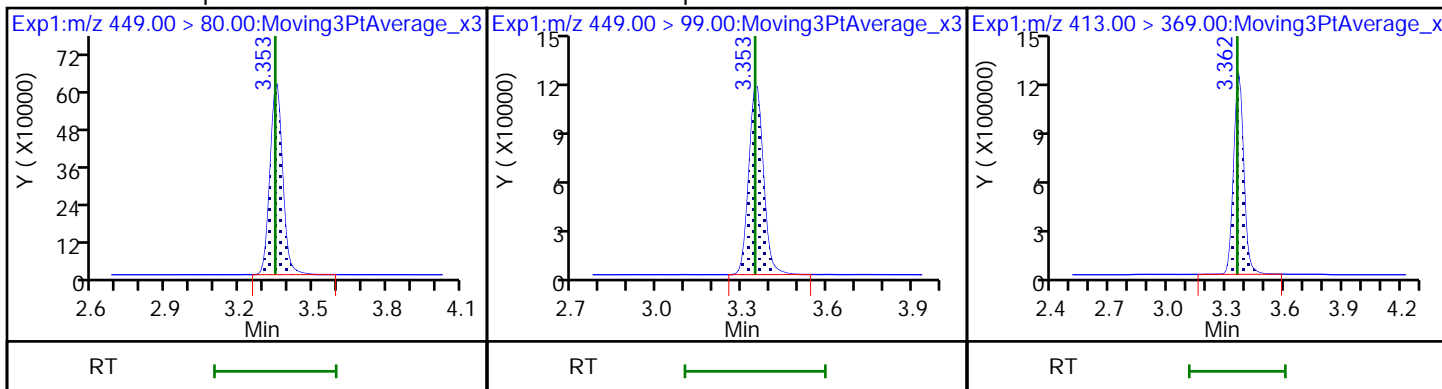
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid

16 Perfluoroheptanesulfonic acid

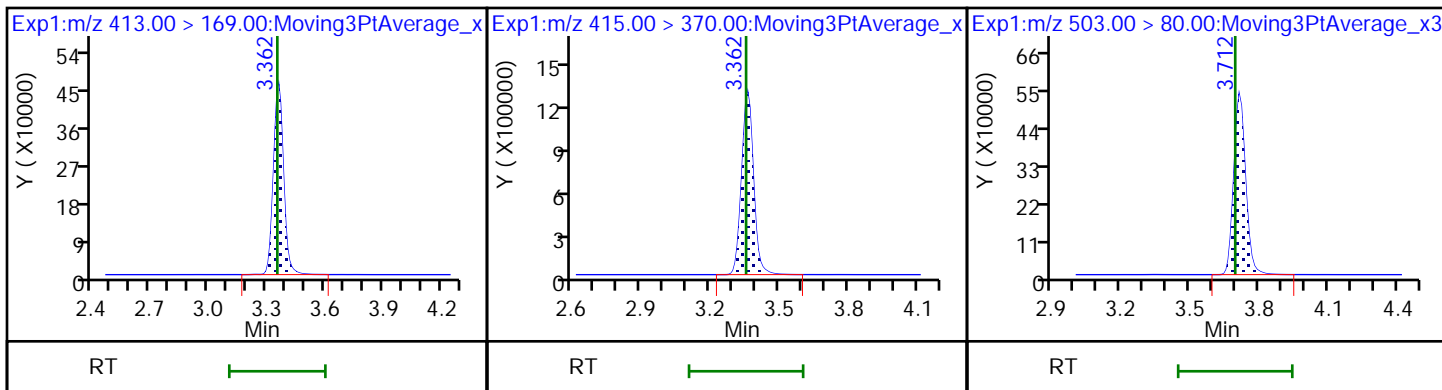
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

* 62 13C2 PFOA

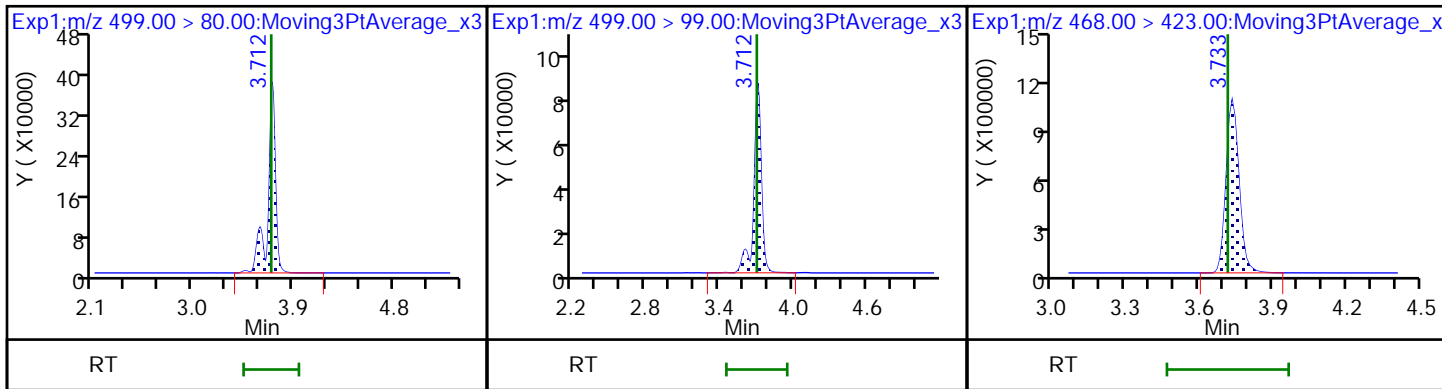
D 18 13C4 PFOS

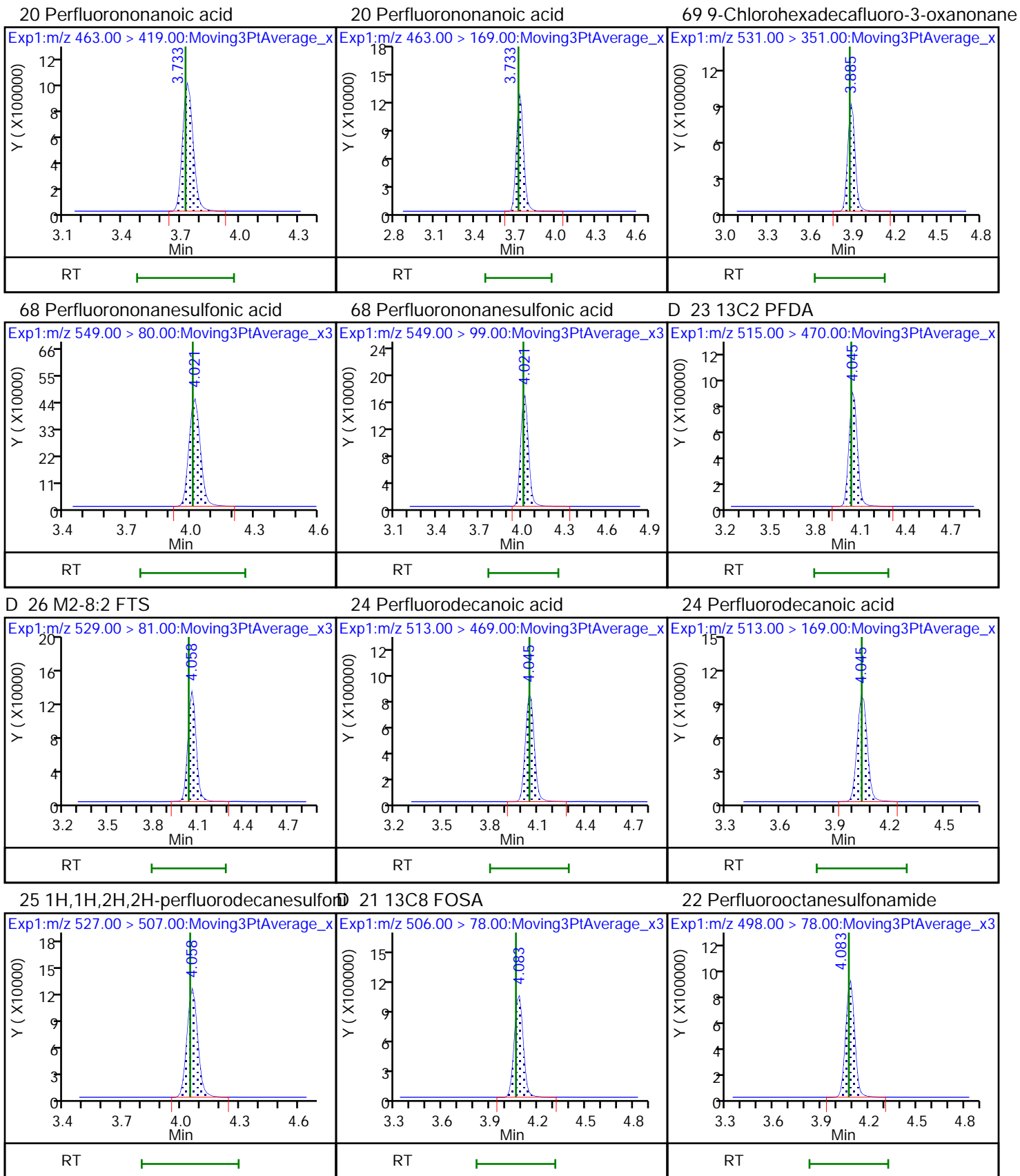


17 Perfluorooctanesulfonic acid

17 Perfluorooctanesulfonic acid

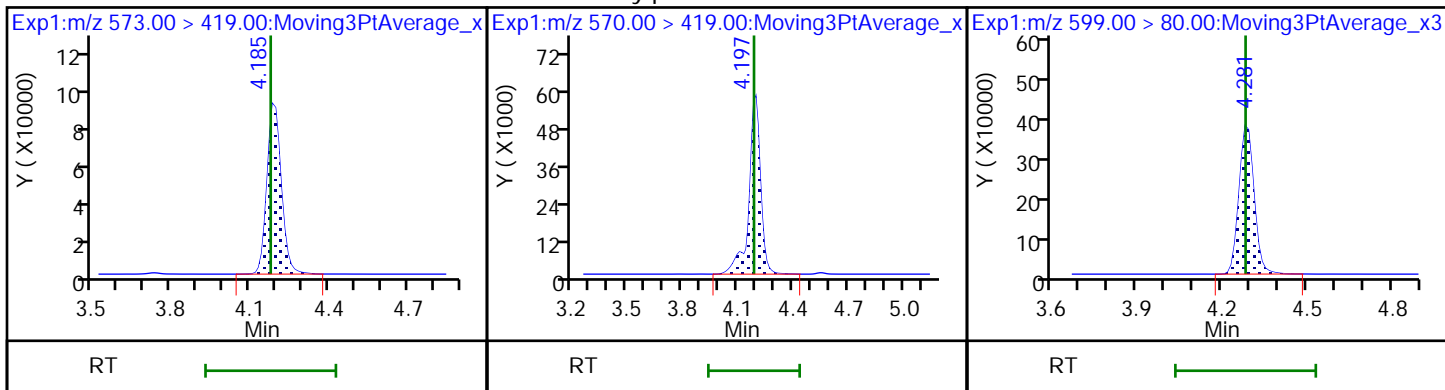
D 19 13C5 PFNA





D 27 d3-NMeFOSAA

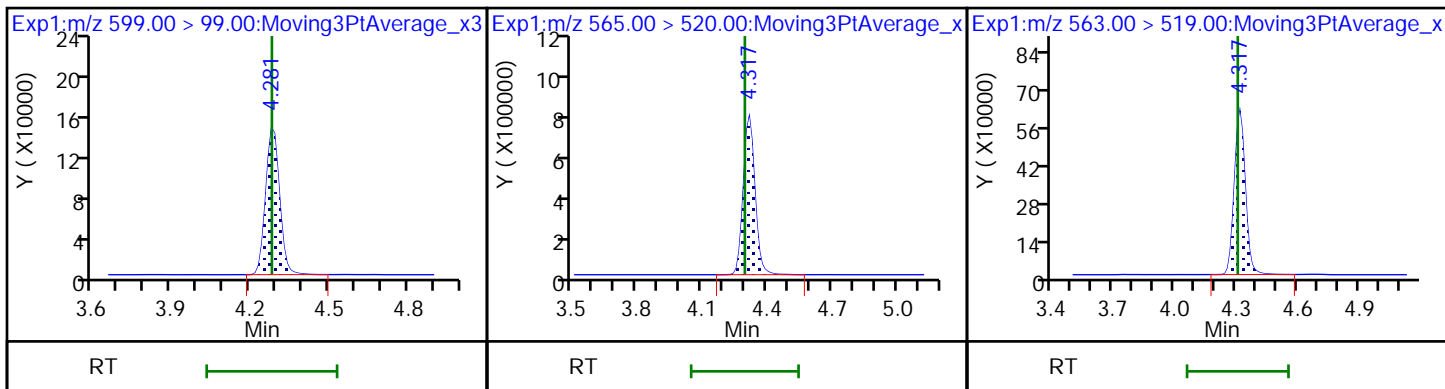
28 N-methylperfluorooctanesulfonamido 29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

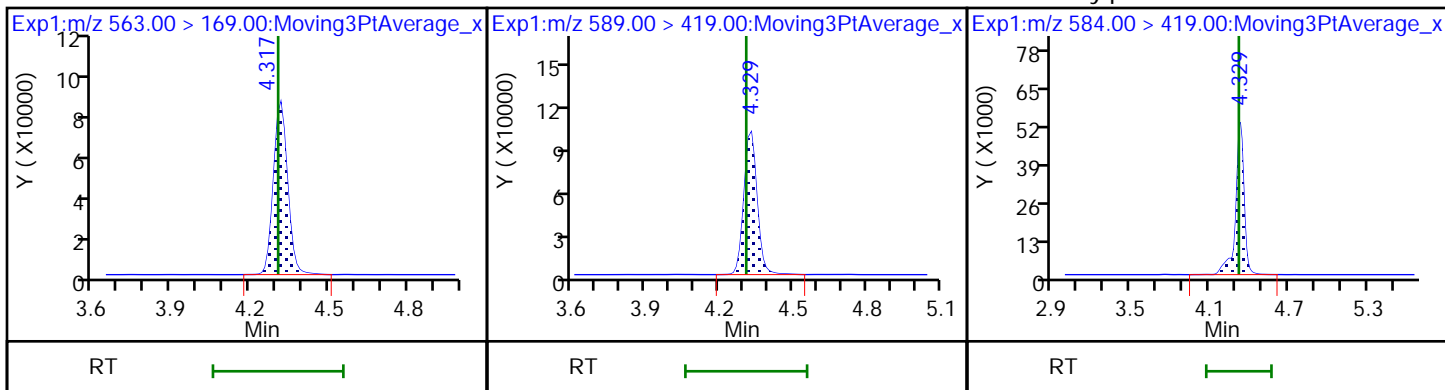
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

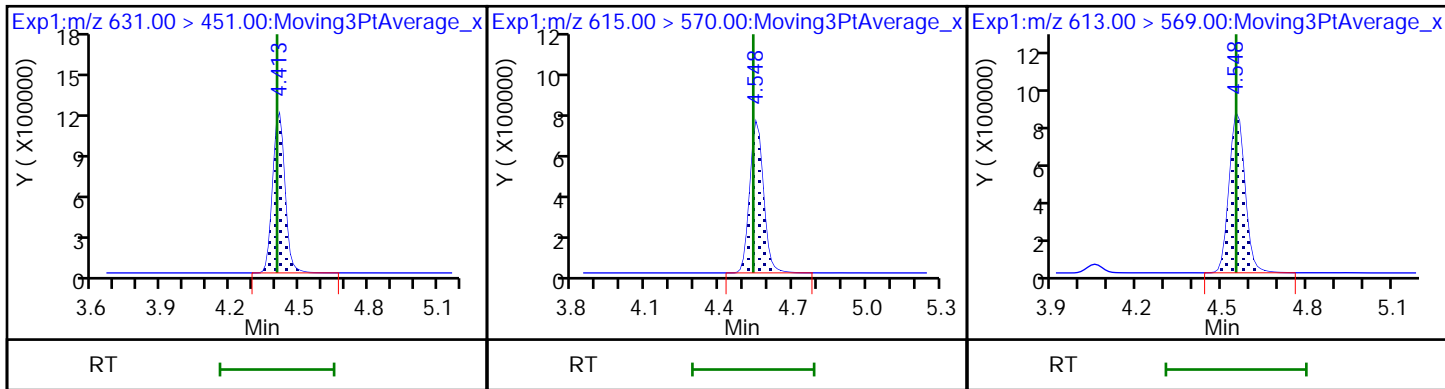
33 N-ethylperfluorooctanesulfonamido



66 11-Chloroeicosafluoro-3-oxaundecanoic acid

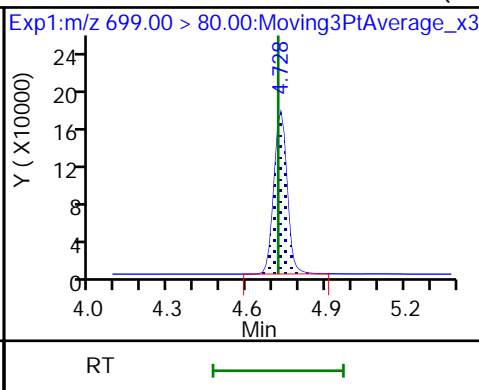
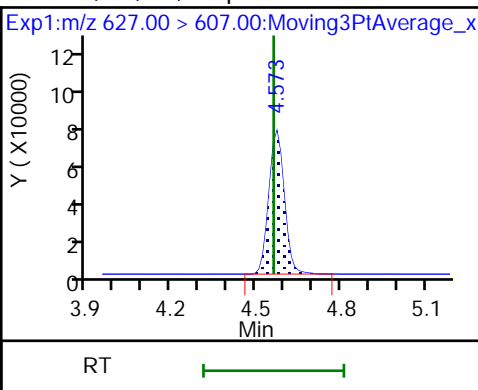
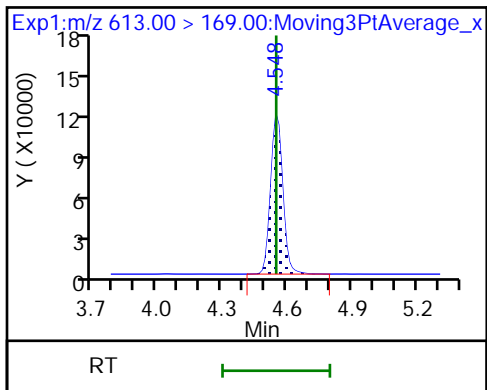
D 36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

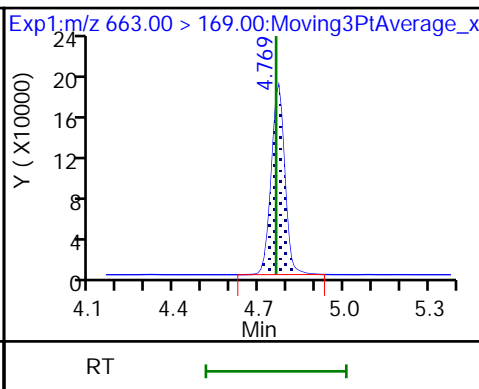
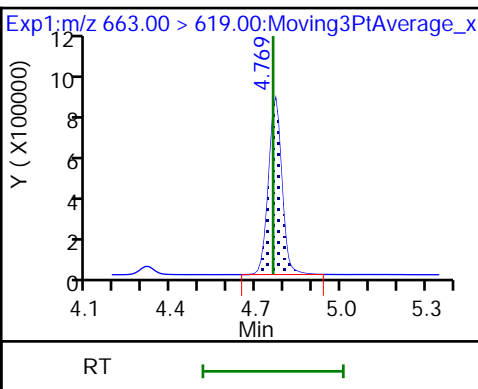
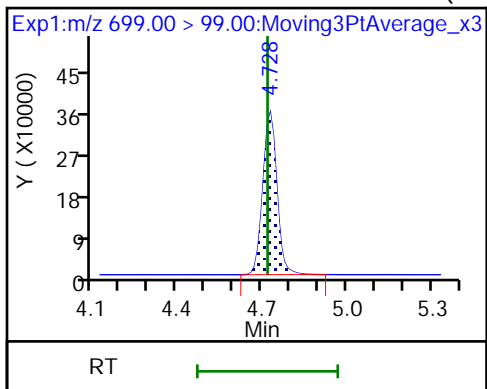
74 1H,1H,2H,2H-perfluorododecanesulfo 75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

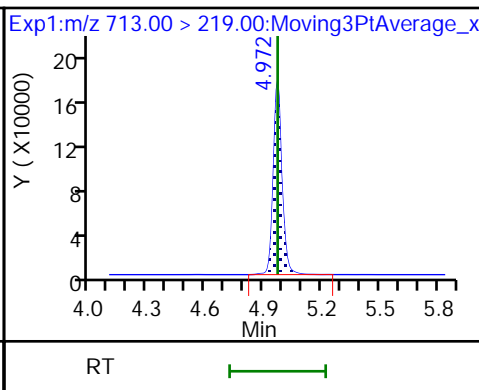
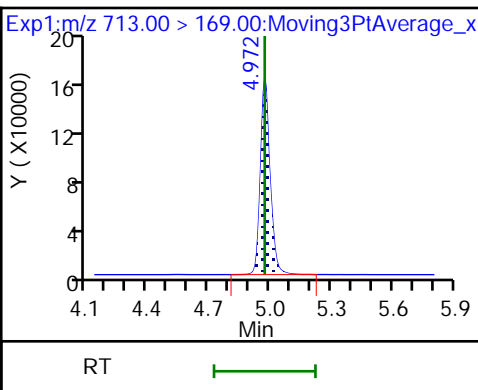
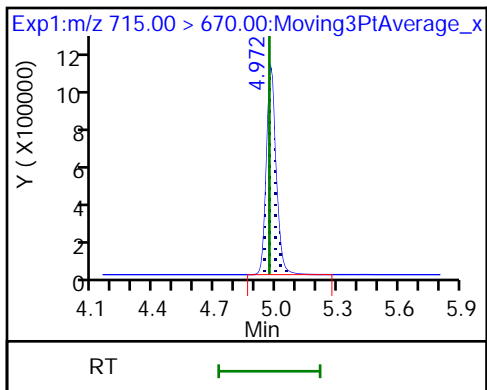
41 Perfluorotridecanoic acid



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

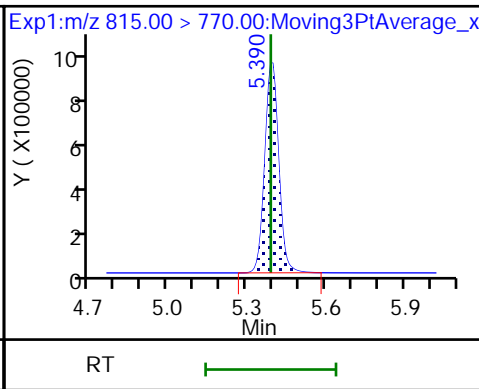
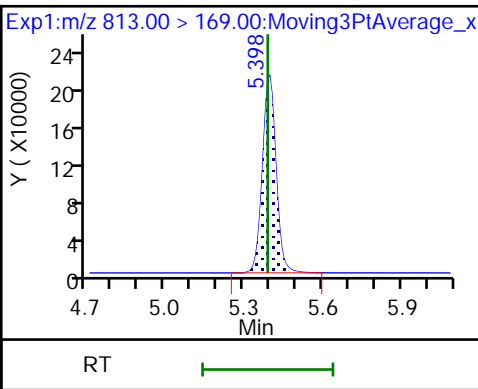
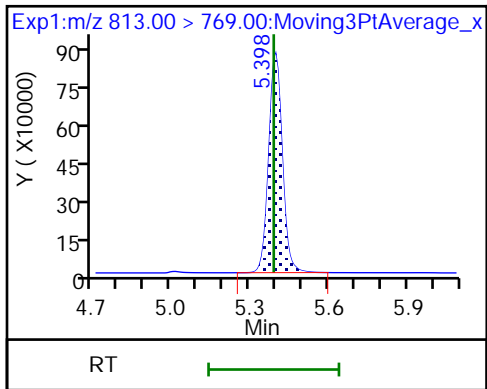
42 Perfluorotetradecanoic acid



45 Perfluorohexadecanoic acid

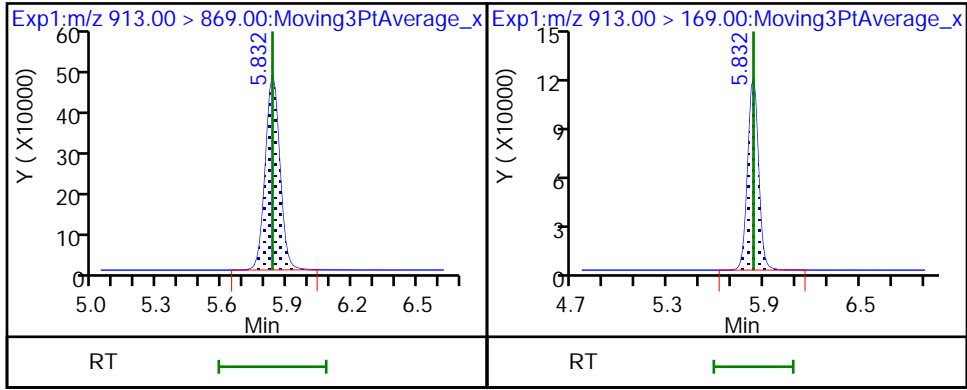
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145761/24 Calibration Date: 08/02/2019 06:54
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119E024.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid (PFBA)	AveID	0.9217	0.9089		49300	50000	-1.4	40.0
Perfluoropentanoic acid (PFPeA)	AveID	0.9677	0.9215		47600	50000	-4.8	40.0
Perfluorobutanesulfonic acid (PFBS)	AveID	1.017	0.9878		42900	44200	-2.8	40.0
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.389	1.933		37800	46700	-19.1	50.0
Perfluorohexanoic acid (PFHxA)	AveID	1.030	1.049		50900	50000	1.9	40.0
Perfluoropentanesulfonic acid	AveID	0.8944	0.8867		46500	46900	-0.9	50.0
HFPO-DA	AveID	2.541	2.578		50700	50000	1.5	40.0
Perfluoroheptanoic acid (PFHpA)	AveID	0.9367	0.9482		50600	50000	1.2	40.0
Perfluorohexanesulfonic acid (PFHxS)	AveID	1.318	1.264		43600	45500	-4.1	40.0
DONA	AveID	4.754	4.454		44100	47100	-6.3	50.0
6:2 FTS	AveID	1.715	1.452		40100	47400	-15.3	40.0
Perfluoroheptanesulfonic Acid (PFHpS)	AveID	1.205	1.156		45700	47600	-4.0	50.0
Perfluorooctanoic acid (PFOA)	AveID	1.088	1.129		51900	50000	3.7	40.0
Perfluorooctanesulfonic acid (PFOS)	AveID	0.9465	0.9443		46300	46400	-0.2	40.0
Perfluorononanoic acid (PFNA)	AveID	0.9059	0.9518		52500	50000	5.1	40.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.174	1.767		37900	46600	-18.7	50.0
Perfluorononanesulfonic acid	AveID	0.8445	0.8583		48800	48000	1.6	50.0
Perfluorodecanoic acid (PFDA)	AveID	0.9682	0.9473		48900	50000	-2.2	40.0
8:2 FTS	AveID	1.337	0.9504		34100	47900	-28.9	40.0
Perfluorooctanesulfonamide (FOSA)	AveID	0.9129	0.8758		48000	50000	-4.1	40.0
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	AveID	0.7567	0.7668		50700	50000	1.3	40.0
Perfluorodecanesulfonic acid (PFDS)	AveID	0.6627	0.7787		56600	48200	17.5	50.0
Perfluoroundecanoic acid (PFUnA)	AveID	0.8581	0.7719		45000	50000	-10.0	40.0
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	AveID	0.6400	0.6205		48500	50000	-3.0	40.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	3.310	2.411		34300	47100	-27.2	50.0
Perfluorododecanoic acid (PFDoA)	AveID	1.022	1.027		50200	50000	0.5	40.0
10:2 FTS	AveID	0.8462	0.5518		31400	48200	-34.8	50.0
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.3176	0.3165		48200	48400	-0.4	50.0
Perfluorotridecanoic acid (PFTriA)	AveID	0.9176	0.8480		46200	50000	-7.6	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1331	0.1596		60000	50000	19.9	40.0

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Lab Sample ID: CCV 200-145761/24 Calibration Date: 08/02/2019 06:54
 Instrument ID: LC812 Calib Start Date: 07/26/2019 10:54
 GC Column: C-18 ID: 4.60 (mm) Calib End Date: 07/26/2019 11:34
 Lab File ID: SC080119E024.d Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluoro-n-hexadecanoic acid (PFHxDA)	L2ID		0.9821		51600	50000	3.1	40.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7518	0.6835		45500	50000	-9.1	50.0
13C4 PFBA	Ave	0.9423	1.055		56000	50000	12.0	50.0
13C5 PFPeA	Ave	0.8851	0.9326		52700	50000	5.4	50.0
13C3 PFBS	Ave	0.8694	0.8920		47700	46500	2.6	50.0
M2-4:2 FTS	Ave	0.0841	0.0951		52800	46700	13.0	50.0
13C2 PFHxA	Ave	0.8791	0.9155		52100	50000	4.1	50.0
13C3 HFPO-DA	Ave	0.0564	0.0528		46800	50000	-6.4	50.0
13C4 PFHpA	Ave	0.8611	0.8627		50100	50000	0.2	50.0
1802 PFHxS	Ave	0.5092	0.5004		46500	47300	-1.7	50.0
M2-6:2 FTS	Ave	0.1060	0.1102		49400	47500	4.0	50.0
13C4 PFOA	Ave	0.9094	0.8895		48900	50000	-2.2	50.0
13C4 PFOS	Ave	0.4242	0.4432		49900	47800	4.5	50.0
13C5 PFNA	Ave	0.8296	0.8768		52800	50000	5.7	50.0
13C2 PFDA	Ave	0.6637	0.7445		56100	50000	12.2	50.0
M2-8:2 FTS	Ave	0.0978	0.1190		58300	47900	21.7	50.0
13C8 FOSA	Ave	0.7620	0.8856		58100	50000	16.2	50.0
d3-NMeFOSAA	Ave	0.0848	0.0803		47400	50000	-5.3	50.0
13C2 PFUnA	Ave	0.6045	0.6521		53900	50000	7.9	50.0
d5-NEtFOSAA	Ave	0.0945	0.0866		45800	50000	-8.4	50.0
13C2 PFDoA	Ave	0.6507	0.7263		55800	50000	11.6	50.0
13C2 PFTeDA	Ave	0.8960	0.7472		41700	50000	-16.6	50.0
13C2 PFHxDA	Ave	0.7972	0.7495		47000	50000	-6.0	50.0

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E024.d
 Lims ID: CCV L5
 Client ID:
 Sample Type: CCV
 Inject. Date: 02-Aug-2019 06:54:22 ALS Bottle#: 17 Worklist Smp#: 24
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: CCV L5
 Misc. Info.: 200-0037095-012 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Sublist: chrom-PFC_LC812*sub3

Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:20 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: chirgwinb Date: 05-Aug-2019 18:51:21

Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.506	4759367	56.0	112	15041	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.000	4325573	49.3	98.6	775	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.613	4206866	52.7	105	9156	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	3876618	47.6	95.2	224	
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.620	3741854	47.7	103	1498852	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	3513471	42.9	Target=1.90	97.2	8692
	298.90 > 99.00	2.093	2.093	0.0	1.000	1796307		1.96(0.95-2.85)		2075
D 60 M2-4:2 FTS	329.00 > 81.00	2.426	2.417	0.009	0.719	400522	52.8	113	578	
61 1H,1H,2H,2H-perfluorohexanesulfoni	327.00 > 307.00	2.426	2.417	0.009	1.000	774017	37.8	80.9	5553	
D 7 13C2 PFHxA	315.00 > 270.00	2.470	2.459	0.011	0.732	4129440	52.1	104	7939	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.000	4331850	50.9	Target=13.23	102	1437
	313.00 > 119.00	2.470	2.459	0.011	1.000	353099		12.27(6.61-19.84)		494
70 Perfluoropentanesulfonic acid	349.00 > 80.00	2.483	2.470	0.013	1.186	3346424	46.5	Target=2.73	99.1	7336
	349.00 > 99.00	2.483	2.470	0.013	1.186	1169867		2.86(1.37-4.10)		2368
D 64 13C3 HFPO-DA	332.10 > 287.00	2.608	2.596	0.012	0.773	238139	46.8	93.6	1352	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.608	2.596	0.012	1.000	614018	50.7		101	198	
D 11 18O2 PFHxS										
403.00 > 84.00	2.939	2.916	0.023	0.871	2135086	46.5		98.3	5773	
D 9 13C4 PFHpA										
367.00 > 322.00	2.939	2.928	0.011	0.871	3891540	50.1		100	7865	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.939	2.928	0.011	1.000	2596351	43.6	Target=3.37	95.9	2679	
399.00 > 99.00	2.939	2.928	0.011	1.000	737630		3.52(1.69-5.06)		983	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.939	2.928	0.011	1.000	3689909	50.6	Target=3.76	101	1042	
363.00 > 169.00	2.939	2.928	0.011	1.000	1034148		3.57(1.88-5.65)		3083	
77 DONA										
377.00 > 251.00	2.995	2.973	0.022	0.805	8387760	44.1	Target=2.72	93.7	5411	
377.00 > 85.00	2.995	2.973	0.022	0.805	3210755		2.61(1.36-4.07)		3720	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.355	3.335	0.020	0.995	472339	49.4		104	1035	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.355	3.336	0.019	1.000	684574	40.1		84.7	1979	
D 14 13C4 PFOA										
417.00 > 372.00	3.373	3.344	0.029	1.000	4012144	48.9		97.8	10670	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.364	3.345	0.019	0.904	2200208	45.7	Target=4.80	96.0	5704	
449.00 > 99.00	3.364	3.345	0.019	0.904	416988		5.28(2.40-7.20)		2358	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.373	3.355	0.018	1.000	4528175	51.9	Target=2.84	104	587	
413.00 > 169.00	3.373	3.355	0.018	1.000	1656906		2.73(1.42-4.25)		5299	
* 62 13C2 PFOA										
415.00 > 370.00	3.373	3.355	0.018		4510697	50.0			12336	
D 18 13C4 PFOS										
503.00 > 80.00	3.723	3.695	0.028	1.104	1911190	49.9		104	6256	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.723	3.703	0.020	1.000	1751777	46.3	Target=4.33	99.8	8252	
499.00 > 99.00	3.723	3.703	0.020	1.000	365568		4.79(2.16-6.49)		1764	
D 19 13C5 PFNA										
468.00 > 423.00	3.745	3.715	0.030	1.110	3954944	52.8		106	29371	
20 Perfluorononanoic acid										
463.00 > 419.00	3.745	3.723	0.022	1.000	3764402	52.5	Target=8.15	105	1469	
463.00 > 169.00	3.745	3.723	0.022	1.000	463417		8.12(4.08-12.23)		3280	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.898	3.875	0.023	1.047	3291904	37.9		81.3	10232	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.022	4.010	0.012	1.080	1647146	48.8	Target=2.42	102	8067	
549.00 > 99.00	4.022	4.010	0.012	1.080	680659		2.42(1.21-3.63)		2295	
D 23 13C2 PFDA										
515.00 > 470.00	4.059	4.036	0.023	1.203	3358078	56.1		112	18085	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.072	4.036	0.036	1.207	514290	58.3		122	1349	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.059	4.047	0.012	1.000	3180993	48.9	Target=9.58	97.8	1279	
513.00 > 169.00	4.059	4.047	0.012	1.000	358251		8.88(4.79-14.37)		2165	
25 1H,1H,2H,2H-perfluorodecanesulfonyl										
527.00 > 507.00	4.072	4.047	0.025	1.000	488792	34.1		71.1	5821	
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.211	3994647	58.1		116	12848	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.084	4.072	0.012	1.000	3498403	48.0		95.9	8886	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.198	4.178	0.020	1.245	362240	47.4		94.7	1137	
28 N-methylperfluorooctanesulfonamide										
570.00 > 419.00	4.198	4.187	0.011	1.000	277777	50.7		101	243	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.295	4.283	0.012	1.154	1500690	56.6	Target=2.64	118	8969	
599.00 > 99.00	4.295	4.283	0.012	1.154	516210		2.91(1.32-3.96)		3854	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.280	2941241	53.9		108	9662	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.307	0.012	1.000	2270388	45.0	Target=7.95	90.0	1116	
563.00 > 169.00	4.319	4.307	0.012	1.000	334394		6.79(3.98-11.93)		2243	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.331	4.308	0.023	1.284	390418	45.8		91.6	1712	
33 N-ethylperfluorooctanesulfonamide										
584.00 > 419.00	4.331	4.319	0.012	1.000	242270	48.5		97.0	2181	
66 11-Chloroeicosafluoro-3-oxaundecan										
631.00 > 451.00	4.415	4.403	0.012	1.186	4539684	34.3		72.8	12466	
D 36 13C2 PFDaA										
615.00 > 570.00	4.549	4.537	0.012	1.349	3276208	55.8		112	11424	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.549	4.549	0.0	1.000	3365064	50.2	Target=7.49	100	274	
613.00 > 169.00	4.549	4.549	0.0	1.000	501396		6.71(3.75-11.24)		3897	
74 1H,1H,2H,2H-perfluorododecanesulfonyl										
627.00 > 607.00	4.574	4.562	0.012	1.123	285565	31.4		65.2	2947	
75 Perfluorododecanesulfonic acid (PF)										
699.00 > 80.00	4.729	4.718	0.011	1.270	612390	48.2	Target=0.50	99.6	1875	
699.00 > 99.00	4.729	4.718	0.011	1.270	1222019		0.50(0.25-0.76)		4264	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.769	4.760	0.009	1.048	2778258	46.2	Target=5.71	92.4	195	
663.00 > 169.00	4.769	4.760	0.009	1.048	613354		4.53(2.85-8.56)		4964	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.474	3370248	41.7		83.4	8810	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.972	4.972	0.0	1.000	537945	60.0	Target=1.02	120	4462	
713.00 > 219.00	4.972	4.972	0.0	1.000	554164		0.97(0.51-1.54)		4203	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.390	5.390	0.0	1.000	3320225	51.6	Target=5.23	103	794	
813.00 > 169.00	5.390	5.390	0.0	1.000	728489		4.56(2.62-7.85)		5234	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.390	5.390	0.0	1.598	3380664	47.0		94.0	6483	
46 Perfluorooctadecanoic acid										
913.00 > 869.00	5.820	5.832	-0.012	1.080	2310509	45.5	Target=5.61	90.9	1366	
913.00 > 169.00	5.820	5.832	-0.012	1.080	538618		4.29(2.80-8.41)		3753	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

LCPFAS32-L5_00001

Amount Added: 100.00

Units: uL

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E024.d

Injection Date: 02-Aug-2019 06:54:22

Instrument ID: LC812

Lims ID: CCV L5

Client ID:

Operator ID: lc812tech

ALS Bottle#: 17

Worklist Smp#: 24

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

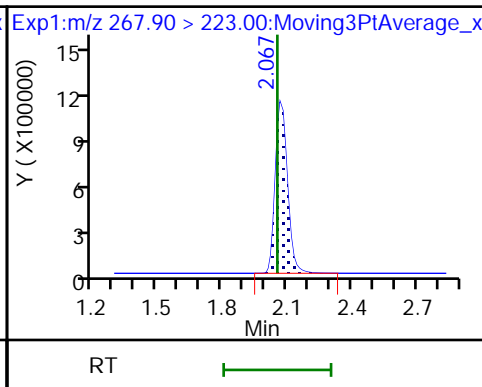
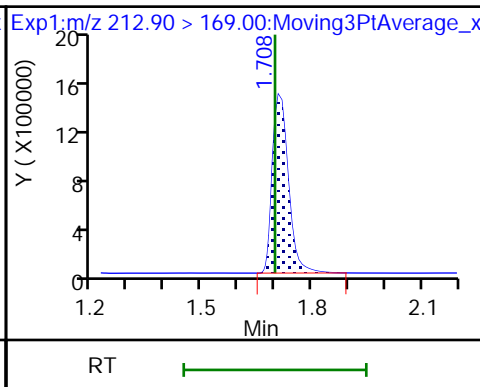
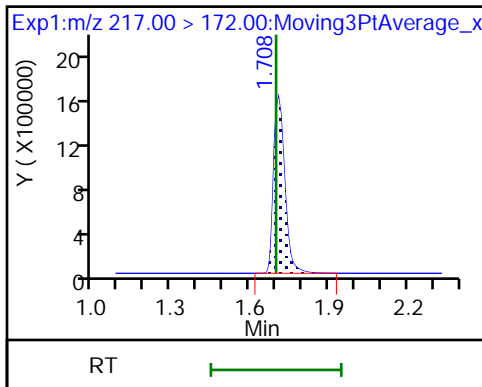
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

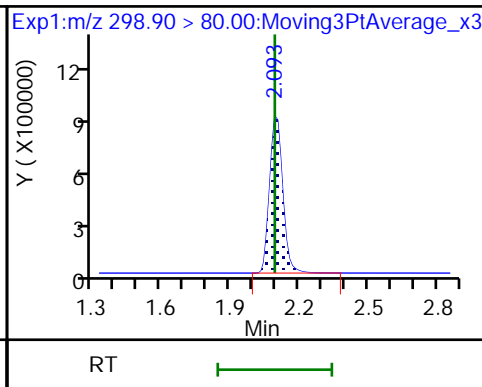
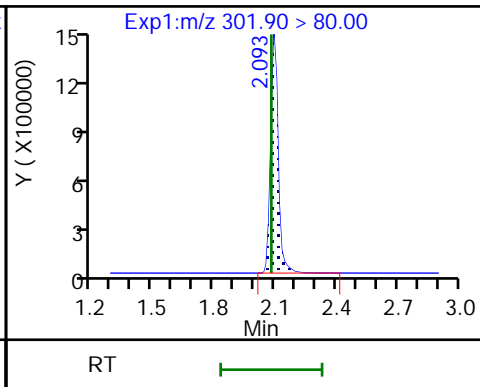
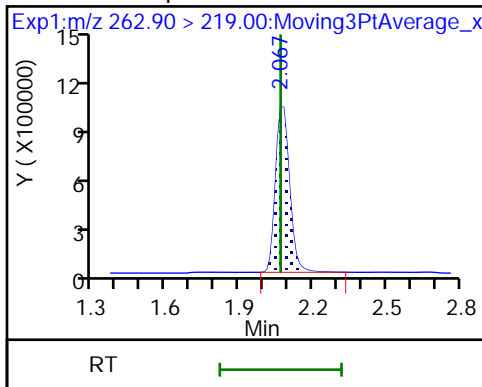
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

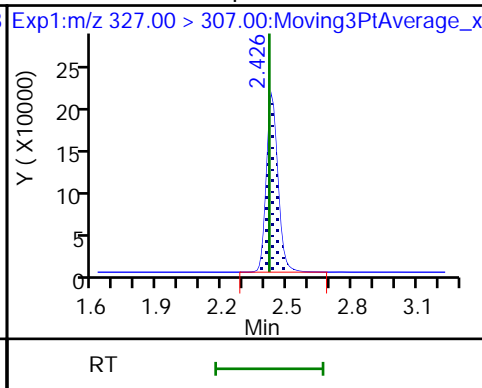
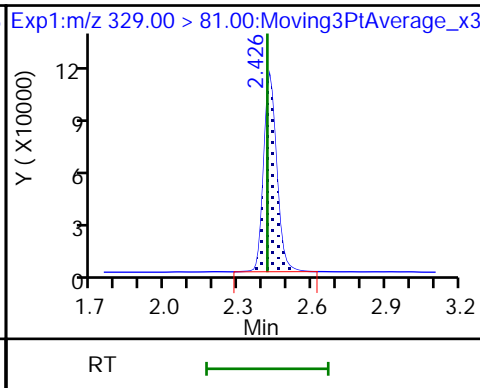
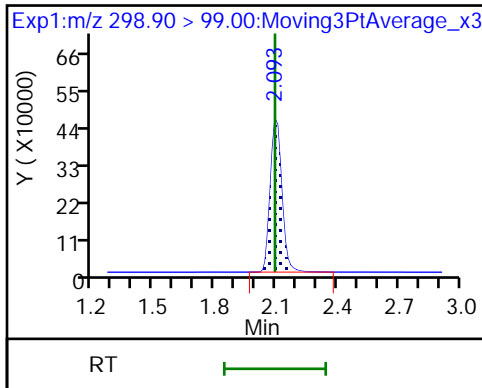
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

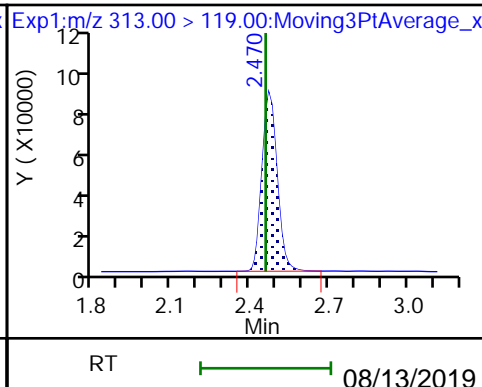
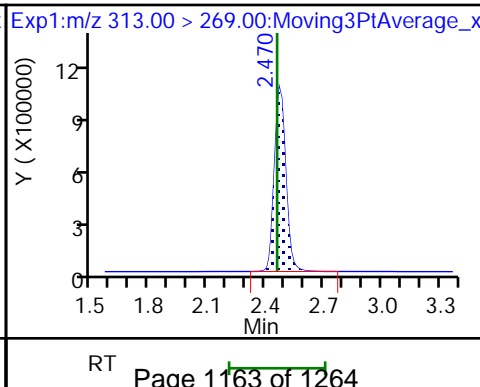
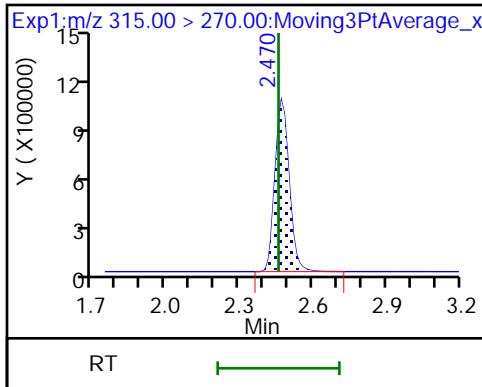
61 1H,1H,2H,2H-perfluorohexanesulfoni

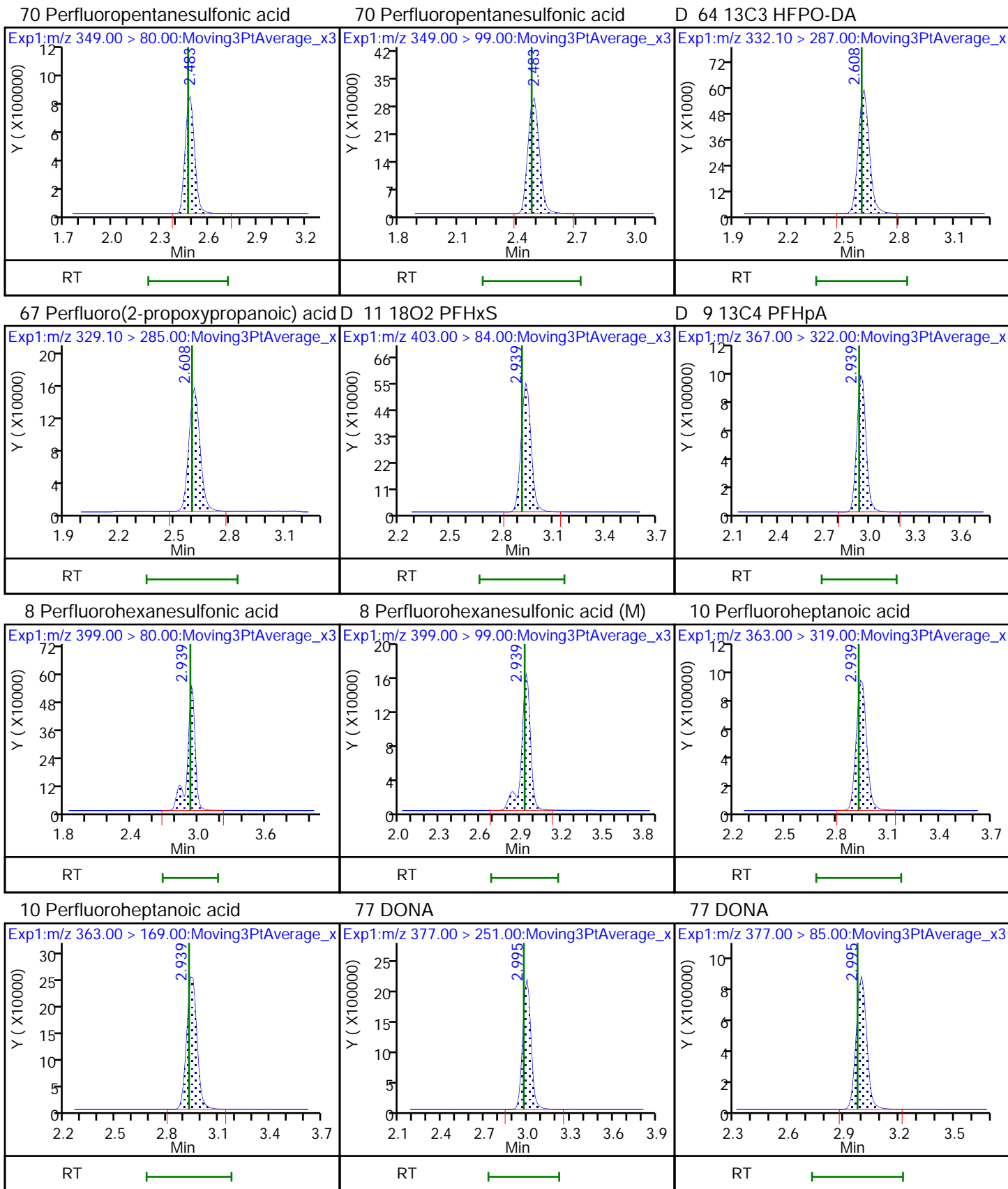


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

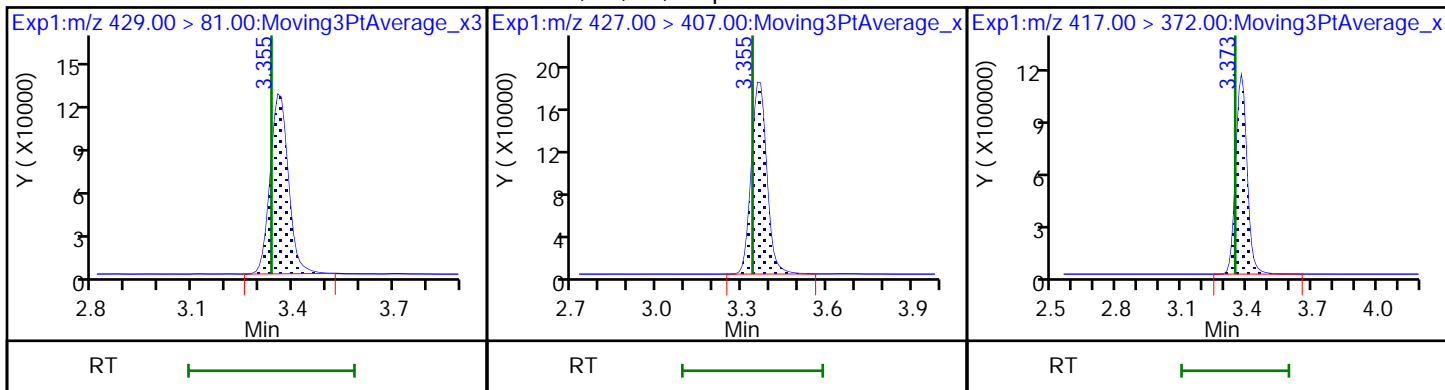
6 Perfluorohexanoic acid





D 12 M2-6:2 FTS

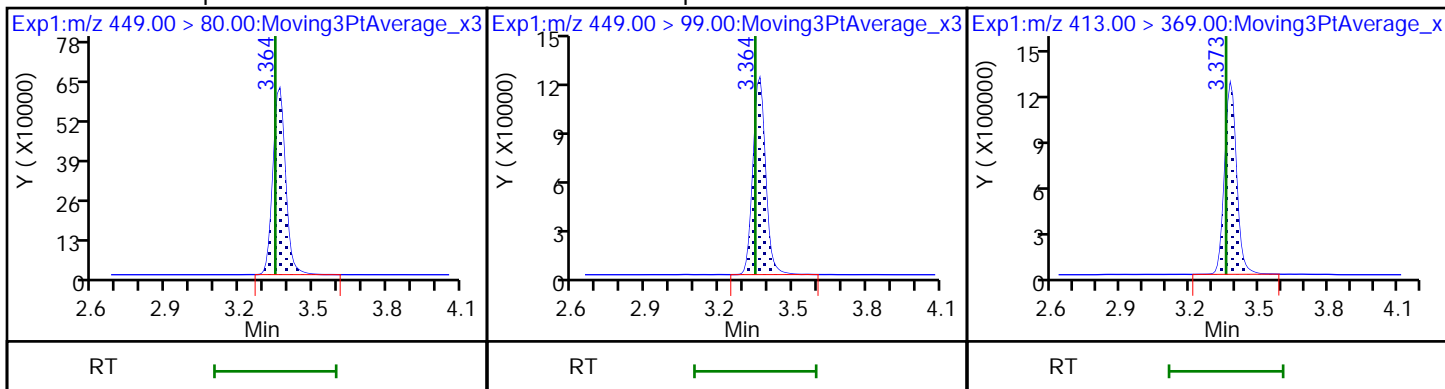
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid

16 Perfluoroheptanesulfonic acid

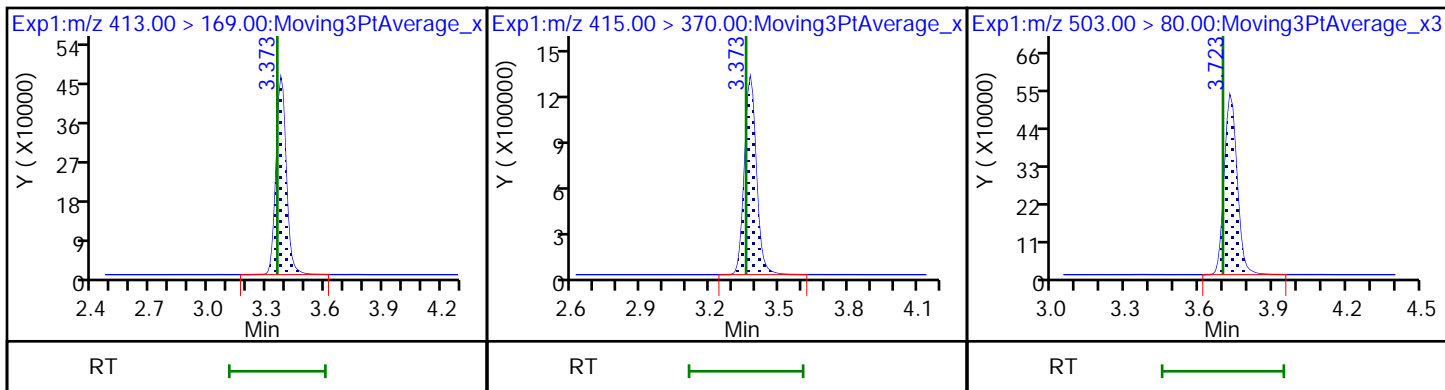
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

* 62 13C2 PFOA

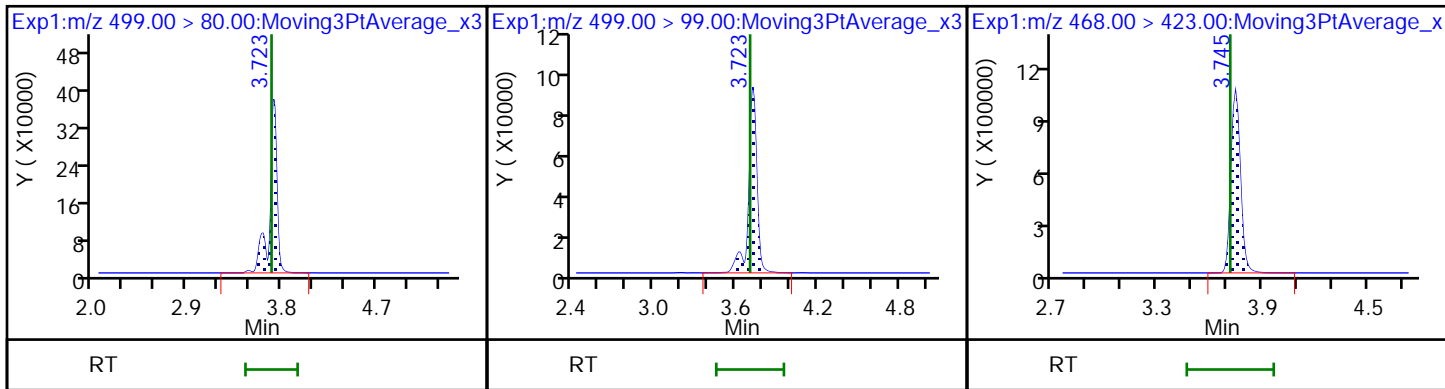
D 18 13C4 PFOS

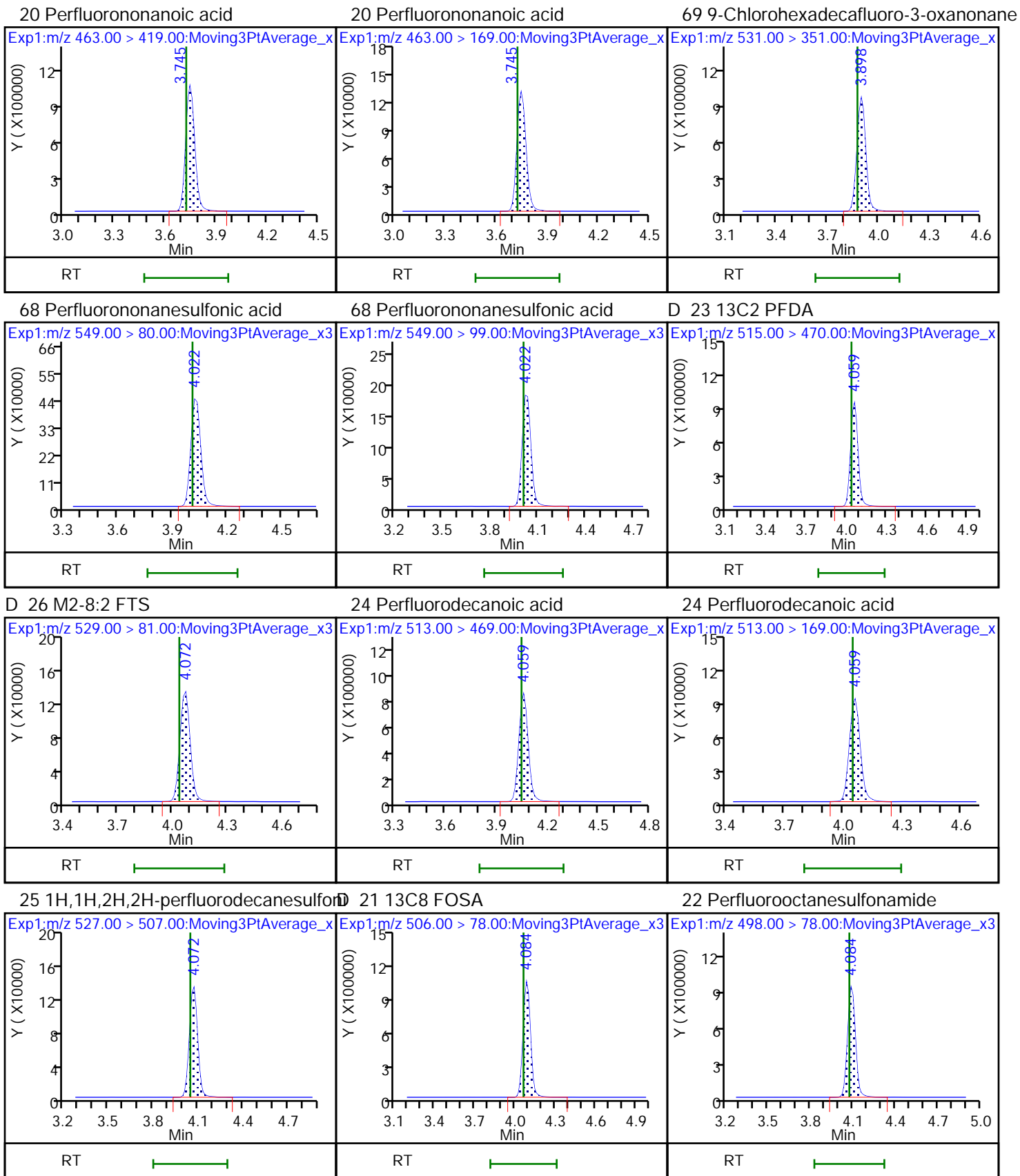


17 Perfluorooctanesulfonic acid

17 Perfluorooctanesulfonic acid

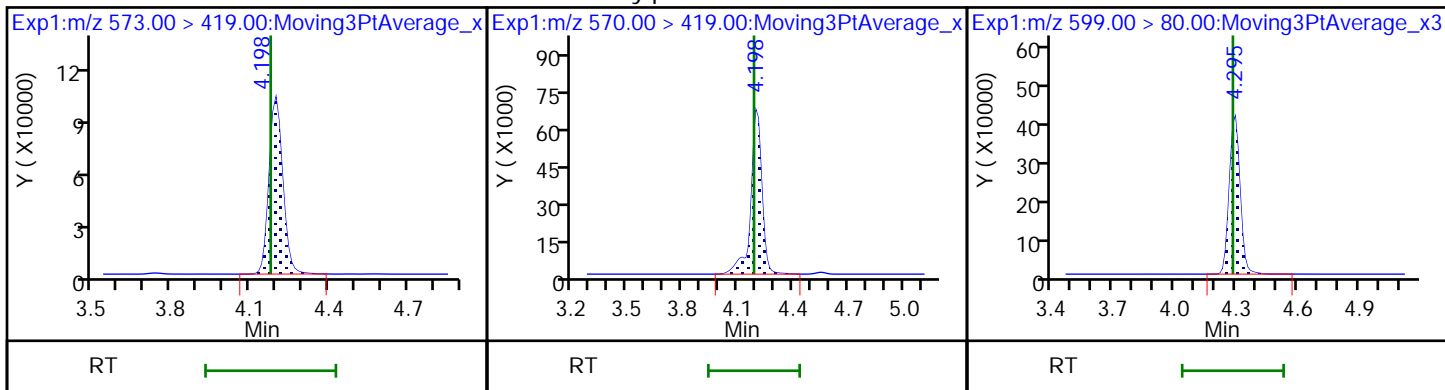
D 19 13C5 PFNA





D 27 d3-NMeFOSAA

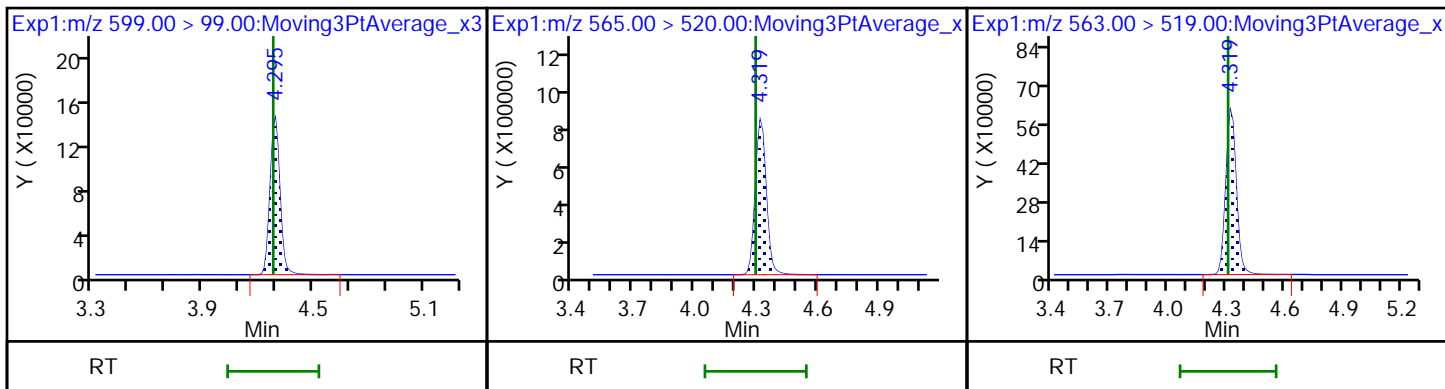
28 N-methylperfluorooctanesulfonamido 29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

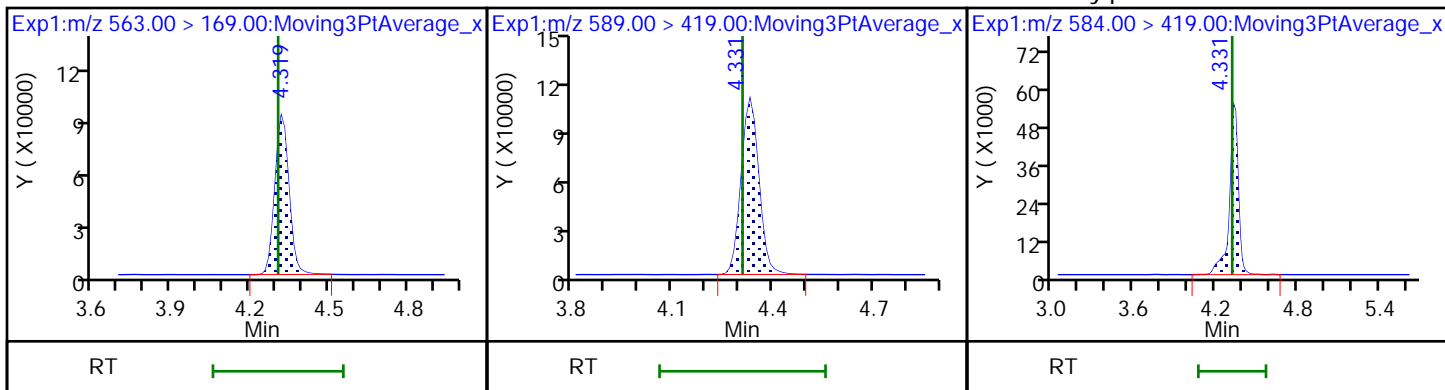
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

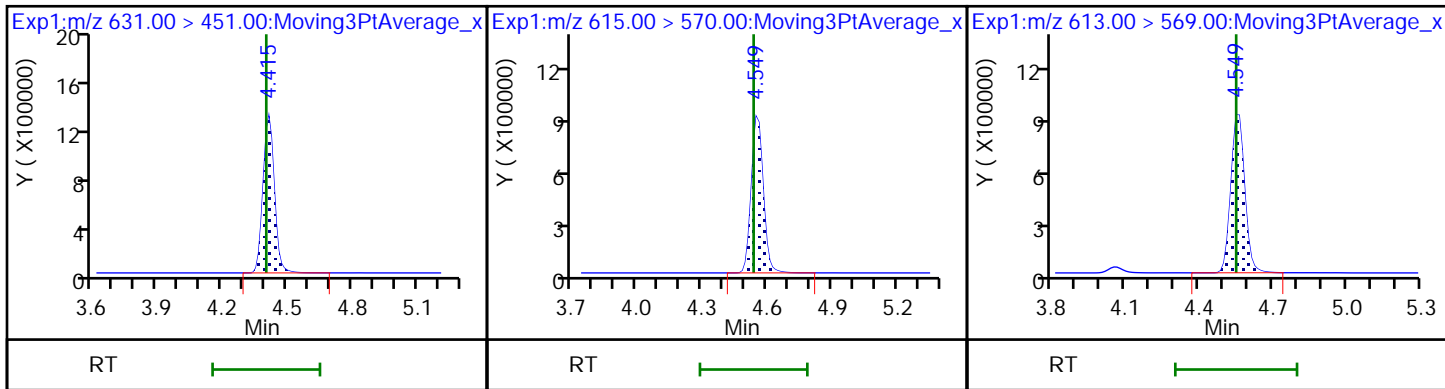
33 N-ethylperfluorooctanesulfonamido



66 11-Chloroeicosafuoro-3-oxaundeca

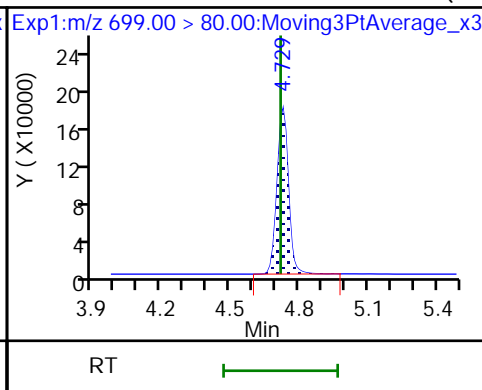
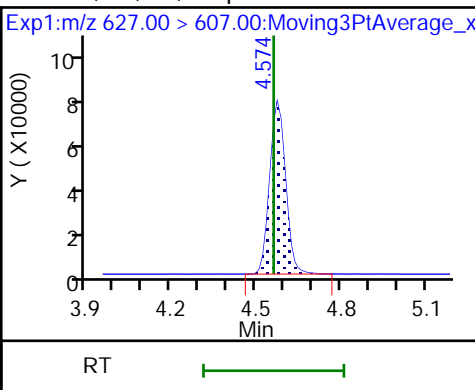
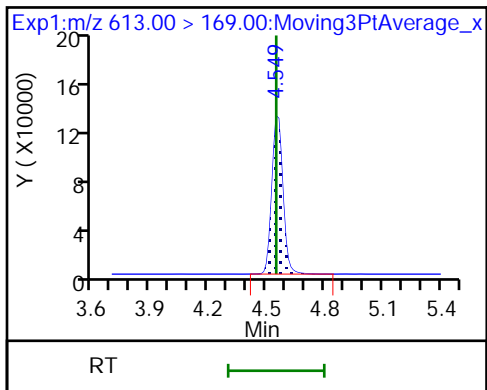
D 36 13C2 PFDoA

37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

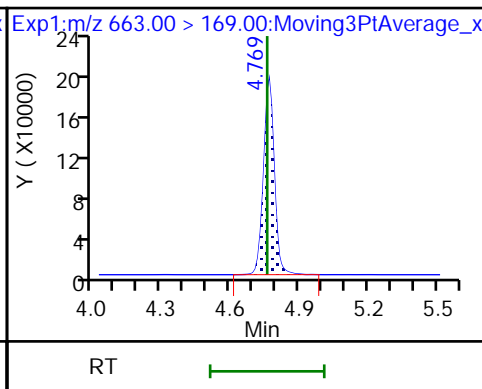
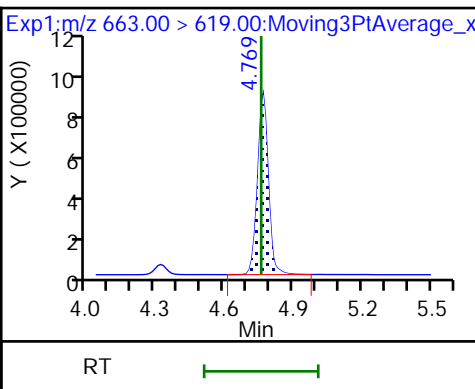
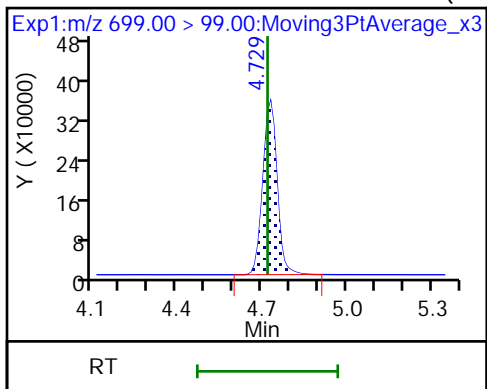
74 1H,1H,2H,2H-perfluorododecanesulfo 75 Perfluorododecanesulfonic acid (PF



75 Perfluorododecanesulfonic acid (PF

41 Perfluorotridecanoic acid

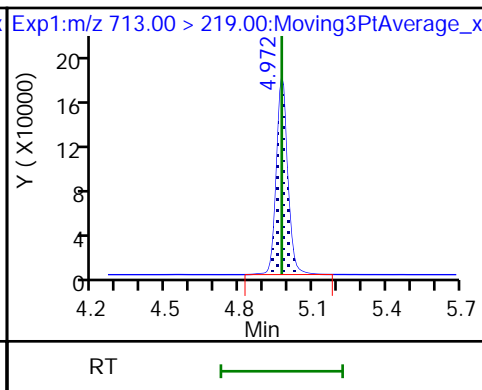
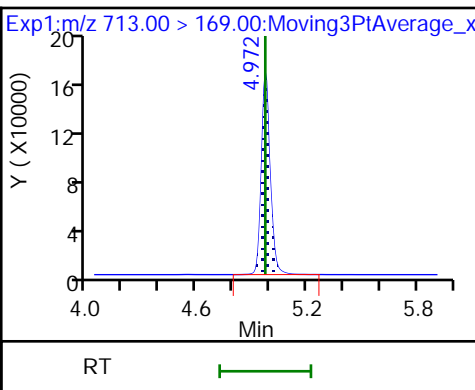
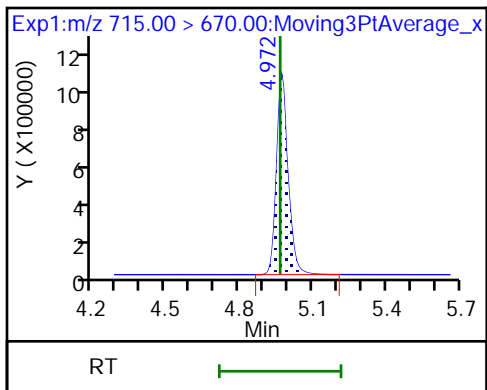
41 Perfluorotridecanoic acid



D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

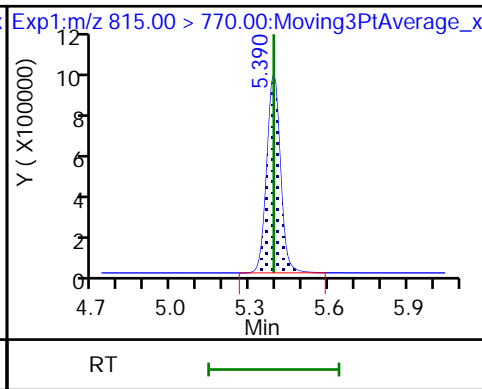
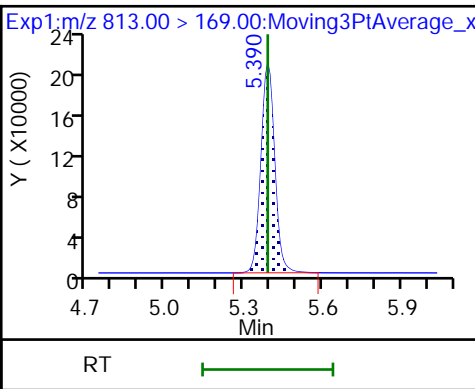
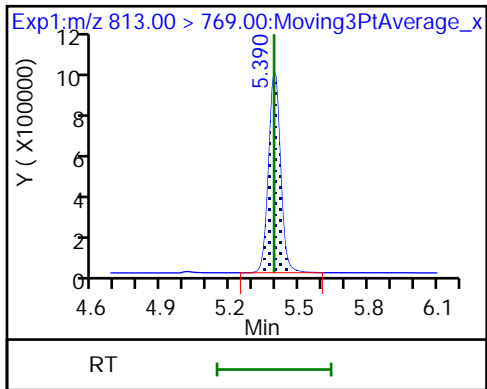
42 Perfluorotetradecanoic acid



45 Perfluorohexadecanoic acid

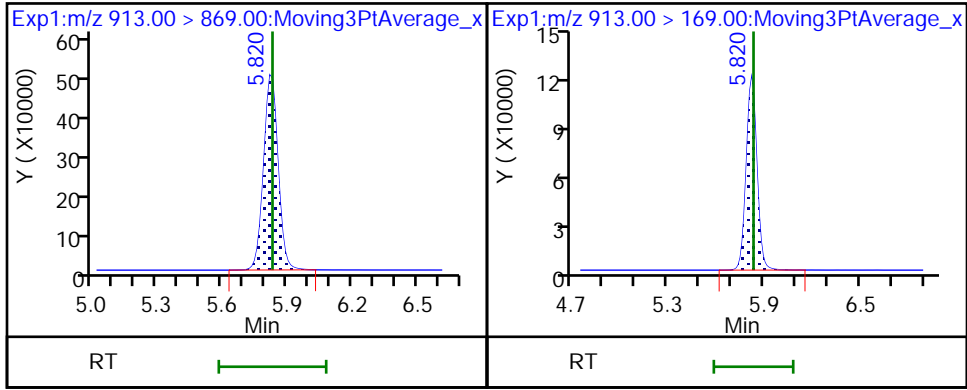
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA



46 Perfluorooctadecanoic acid

46 Perfluorooctadecanoic acid



Eurofins TestAmerica, Burlington

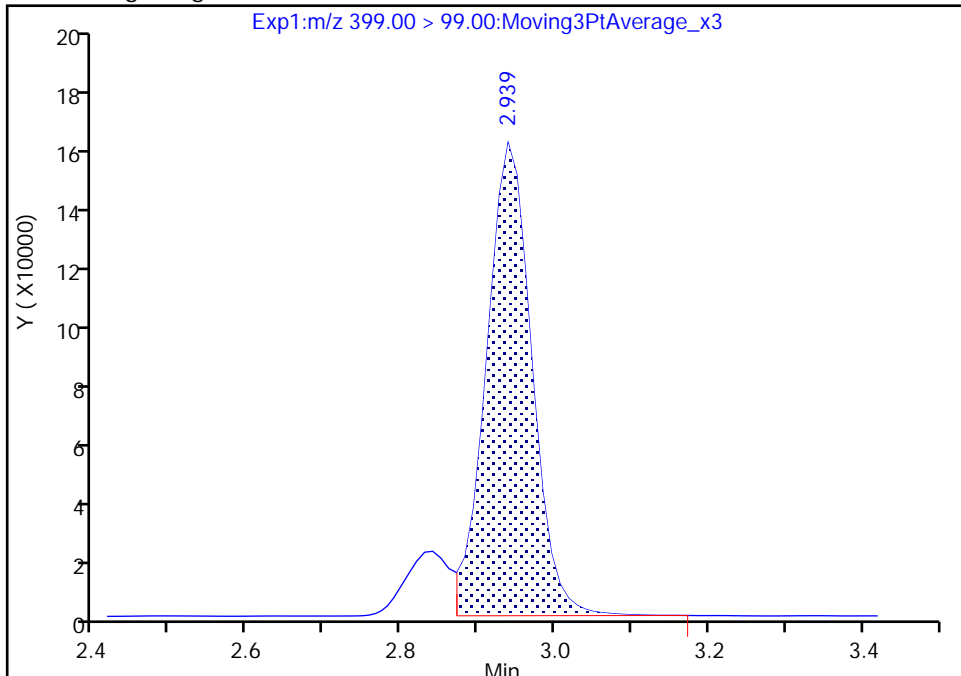
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E024.d
Injection Date: 02-Aug-2019 06:54:22 Instrument ID: LC812
Lims ID: CCV L5
Client ID:
Operator ID: lc812tech ALS Bottle#: 17 Worklist Smp#: 24
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

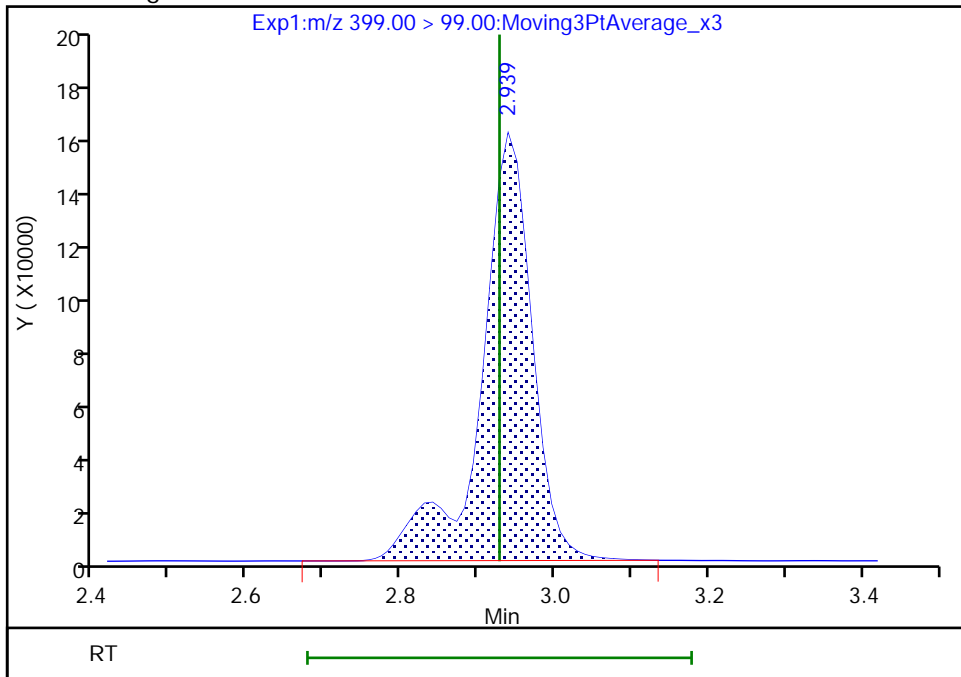
RT: 2.94
Area: 652267
Amount: 43.647819
Amount Units: ng/ml

Processing Integration Results



RT: 2.94
Area: 737630
Amount: 43.647819
Amount Units: ng/ml

Manual Integration Results



Reviewer: chirgwinb, 05-Aug-2019 18:49:42
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 200-145382/1-A
 Matrix: Water Lab File ID: SC080119E002.d
 Analysis Method: 537 (modified) Date Collected: _____
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 250 (mL) Date Analyzed: 08/02/2019 03:57
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		2.0	1.0
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		2.0	0.63
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		2.0	0.76
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.91
335-67-1	Perfluorooctanoic acid (PFOA)	ND		2.0	0.63
375-95-1	Perfluorononanoic acid (PFNA)	ND		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	ND		2.0	0.77
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.53
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		2.0	0.59
72629-94-8	Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.60
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.92
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.49
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.80
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.95
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.90
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.61
754-91-6	Perfluorooctanesulfonamide (FOSA)	ND		10	10
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		20	1.7
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		20	1.5
27619-97-2	6:2 FTS	ND		20	4.6
39108-34-4	8:2 FTS	ND		20	2.9

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 200-145382/1-A
 Matrix: Water Lab File ID: SC080119E002.d
 Analysis Method: 537 (modified) Date Collected: _____
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 250 (mL) Date Analyzed: 08/02/2019 03:57
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	73		25-150
STL00992	13C4 PFBA	94		25-150
STL01893	13C5 PFPeA	92		25-150
STL00993	13C2 PFHxA	95		50-150
STL01892	13C4 PFHpA	93		50-150
STL00990	13C4 PFOA	89		50-150
STL00995	13C5 PFNA	94		50-150
STL00996	13C2 PFDA	102		50-150
STL00997	13C2 PFUnA	94		50-150
STL00998	13C2 PFDoA	96		50-150
STL02116	13C2 PFTeDA	65		50-150
STL02337	13C3 PFBS	90		50-150
STL00994	18O2 PFHxS	89		50-150
STL00991	13C4 PFOS	90		50-150
STL02118	d3-NMeFOSAA	82		50-150
STL02117	d5-NEtFOSAA	79		50-150
STL02279	M2-6:2 FTS	101		25-150
STL02280	M2-8:2 FTS	111		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
 Lims ID: MB 200-145382/1-A
 Client ID:
 Sample Type: MB
 Inject. Date: 02-Aug-2019 03:57:22 ALS Bottle#: 49 Worklist Smp#: 2
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: MB 200-145382/1-A
 Misc. Info.: 200-0037095-002 Plate: 1 Rack: 4
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:28:48
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.507	3543299	46.9	93.9	13264	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.708	1.699	0.009	1.005	20347	0.3115		2.2		M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.616	3249957	45.8	91.7	7200	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	12109	0.1925		0.6	
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.624	2905089	41.7	89.7	607851	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	8703	0.1370	Target=1.90	26.9	
298.90 > 99.00	2.093	2.093	0.0	1.000	4878		1.78(0.95-2.85)	5.0		
D 60 M2-4:2 FTS	329.00 > 81.00	2.417	2.417	0.0	0.721	313909	46.6	99.8	406	
61 1H,1H,2H,2H-perfluorohexanesulfoni										M
327.00 > 307.00	2.426	2.417	0.009	1.004	1089	0.0678		11.7		M
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.733	3350742	47.6	95.1	7394	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.005	9460	0.1371	Target=13.23	2.8	RM
313.00 > 119.00	2.459	2.459	0.0	1.000	1722		5.49(6.61-19.84)	2.6		RM
D 64 13C3 HFPO-DA	332.10 > 287.00	2.596	2.596	0.0	0.774	264887	58.6	117	1675	
67 Perfluoro(2-propoxypropanoic) acid	329.10 > 285.00	2.621	2.596	0.025	1.010	2072	0.1539		0.6	
D 11 18O2 PFHxS	403.00 > 84.00	2.928	2.916	0.012	0.873	1722877	42.2	89.3	6624	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 9 13C4 PFHpA										
367.00 > 322.00	2.928	2.928	0.0	0.873	3202483	46.4		92.8	7064	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	8951	0.1865	Target=3.37		14.0	M
399.00 > 99.00	2.928	2.928	0.0	1.000	2018		4.44(1.69-5.06)		3.3	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	2.928	2.928	0.0	1.000	2950	0.0492	Target=3.76		1.0	M
363.00 > 169.00	2.928	2.928	0.0	1.000	1050		2.81(1.88-5.65)		4.4	M
77 DONA										
377.00 > 251.00	2.973	2.973	0.0	0.802	7630	0.0527	Target=2.72		4.8	
377.00 > 85.00	2.973	2.973	0.0	0.802	3006		2.54(1.36-4.07)		5.1	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.344	3.335	0.009	0.997	408230	48.1		101	1085	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.344	3.336	0.008	1.000	13296	0.9021			24.2	
D 14 13C4 PFOA										
417.00 > 372.00	3.354	3.344	0.010	1.000	3229535	44.3		88.6	7528	
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.344	3.345	-0.001	0.903	1337	0.0364	Target=4.80		8.5	M
449.00 > 99.00	3.344	3.345	-0.001	0.903	206		6.49(2.40-7.20)		1.8	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.354	3.355	-0.001	1.000	21354	0.3038	Target=2.84		2.2	M
413.00 > 169.00	3.363	3.355	0.008	1.003	6539		3.27(1.42-4.25)		16.9	M
* 62 13C2 PFOA										
415.00 > 370.00	3.354	3.355	-0.001		4005864	50.0			17499	
D 18 13C4 PFOS										
503.00 > 80.00	3.705	3.695	0.010	1.105	1456157	42.8		89.6	6592	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.705	3.703	0.002	1.000	3398	0.1178	Target=4.33		22.6	M
499.00 > 99.00	3.695	3.703	-0.008	0.997	1110		3.06(2.16-6.49)		2.8	M
D 19 13C5 PFNA										
468.00 > 423.00	3.724	3.715	0.009	1.111	3124701	47.0		94.0	14259	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.724	3.723	0.001	1.000	3684	0.0651	Target=8.15		1.3	M
463.00 > 169.00	3.724	3.723	0.001	1.000	876		4.21(4.08-12.23)		6.7	M
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.888	3.875	0.013	1.049	2583	0.0390			11.1	
D 23 13C2 PFDA										
515.00 > 470.00	4.036	4.036	0.0	1.204	2716565	51.1		102	7513	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.049	4.036	0.013	1.207	417363	53.3		111	1277	
24 Perfluorodecanoic acid										RM
513.00 > 469.00	4.049	4.047	0.002	1.003	3754	0.0714	Target=9.58		1.9	RM
513.00 > 169.00	4.049	4.047	0.002	1.003	245		15.32(4.79-14.37)		2.4	M
25 1H,1H,2H,2H-perfluorodecanesulfoni										M
527.00 > 507.00	4.049	4.047	0.002	1.000	431	0.0370			7.8	M
D 21 13C8 FOSA										
506.00 > 78.00	4.074	4.061	0.013	1.215	2243194	26.7		73.5	64108	08/13/2019

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
22 Perfluorooctanesulfonamide	498.00 > 78.00	4.074	4.072	0.002	1.000	5327	0.1301		39.6	
D 27 d3-NMeFOSAA	573.00 > 419.00	4.189	4.178	0.010	1.249	277513	40.9	81.7	2757	
28 N-methylperfluorooctanesulfonamido	570.00 > 419.00	4.189	4.187	0.001	1.000	609	0.1450		1.7	M
D 30 13C2 PFUnA	565.00 > 520.00	4.308	4.296	0.012	1.285	2274402	47.0	93.9	6182	
31 Perfluoroundecanoic acid	563.00 > 519.00	4.308	4.307	0.001	1.000	6786	0.1739	Target=7.95	3.5	M
	563.00 > 169.00	4.308	4.307	0.001	1.000	1287		5.27(3.98-11.93)	15.7	M
D 32 d5-NEtFOSAA	589.00 > 419.00	4.320	4.308	0.012	1.288	299037	39.5	79.0	1133	
33 N-ethylperfluorooctanesulfonamidoa	584.00 > 419.00	4.320	4.319	0.001	1.000	811	0.2119		4.3	M
66 11-Chloroeicosafuoro-3-oxaundecan	631.00 > 451.00	4.404	4.403	0.001	1.189	3733	0.0370		29.0	M
D 36 13C2 PFDoA	615.00 > 570.00	4.550	4.537	0.013	1.357	2513705	48.2	96.4	9032	
37 Perfluorododecanoic acid	613.00 > 569.00	4.550	4.549	0.001	1.000	3456	0.0672	Target=7.49	0.4	M
	613.00 > 169.00	4.550	4.549	0.001	1.000	570		6.06(3.75-11.24)	7.4	M
74 1H,1H,2H,2H-perfluorododecanesulfo	627.00 > 607.00	4.575	4.562	0.013	1.130	151	0.0205		2.3	M
75 Perfluorododecanesulfonic acid (PF	699.00 > 80.00	4.718	4.718	0.0	1.274	479	0.0495	Target=0.50	1.2	M
	699.00 > 99.00	4.730	4.718	0.012	1.277	812		0.59(0.25-0.76)	6.7	M
41 Perfluorotridecanoic acid	663.00 > 619.00	4.760	4.760	0.0	1.046	3040	0.0659	Target=5.71	0.5	M
	663.00 > 169.00	4.760	4.760	0.0	1.046	492		6.18(2.85-8.56)	5.0	M
D 43 13C2 PFTeDA	715.00 > 670.00	4.972	4.965	0.007	1.483	2348728	32.7	65.4	7610	
45 Perfluorohexadecanoic acid	813.00 > 769.00	5.390	5.390	0.0	1.000	22453	0.1178	Target=5.23	7.9	
	813.00 > 169.00	5.390	5.390	0.0	1.000	4953		4.53(2.62-7.85)	84.9	
D 44 13C2 PFHxDA	815.00 > 770.00	5.390	5.390	0.0	1.607	2329098	36.5	72.9	4991	
46 Perfluorooctadecanoic acid	913.00 > 869.00	5.832	5.832	0.0	1.082	1669	0.0477	Target=5.61	1.8	M
	913.00 > 169.00	5.820	5.832	-0.012	1.080	544		3.07(2.80-8.41)	11.6	M

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d

Injection Date: 02-Aug-2019 03:57:22

Instrument ID: LC812

Lims ID: MB 200-145382/1-A

Client ID:

Operator ID: lc812tech

ALS Bottle#: 49

Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

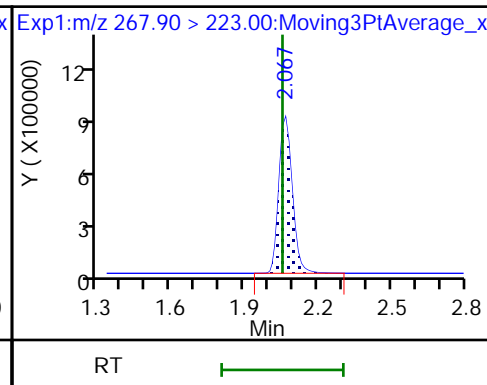
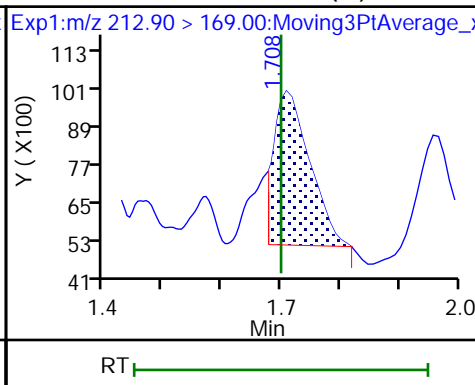
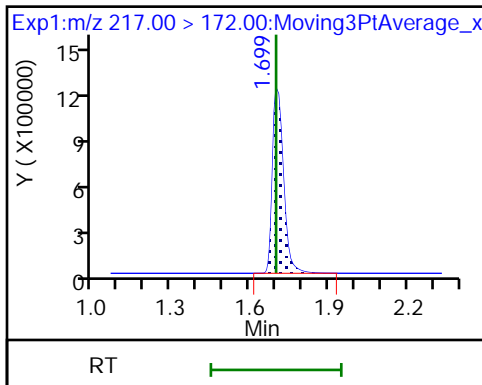
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

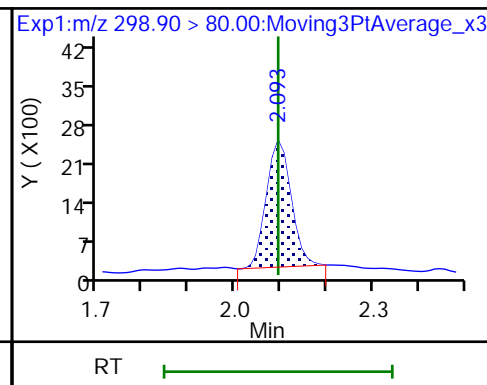
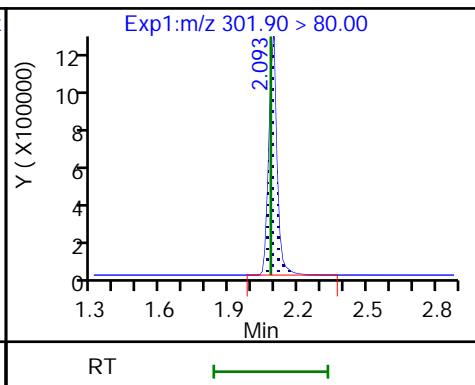
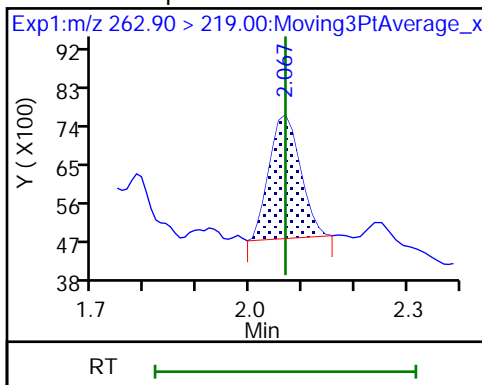
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

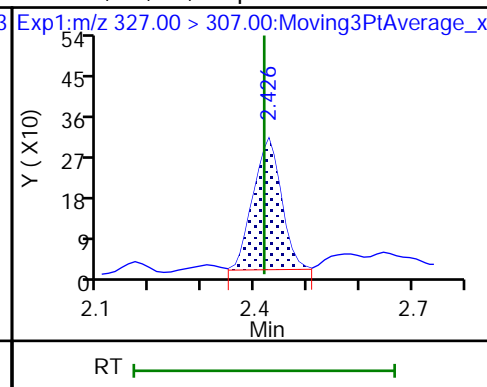
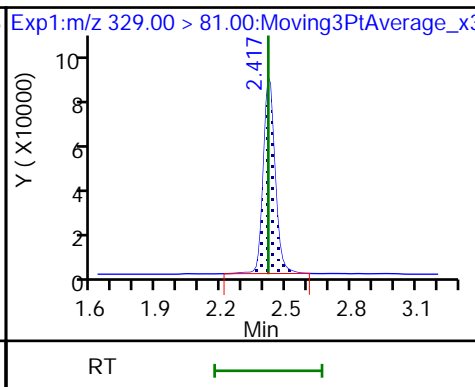
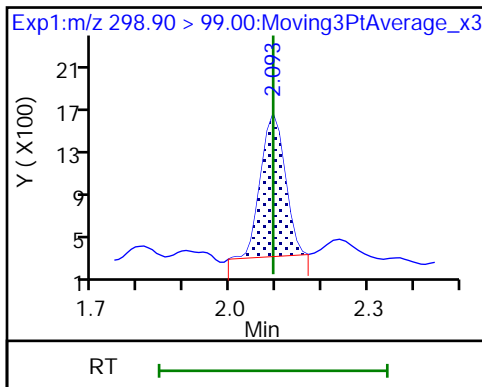
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

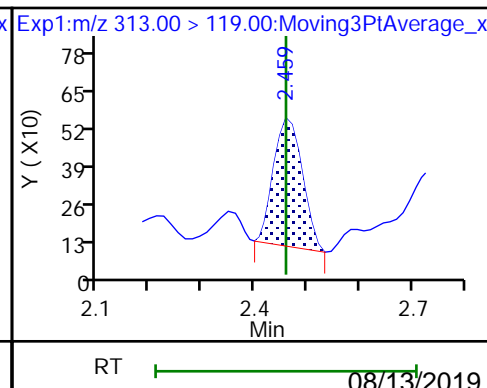
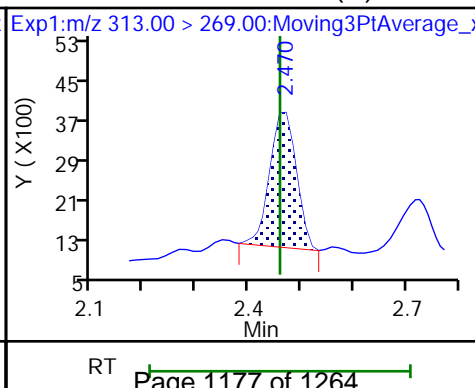
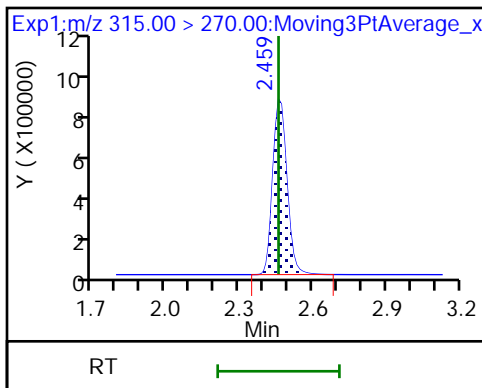
61 1H,1H,2H,2H-perfluorohexanesulfoni (M)



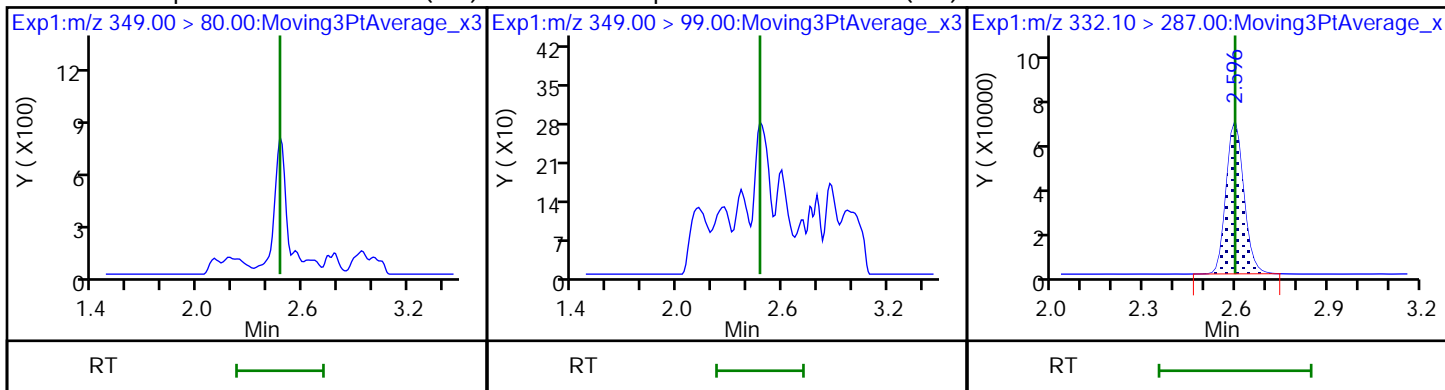
D 7 13C2 PFXhA

6 Perfluorohexanoic acid (M)

6 Perfluorohexanoic acid

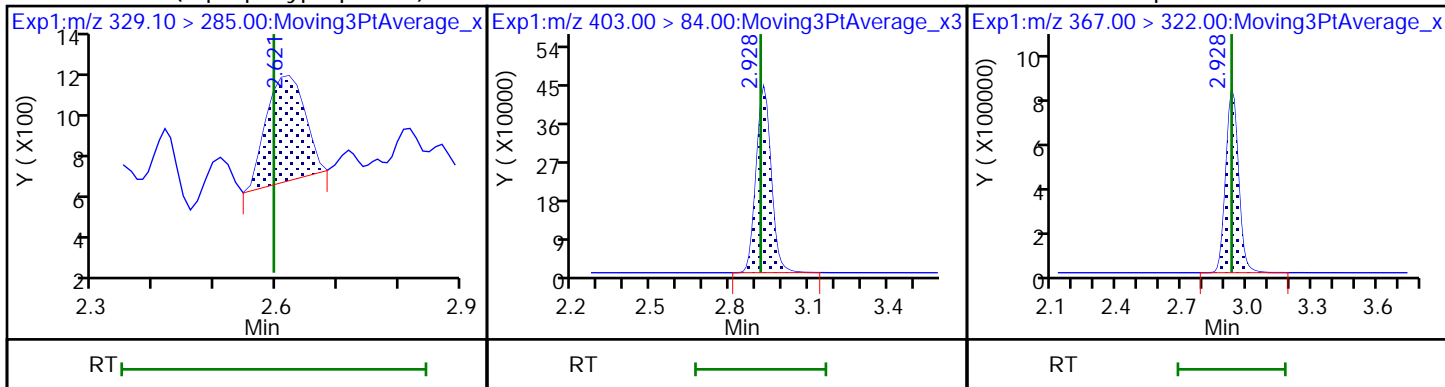


70 Perfluoropentanesulfonic acid (ND) 70 Perfluoropentanesulfonic acid (ND) D 64 13C3 HFPO-DA



67 Perfluoro(2-propoxypropanoic) acid D 11 18O2 PFHxS

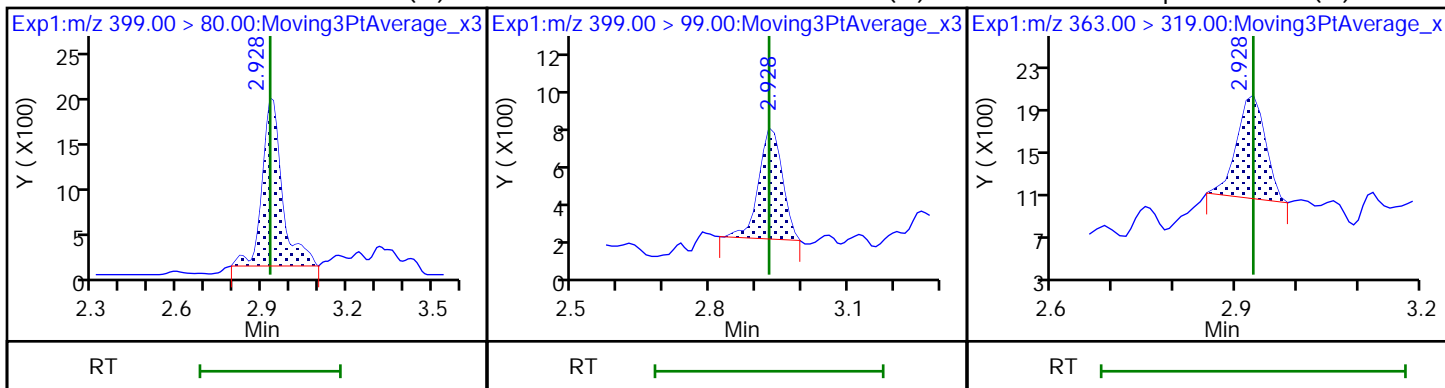
D 9 13C4 PFHpA



8 Perfluorohexanesulfonic acid (M)

8 Perfluorohexanesulfonic acid (M)

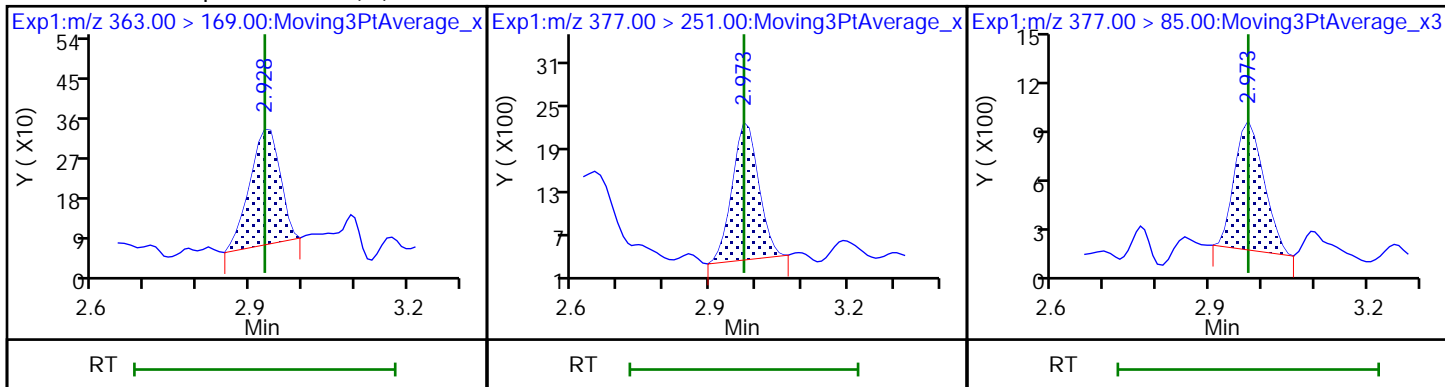
10 Perfluoroheptanoic acid (M)



10 Perfluoroheptanoic acid (M)

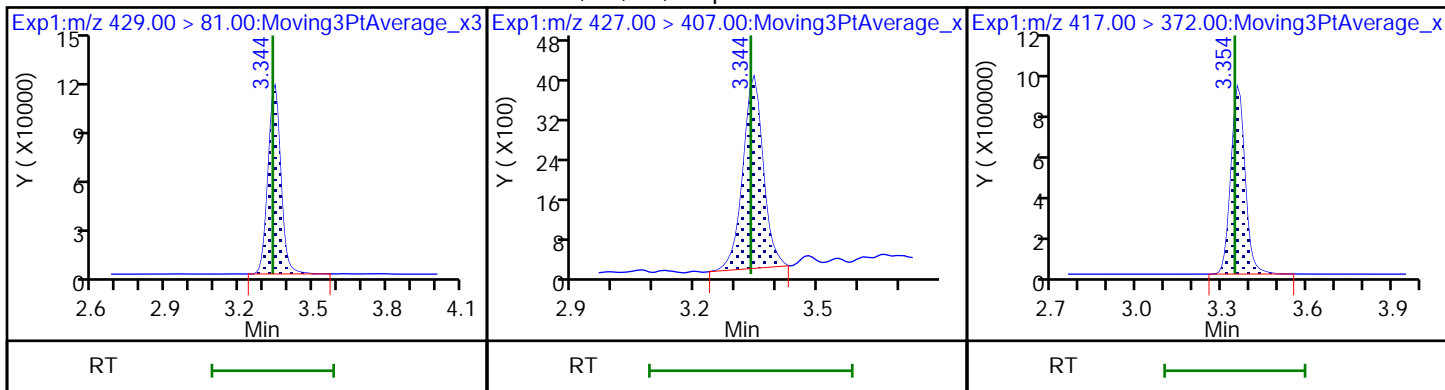
77 DONA

77 DONA



D 12 M2-6:2 FTS

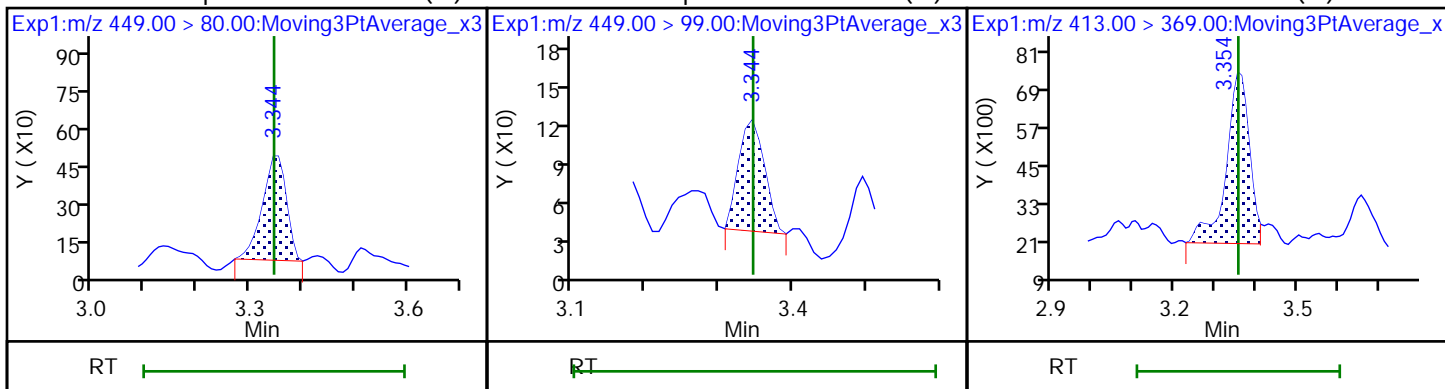
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid (M)

16 Perfluoroheptanesulfonic acid (M)

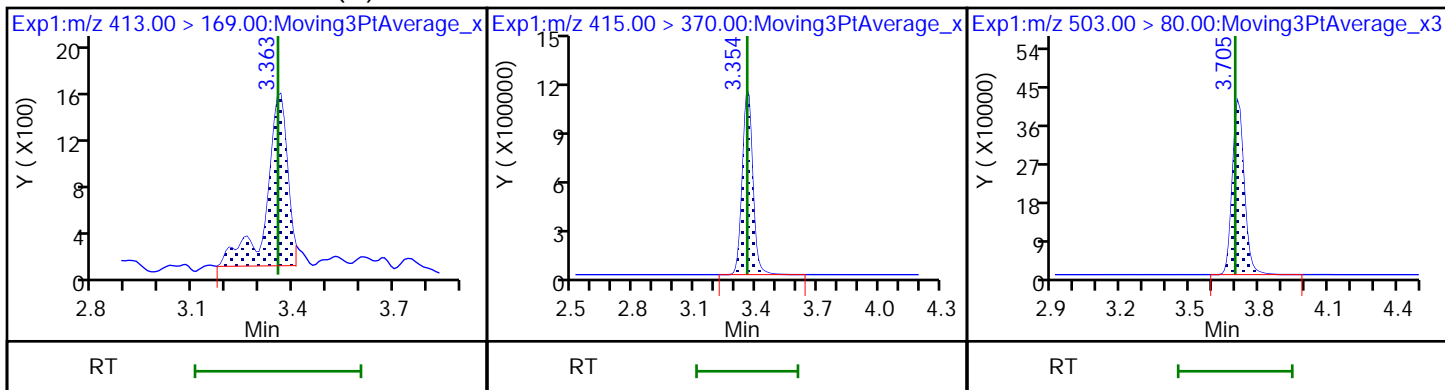
15 Perfluorooctanoic acid (M)



15 Perfluorooctanoic acid (M)

* 62 13C2 PFOA

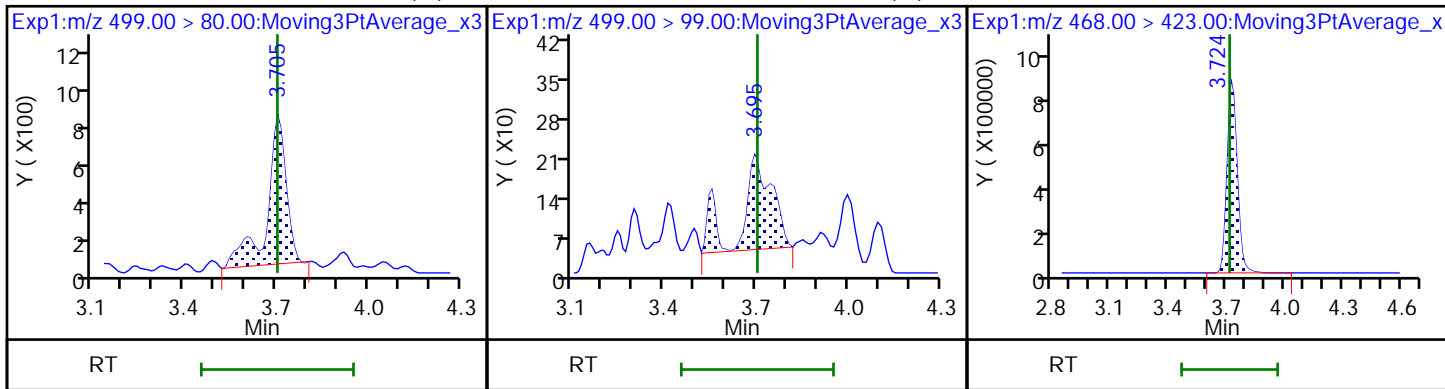
D 18 13C4 PFOS

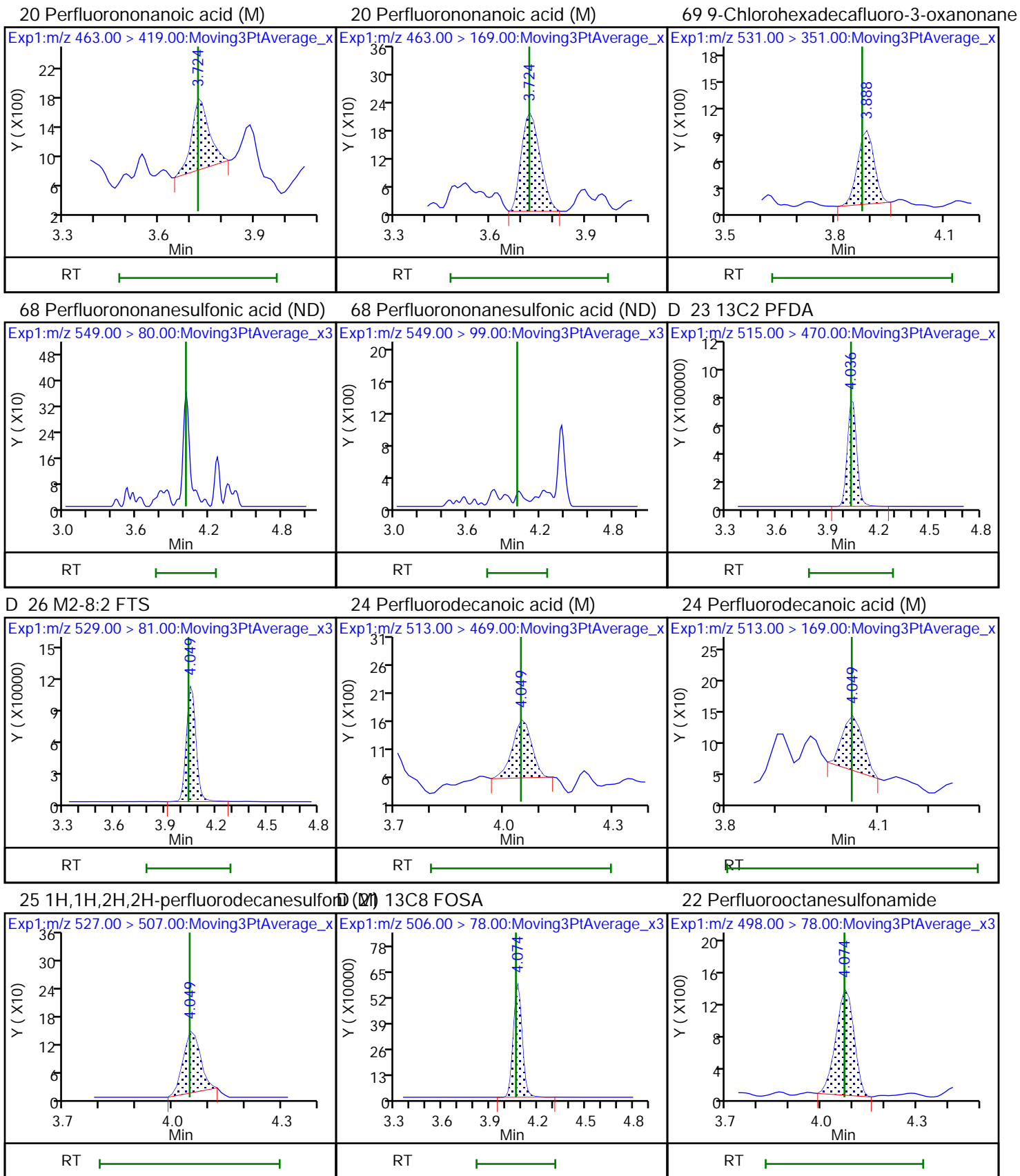


17 Perfluorooctanesulfonic acid (M)

17 Perfluorooctanesulfonic acid (M)

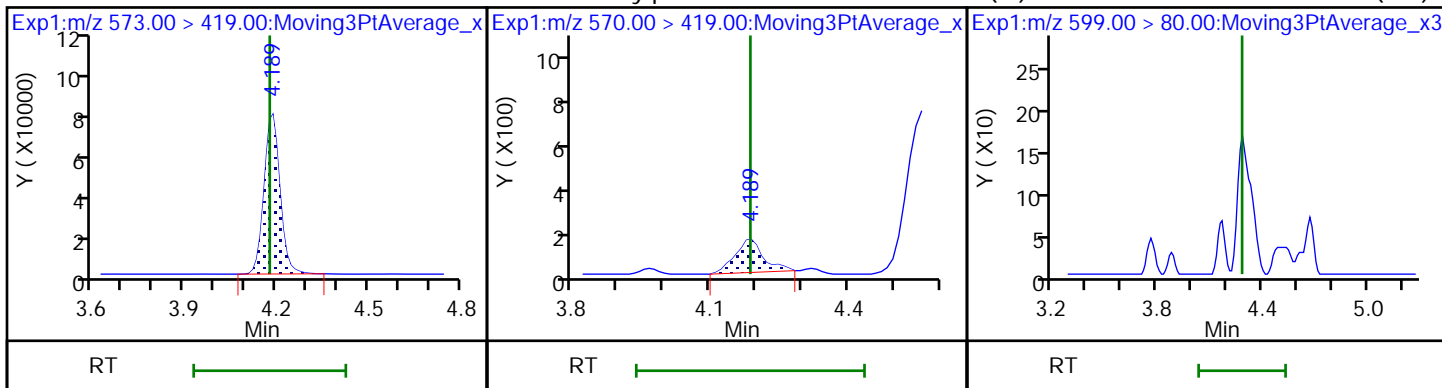
D 19 13C5 PFNA





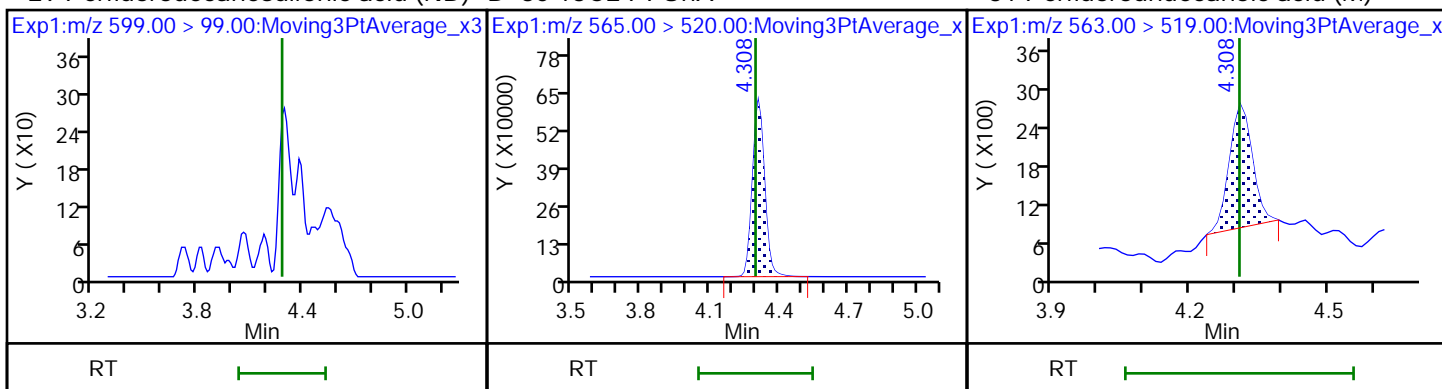
D 27 d3-NMeFOSAA

28 N-methylperfluorooctanesulfonamido (M) Perfluorodecanesulfonic acid (ND)



29 Perfluorodecanesulfonic acid (ND) D 30 13C2 PFUoA

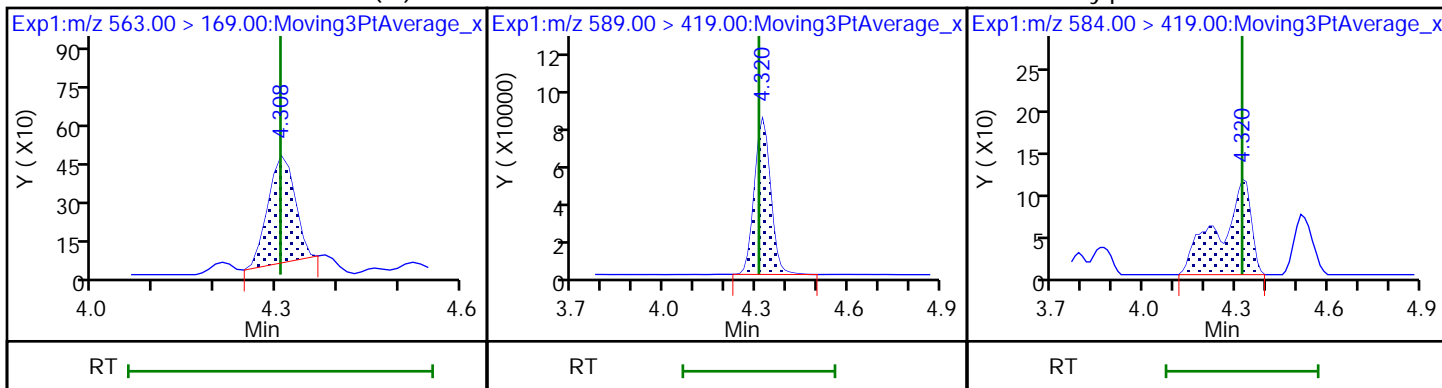
31 Perfluoroundecanoic acid (M)



31 Perfluoroundecanoic acid (M)

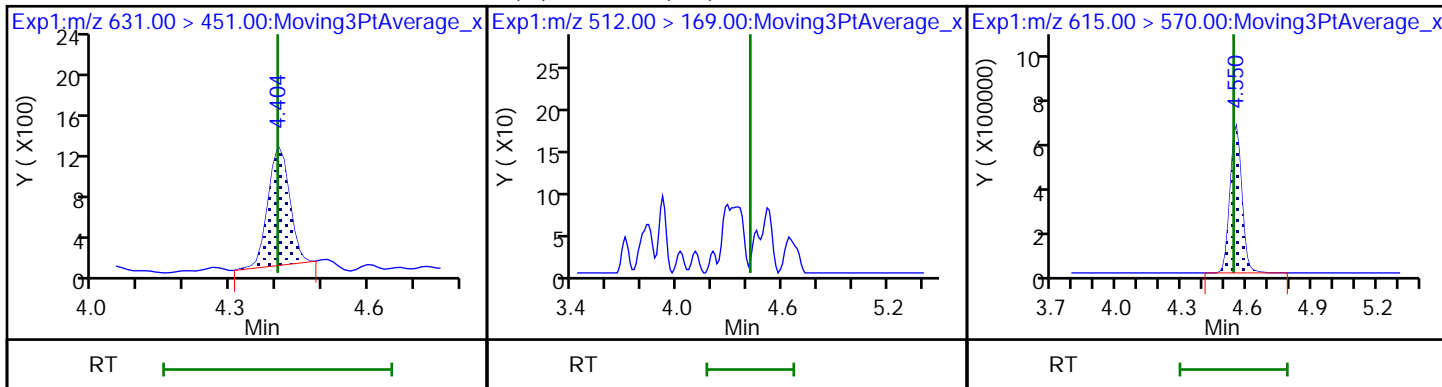
D 32 d5-NEtFOSAA

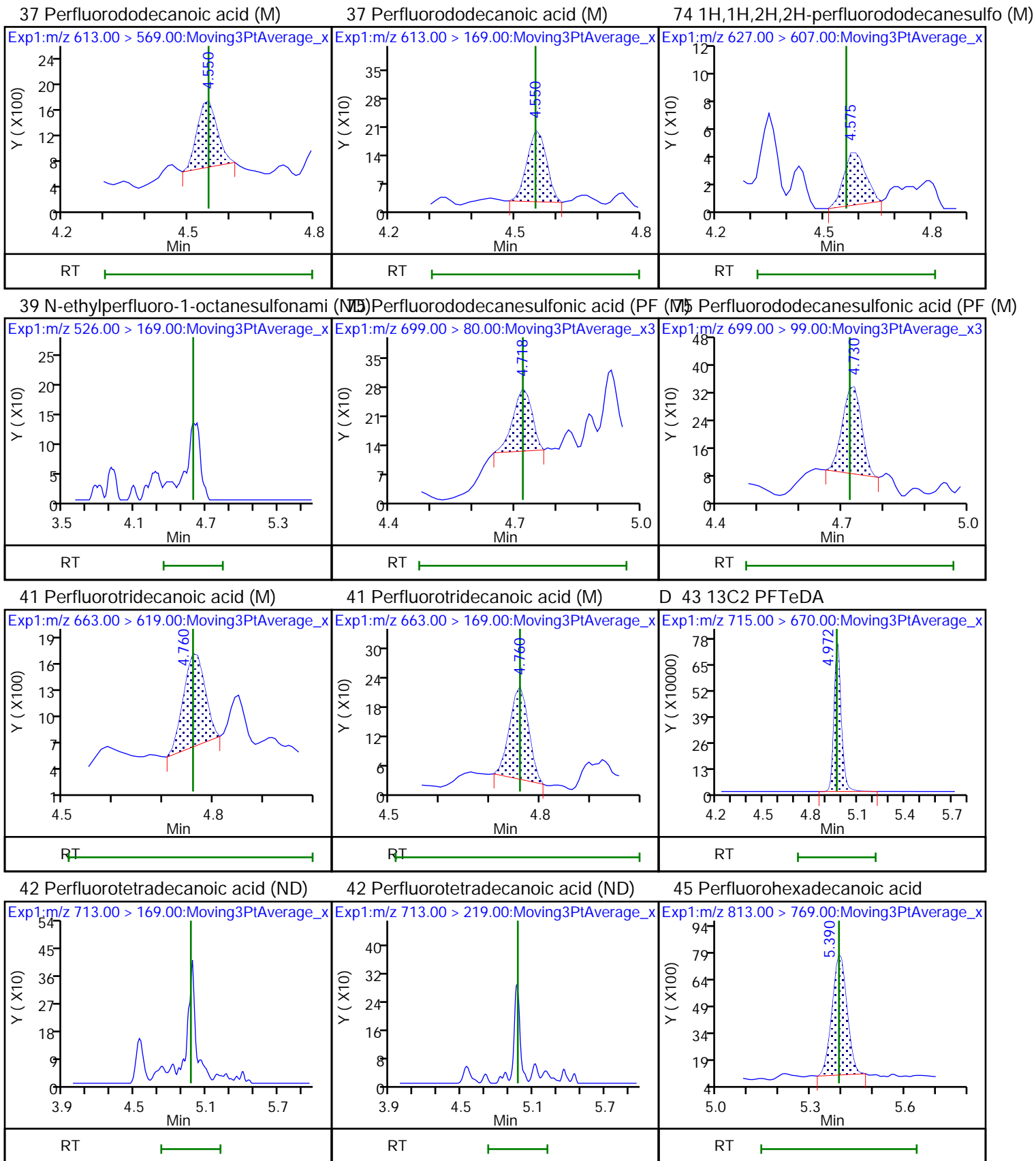
33 N-ethylperfluorooctanesulfonamidoa (M)



66 11-Chloroeicosafuoro-3-oxaundecan (M) MeFOSA (ND)

D 36 13C2 PFDoA

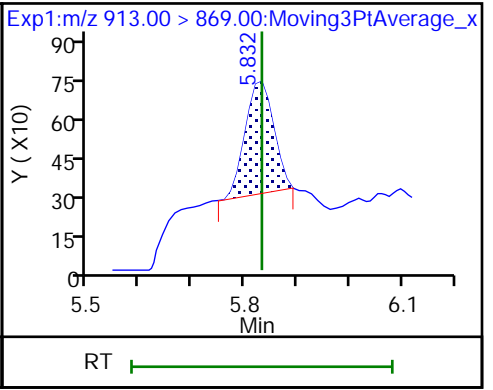
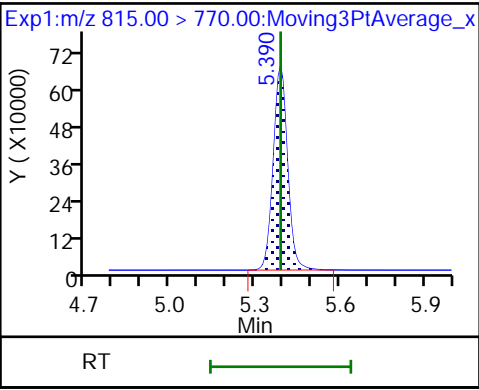
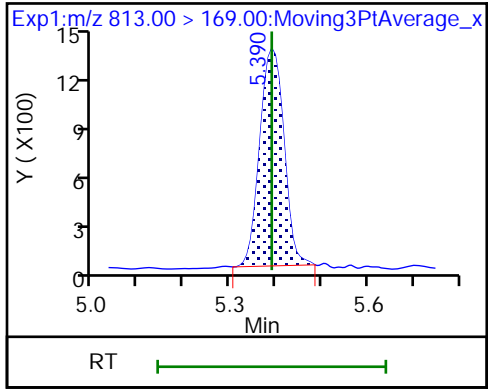




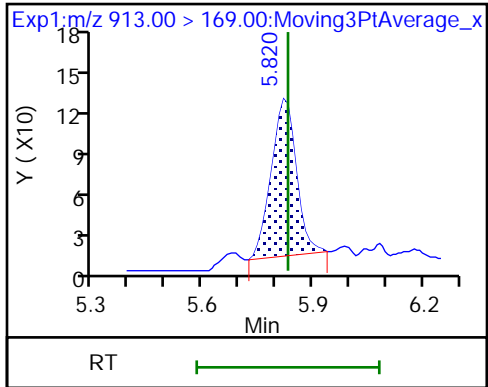
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid



46 Perfluorooctadecanoic acid (M)



Euofins TestAmerica, Burlington

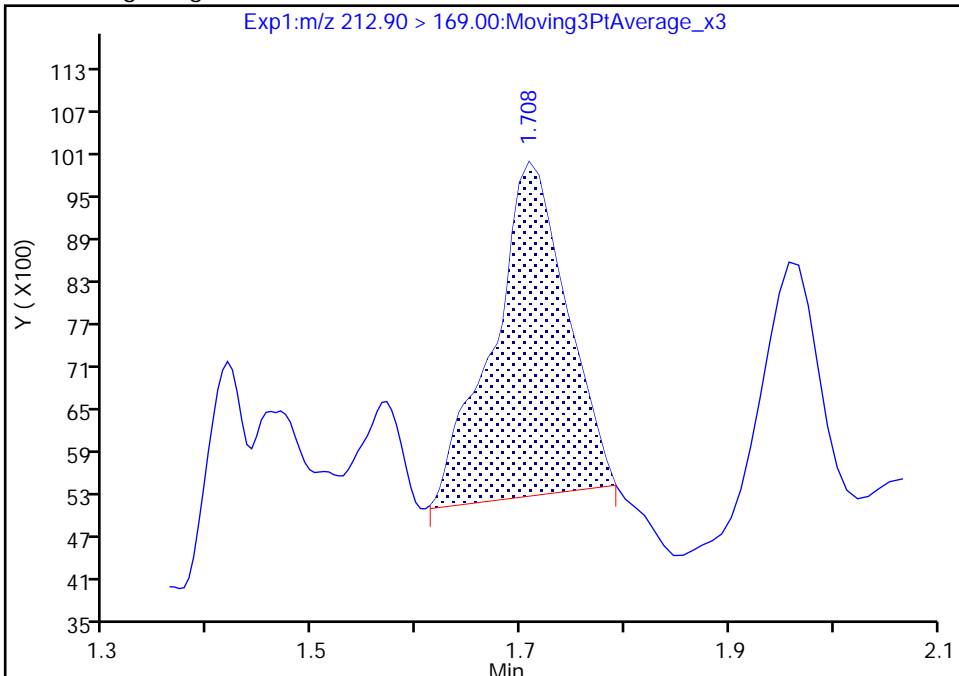
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

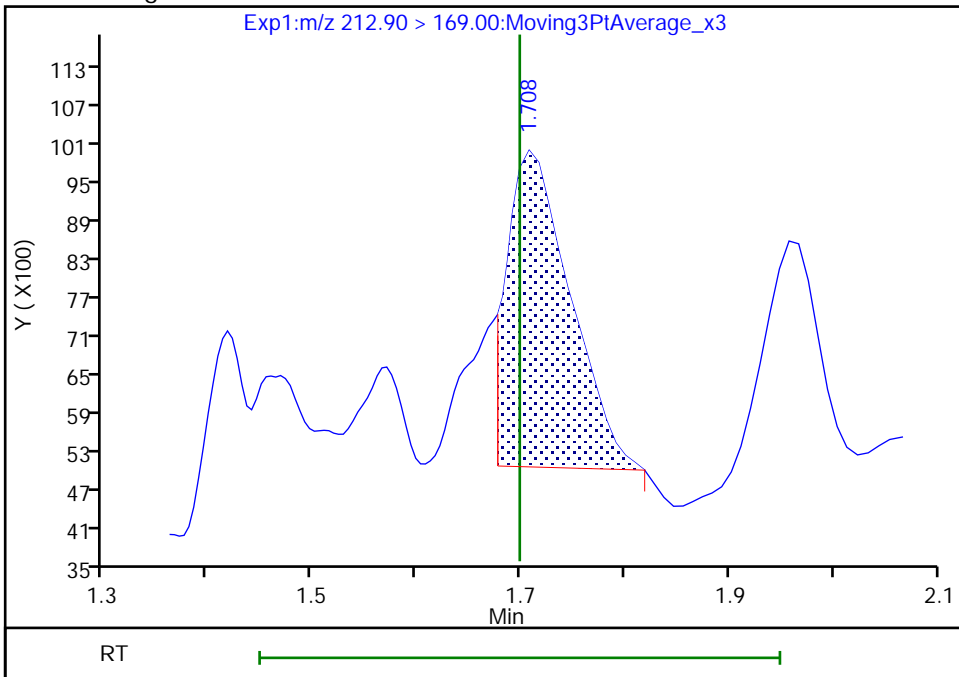
RT: 1.71
Area: 22916
Amount: 0.350860
Amount Units: ng/ml

Processing Integration Results



RT: 1.71
Area: 20347
Amount: 0.311527
Amount Units: ng/ml

Manual Integration Results



Reviewer: murrayjw, 12-Aug-2019 08:52:33
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

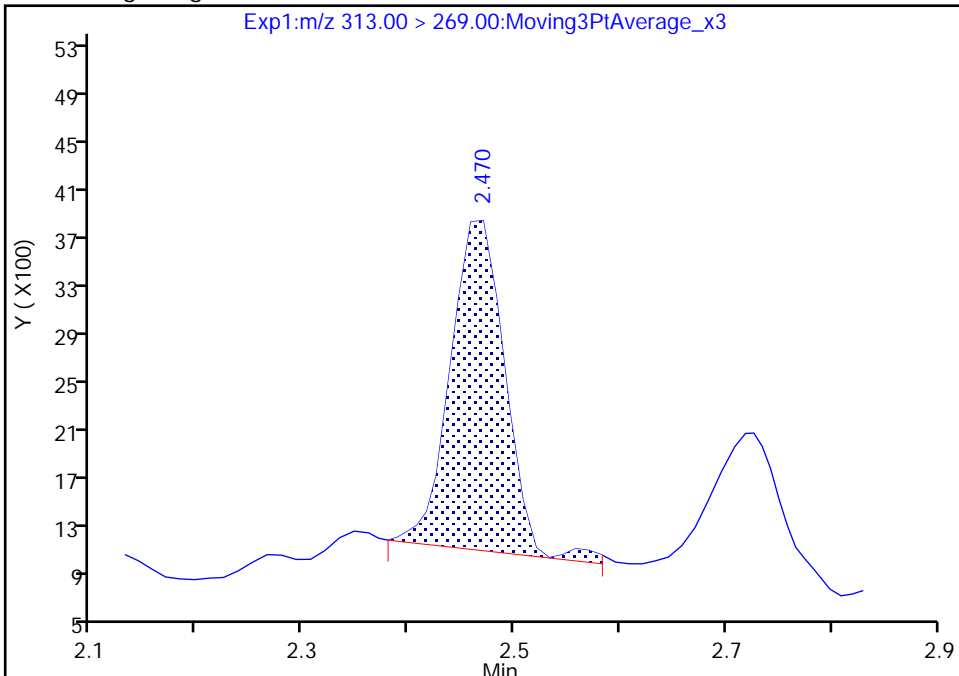
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

6 Perfluorohexanoic acid, CAS: 307-24-4

Signal: 1

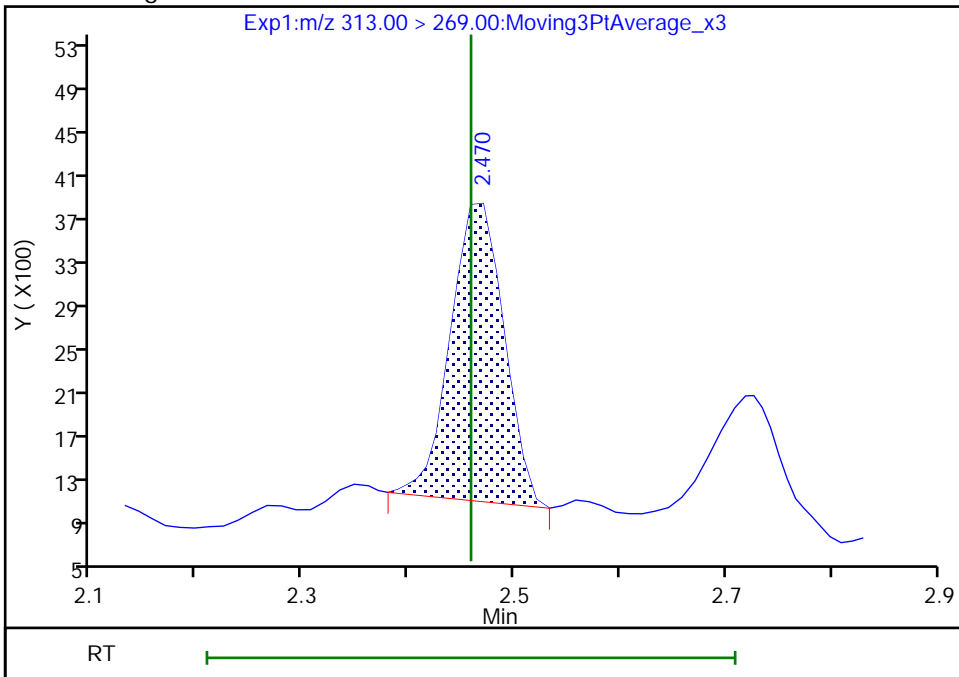
RT: 2.47
Area: 9676
Amount: 0.140211
Amount Units: ng/ml

Processing Integration Results



RT: 2.47
Area: 9460
Amount: 0.137081
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:23:14
Audit Action: Manually Integrated

Audit Reason: Baseline

Euofins TestAmerica, Burlington

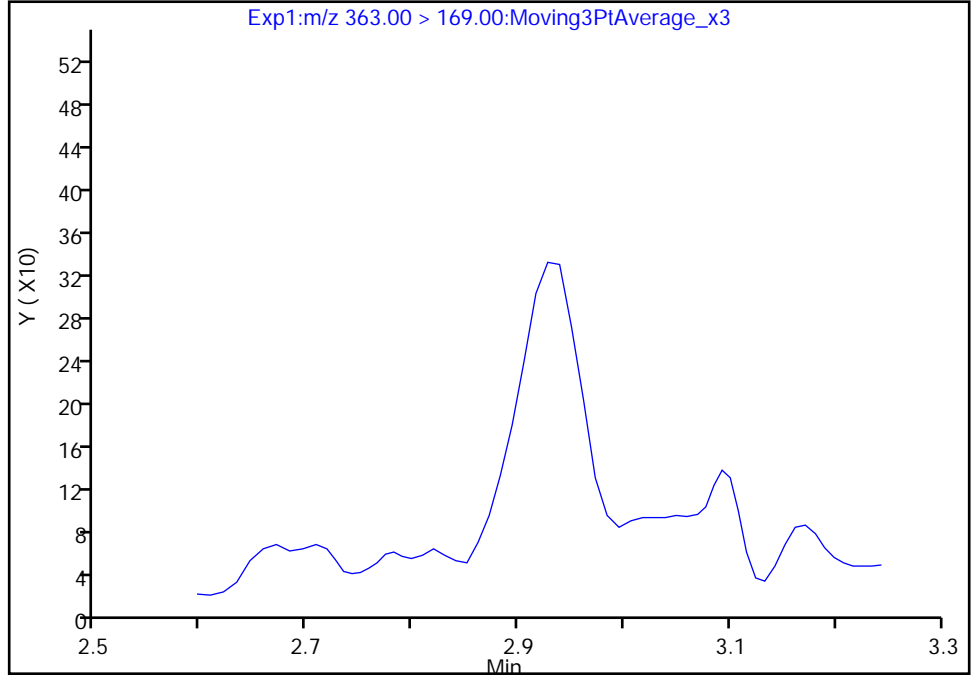
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 2

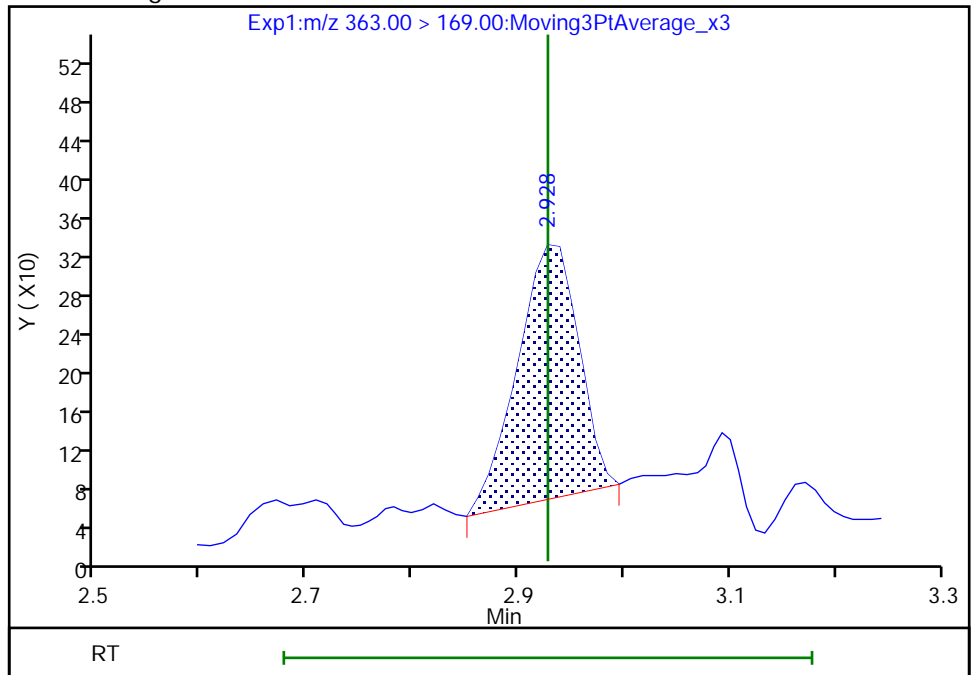
Not Detected
Expected RT: 2.93

Processing Integration Results



RT: 2.93
Area: 1050
Amount: 0.049173
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:24:23
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

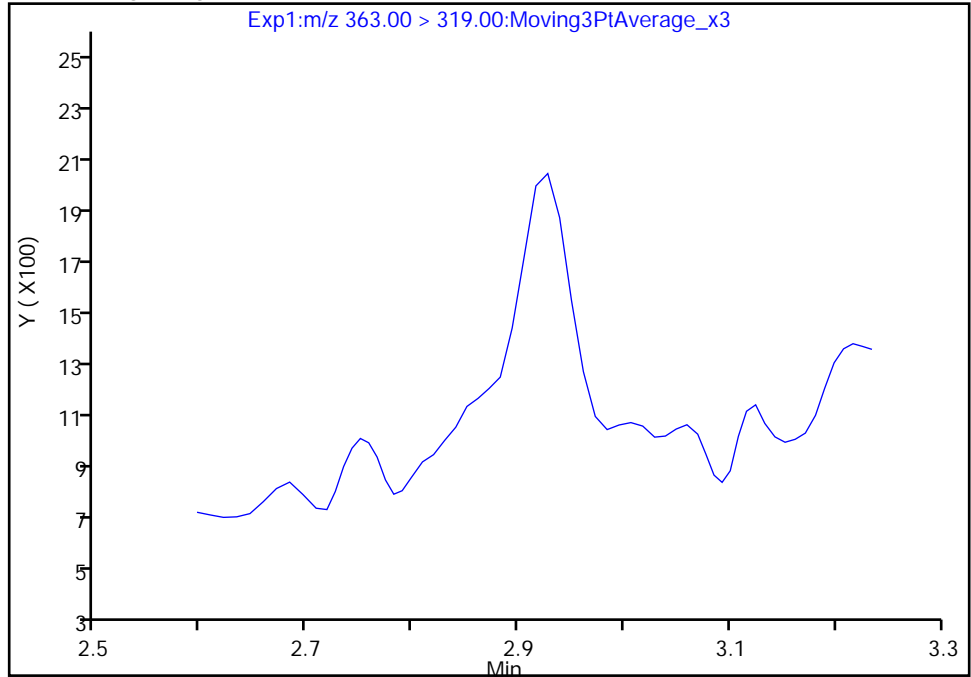
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

10 Perfluoroheptanoic acid, CAS: 375-85-9

Signal: 1

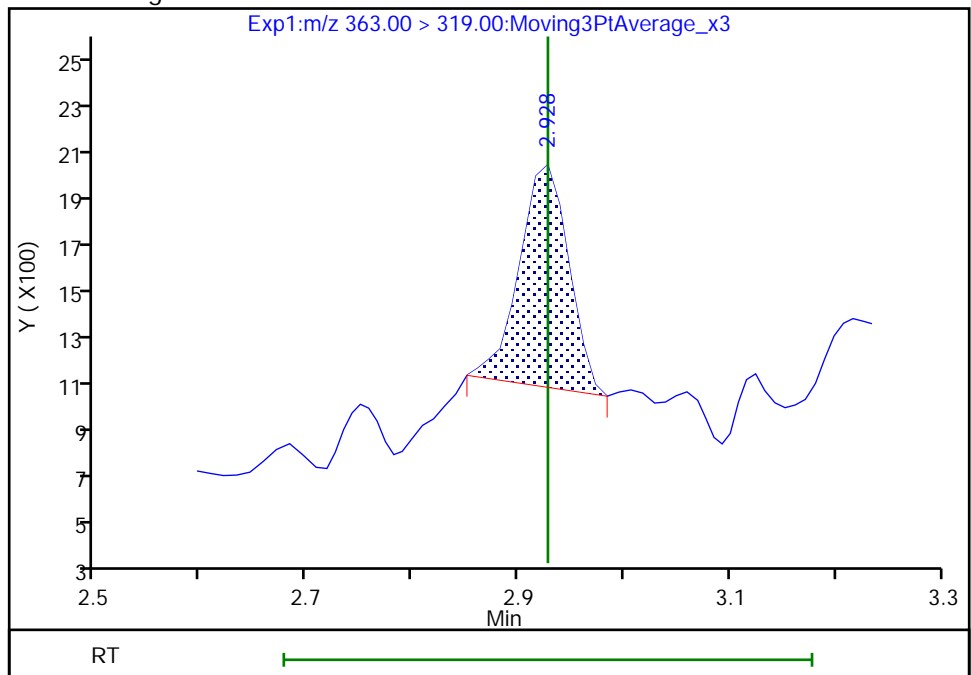
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 2950
Amount: 0.049173
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:24:27

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

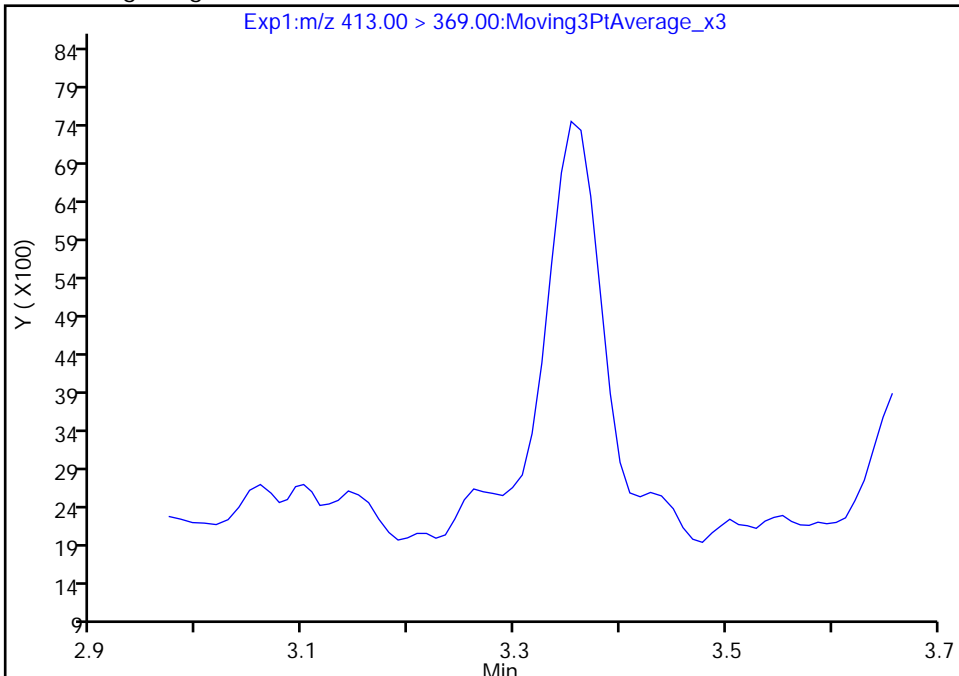
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 1

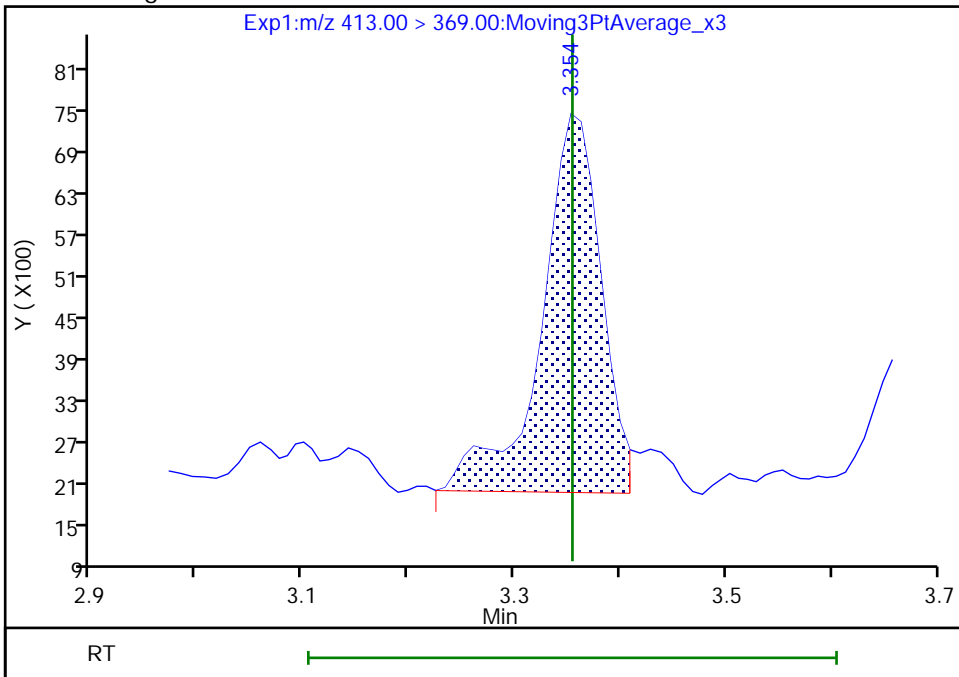
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.35
Area: 21354
Amount: 0.303829
Amount Units: ng/ml



Reviewer: murrayjw, 12-Aug-2019 08:53:26
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

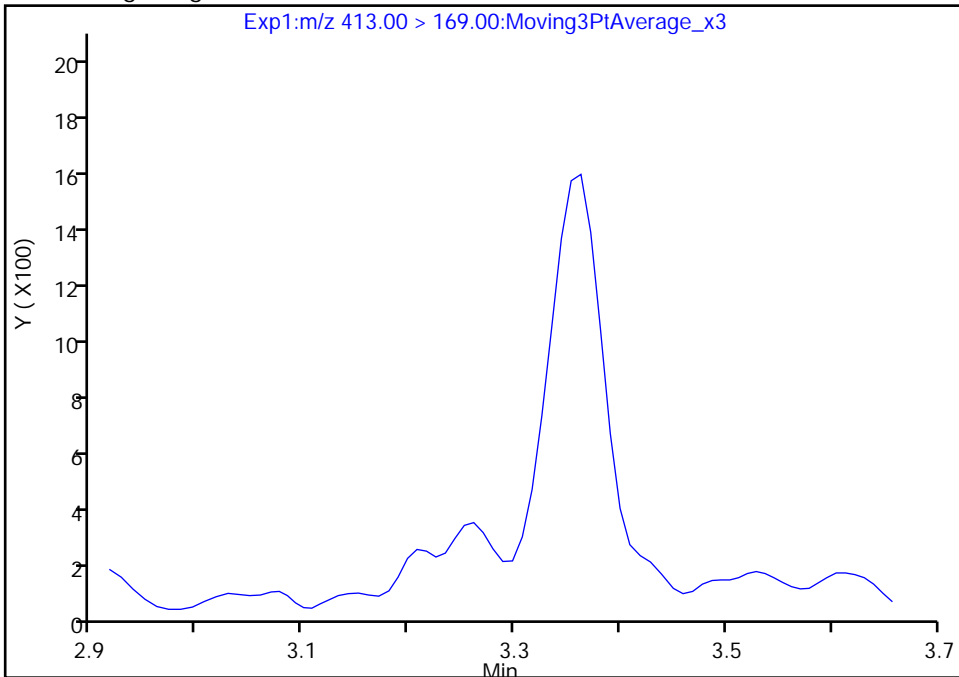
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

15 Perfluorooctanoic acid, CAS: 335-67-1

Signal: 2

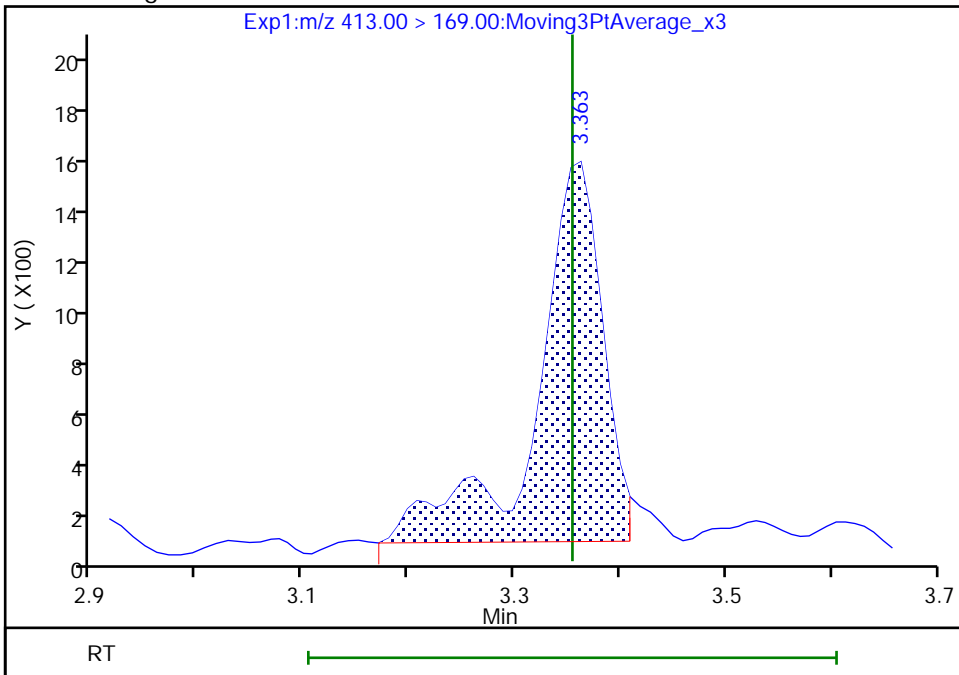
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.36
Area: 6539
Amount: 0.303829
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

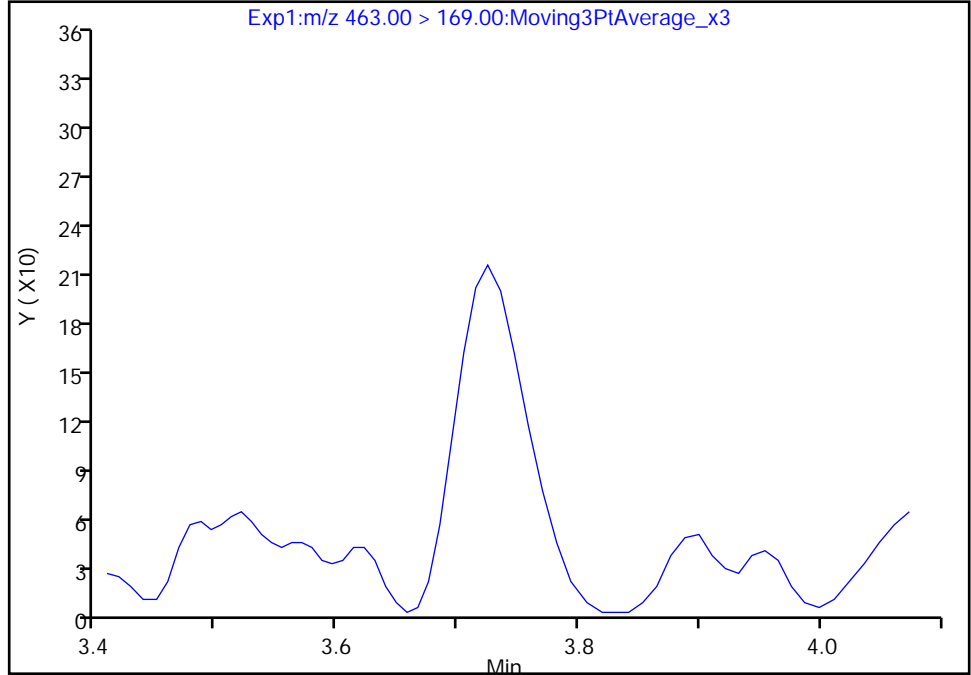
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 2

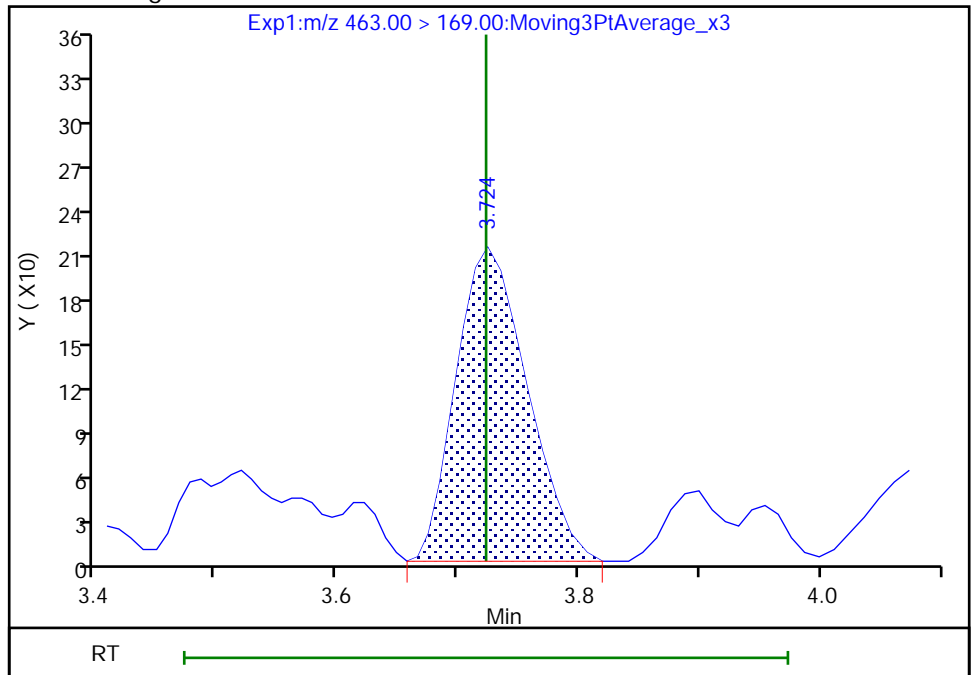
Not Detected
Expected RT: 3.72

Processing Integration Results



Manual Integration Results

RT: 3.72
Area: 876
Amount: 0.065073
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:25:37

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

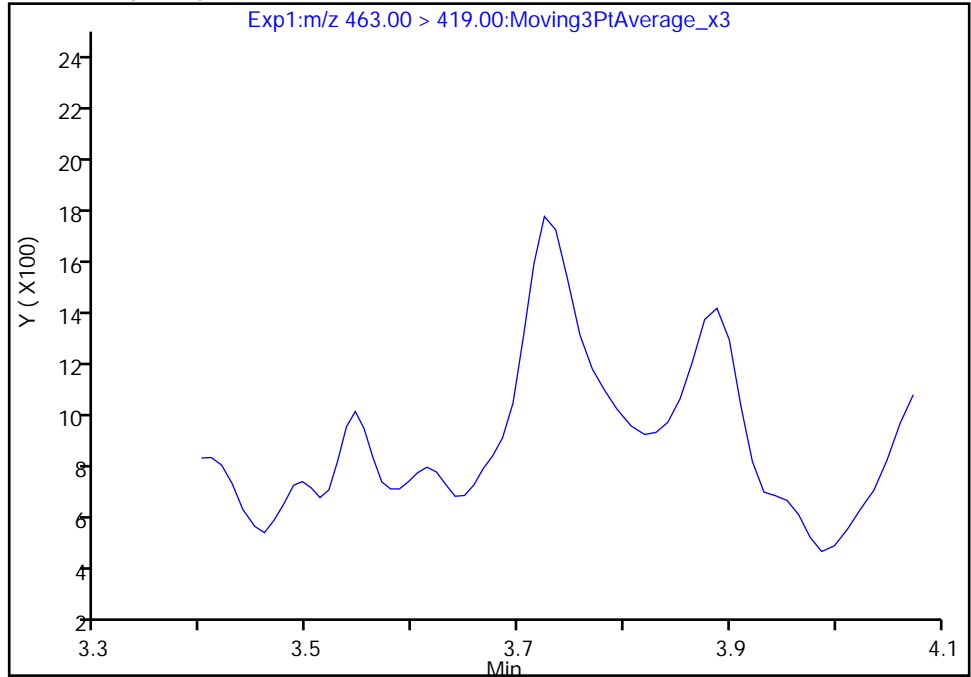
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

20 Perfluorononanoic acid, CAS: 375-95-1

Signal: 1

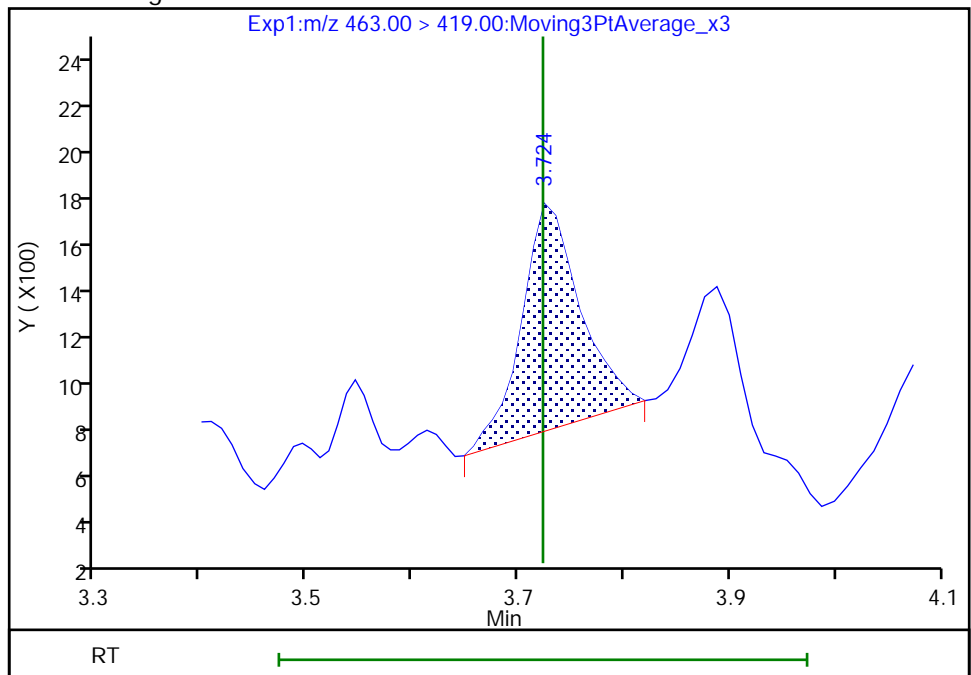
Not Detected
Expected RT: 3.72

Processing Integration Results



RT: 3.72
Area: 3684
Amount: 0.065073
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:25:41

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Euofins TestAmerica, Burlington

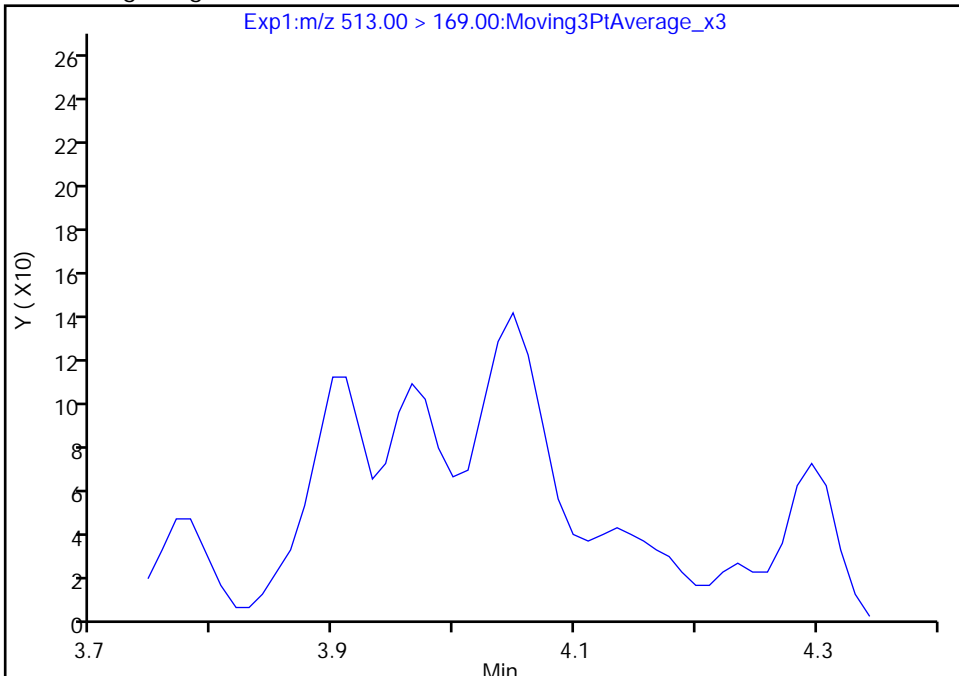
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 2

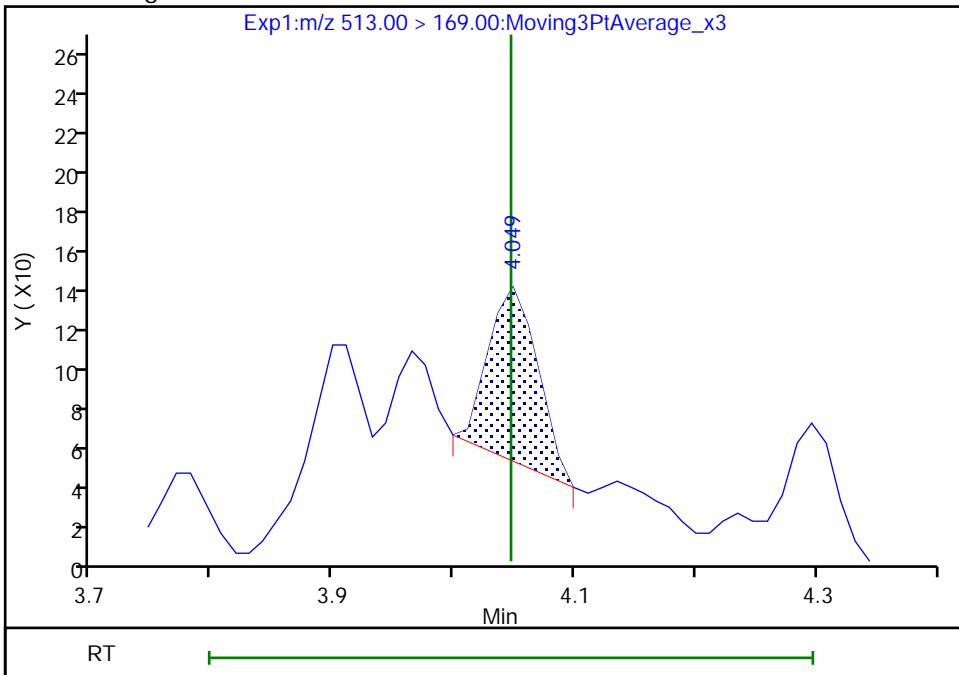
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 245
Amount: 0.071364
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:26:04
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

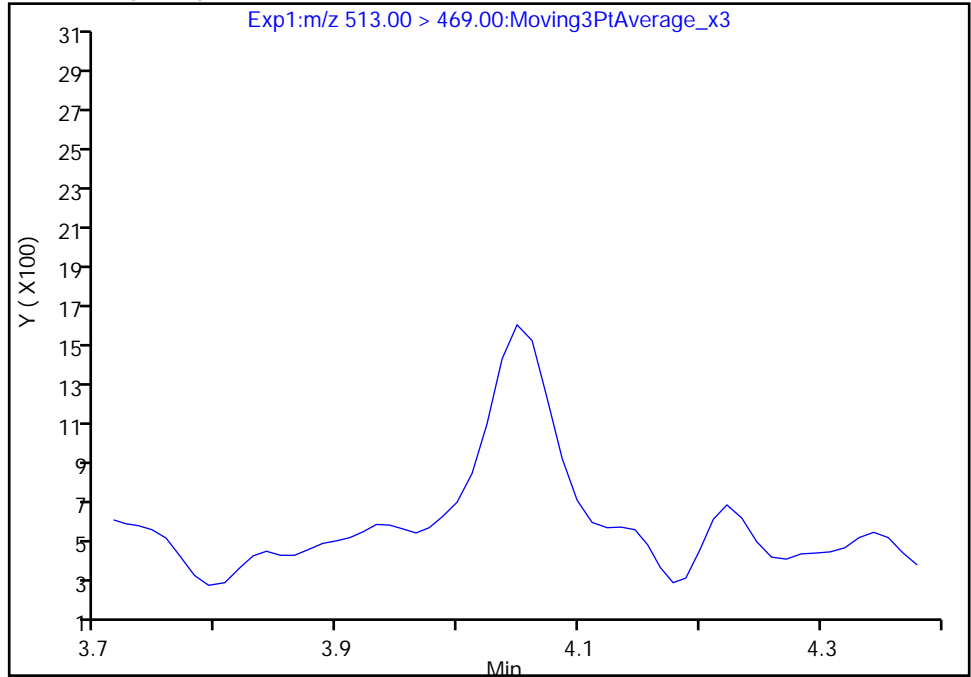
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

24 Perfluorodecanoic acid, CAS: 335-76-2

Signal: 1

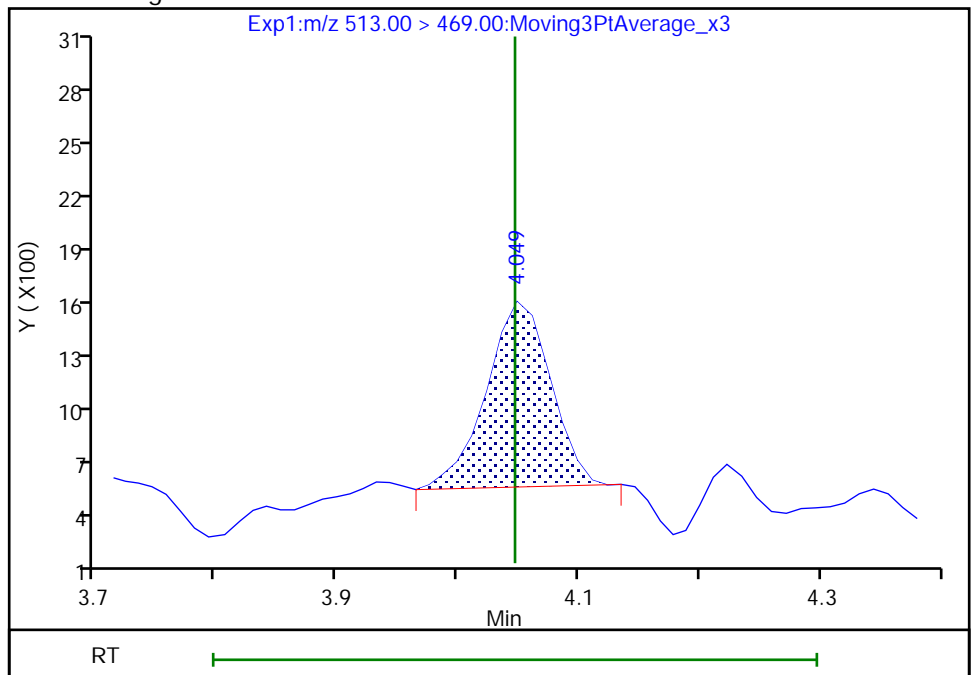
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 3754
Amount: 0.071364
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

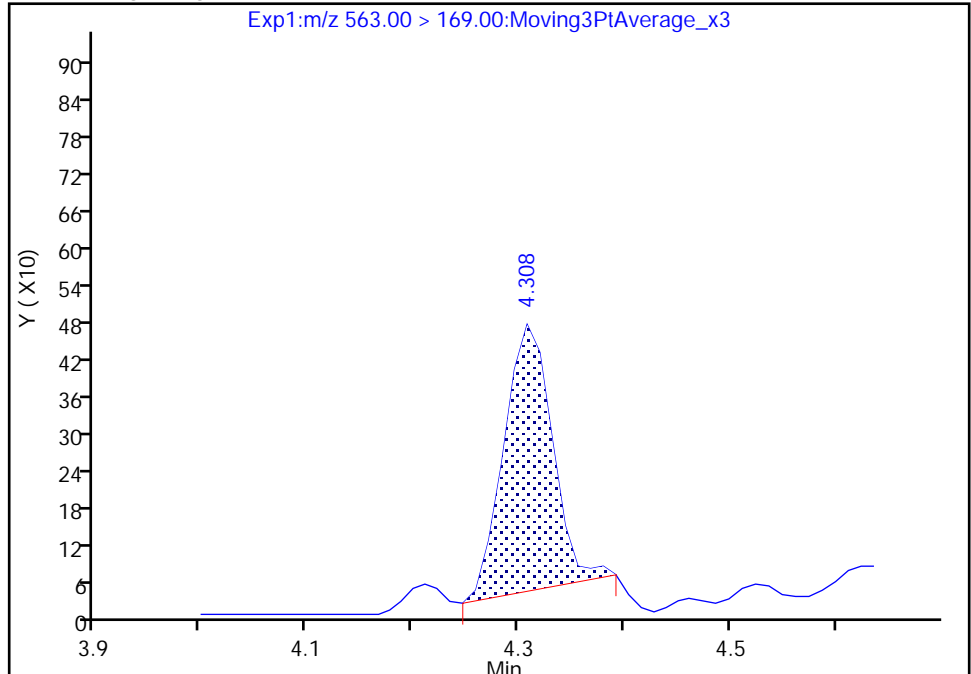
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 2

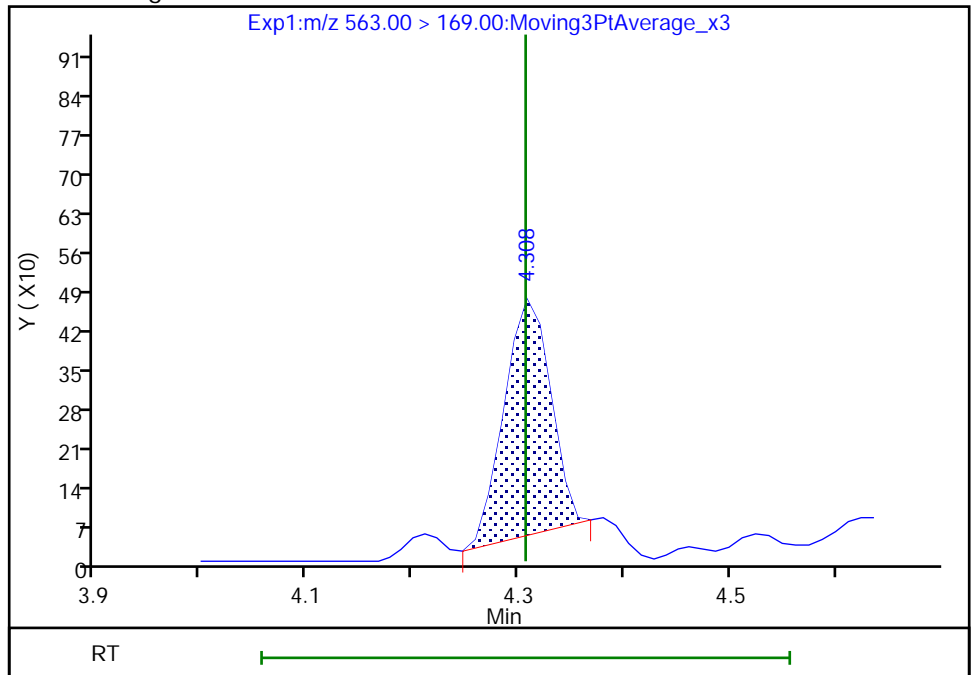
RT: 4.31
Area: 1370
Amount: 0.194742
Amount Units: ng/ml

Processing Integration Results



RT: 4.31
Area: 1287
Amount: 0.173861
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:26:49
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

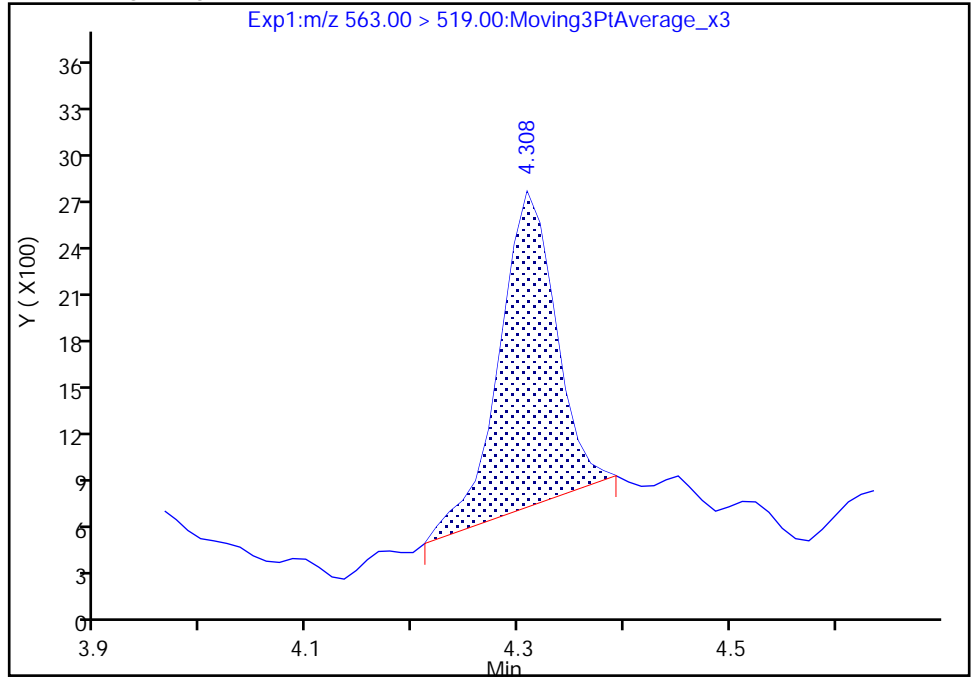
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

31 Perfluoroundecanoic acid, CAS: 2058-94-8

Signal: 1

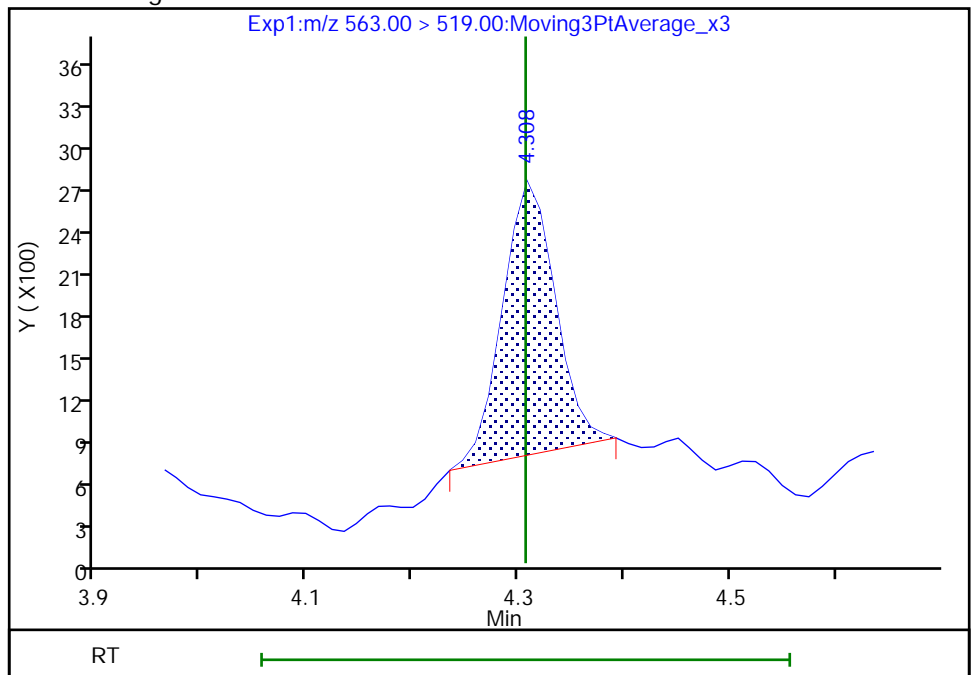
RT: 4.31
Area: 7601
Amount: 0.194742
Amount Units: ng/ml

Processing Integration Results



RT: 4.31
Area: 6786
Amount: 0.173861
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:26:55

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

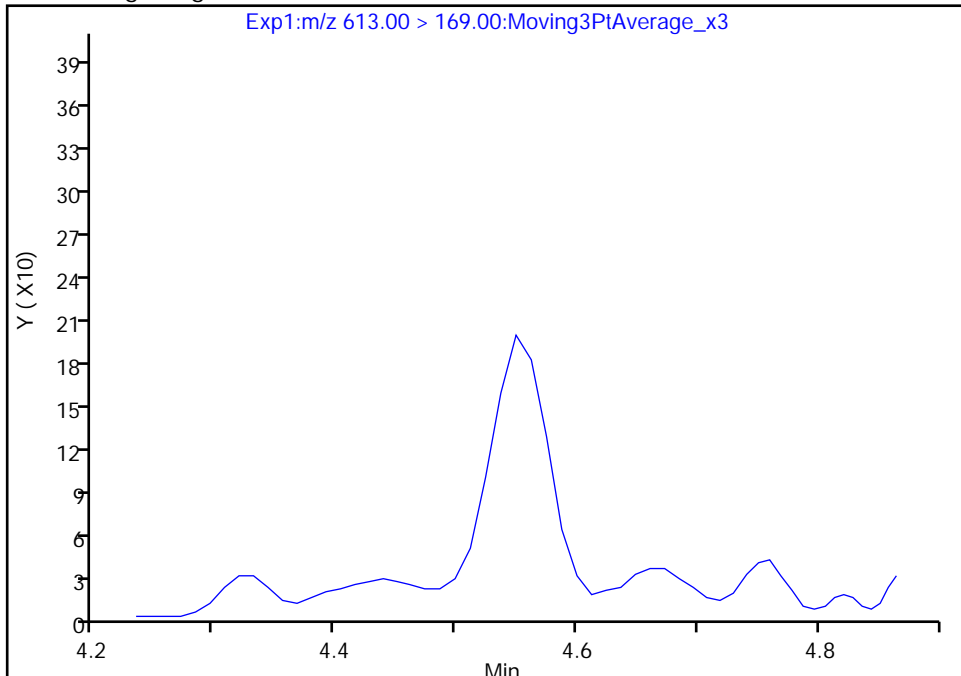
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 2

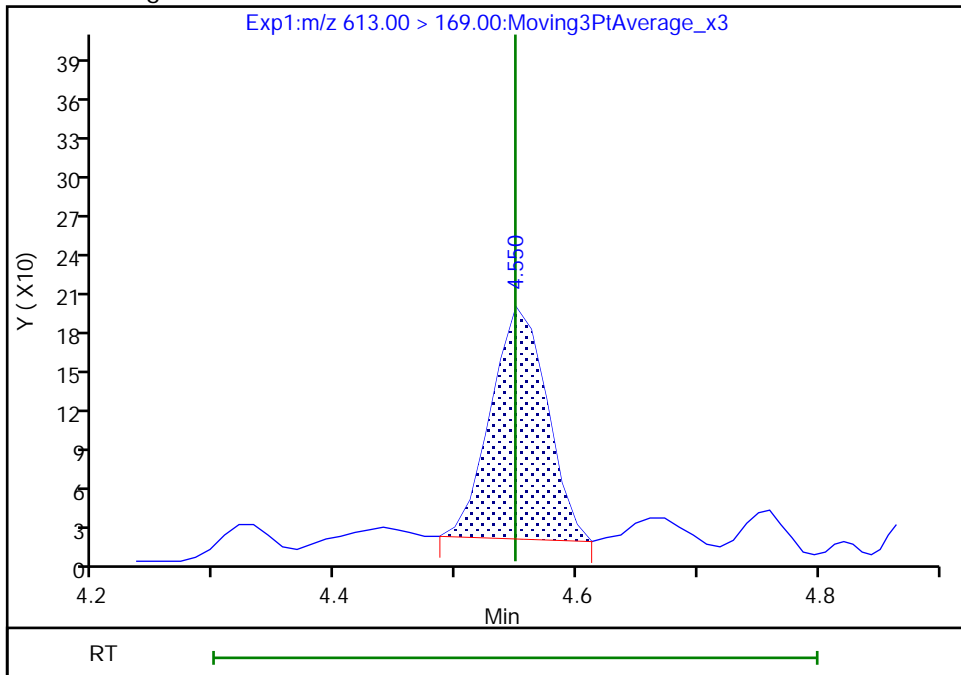
Not Detected
Expected RT: 4.55

Processing Integration Results



Manual Integration Results

RT: 4.55
Area: 570
Amount: 0.067240
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:27:29
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

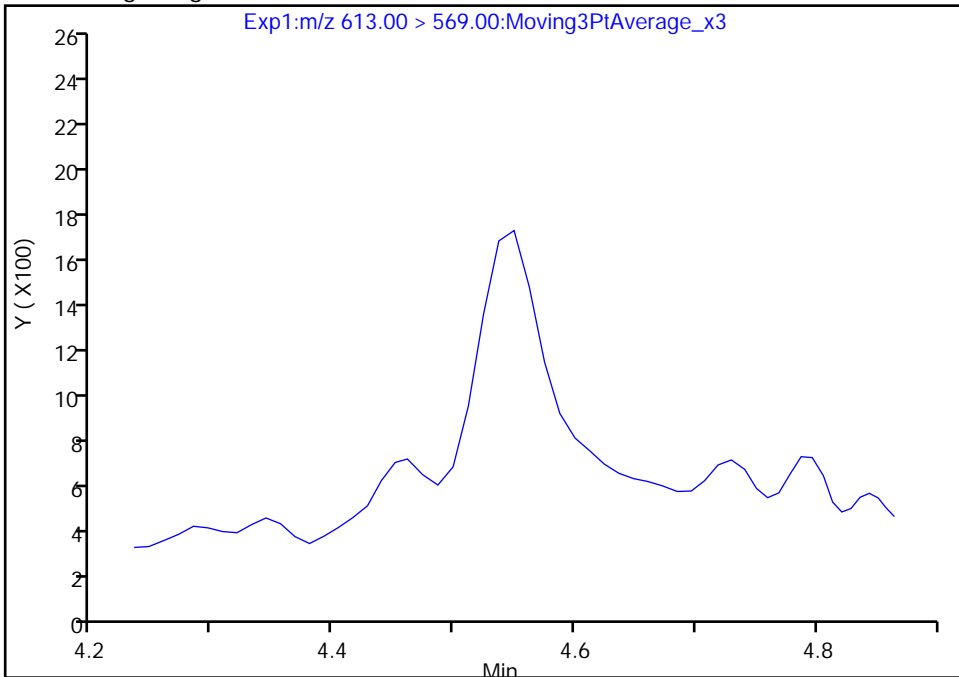
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

37 Perfluorododecanoic acid, CAS: 307-55-1

Signal: 1

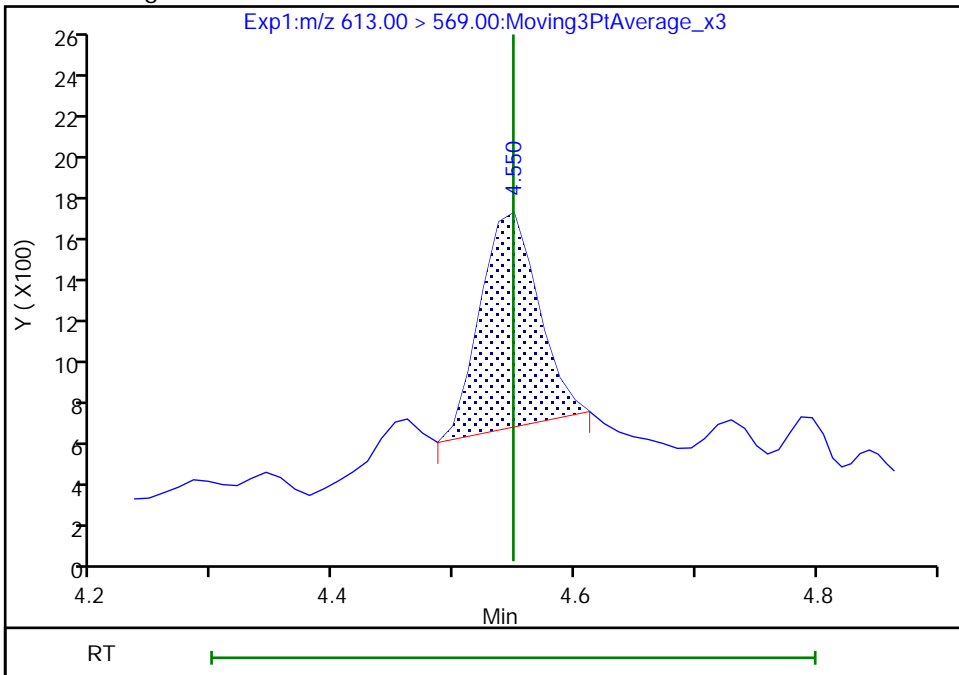
Not Detected
Expected RT: 4.55

Processing Integration Results



Manual Integration Results

RT: 4.55
Area: 3456
Amount: 0.067240
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:27:29

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

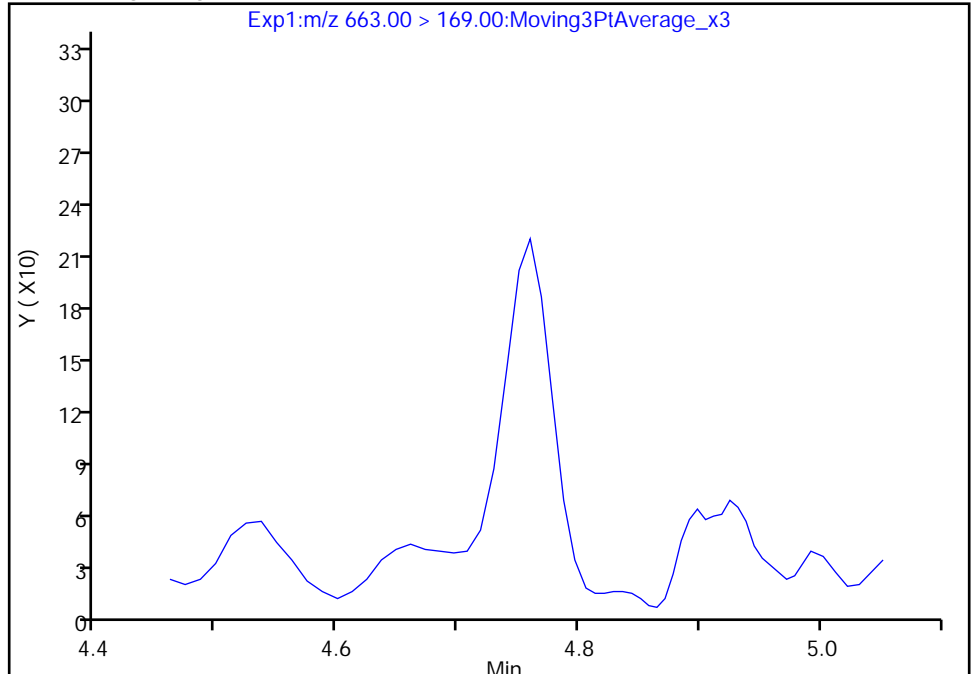
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 2

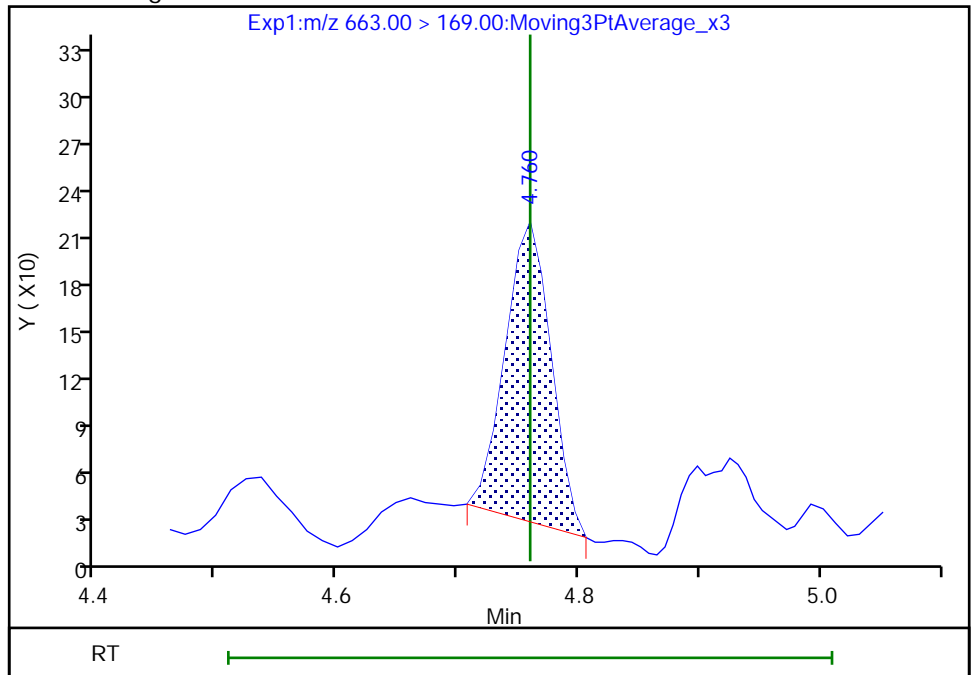
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.76
Area: 492
Amount: 0.065898
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:28:13
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

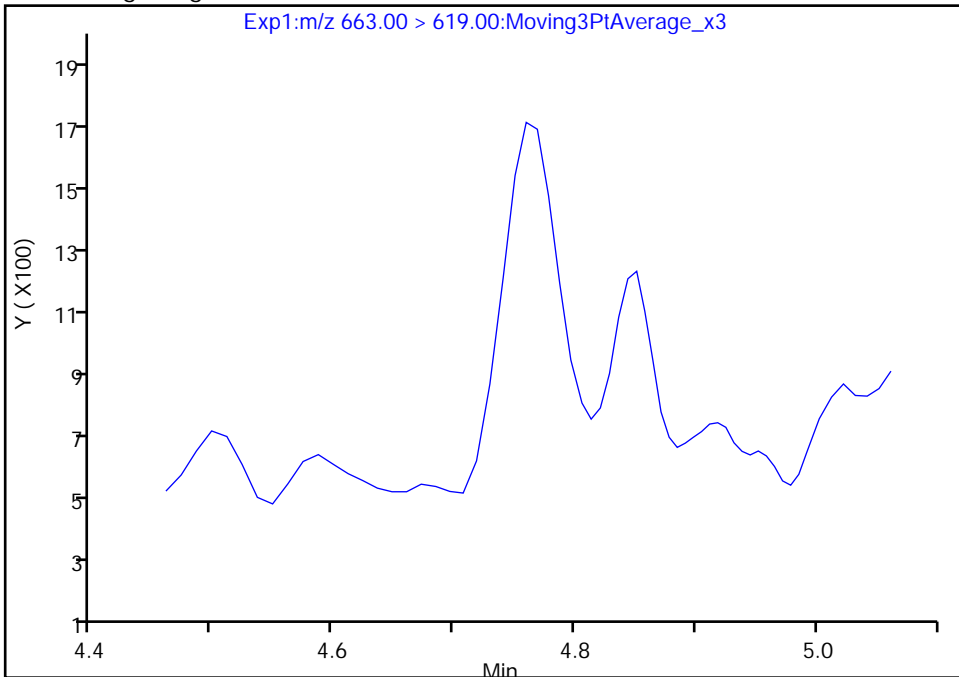
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

41 Perfluorotridecanoic acid, CAS: 72629-94-8

Signal: 1

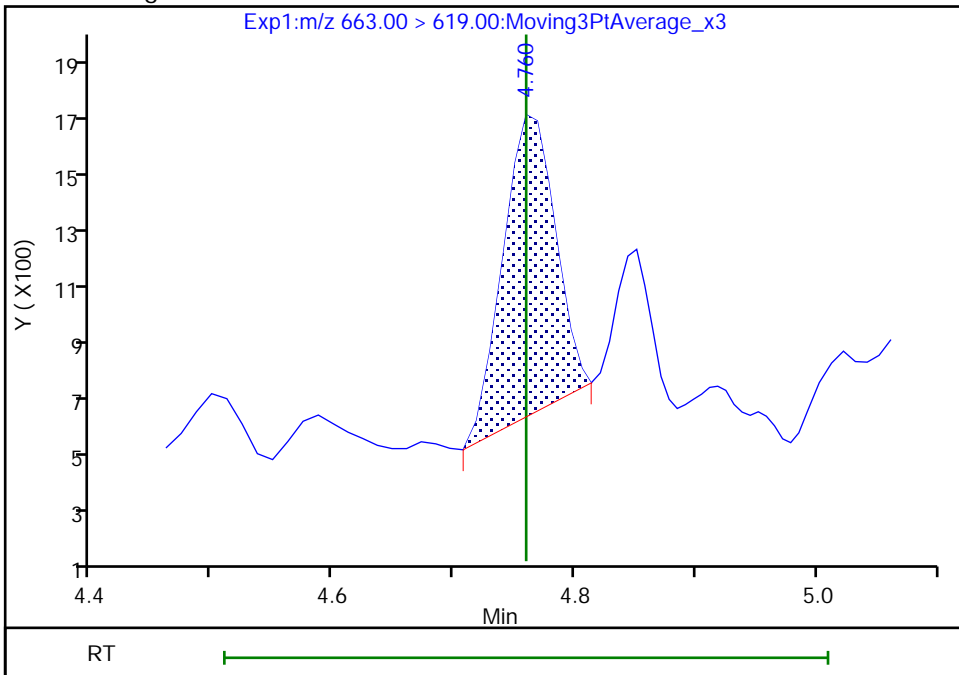
Not Detected
Expected RT: 4.76

Processing Integration Results



Manual Integration Results

RT: 4.76
Area: 3040
Amount: 0.065898
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

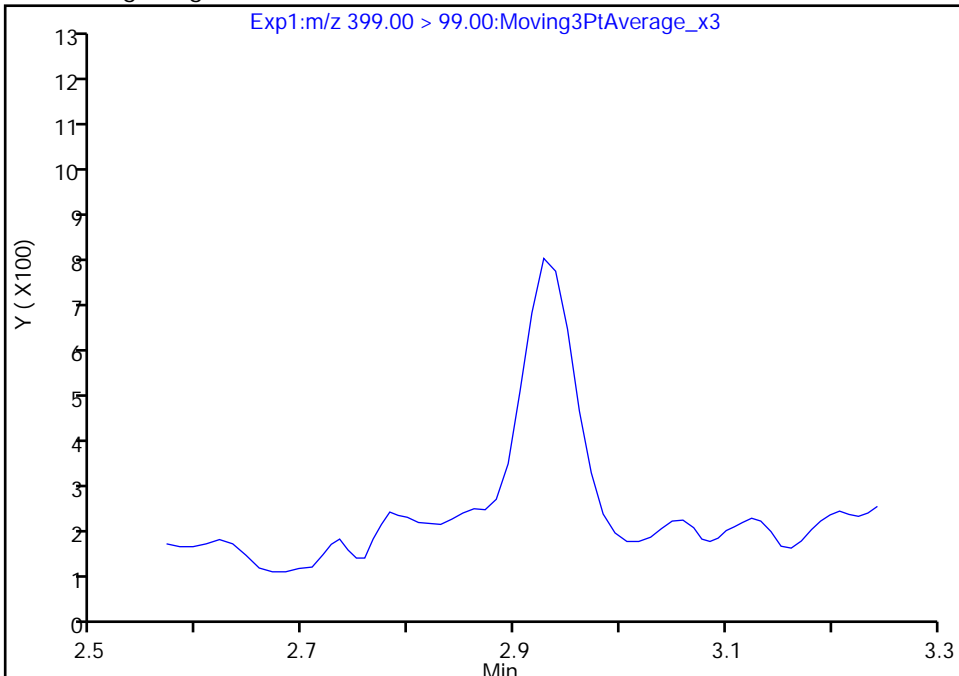
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

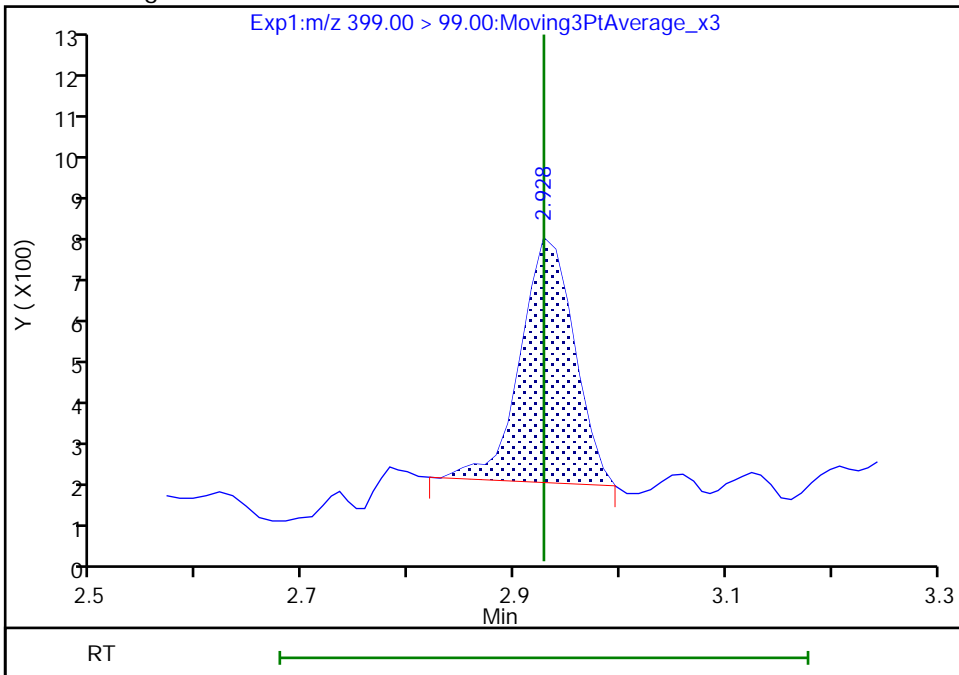
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 2018
Amount: 0.186480
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:24:04
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

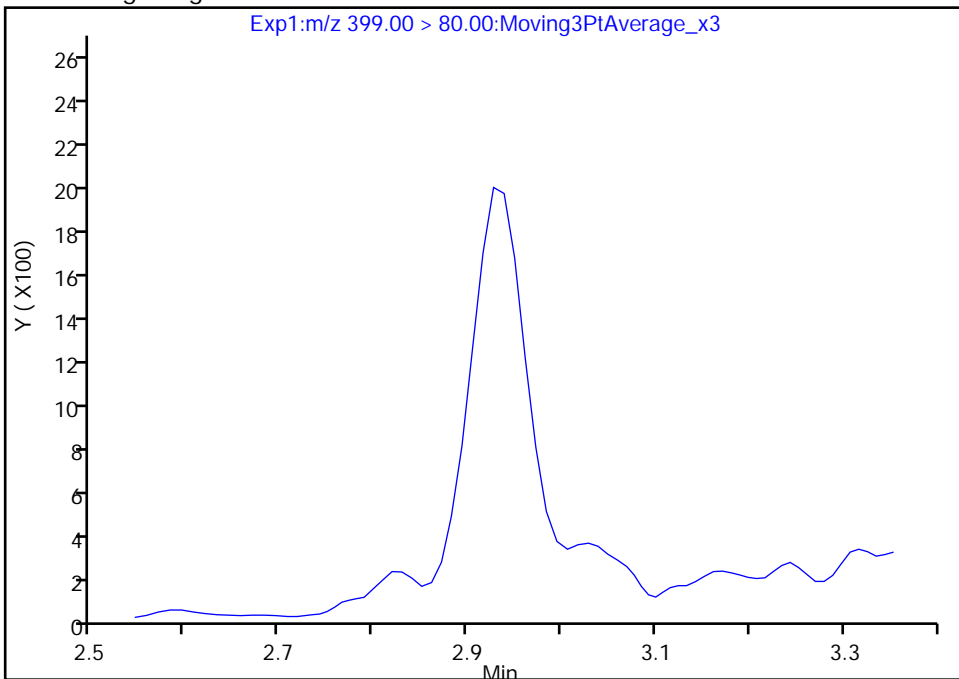
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 1

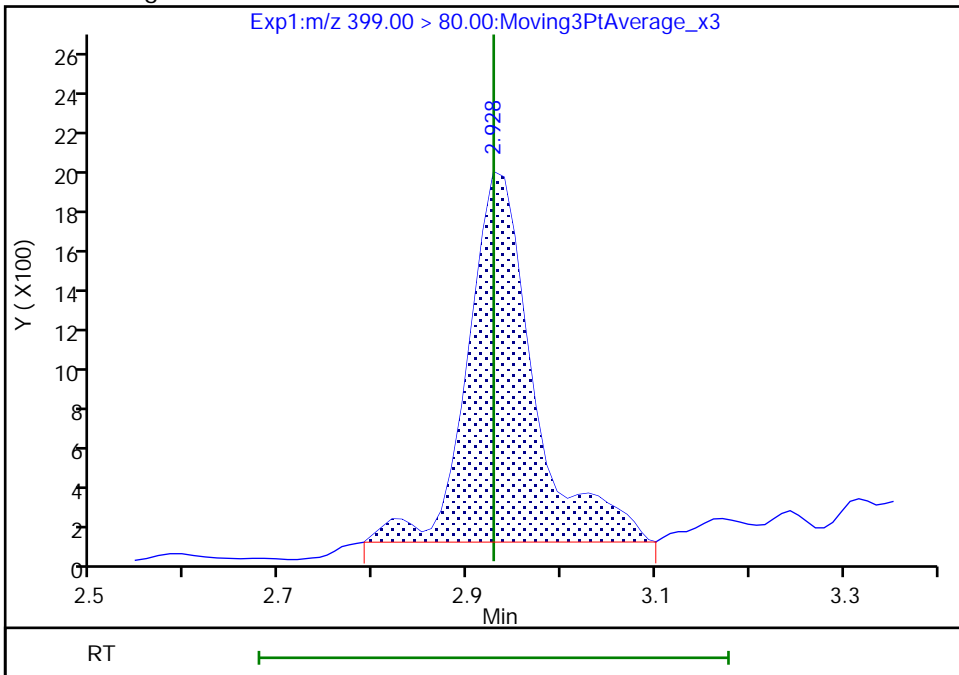
Not Detected
Expected RT: 2.93

Processing Integration Results



Manual Integration Results

RT: 2.93
Area: 8951
Amount: 0.186480
Amount Units: ng/ml



Eurofins TestAmerica, Burlington

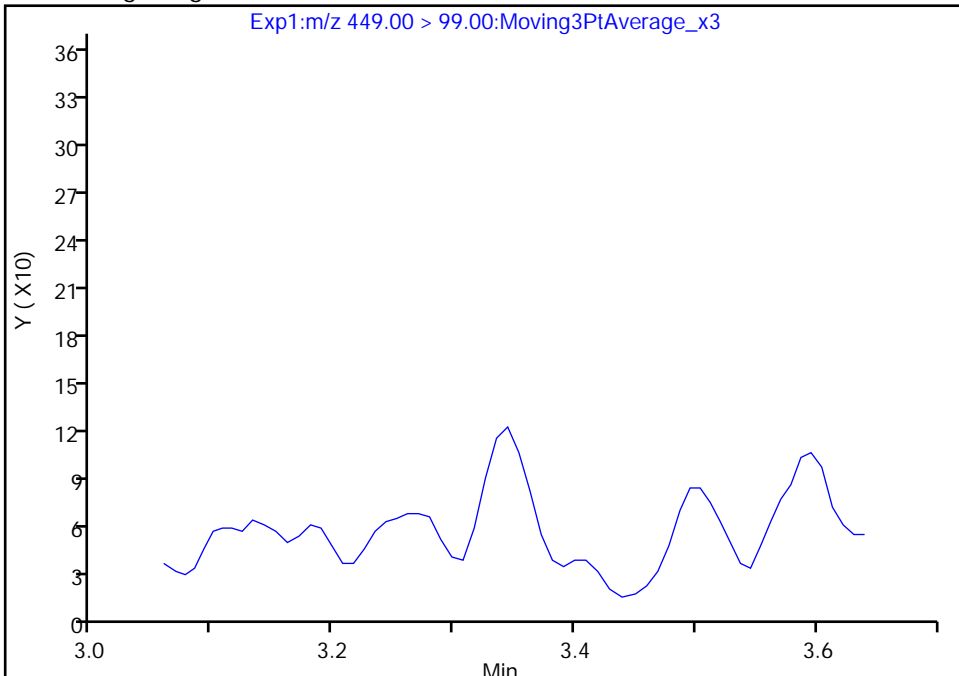
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 2

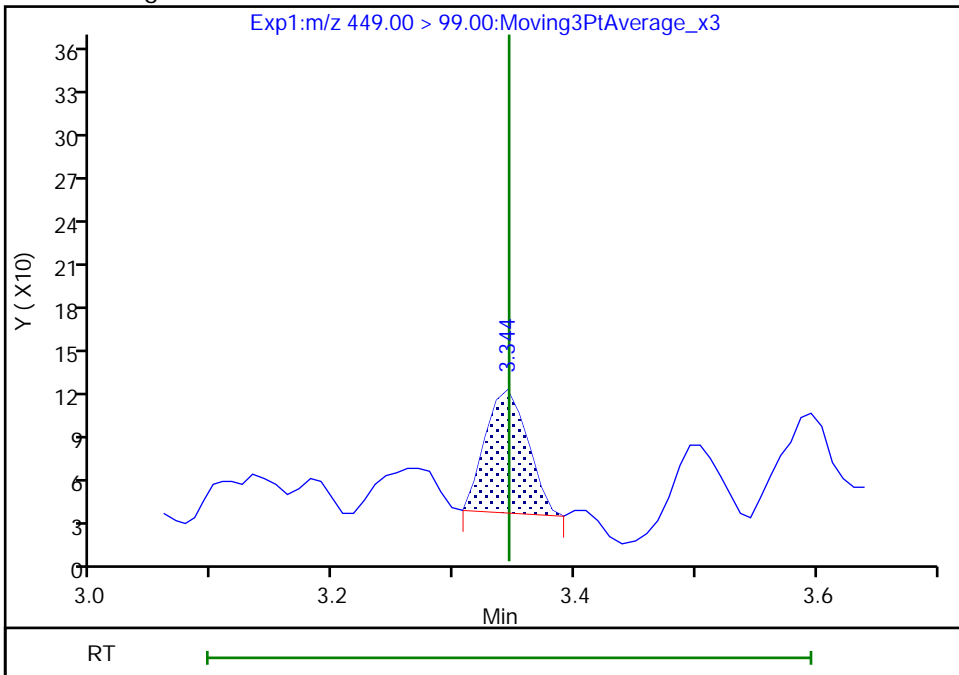
Not Detected
Expected RT: 3.35

Processing Integration Results



RT: 3.34
Area: 206
Amount: 0.036435
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:24:38
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

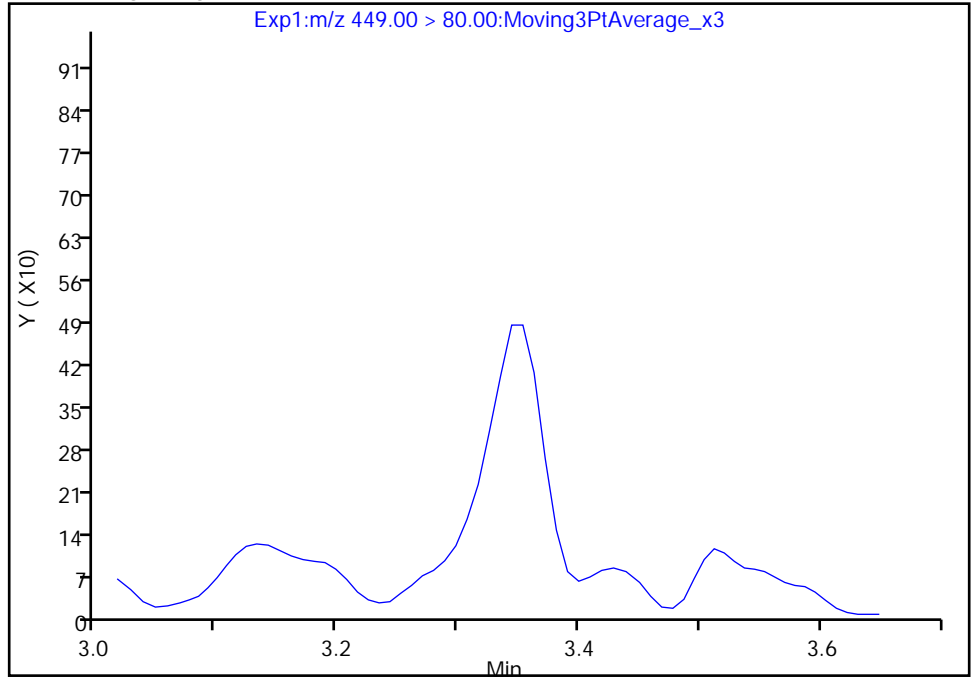
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

16 Perfluoroheptanesulfonic acid, CAS: 375-92-8

Signal: 1

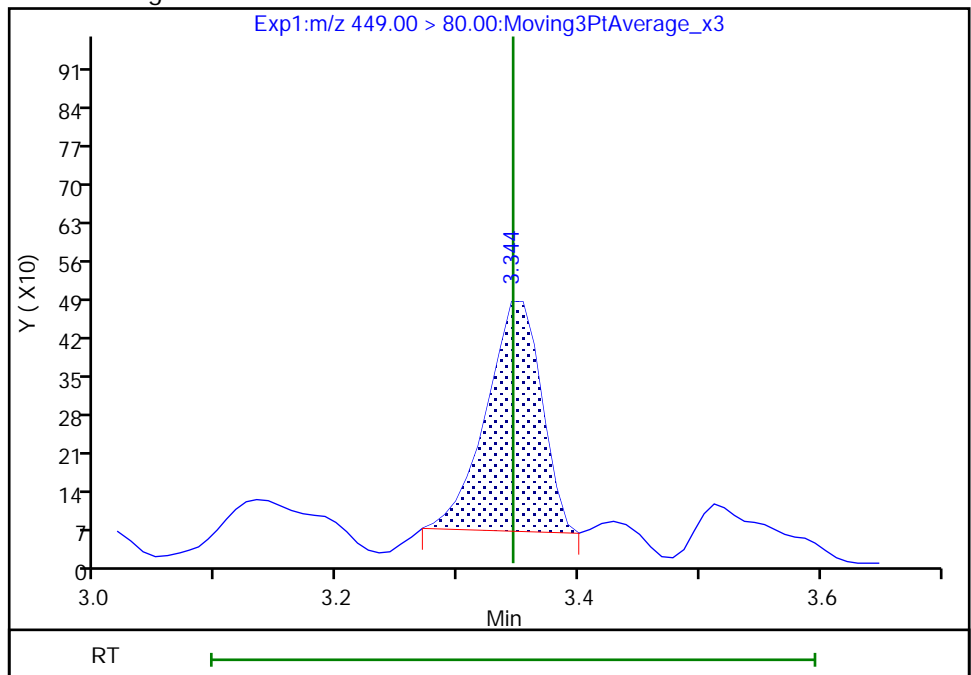
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.34
Area: 1337
Amount: 0.036435
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:24:42

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

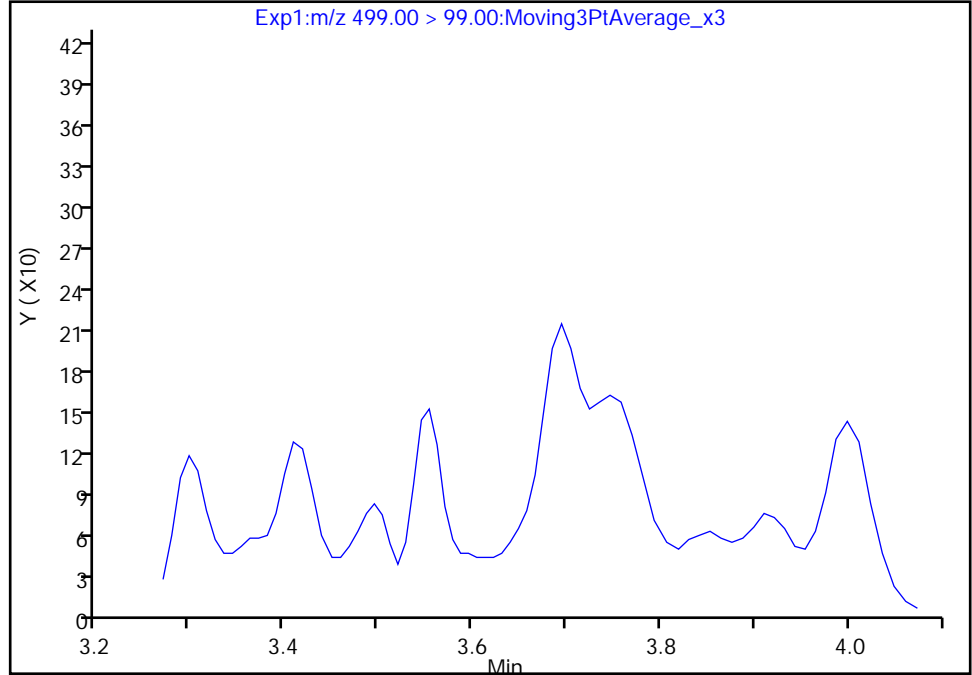
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

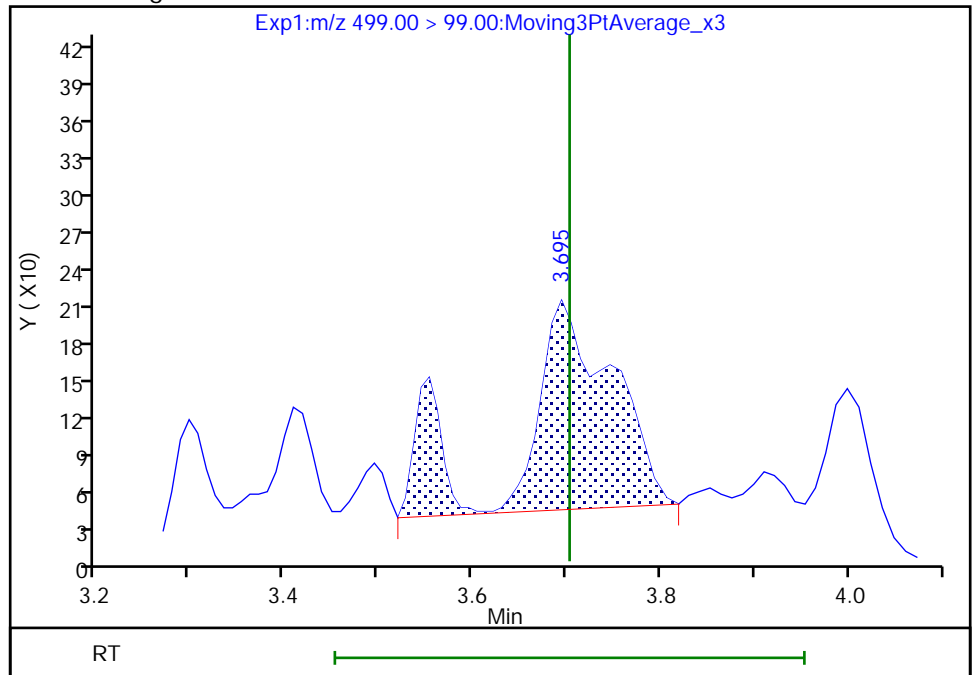
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.69
Area: 1110
Amount: 0.117846
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:25:24
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

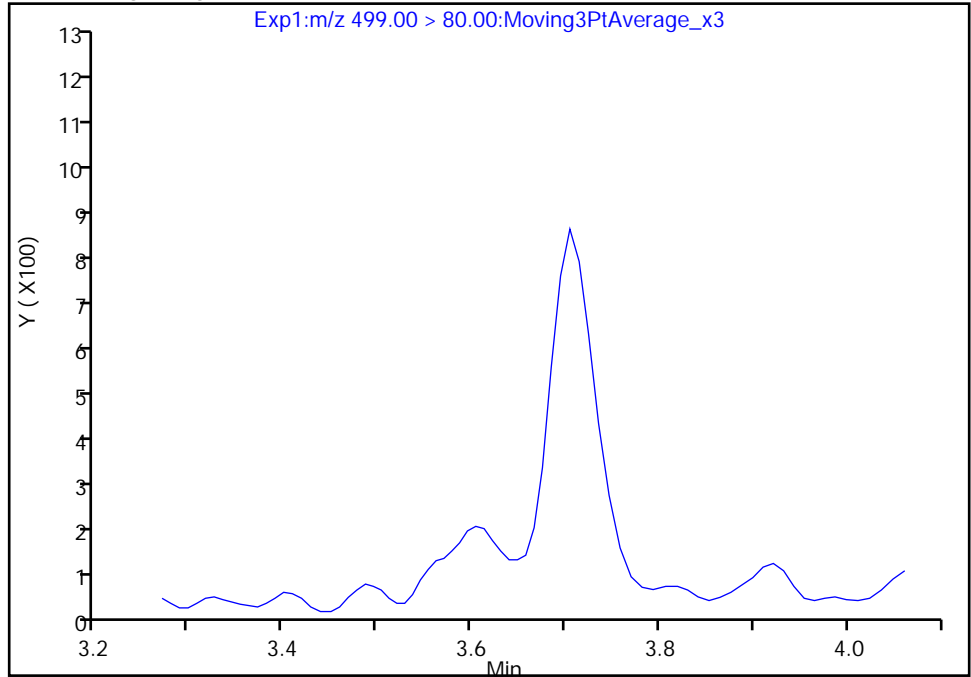
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 1

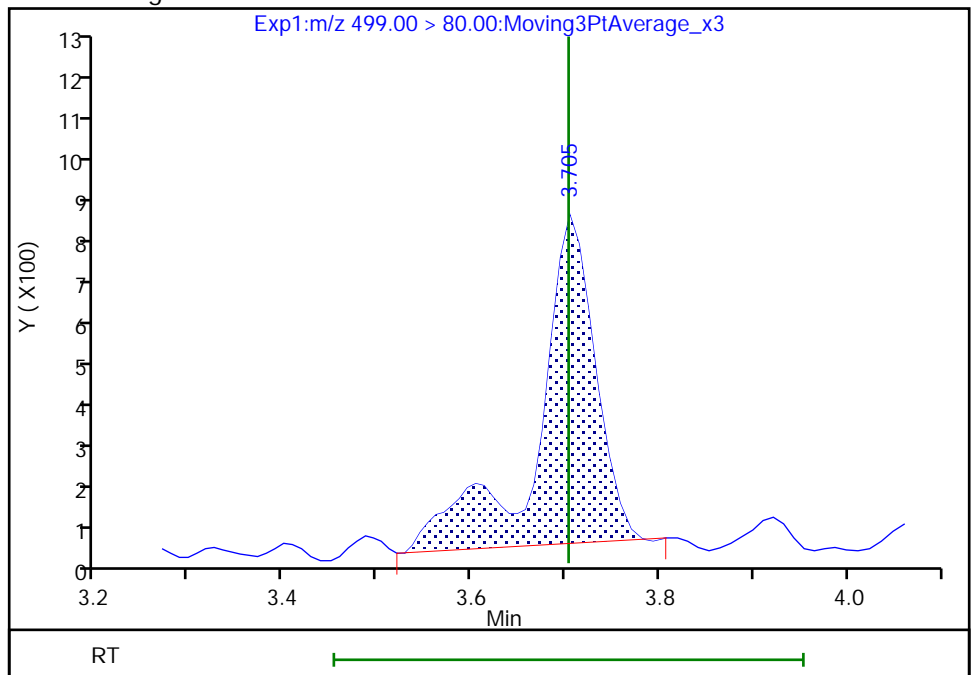
Not Detected
Expected RT: 3.70

Processing Integration Results



Manual Integration Results

RT: 3.70
Area: 3398
Amount: 0.117846
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:25:28

Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

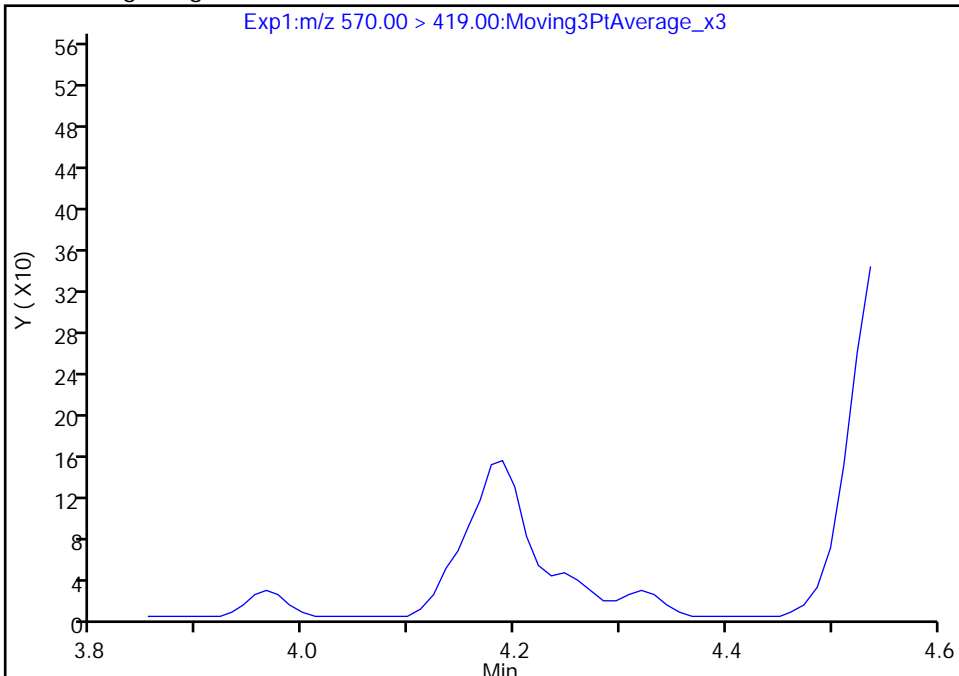
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

28 N-methylperfluorooctanesulfonamidoacetic aci, CAS: 2355-31-9

Signal: 1

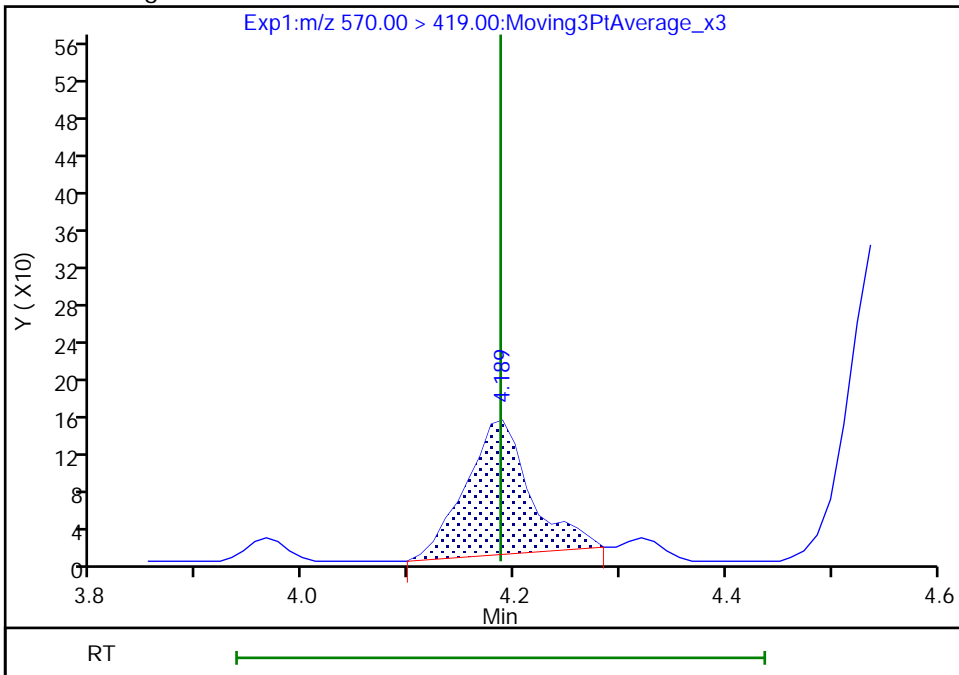
Not Detected
Expected RT: 4.19

Processing Integration Results



Manual Integration Results

RT: 4.19
Area: 609
Amount: 0.145005
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:26:35
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

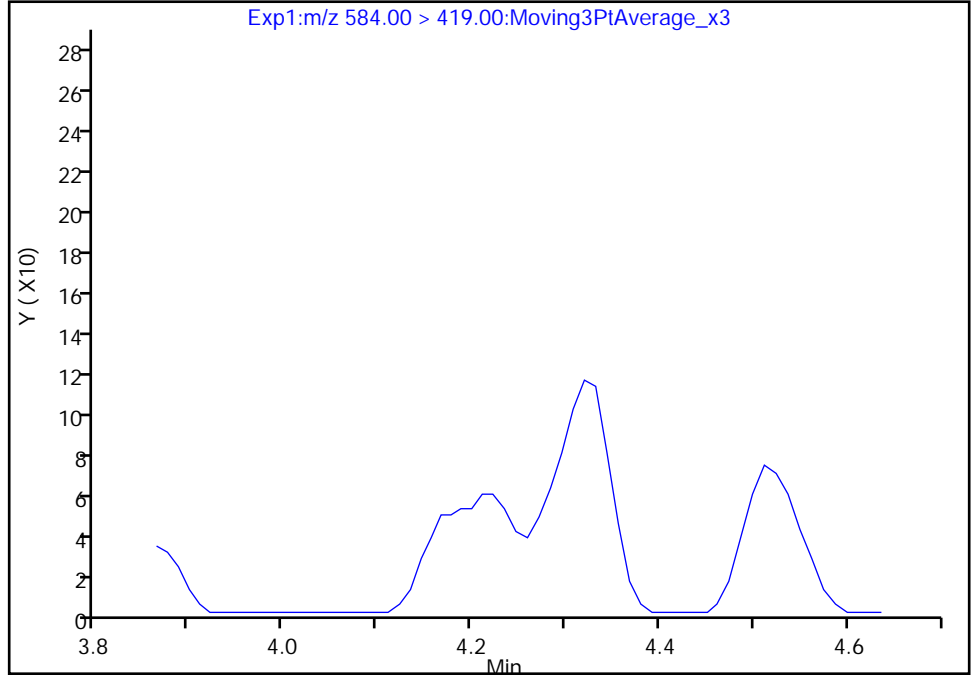
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

33 N-ethylperfluorooctanesulfonamidoacetic acid, CAS: 2991-50-6

Signal: 1

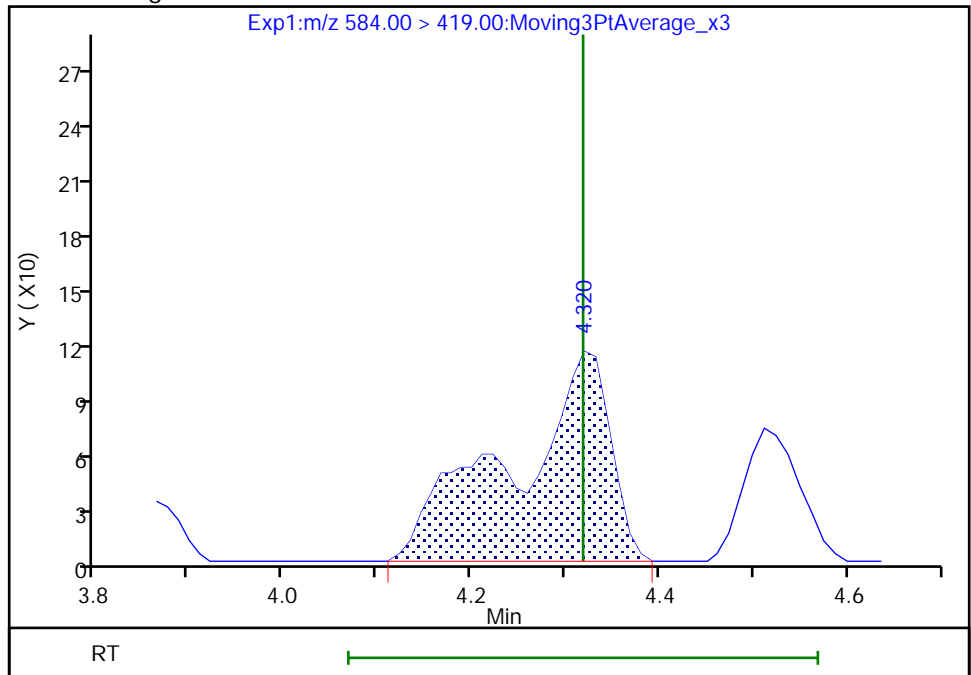
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 811
Amount: 0.211889
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:27:05
Audit Action: Manually Integrated

Audit Reason: Assign Peak

Eurofins TestAmerica, Burlington

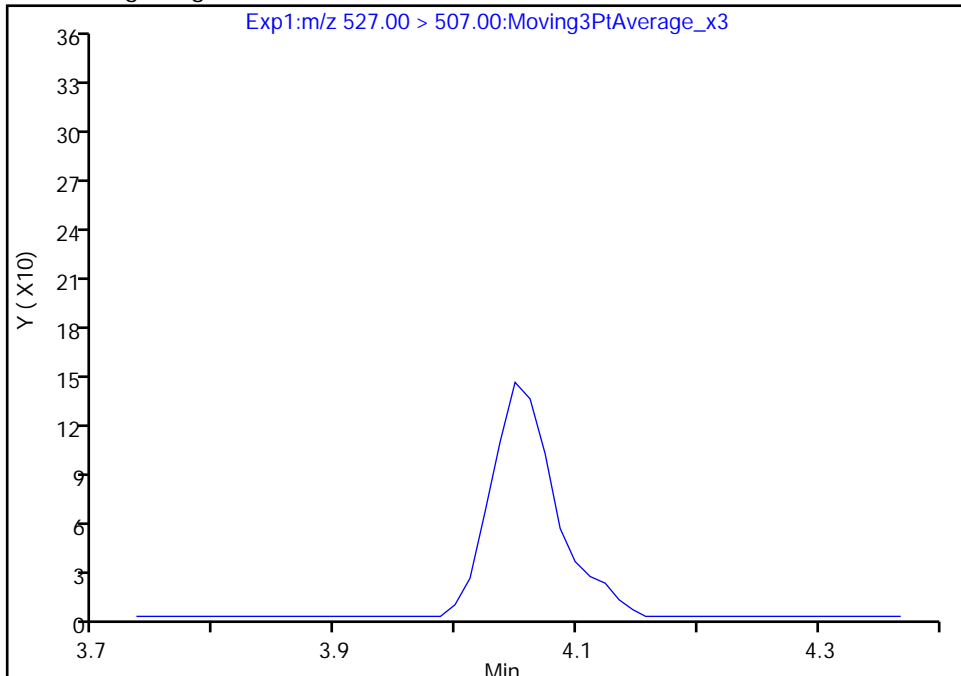
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E002.d
Injection Date: 02-Aug-2019 03:57:22 Instrument ID: LC812
Lims ID: MB 200-145382/1-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 49 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

25 1H,1H,2H,2H-perfluorodecanesulfonic acid (8:, CAS: 39108-34-4

Signal: 1

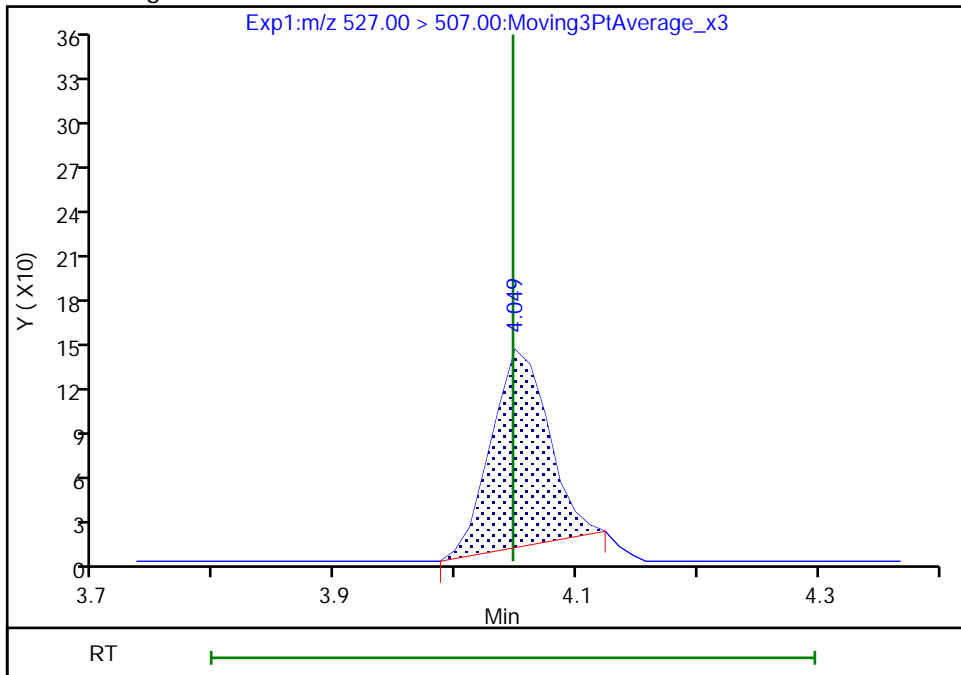
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.05
Area: 431
Amount: 0.037004
Amount Units: ng/ml



Reviewer: manopan, 06-Aug-2019 16:26:14
Audit Action: Manually Integrated

Audit Reason: Assign Peak

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 200-145382/2-A
 Matrix: Water Lab File ID: SC080119E003.d
 Analysis Method: 537 (modified) Date Collected: _____
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 250 (mL) Date Analyzed: 08/02/2019 04:05
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	41.6		2.0	1.0
2706-90-3	Perfluoropentanoic acid (PFPeA)	39.5		2.0	0.63
307-24-4	Perfluorohexanoic acid (PFHxA)	40.7		2.0	0.76
375-85-9	Perfluoroheptanoic acid (PFHpA)	43.2		2.0	0.91
335-67-1	Perfluorooctanoic acid (PFOA)	42.8		2.0	0.63
375-95-1	Perfluorononanoic acid (PFNA)	42.0		2.0	0.27
335-76-2	Perfluorodecanoic acid (PFDA)	40.8		2.0	0.77
2058-94-8	Perfluoroundecanoic acid (PFUnA)	41.6		2.0	0.53
307-55-1	Perfluorododecanoic acid (PFDoA)	42.4		2.0	0.59
72629-94-8	Perfluorotridecanoic acid (PFTriA)	45.0		2.0	0.60
376-06-7	Perfluorotetradecanoic acid (PFTeA)	48.5		2.0	0.92
375-73-5	Perfluorobutanesulfonic acid (PFBS)	36.5		2.0	0.49
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	36.2		2.0	0.80
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	39.0		2.0	0.95
335-77-3	Perfluorodecanesulfonic acid (PFDS)	34.9		2.0	0.90
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	40.9		2.0	0.61
754-91-6	Perfluorooctanesulfonamide (FOSA)	42.1		10	10
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	51.4		20	1.7
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	52.6		20	1.5
27619-97-2	6:2 FTS	32.5		20	4.6
39108-34-4	8:2 FTS	26.1		20	2.9

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 200-145382/2-A
 Matrix: Water Lab File ID: SC080119E003.d
 Analysis Method: 537 (modified) Date Collected: _____
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 250 (mL) Date Analyzed: 08/02/2019 04:05
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	70		25-150
STL00992	13C4 PFBA	104		25-150
STL01893	13C5 PFPeA	102		25-150
STL00993	13C2 PFHxA	100		50-150
STL01892	13C4 PFHpA	100		50-150
STL00990	13C4 PFOA	87		50-150
STL00995	13C5 PFNA	104		50-150
STL00996	13C2 PFDA	104		50-150
STL00997	13C2 PFUnA	93		50-150
STL00998	13C2 PFDoA	79		50-150
STL02116	13C2 PFTeDA	59		50-150
STL02337	13C3 PFBS	96		50-150
STL00994	18O2 PFHxS	93		50-150
STL00991	13C4 PFOS	99		50-150
STL02118	d3-NMeFOSAA	76		50-150
STL02117	d5-NEtFOSAA	71		50-150
STL02279	M2-6:2 FTS	102		25-150
STL02280	M2-8:2 FTS	117		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E003.d
 Lims ID: LCS 200-145382/2-A
 Client ID:
 Sample Type: LCS
 Inject. Date: 02-Aug-2019 04:05:24 ALS Bottle#: 50 Worklist Smp#: 3
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: LCS 200-145382/2-A
 Misc. Info.: 200-0037095-003 Plate: 1 Rack: 4
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:35:42 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 16:30:53
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.708	1.699	0.009	0.508	3825149	52.1	104	12680	
2 Perfluorobutanoic acid										M
212.90 > 169.00	1.708	1.699	0.009	1.000	1464874	20.8		104	231	M
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	3505113	50.8	102	7408	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.067	2.067	0.0	1.000	1340001	19.8		98.8	72.4	M
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	3017217	44.5	95.8	628999	
5 Perfluorobutanesulfonic acid										
298.90 > 80.00	2.093	2.093	0.0	1.000	1205015	18.3	Target=1.90	103	2979	
298.90 > 99.00	2.093	2.093	0.0	1.000	600824		2.01(0.95-2.85)		611	
D 60 M2-4:2 FTS	329.00 > 81.00	2.417	2.417	0.0	0.719	326573	49.8	107	378	
61 1H,1H,2H,2H-perfluorohexanesulfoni										
327.00 > 307.00	2.417	2.417	0.0	1.000	278561	16.7		89.3	2369	
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.731	3433939	50.1	100	7983	
6 Perfluorohexanoic acid										
313.00 > 269.00	2.470	2.459	0.011	1.005	1439284	20.4	Target=13.23	102	378	
313.00 > 119.00	2.459	2.459	0.0	1.000	111809		12.87(6.61-19.84)		193	
70 Perfluoropentanesulfonic acid										
349.00 > 80.00	2.470	2.470	0.0	1.180	1150260	19.8	Target=2.73	106	3718	
349.00 > 99.00	2.470	2.470	0.0	1.180	395332		2.91(1.37-4.10)		931	
D 64 13C3 HFPO-DA	332.10 > 287.00	2.596	2.596	0.0	0.772	269850	61.4	123	1793	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.596	2.596	0.0	1.000	201391	14.7		73.4	59.0	
D 11 18O2 PFHxS										
403.00 > 84.00	2.928	2.916	0.012	0.871	1739635	43.8		92.7	7578	
D 9 13C4 PFHpA										
367.00 > 322.00	2.928	2.928	0.0	0.871	3344607	49.8		99.7	10445	
8 Perfluorohexanesulfonic acid										
399.00 > 80.00	2.928	2.928	0.0	1.000	876402	18.1	Target=3.37	99.4	1143	M
399.00 > 99.00	2.928	2.928	0.0	1.000	252500		3.47(1.69-5.06)		305	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.928	2.928	0.0	1.000	1351941	21.6	Target=3.76	108	382	
363.00 > 169.00	2.928	2.928	0.0	1.000	377960		3.58(1.88-5.65)		1516	
77 DONA										
377.00 > 251.00	2.984	2.973	0.011	0.803	2798226	17.9	Target=2.72	95.0	1750	
377.00 > 85.00	2.984	2.973	0.011	0.803	1076833		2.60(1.36-4.07)		1585	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.344	3.335	0.009	0.994	398461	48.2		102	1072	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.344	3.336	0.008	1.000	233946	16.3		85.8	349	
D 14 13C4 PFOA										
417.00 > 372.00	3.363	3.344	0.019	1.000	3091289	43.6		87.2	6859	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.344	3.345	-0.001	0.900	772629	19.5	Target=4.80	102	2460	
449.00 > 99.00	3.344	3.345	-0.001	0.900	146951		5.26(2.40-7.20)		674	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.363	3.355	0.008	1.000	1440239	21.4	Target=2.84	107	162	
413.00 > 169.00	3.363	3.355	0.008	1.000	562525		2.56(1.42-4.25)		1828	
* 62 13C2 PFOA										
415.00 > 370.00	3.363	3.355	0.008		3897003	50.0			10336	
D 18 13C4 PFOS										
503.00 > 80.00	3.715	3.695	0.020	1.105	1571468	47.5		99.4	6691	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.715	3.703	0.012	1.000	636391	20.5	Target=4.33	110	3452	M
499.00 > 99.00	3.715	3.703	0.012	1.000	131995		4.82(2.16-6.49)		443	M
D 19 13C5 PFNA										
468.00 > 423.00	3.735	3.715	0.020	1.111	3348144	51.8		104	13121	
20 Perfluorononanoic acid										
463.00 > 419.00	3.735	3.723	0.012	1.000	1274814	21.0	Target=8.15	105	503	
463.00 > 169.00	3.735	3.723	0.012	1.000	155191		8.21(4.08-12.23)		1099	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.888	3.875	0.013	1.047	1090432	15.3		81.8	4333	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.011	4.010	0.001	1.080	498477	18.0	Target=2.42	93.5	2236	
549.00 > 99.00	4.011	4.010	0.001	1.080	214550		2.32(1.21-3.63)		308	
D 23 13C2 PFDA										
515.00 > 470.00	4.049	4.036	0.013	1.204	2686371	51.9		104	6434	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.061	4.036	0.025	1.208	427880	56.1		117	97208	08/13/2019

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.049	4.047	0.002	1.000	1060352	20.4	Target=9.58	102	486	
513.00 > 169.00	4.049	4.047	0.002	1.000	120641		8.79(4.79-14.37)		847	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.061	4.047	0.014	1.000	155725	13.1		68.1	2687	
D 21 13C8 FOSA										
506.00 > 78.00	4.074	4.061	0.013	1.211	2074448	34.9		69.9	5760	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.074	4.072	0.002	1.000	798010	21.1		105	3524	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.189	4.178	0.011	1.246	250379	37.9		75.8	1585	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.189	4.187	0.002	1.000	97367	25.7		128	248	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.284	4.283	0.001	1.153	380082	17.4	Target=2.64	90.5	2389	
599.00 > 99.00	4.284	4.283	0.001	1.153	142355		2.67(1.32-3.96)		677	
D 30 13C2 PFUnA										
565.00 > 520.00	4.308	4.296	0.012	1.281	2191205	46.5		93.0	6171	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.320	4.307	0.013	1.003	782666	20.8	Target=7.95	104	314	
563.00 > 169.00	4.308	4.307	0.001	1.000	106072		7.38(3.98-11.93)		1038	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.308	0.012	1.285	259757	35.3		70.6	1422	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.332	4.319	0.013	1.003	87467	26.3		132	1415	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.404	4.403	0.001	1.186	1181842	10.9		57.6	4946	
D 36 13C2 PFDaA										
615.00 > 570.00	4.550	4.537	0.013	1.353	2005371	39.5		79.1	6639	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.550	4.549	0.001	1.000	868610	21.2	Target=7.49	106	85.7	
613.00 > 169.00	4.550	4.549	0.001	1.000	124274		6.99(3.75-11.24)		1039	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.769	4.760	0.009	1.048	827738	22.5	Target=5.71	112	102	
663.00 > 169.00	4.769	4.760	0.009	1.048	181627		4.56(2.85-8.56)		1219	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.973	4.965	0.007	1.479	2057146	29.5		58.9	7300	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.973	4.972	0.0	1.000	132899	24.3	Target=1.02	121	1959	
713.00 > 219.00	4.973	4.972	0.0	1.000	124114		1.07(0.51-1.54)		1441	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.389	5.390	-0.001	1.603	2116397	34.1		68.1	4723	

QC Flag Legend

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E003.d

Injection Date: 02-Aug-2019 04:05:24

Instrument ID: LC812

Lims ID: LCS 200-145382/2-A

Client ID:

Operator ID: lc812tech

ALS Bottle#: 50

Worklist Smp#: 3

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

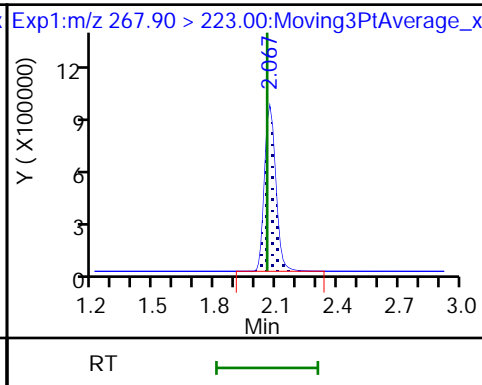
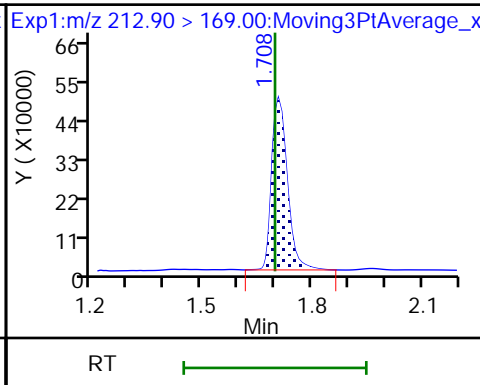
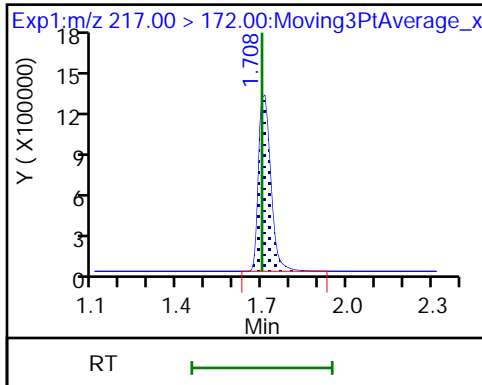
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid (M)

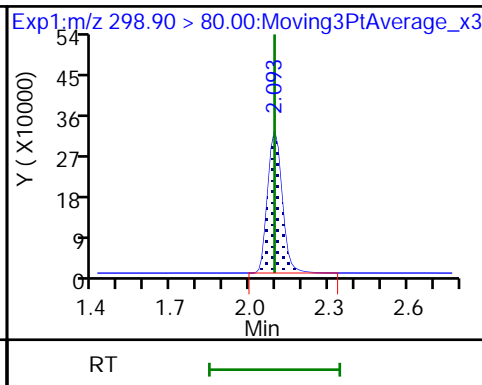
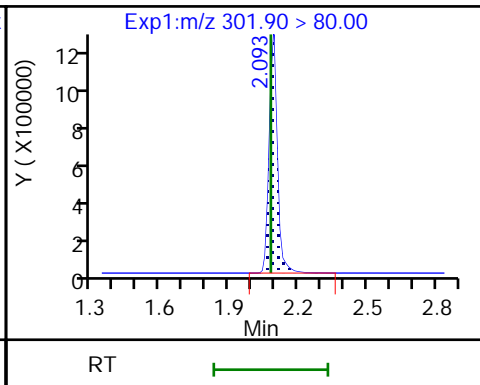
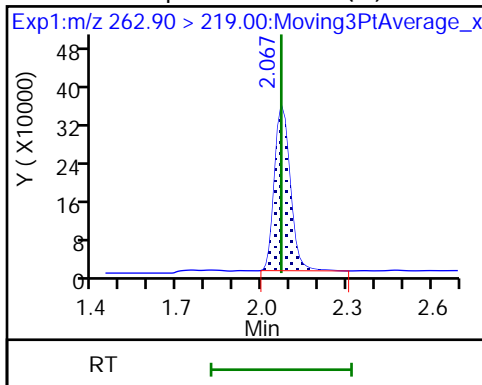
D 3 13C5 PFPeA



4 Perfluoropentanoic acid (M)

D 47 13C3 PFBS

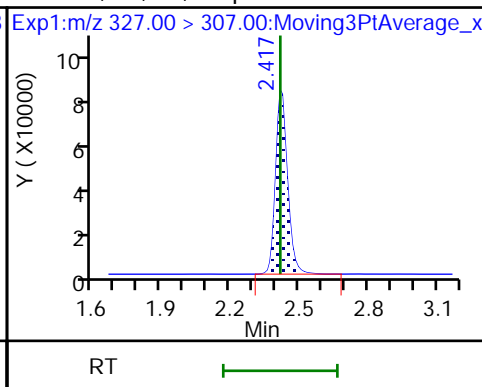
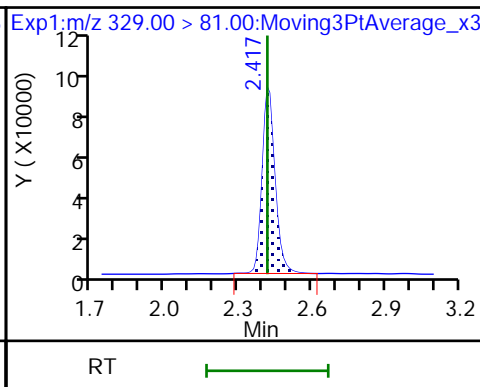
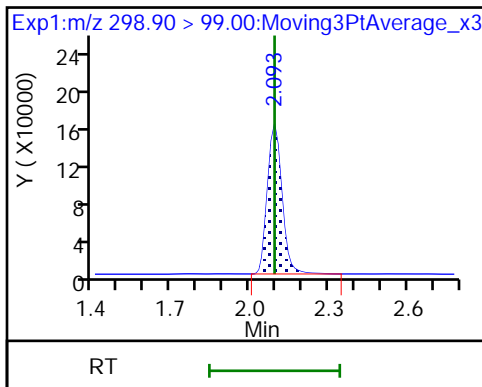
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

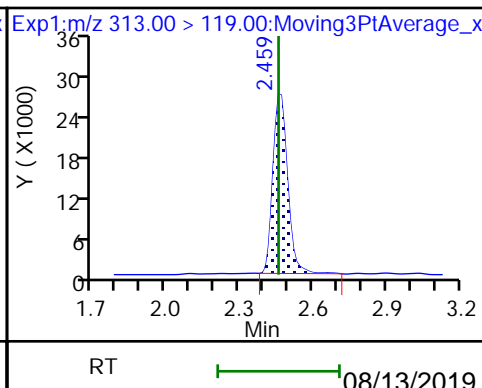
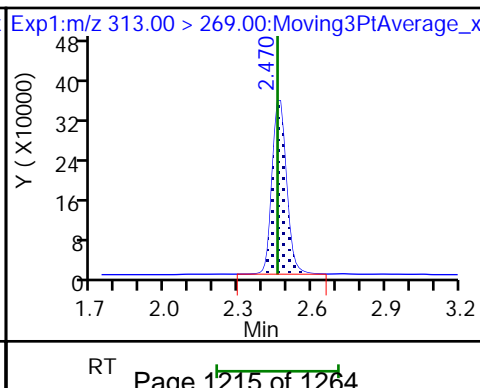
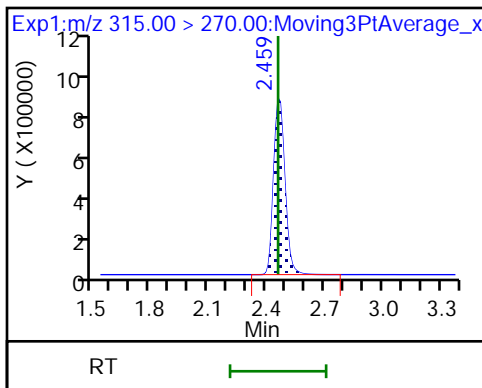
61 1H,1H,2H,2H-perfluorohexanesulfoni

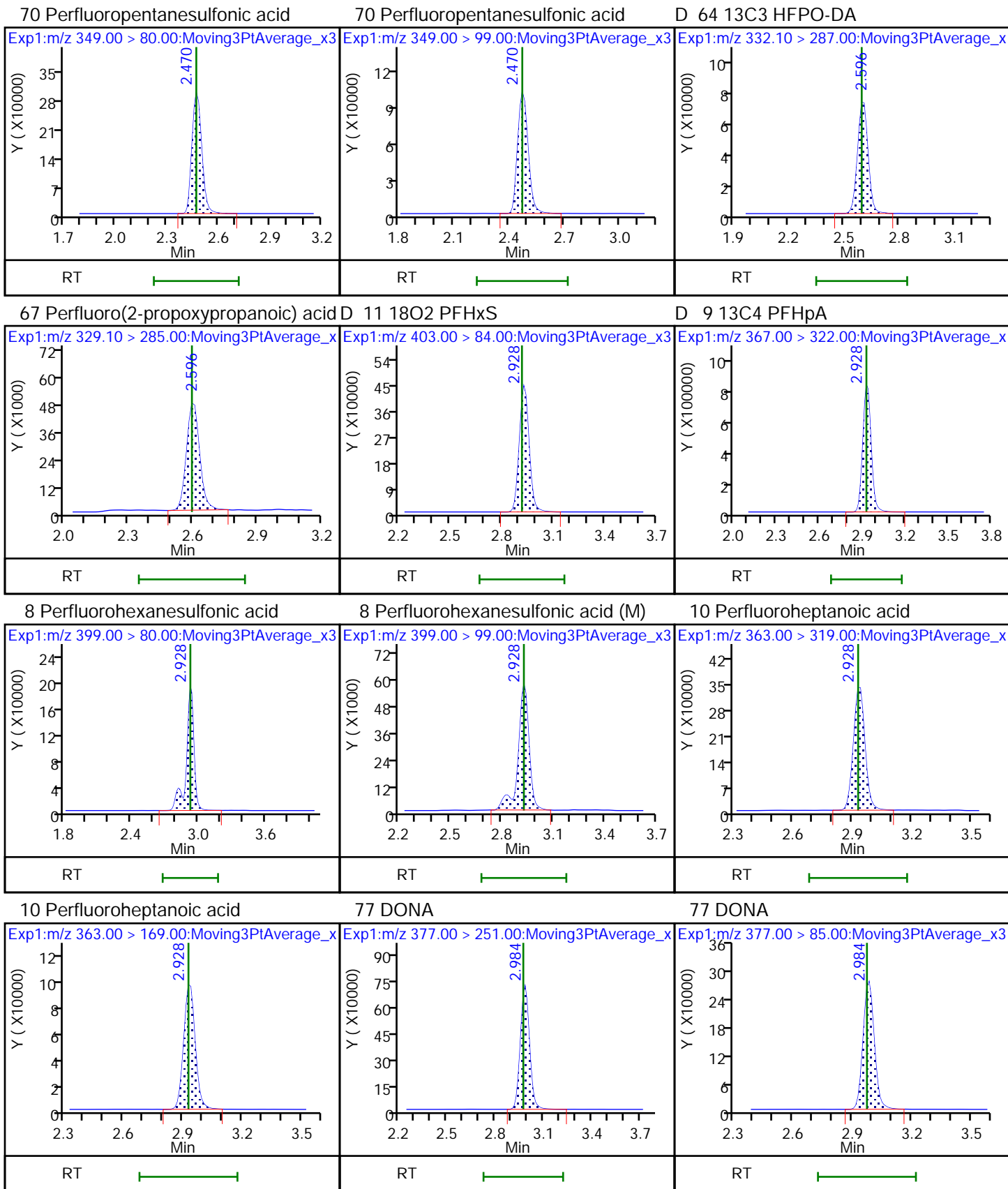


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

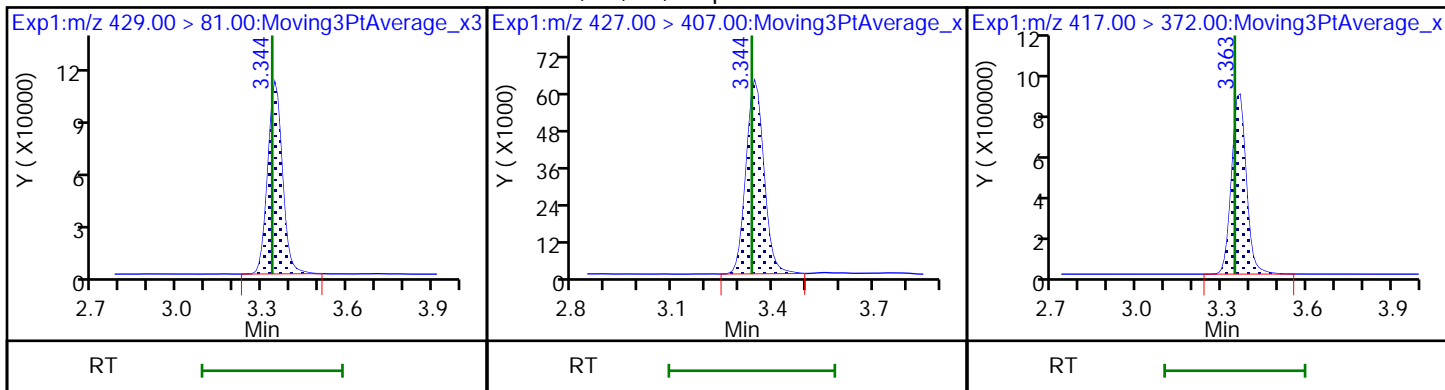
6 Perfluorohexanoic acid





D 12 M2-6:2 FTS

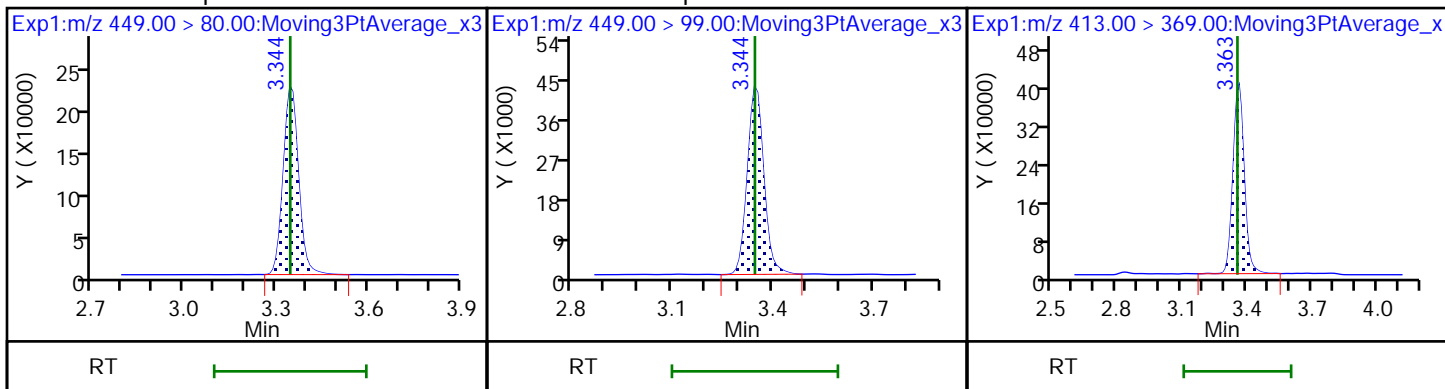
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid

16 Perfluoroheptanesulfonic acid

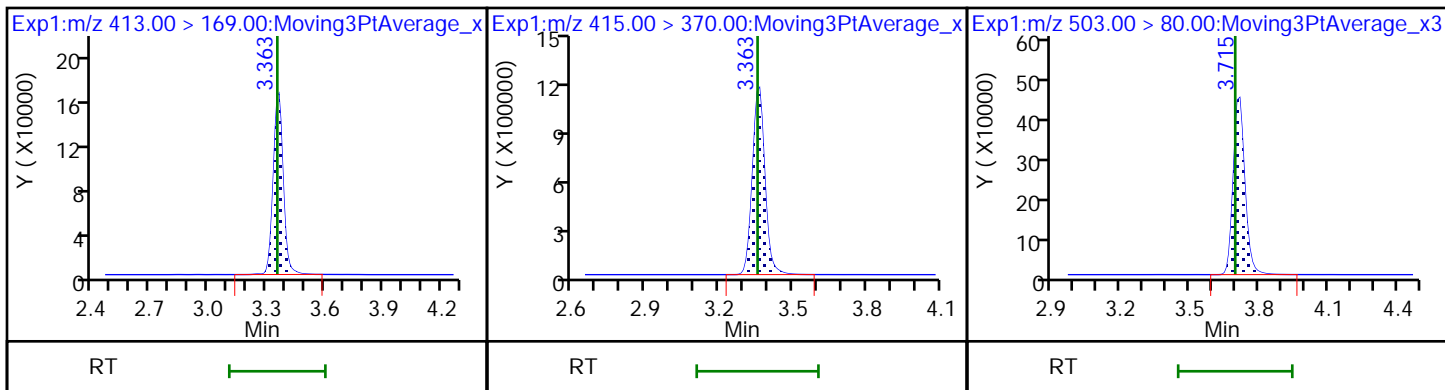
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

* 62 13C2 PFOA

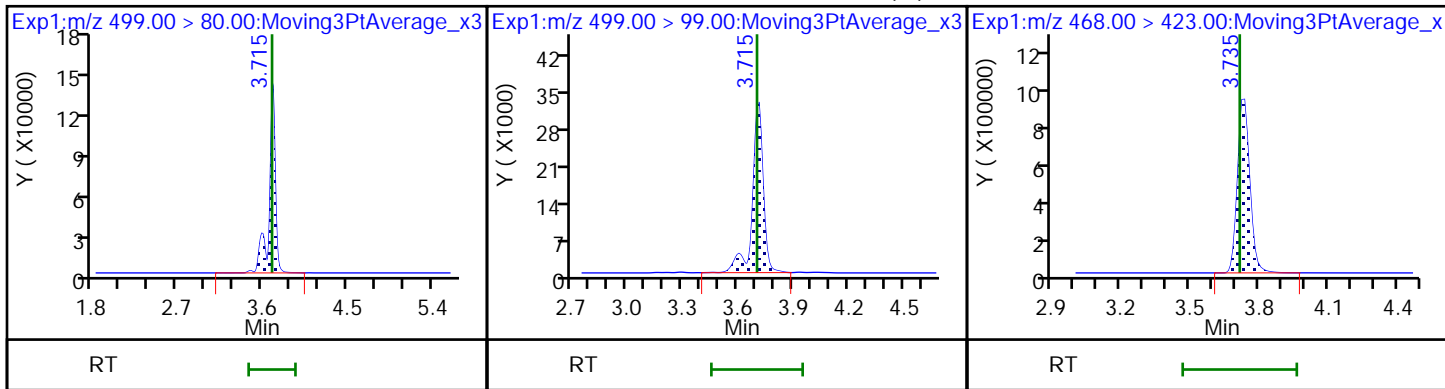
D 18 13C4 PFOS

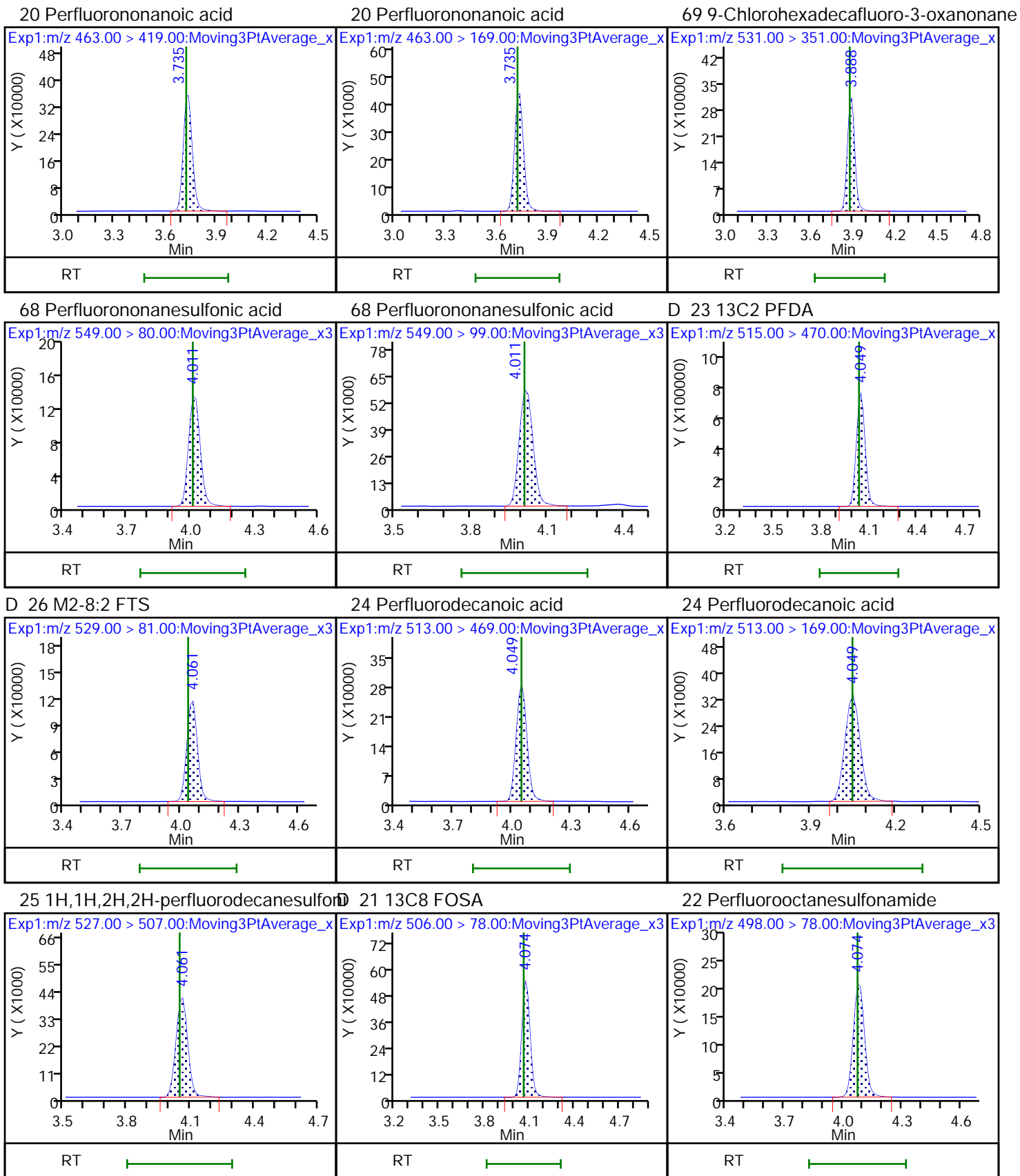


17 Perfluorooctanesulfonic acid

17 Perfluorooctanesulfonic acid (M)

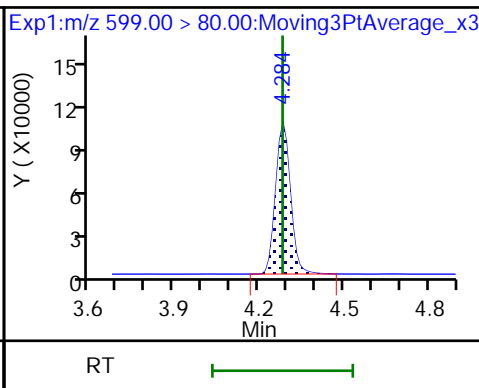
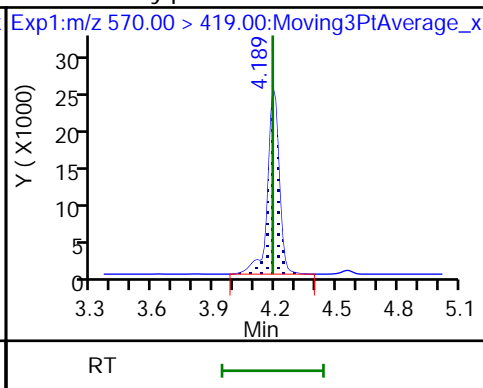
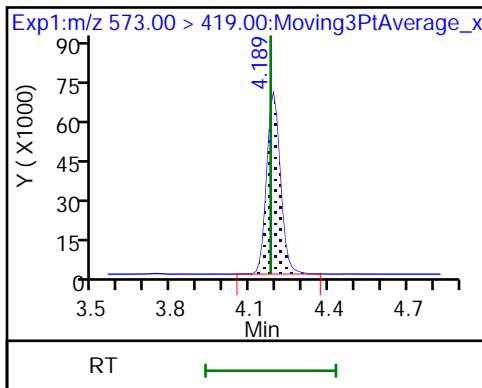
D 19 13C5 PFNA





D 27 d3-NMeFOSAA

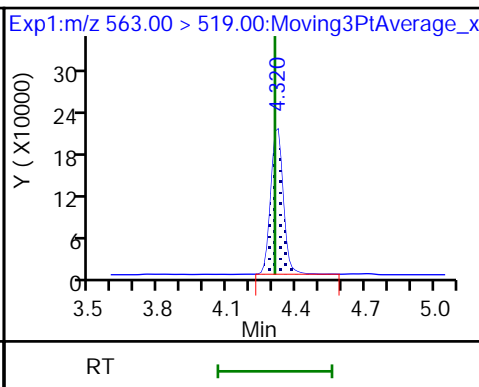
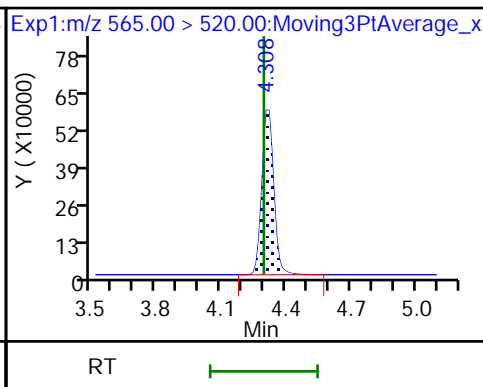
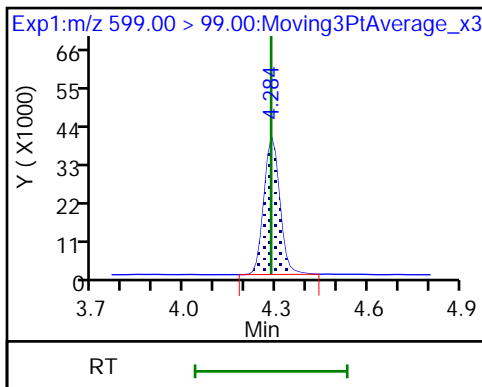
28 N-methylperfluorooctanesulfonamido 29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUnA

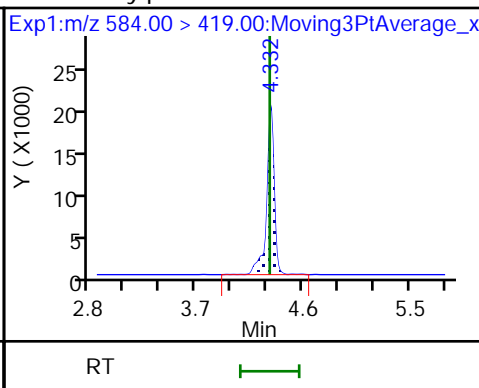
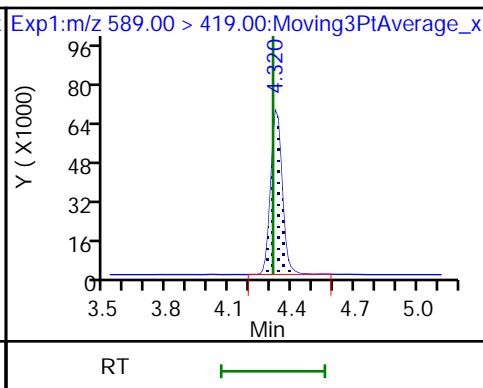
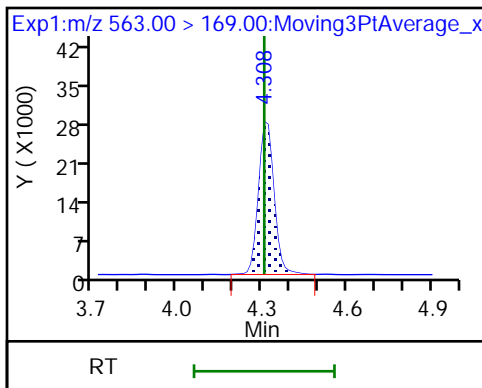
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

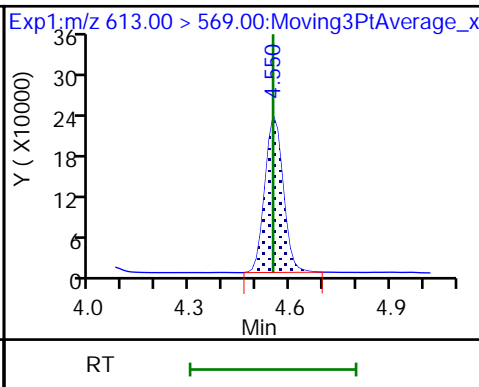
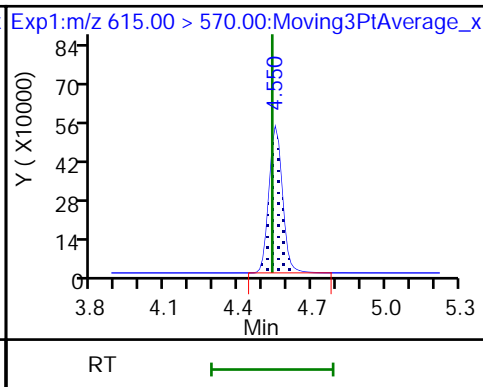
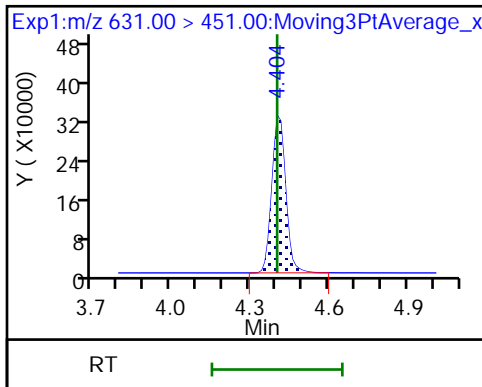
33 N-ethylperfluorooctanesulfonamido



66 11-Chloroeicosafuoro-3-oxaundeca

D 36 13C2 PFDoA

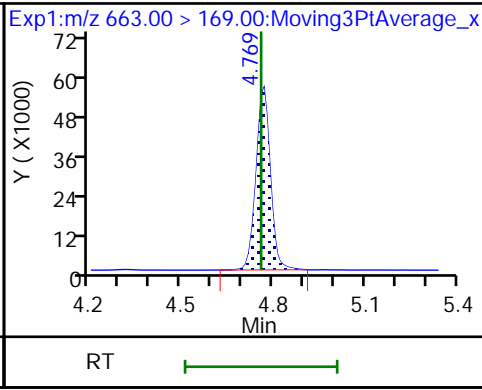
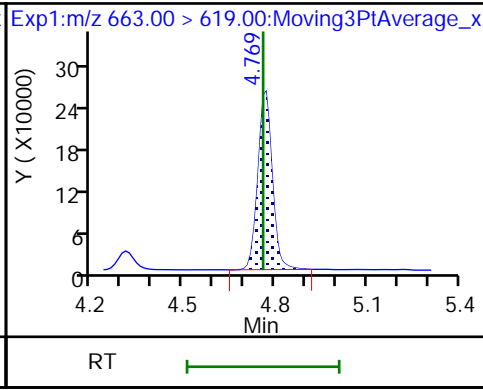
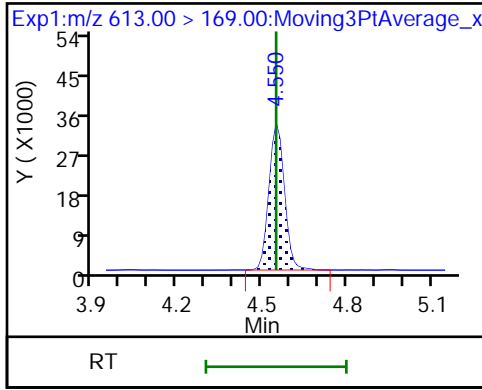
37 Perfluorododecanoic acid



37 Perfluorododecanoic acid

41 Perfluorotridecanoic acid

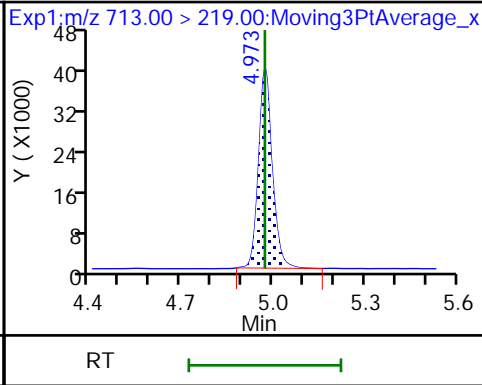
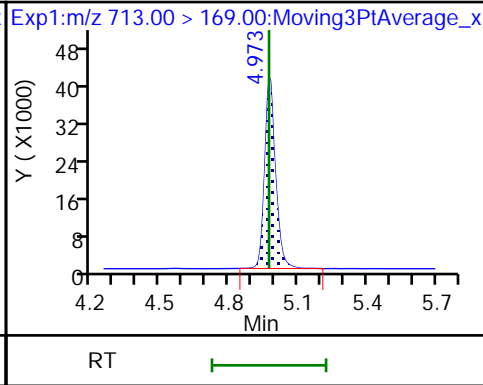
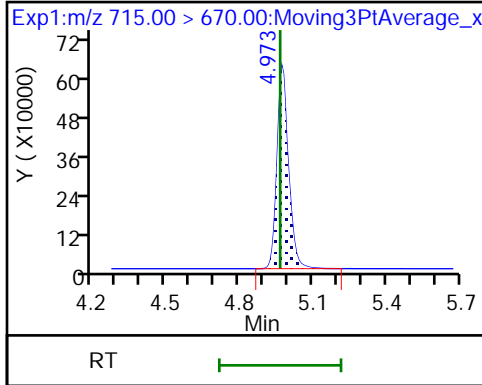
41 Perfluorotridecanoic acid



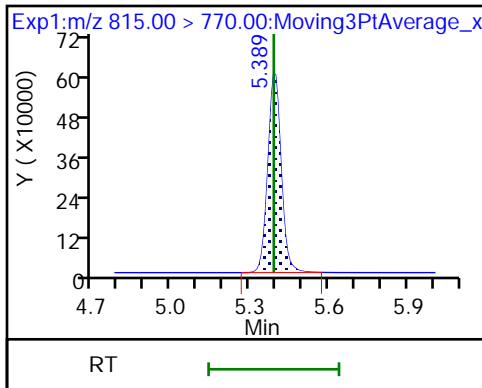
D 43 13C2 PFTeDA

42 Perfluorotetradecanoic acid

42 Perfluorotetradecanoic acid



D 44 13C2 PFHxDA



Eurofins TestAmerica, Burlington

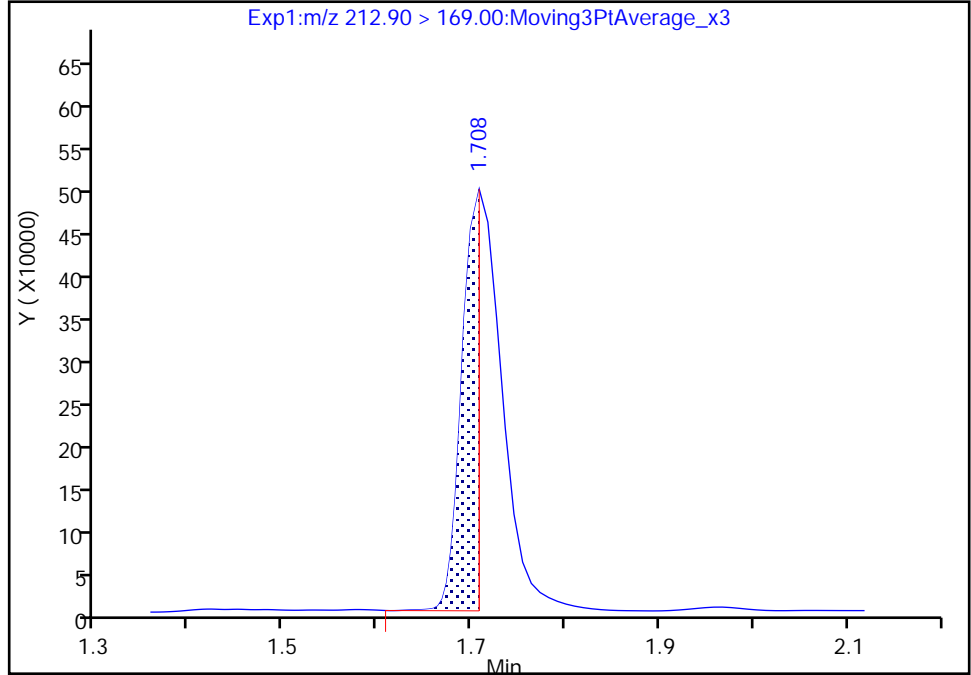
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E003.d
Injection Date: 02-Aug-2019 04:05:24 Instrument ID: LC812
Lims ID: LCS 200-145382/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 50 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

2 Perfluorobutanoic acid, CAS: 375-22-4

Signal: 1

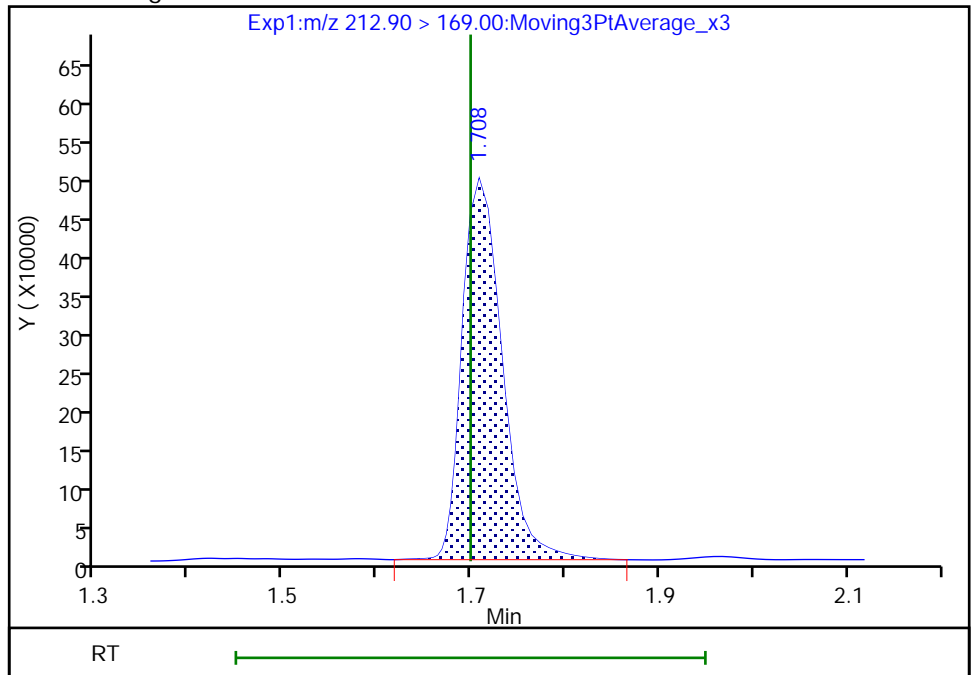
RT: 1.71
Area: 613856
Amount: 8.706051
Amount Units: ng/ml

Processing Integration Results



RT: 1.71
Area: 1464874
Amount: 20.775667
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:30:00
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

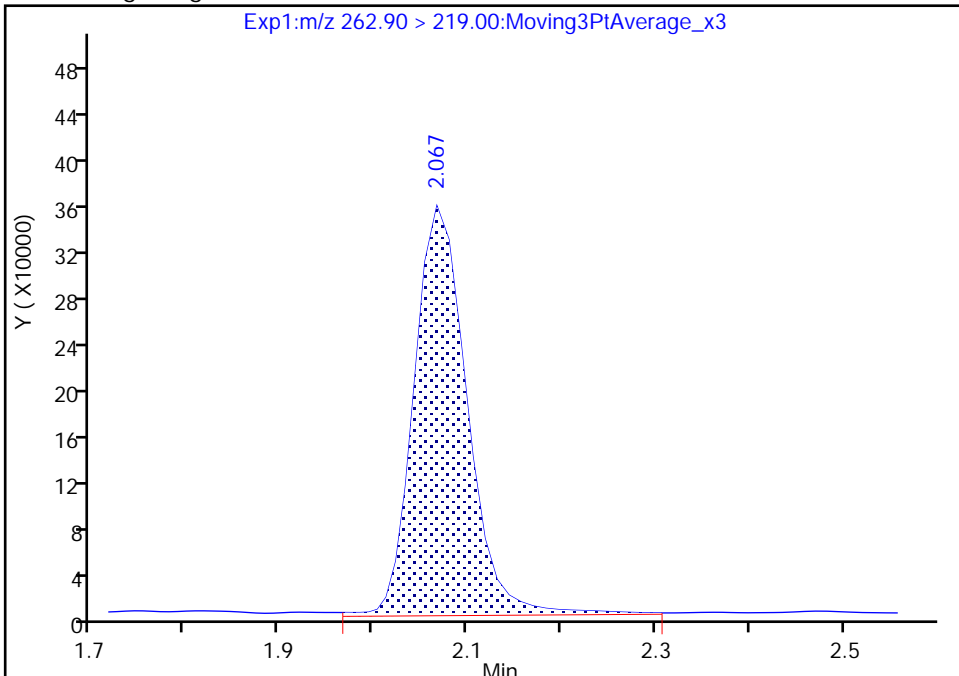
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E003.d
Injection Date: 02-Aug-2019 04:05:24 Instrument ID: LC812
Lims ID: LCS 200-145382/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 50 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

4 Perfluoropentanoic acid, CAS: 2706-90-3

Signal: 1

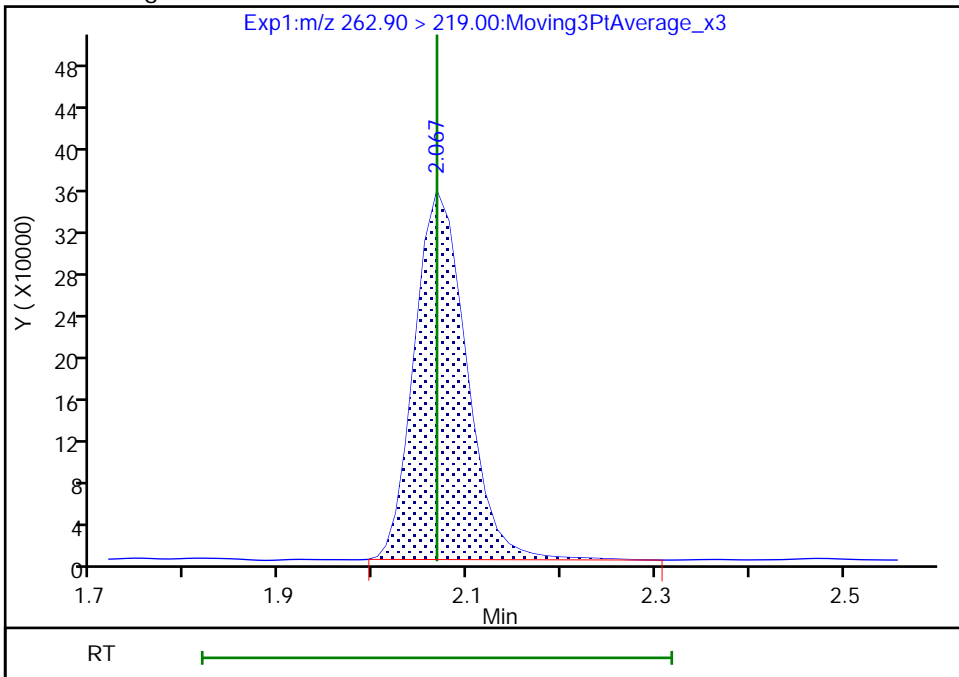
RT: 2.07
Area: 1388163
Amount: 20.463661
Amount Units: ng/ml

Processing Integration Results



RT: 2.07
Area: 1340001
Amount: 19.753679
Amount Units: ng/ml

Manual Integration Results



Reviewer: murrayjw, 12-Aug-2019 08:57:13
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Burlington

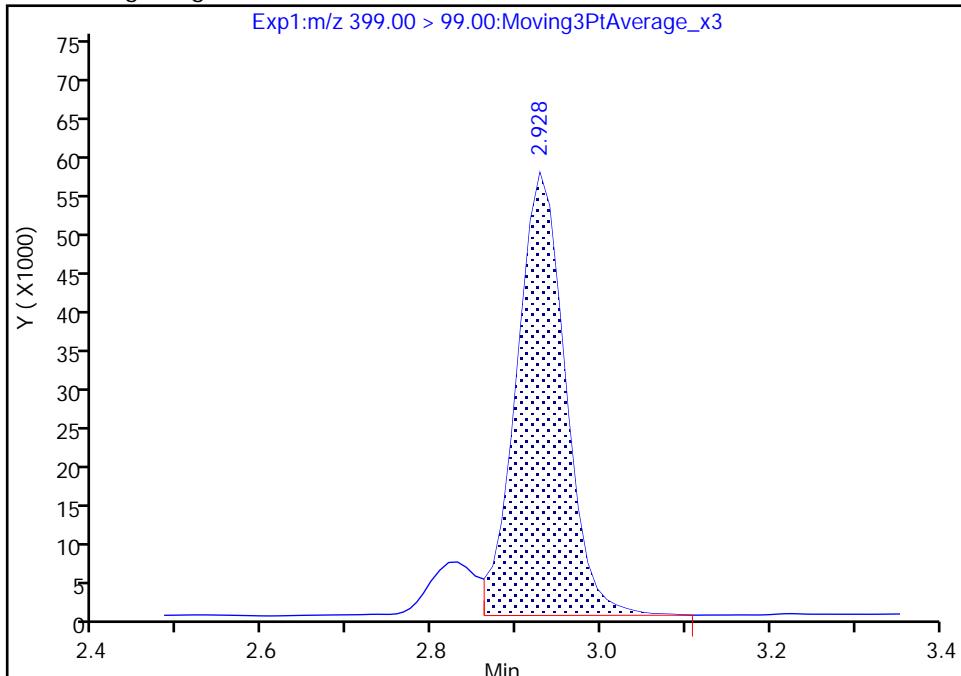
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E003.d
Injection Date: 02-Aug-2019 04:05:24 Instrument ID: LC812
Lims ID: LCS 200-145382/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 50 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

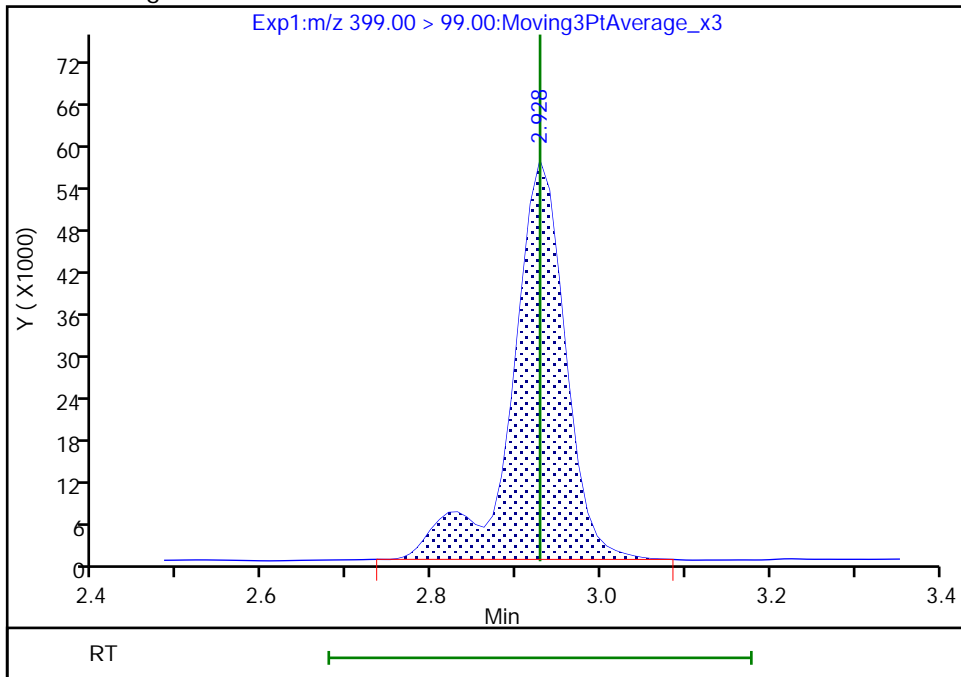
RT: 2.93
Area: 228737
Amount: 18.082553
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 252500
Amount: 18.082553
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:29:52
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

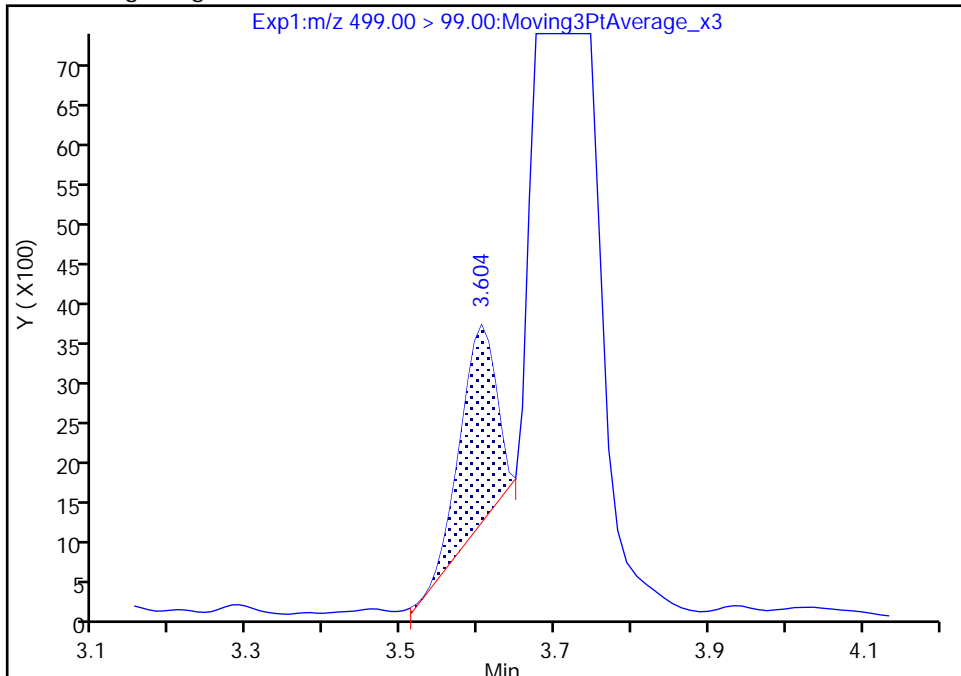
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E003.d
Injection Date: 02-Aug-2019 04:05:24 Instrument ID: LC812
Lims ID: LCS 200-145382/2-A
Client ID:
Operator ID: lc812tech ALS Bottle#: 50 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

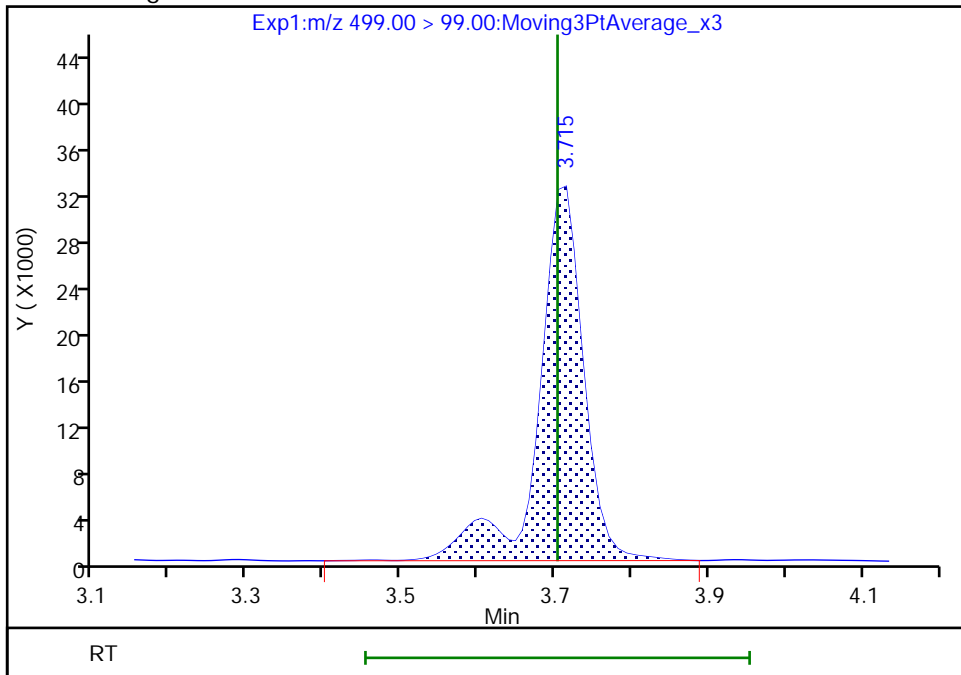
RT: 3.60
Area: 8046
Amount: 20.451175
Amount Units: ng/ml

Processing Integration Results



RT: 3.71
Area: 131995
Amount: 20.451175
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 16:30:26
Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MS Lab Sample ID: 480-156213-14 MS
 Matrix: Water Lab File ID: SC080119E016.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 272.7 (mL) Date Analyzed: 08/02/2019 05:49
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	40.2		1.8	0.92
2706-90-3	Perfluoropentanoic acid (PFPeA)	38.9		1.8	0.58
307-24-4	Perfluorohexanoic acid (PFHxA)	38.3		1.8	0.70
375-85-9	Perfluoroheptanoic acid (PFHpA)	41.0		1.8	0.83
335-67-1	Perfluorooctanoic acid (PFOA)	37.9		1.8	0.58
375-95-1	Perfluorononanoic acid (PFNA)	36.9		1.8	0.25
335-76-2	Perfluorodecanoic acid (PFDA)	39.5		1.8	0.71
2058-94-8	Perfluoroundecanoic acid (PFUnA)	35.6		1.8	0.49
307-55-1	Perfluorododecanoic acid (PFDoA)	37.8		1.8	0.54
72629-94-8	Perfluorotridecanoic acid (PFTriA)	42.7		1.8	0.55
376-06-7	Perfluorotetradecanoic acid (PFTeA)	44.5		1.8	0.84
375-73-5	Perfluorobutanesulfonic acid (PFBS)	32.5		1.8	0.45
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	33.4		1.8	0.73
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	38.3		1.8	0.87
335-77-3	Perfluorodecanesulfonic acid (PFDS)	35.1		1.8	0.83
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	38.4		1.8	0.56
754-91-6	Perfluorooctanesulfonamide (FOSA)	42.6		9.2	9.2
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	43.6		18	1.6
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	45.7		18	1.4
27619-97-2	6:2 FTS	26.9		18	4.2
39108-34-4	8:2 FTS	25.6		18	2.7

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MS Lab Sample ID: 480-156213-14 MS
 Matrix: Water Lab File ID: SC080119E016.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 272.7 (mL) Date Analyzed: 08/02/2019 05:49
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	74		25-150
STL00992	13C4 PFBA	82		25-150
STL01893	13C5 PFPeA	88		25-150
STL00993	13C2 PFHxA	88		50-150
STL01892	13C4 PFHpA	90		50-150
STL00990	13C4 PFOA	85		50-150
STL00995	13C5 PFNA	86		50-150
STL00996	13C2 PFDA	87		50-150
STL00997	13C2 PFUnA	86		50-150
STL00998	13C2 PFDoA	83		50-150
STL02116	13C2 PFTeDA	67		50-150
STL02337	13C3 PFBS	93		50-150
STL00994	18O2 PFHxS	94		50-150
STL00991	13C4 PFOS	89		50-150
STL02118	d3-NMeFOSAA	64		50-150
STL02117	d5-NEtFOSAA	67		50-150
STL02279	M2-6:2 FTS	104		25-150
STL02280	M2-8:2 FTS	111		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E016.d
 Lims ID: 480-156213-F-14-B MS
 Client ID: 356023-MW6B
 Sample Type: MS
 Inject. Date: 02-Aug-2019 05:49:54 ALS Bottle#: 9 Worklist Smp#: 16
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-14-B MS
 Misc. Info.: 200-0037095-016 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:20:44
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.505	3374551	41.1	82.1	12039	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.005	1362896	21.9	110	242	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	3406953	44.1	88.3	7514	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	1399099	21.2	106	78.7	
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	3276772	43.2	93.0	309558	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	1271344	17.7	Target=1.90	100	386
	298.90 > 99.00	2.093	2.093	0.0	1.000	647340		1.96(0.95-2.85)		573
D 60 M2-4:2 FTS	329.00 > 81.00	2.417	2.417	0.0	0.719	336652	45.9	98.3	217	
61 1H,1H,2H,2H-perfluorohexanesulfoni	327.00 > 307.00	2.417	2.417	0.0	1.000	291216	16.9	90.5	2183	
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.731	3357892	43.8	87.6	7592	
6 Perfluorohexanoic acid	313.00 > 269.00	2.459	2.459	0.0	1.000	1444171	20.9	Target=13.23	104	288
	313.00 > 119.00	2.459	2.459	0.0	1.000	118424		12.19(6.61-19.84)		157
70 Perfluoropentanesulfonic acid	349.00 > 80.00	2.470	2.470	0.0	1.180	1232196	19.5	Target=2.73	104	870
	349.00 > 99.00	2.470	2.470	0.0	1.180	417657		2.95(1.37-4.10)		597
D 64 13C3 HFPO-DA	332.10 > 287.00	2.608	2.596	0.012	0.776	213516	43.4	86.8	1204	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.596	2.596	0.0	0.995	219748	20.2		101	66.0	
D 11 18O2 PFHxS										
403.00 > 84.00	2.928	2.916	0.012	0.871	1968265	44.3		93.7	4666	
D 9 13C4 PFHpA										
367.00 > 322.00	2.928	2.928	0.0	0.871	3367051	44.8		89.7	8404	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	998367	18.2	Target=3.37	100	662	
399.00 > 99.00	2.928	2.928	0.0	1.000	280770		3.56(1.69-5.06)		304	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.928	2.928	0.0	1.000	1409495	22.3	Target=3.76	112	333	
363.00 > 169.00	2.939	2.928	0.011	1.004	374728		3.76(1.88-5.65)		1252	
77 DONA										
377.00 > 251.00	2.984	2.973	0.011	0.803	2939623	18.7	Target=2.72	99.4	2477	
377.00 > 85.00	2.984	2.973	0.011	0.803	1130156		2.60(1.36-4.07)		1589	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.344	3.335	0.009	0.994	457573	49.5		104	769	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.344	3.336	0.008	1.000	242102	14.7		77.3	599	
D 14 13C4 PFOA										
417.00 > 372.00	3.363	3.344	0.019	1.000	3362635	42.4		84.8	11119	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.344	3.345	-0.001	0.900	831254	20.9	Target=4.80	110	1791	
449.00 > 99.00	3.344	3.345	-0.001	0.900	166350		5.00(2.40-7.20)		651	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.363	3.355	0.008	1.000	1513228	20.7	Target=2.84	103	184	
413.00 > 169.00	3.363	3.355	0.008	1.000	579872		2.61(1.42-4.25)		1764	
* 62 13C2 PFOA										
415.00 > 370.00	3.363	3.355	0.008		4360226	50.0			10310	
D 18 13C4 PFOS										
503.00 > 80.00	3.715	3.695	0.020	1.105	1578648	42.7		89.3	3922	
17 Perfluorooctanesulfonic acid										
499.00 > 80.00	3.705	3.703	0.002	0.997	655277	21.0	Target=4.33	113	1677	
499.00 > 99.00	3.705	3.703	0.002	0.997	136880		4.79(2.16-6.49)		513	
D 19 13C5 PFNA										
468.00 > 423.00	3.724	3.715	0.009	1.108	3128312	43.2		86.5	12986	
20 Perfluorononanoic acid										
463.00 > 419.00	3.724	3.723	0.001	1.000	1141200	20.1	Target=8.15	101	405	
463.00 > 169.00	3.724	3.723	0.001	1.000	146745		7.78(4.08-12.23)		1816	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.876	3.875	0.001	1.044	1118257	15.6		83.5	3922	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.011	4.010	0.001	1.080	533420	19.1	Target=2.42	99.6	2757	
549.00 > 99.00	4.011	4.010	0.001	1.080	229695		2.32(1.21-3.63)		585	
D 23 13C2 PFDA										
515.00 > 470.00	4.049	4.036	0.013	1.204	2508053	43.3		86.7	10998	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.049	4.036	0.013	1.204	454827	43.3		111	1233	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.049	4.047	0.002	1.000	1047127	21.6	Target=9.58	108	461	
513.00 > 169.00	4.049	4.047	0.002	1.000	124691		8.40(4.79-14.37)		896	
25 1H,1H,2H,2H-perfluorodecanesulfonyl										
527.00 > 507.00	4.049	4.047	0.002	1.000	176996	14.0		72.8	2367	
D 21 13C8 FOSA										
506.00 > 78.00	4.074	4.061	0.013	1.211	2462389	37.1		74.1	5774	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.074	4.072	0.002	1.000	1044110	23.2		116	5427	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.189	4.178	0.011	1.246	238284	32.2		64.5	1223	
28 N-methylperfluorooctanesulfonamide										
570.00 > 419.00	4.189	4.187	0.002	1.000	85758	23.8		119	383	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.284	4.283	0.001	1.153	419187	19.2	Target=2.64	99.3	2054	
599.00 > 99.00	4.284	4.283	0.001	1.153	167946		2.50(1.32-3.96)		792	
D 30 13C2 PFUnA										
565.00 > 520.00	4.308	4.296	0.012	1.281	2264939	43.0		85.9	29000	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.308	4.307	0.001	1.000	754369	19.4	Target=7.95	97.0	328	
563.00 > 169.00	4.308	4.307	0.001	1.000	104445		7.22(3.98-11.93)		768	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.320	4.308	0.012	1.285	278005	33.7		67.5	897	
33 N-ethylperfluorooctanesulfonamide										
584.00 > 419.00	4.320	4.319	0.001	1.000	88679	24.9		125	895	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.404	4.403	0.001	1.186	1410940	12.9		68.5	9581	
D 36 13C2 PFDoA										
615.00 > 570.00	4.550	4.537	0.013	1.353	2364690	41.7		83.3	6772	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.550	4.549	0.001	1.000	997070	20.6	Target=7.49	103	92.3	
613.00 > 169.00	4.550	4.549	0.001	1.000	140689		7.09(3.75-11.24)		1306	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.760	4.760	0.0	1.046	1010841	23.3	Target=5.71	116	115	
663.00 > 169.00	4.760	4.760	0.0	1.046	202476		4.99(2.85-8.56)		1311	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.965	4.965	0.0	1.477	2609171	33.4		66.8	8962	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.972	4.972	0.0	1.001	168508	24.3	Target=1.02	121	1540	
713.00 > 219.00	4.965	4.972	-0.007	1.000	167505		1.01(0.51-1.54)		1746	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.398	5.390	0.008	1.001	24960	0.1023	Target=5.23	0.0	8.2	
813.00 > 169.00	5.398	5.390	0.008	1.001	5304		4.71(2.62-7.85)		127	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.390	5.390	0.0	1.603	2670089	38.4		76.8	6269	

QC Flag Legend

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E016.d

Injection Date: 02-Aug-2019 05:49:54

Instrument ID: LC812

Lims ID: 480-156213-F-14-B MS

Client ID: 356023-MW6B

Operator ID: lc812tech

ALS Bottle#: 9

Worklist Smp#: 16

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

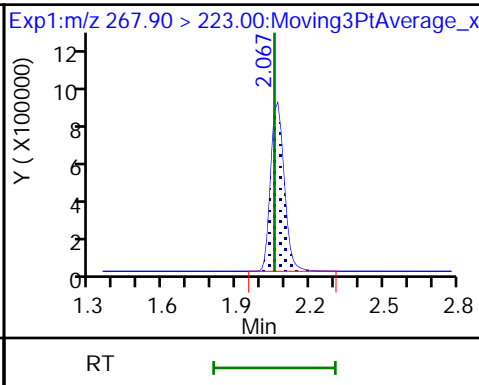
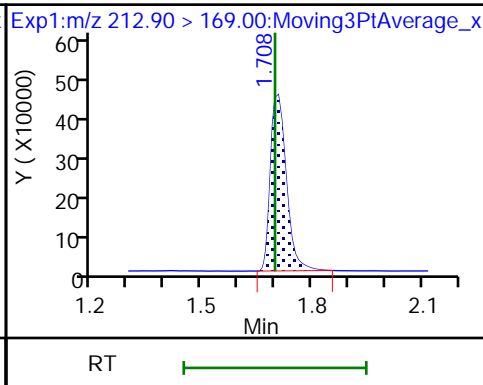
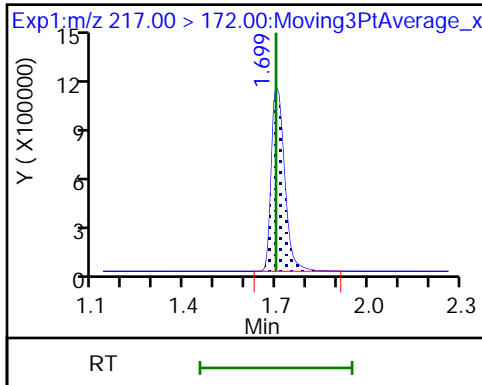
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

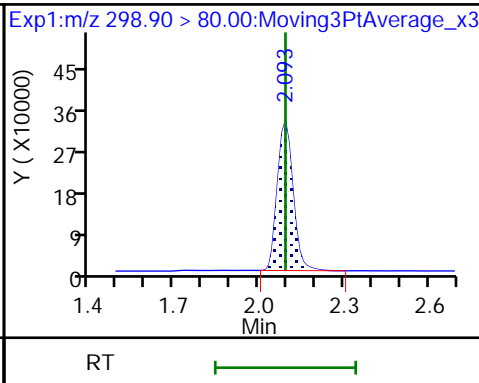
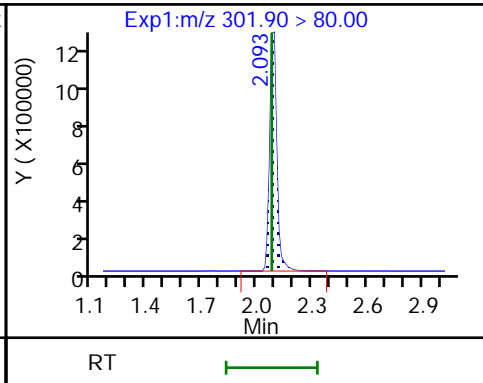
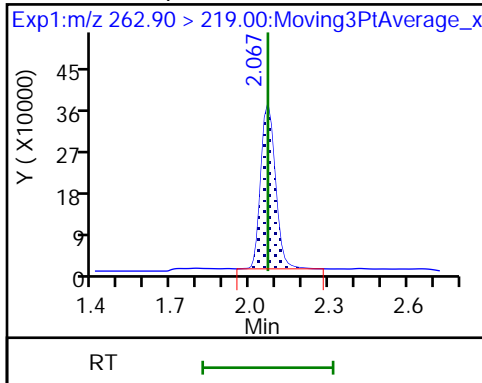
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

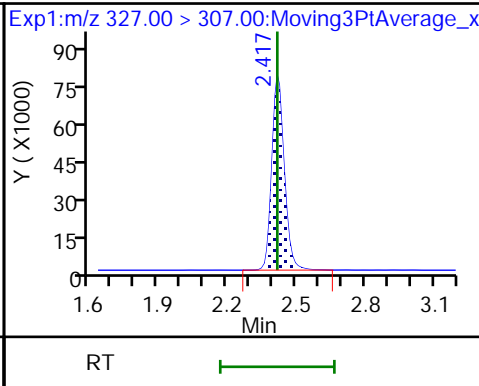
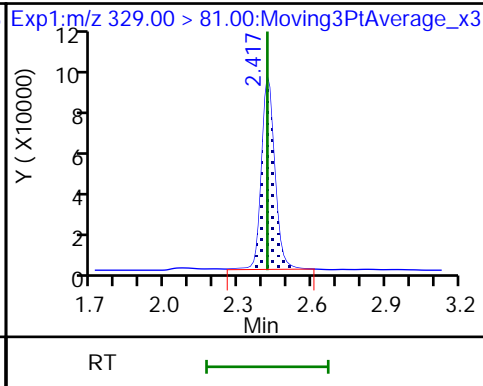
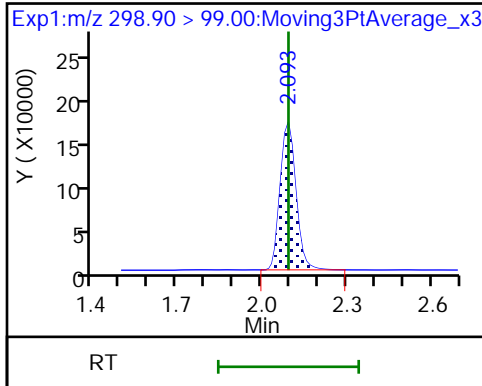
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

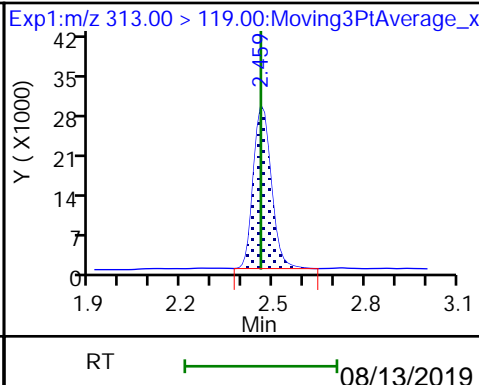
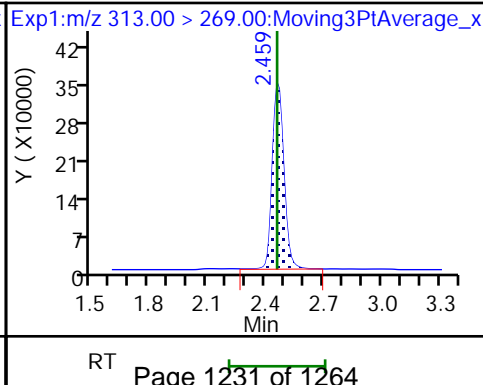
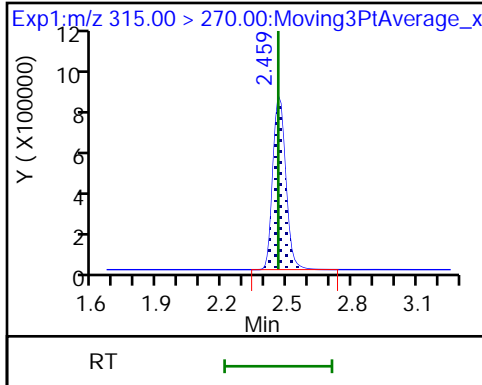
61 1H,1H,2H,2H-perfluorohexanesulfoni

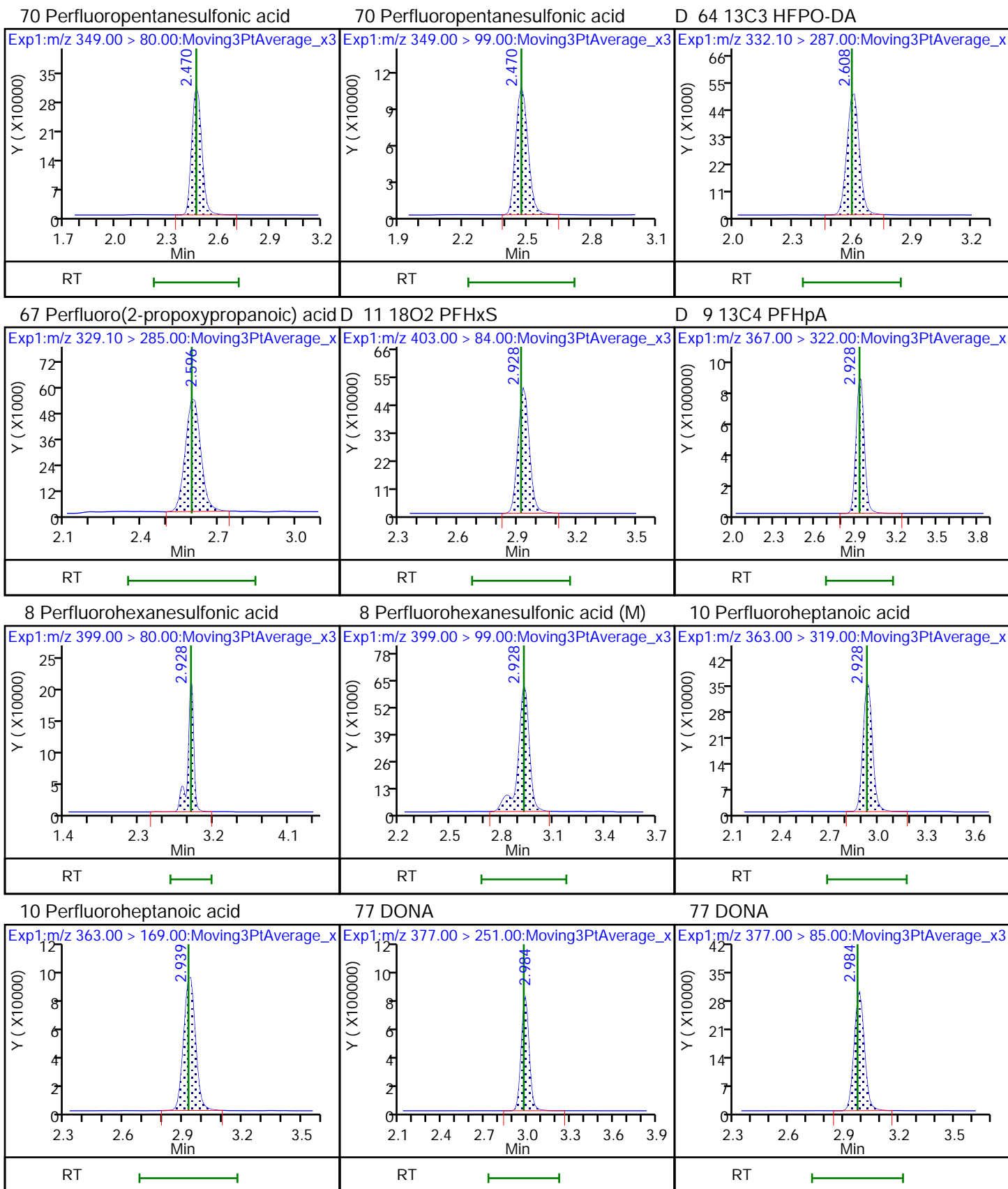


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

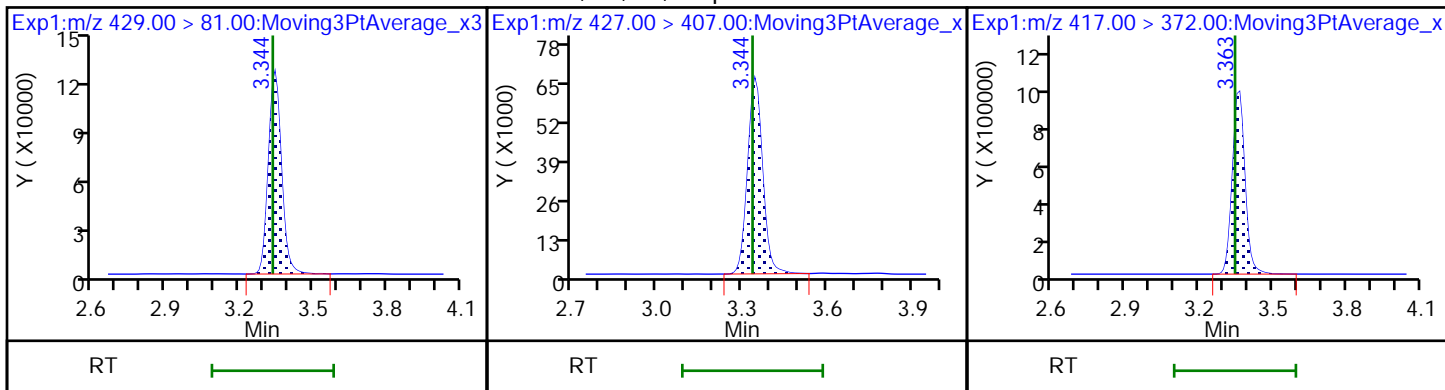
6 Perfluorohexanoic acid





D 12 M2-6:2 FTS

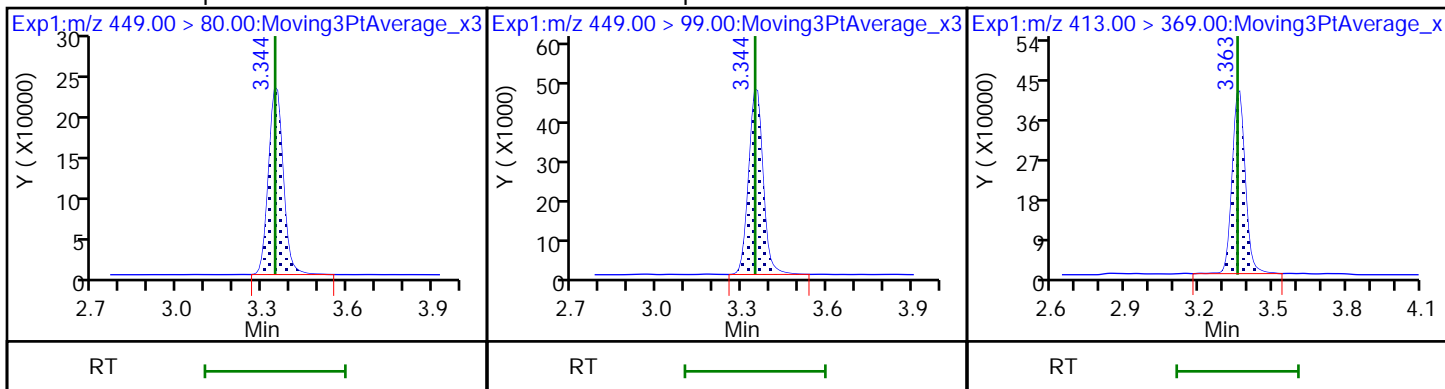
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid

16 Perfluoroheptanesulfonic acid

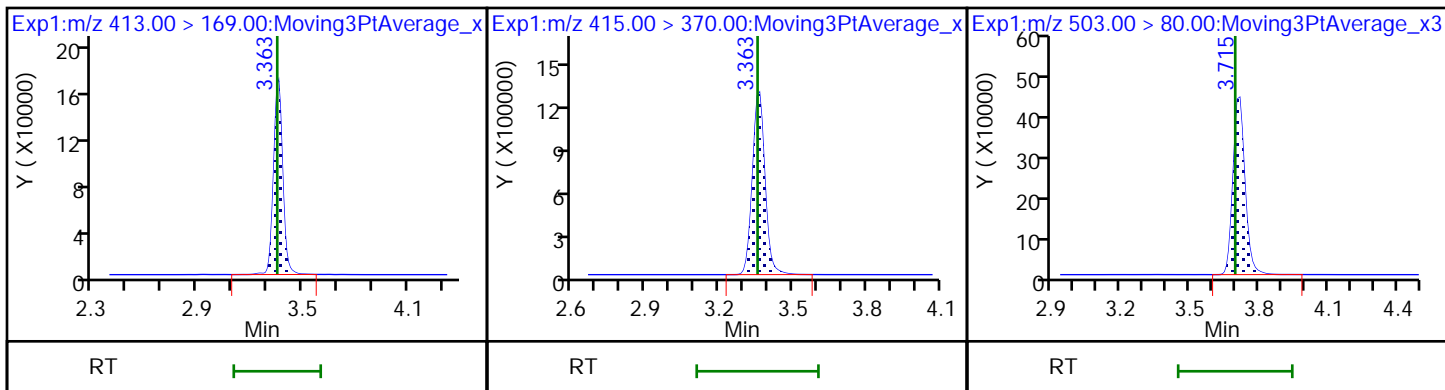
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

* 62 13C2 PFOA

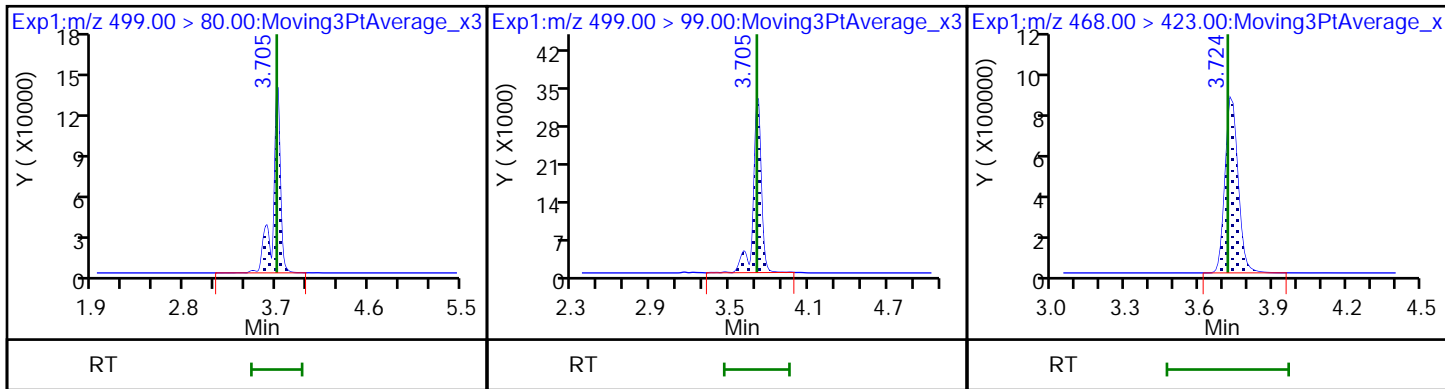
D 18 13C4 PFOS

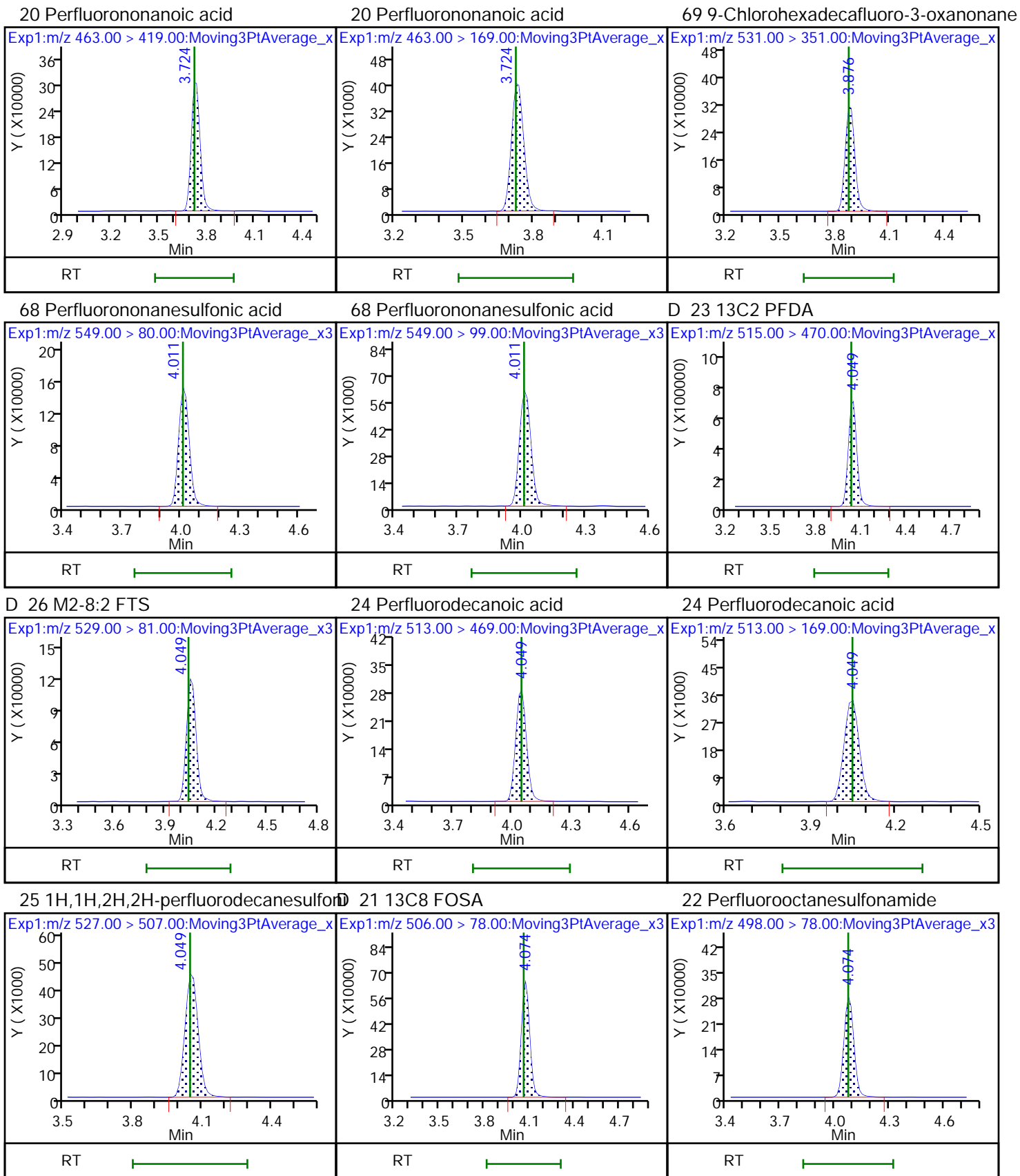


17 Perfluorooctanesulfonic acid

17 Perfluorooctanesulfonic acid

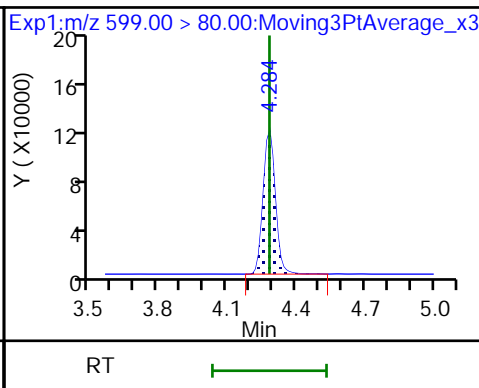
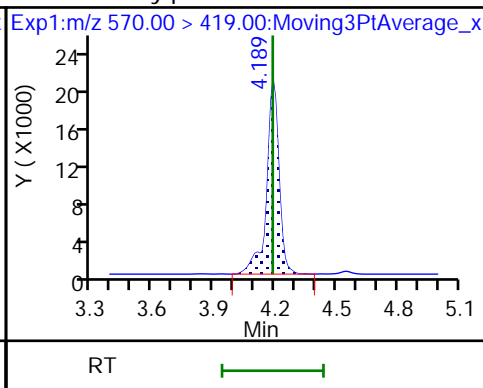
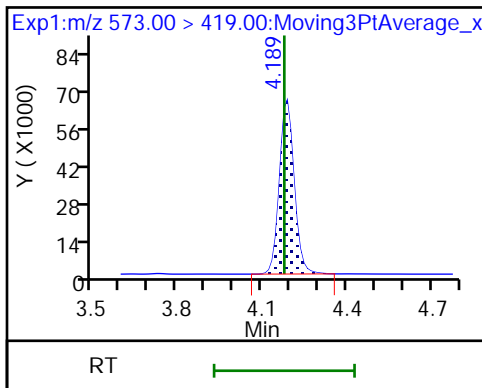
D 19 13C5 PFNA





D 27 d3-NMeFOSAA

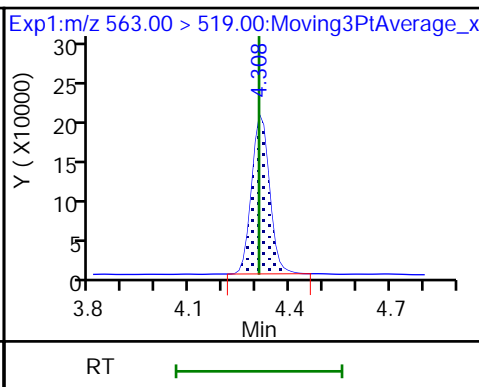
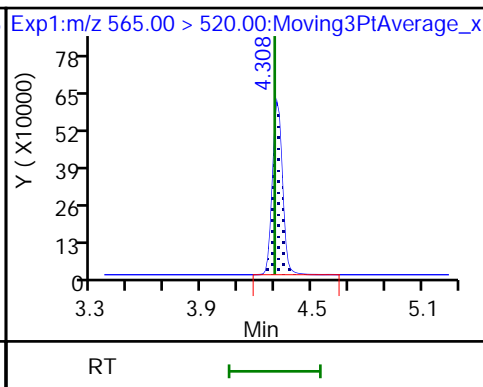
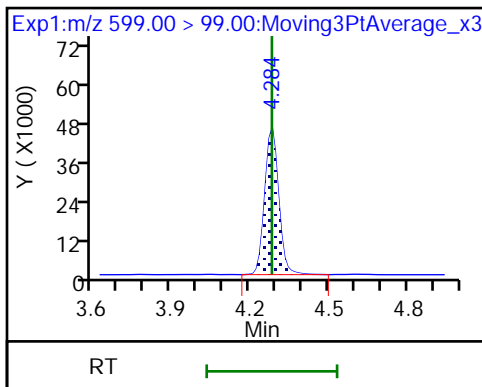
28 N-methylperfluorooctanesulfonamido 29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUnA

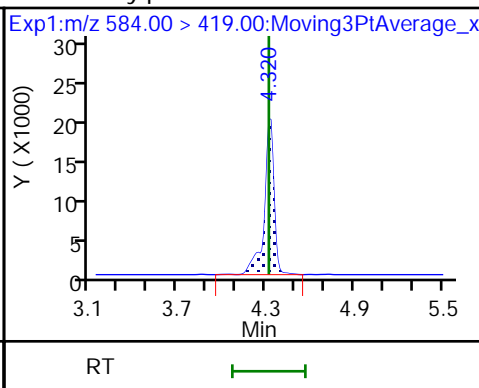
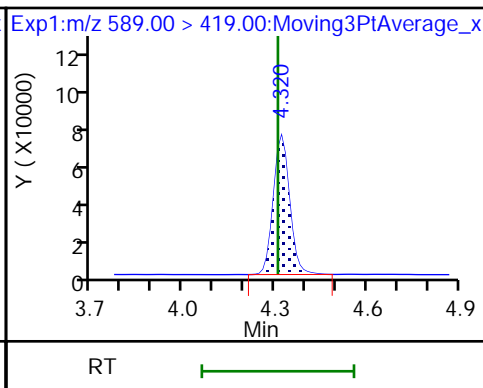
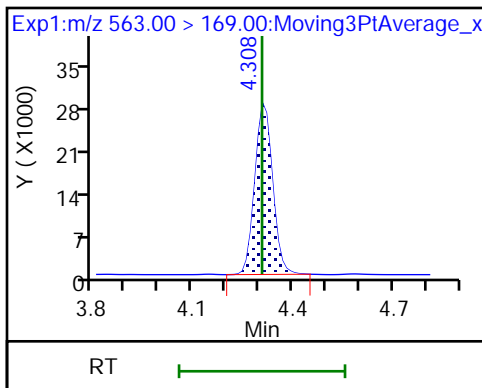
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

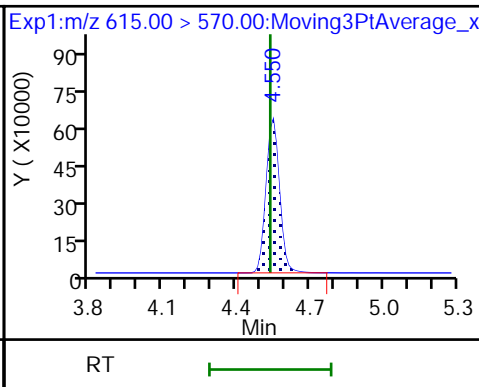
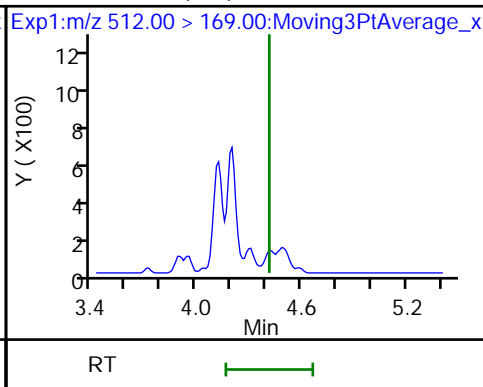
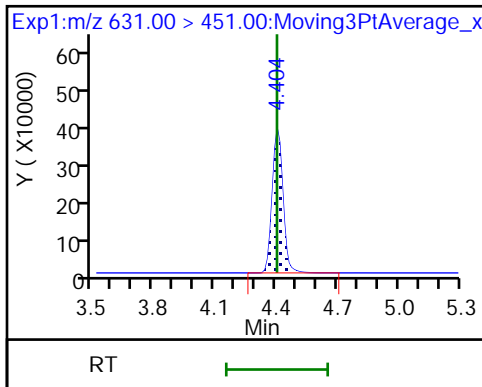
D 32 d5-NEtFOSAA

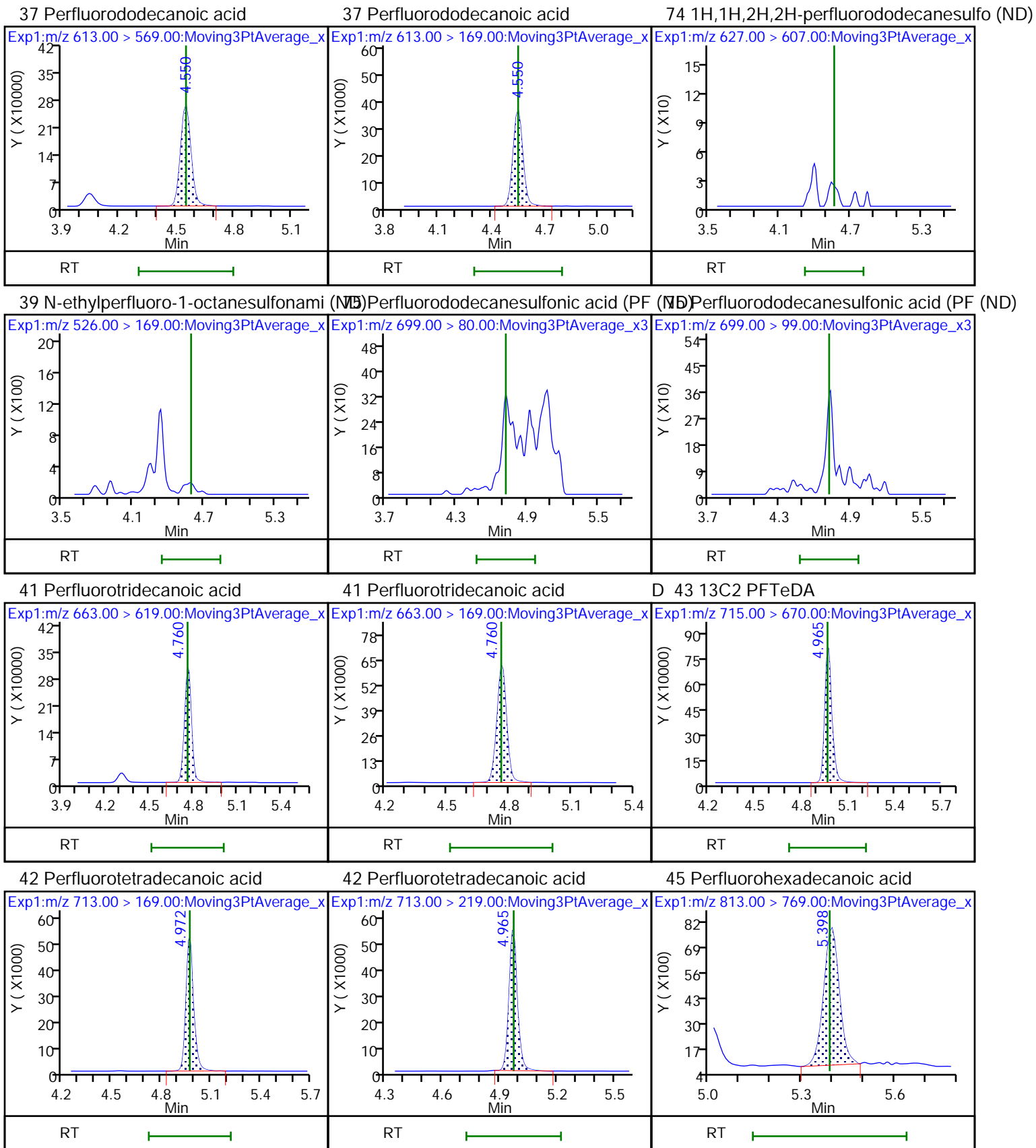
33 N-ethylperfluorooctanesulfonamido



66 11-Chloroeicosafuoro-3-oxaundecan 35 MeFOSA (ND)

D 36 13C2 PFDoA

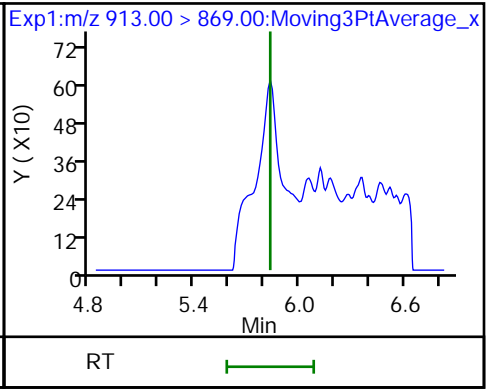
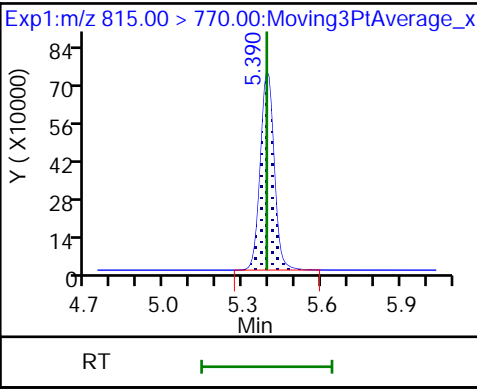
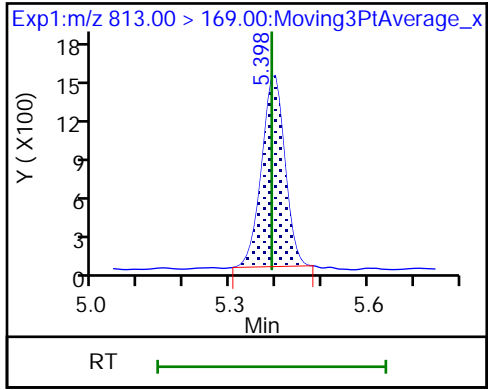




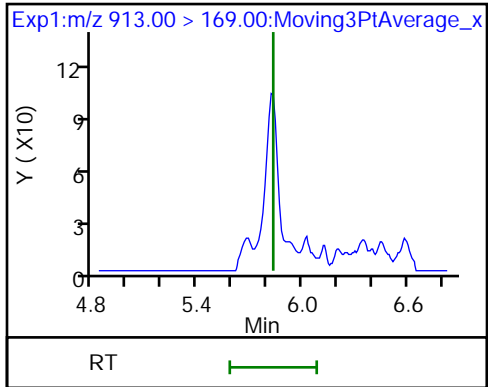
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



Euofins TestAmerica, Burlington

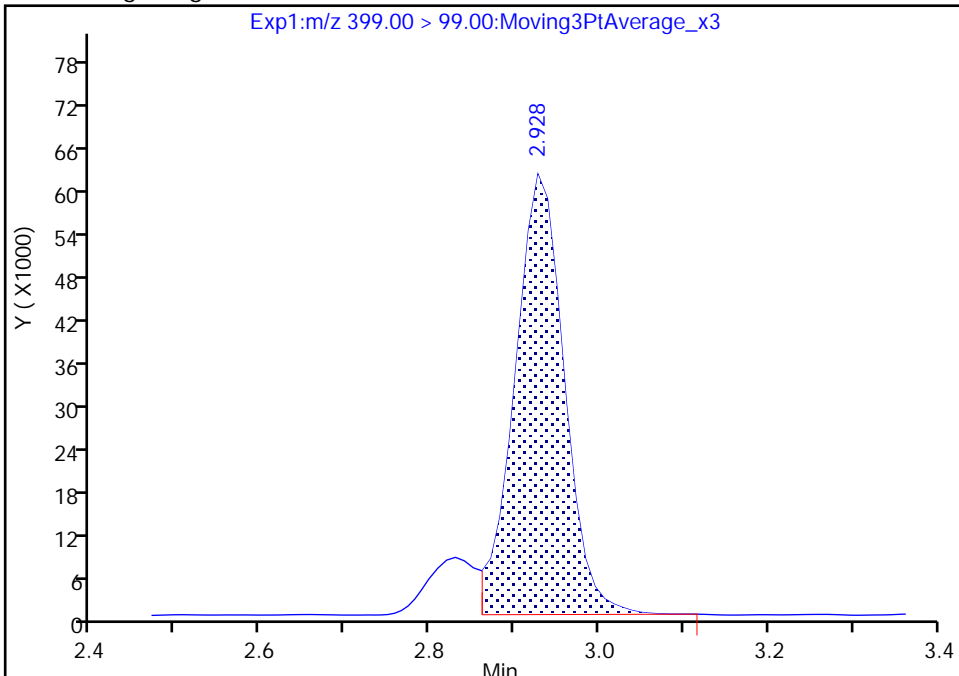
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E016.d
Injection Date: 02-Aug-2019 05:49:54 Instrument ID: LC812
Lims ID: 480-156213-F-14-B MS
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 9 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

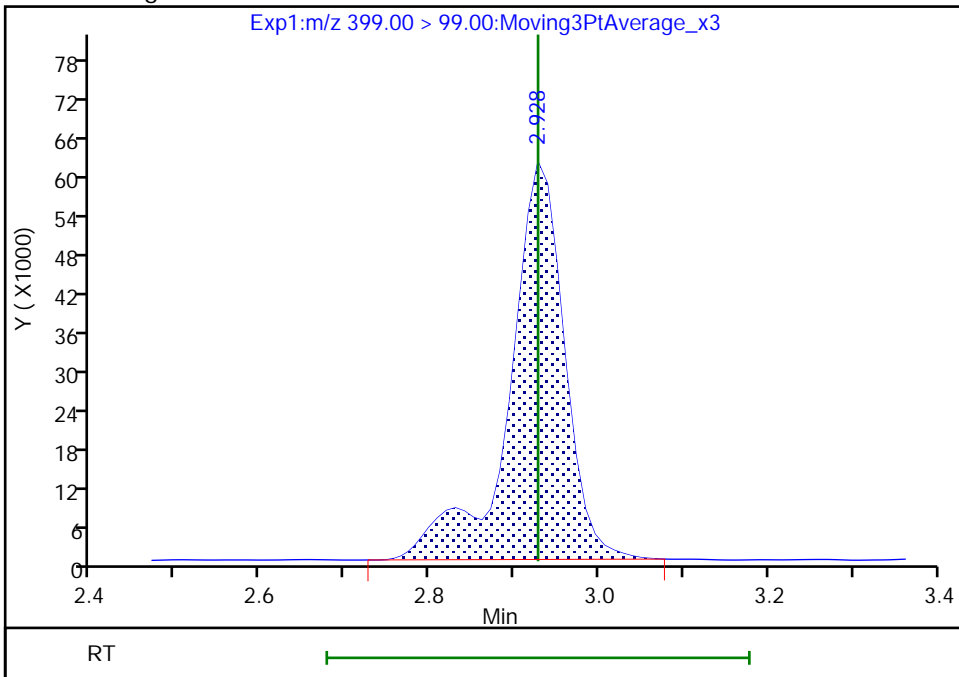
RT: 2.93
Area: 249643
Amount: 18.206278
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 280770
Amount: 18.206278
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:19:57
Audit Action: Manually Integrated

Audit Reason: Isomers

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MSD Lab Sample ID: 480-156213-14 MSD
 Matrix: Water Lab File ID: SC080119E017.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 287.8 (mL) Date Analyzed: 08/02/2019 05:57
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	38.4		1.7	0.87
2706-90-3	Perfluoropentanoic acid (PFPeA)	39.1		1.7	0.55
307-24-4	Perfluorohexanoic acid (PFHxA)	38.0		1.7	0.66
375-85-9	Perfluoroheptanoic acid (PFHpA)	38.5		1.7	0.79
335-67-1	Perfluorooctanoic acid (PFOA)	39.7		1.7	0.55
375-95-1	Perfluorononanoic acid (PFNA)	39.3		1.7	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	39.1		1.7	0.67
2058-94-8	Perfluoroundecanoic acid (PFUnA)	33.6		1.7	0.46
307-55-1	Perfluorododecanoic acid (PFDoA)	35.3		1.7	0.51
72629-94-8	Perfluorotridecanoic acid (PFTriA)	34.9		1.7	0.52
376-06-7	Perfluorotetradecanoic acid (PFTeA)	43.5		1.7	0.80
375-73-5	Perfluorobutanesulfonic acid (PFBS)	30.1		1.7	0.43
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	33.8		1.7	0.69
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	40.9		1.7	0.83
335-77-3	Perfluorodecanesulfonic acid (PFDS)	34.1		1.7	0.78
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	37.3		1.7	0.53
754-91-6	Perfluorooctanesulfonamide (FOSA)	41.4		8.7	8.7
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	43.0		17	1.5
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	43.5		17	1.3
27619-97-2	6:2 FTS	25.4		17	4.0
39108-34-4	8:2 FTS	25.6		17	2.5

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1
 SDG No.: _____
 Client Sample ID: 356023-MW6B MSD Lab Sample ID: 480-156213-14 MSD
 Matrix: Water Lab File ID: SC080119E017.d
 Analysis Method: 537 (modified) Date Collected: 07/11/2019 13:15
 Extraction Method: 3535 Date Extracted: 07/23/2019 10:21
 Sample wt/vol: 287.8 (mL) Date Analyzed: 08/02/2019 05:57
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 2 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 145761 Units: ng/L

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
STL01056	13C8 FOSA	71		25-150
STL00992	13C4 PFBA	83		25-150
STL01893	13C5 PFPeA	86		25-150
STL00993	13C2 PFHxA	89		50-150
STL01892	13C4 PFHpA	92		50-150
STL00990	13C4 PFOA	81		50-150
STL00995	13C5 PFNA	83		50-150
STL00996	13C2 PFDA	85		50-150
STL00997	13C2 PFUnA	80		50-150
STL00998	13C2 PFDoA	87		50-150
STL02116	13C2 PFTeDA	63		50-150
STL02337	13C3 PFBS	101		50-150
STL00994	18O2 PFHxS	90		50-150
STL00991	13C4 PFOS	86		50-150
STL02118	d3-NMeFOSAA	64		50-150
STL02117	d5-NEtFOSAA	65		50-150
STL02279	M2-6:2 FTS	109		25-150
STL02280	M2-8:2 FTS	104		25-150

Eurofins TestAmerica, Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E017.d
 Lims ID: 480-156213-F-14-C MSD
 Client ID: 356023-MW6B
 Sample Type: MSD
 Inject. Date: 02-Aug-2019 05:57:57 ALS Bottle#: 10 Worklist Smp#: 17
 Injection Vol: 2.0 ul Dil. Factor: 1.0000
 Sample Info: 480-156213-F-14-C MSD
 Misc. Info.: 200-0037095-017 Plate: 1 Rack: 6
 Operator ID: lc812tech Instrument ID: LC812
 Method: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\PFC_LC812.m
 Limit Group: LC_PFC_ICAL
 Last Update: 12-Aug-2019 09:36:00 Calib Date: 26-Jul-2019 11:34:21
 Integrator: Picker
 Quant Method: Isotopic Dilution Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\LC812\20190726-36970.b\SC072619A022.d
 Column 1 : C-18 (4.60 mm) Det: EXP1
 Process Host: CTX0314

First Level Reviewer: manopan Date: 06-Aug-2019 17:21:59
 Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA	217.00 > 172.00	1.699	1.699	0.0	0.505	3226720	41.3	82.5	11192	
2 Perfluorobutanoic acid	212.90 > 169.00	1.708	1.699	0.009	1.005	1313121	22.1	110	241	
D 3 13C5 PFPeA	267.90 > 223.00	2.067	2.054	0.013	0.615	3170757	43.2	86.3	7407	
4 Perfluoropentanoic acid	262.90 > 219.00	2.067	2.067	0.0	1.000	1379870	22.5	112	78.6	
D 47 13C3 PFBS	301.90 > 80.00	2.093	2.080	0.013	0.622	3401571	47.1	101	351548	
5 Perfluorobutanesulfonic acid	298.90 > 80.00	2.093	2.093	0.0	1.000	1290196	17.3	Target=1.90	98.1	390
	298.90 > 99.00	2.093	2.093	0.0	1.000	659884		1.96(0.95-2.85)		572
D 60 M2-4:2 FTS	329.00 > 81.00	2.417	2.417	0.0	0.718	316840	45.4	97.2	200	
61 1H,1H,2H,2H-perfluorohexanesulfoni	327.00 > 307.00	2.426	2.417	0.009	1.004	273457	16.9	90.3	2246	
D 7 13C2 PFHxA	315.00 > 270.00	2.459	2.459	0.0	0.731	3229530	44.3	88.5	8245	
6 Perfluorohexanoic acid	313.00 > 269.00	2.470	2.459	0.011	1.005	1454431	21.9	Target=13.23	109	310
	313.00 > 119.00	2.470	2.459	0.011	1.005	117049		12.43(6.61-19.84)		139
70 Perfluoropentanesulfonic acid	349.00 > 80.00	2.470	2.470	0.0	1.180	1229912	18.8	Target=2.73	100	959
	349.00 > 99.00	2.470	2.470	0.0	1.180	410014		3.00(1.37-4.10)		705
D 64 13C3 HFPO-DA	332.10 > 287.00	2.596	2.596	0.0	0.772	221718	47.4	94.7	1217	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
67 Perfluoro(2-propoxypropanoic) acid										
329.10 > 285.00	2.608	2.596	0.012	1.005	211007	18.7		93.6	61.7	
D 11 18O2 PFHxS										
403.00 > 84.00	2.928	2.916	0.012	0.870	1803854	42.7		90.2	5913	
D 9 13C4 PFHpA										
367.00 > 322.00	2.928	2.928	0.0	0.870	3296671	46.1		92.3	7981	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	2.928	2.928	0.0	1.000	977242	19.4	Target=3.37	107	5877	
399.00 > 99.00	2.928	2.928	0.0	1.000	273551		3.57(1.69-5.06)		310	M
10 Perfluoroheptanoic acid										
363.00 > 319.00	2.939	2.928	0.011	1.004	1369507	22.2	Target=3.76	111	336	
363.00 > 169.00	2.939	2.928	0.011	1.004	383636		3.57(1.88-5.65)		1418	
77 DONA										
377.00 > 251.00	2.984	2.973	0.011	0.804	2849364	19.8	Target=2.72	105	2063	
377.00 > 85.00	2.984	2.973	0.011	0.804	1072829		2.66(1.36-4.07)		1407	
D 12 M2-6:2 FTS										
429.00 > 81.00	3.345	3.335	0.010	0.995	456057	51.9		109	802	
13 1H,1H,2H,2H-perfluorooctanesulfoni										
427.00 > 407.00	3.345	3.336	0.009	1.000	240546	14.6		77.0	545	
D 14 13C4 PFOA										
417.00 > 372.00	3.364	3.344	0.020	1.000	3062436	40.6		81.1	9743	
16 Perfluoroheptanesulfonic acid										
449.00 > 80.00	3.355	3.345	0.010	0.903	860915	23.6	Target=4.80	124	1819	
449.00 > 99.00	3.345	3.345	0.0	0.901	165410		5.20(2.40-7.20)		610	
15 Perfluorooctanoic acid										
413.00 > 369.00	3.364	3.355	0.009	1.000	1522975	22.9	Target=2.84	114	191	
413.00 > 169.00	3.364	3.355	0.009	1.000	578180		2.63(1.42-4.25)		1525	
* 62 13C2 PFOA										
415.00 > 370.00	3.364	3.355	0.009		4149672	50.0			13764	
D 18 13C4 PFOS										
503.00 > 80.00	3.713	3.695	0.018	1.104	1449496	41.2		86.1	3751	
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.713	3.703	0.010	1.000	617040	21.5	Target=4.33	116	2478	
499.00 > 99.00	3.713	3.703	0.010	1.000	131175		4.70(2.16-6.49)		568	M
D 19 13C5 PFNA										
468.00 > 423.00	3.734	3.715	0.019	1.110	2845599	41.3		82.7	14177	
20 Perfluorononanoic acid										
463.00 > 419.00	3.734	3.723	0.011	1.000	1167397	22.6	Target=8.15	113	431	
463.00 > 169.00	3.734	3.723	0.011	1.000	138265		8.44(4.08-12.23)		1104	
69 9-Chlorohexadecafluoro-3-oxanonane										
531.00 > 351.00	3.886	3.875	0.011	1.047	1009611	15.3		82.1	2965	
68 Perfluorononanesulfonic acid										
549.00 > 80.00	4.022	4.010	0.012	1.083	493139	19.3	Target=2.42	100	2293	
549.00 > 99.00	4.022	4.010	0.012	1.083	206753		2.39(1.21-3.63)		603	
D 23 13C2 PFDA										
515.00 > 470.00	4.047	4.036	0.011	1.203	2332382	42.3		84.7	11961	
D 26 M2-8:2 FTS										
529.00 > 81.00	4.059	4.036	0.023	1.207	4041292	49.8		104	87308	

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
24 Perfluorodecanoic acid										
513.00 > 469.00	4.047	4.047	0.0	1.000	1015390	22.5	Target=9.58	112	409	
513.00 > 169.00	4.047	4.047	0.0	1.000	114104		8.90(4.79-14.37)		727	
25 1H,1H,2H,2H-perfluorodecanesulfoni										
527.00 > 507.00	4.059	4.047	0.012	1.000	166493	14.7		77.0	1852	
D 21 13C8 FOSA										
506.00 > 78.00	4.084	4.061	0.023	1.214	2244081	35.5		71.0	7833	
22 Perfluorooctanesulfonamide										
498.00 > 78.00	4.084	4.072	0.012	1.000	977012	23.8		119	4772	
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.187	4.178	0.009	1.245	226309	32.2		64.3	1796	
28 N-methylperfluorooctanesulfonamido										
570.00 > 419.00	4.198	4.187	0.011	1.003	84707	24.7		124	201	
29 Perfluorodecanesulfonic acid										
599.00 > 80.00	4.283	4.283	0.0	1.153	393961	19.6	Target=2.64	102	3673	
599.00 > 99.00	4.283	4.283	0.0	1.153	156161		2.52(1.32-3.96)		745	
D 30 13C2 PFUnA										
565.00 > 520.00	4.319	4.296	0.023	1.284	1995178	39.8		79.5	6534	
31 Perfluoroundecanoic acid										
563.00 > 519.00	4.319	4.307	0.012	1.000	662161	19.3	Target=7.95	96.7	346	
563.00 > 169.00	4.319	4.307	0.012	1.000	92196		7.18(3.98-11.93)		801	
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.319	4.308	0.011	1.284	255671	32.6		65.2	942	
33 N-ethylperfluorooctanesulfonamidoa										
584.00 > 419.00	4.331	4.319	0.012	1.003	81904	25.0		125	680	
66 11-Chloroeicosafuoro-3-oxaundecan										
631.00 > 451.00	4.415	4.403	0.012	1.189	1269781	12.6		67.1	5188	
35 MeFOSA										
512.00 > 169.00	4.198	4.415	-0.217		2498	NR		0.0	11.6	
D 36 13C2 PFDaA										
615.00 > 570.00	4.549	4.537	0.012	1.352	2361495	43.7		87.5	8236	
37 Perfluorododecanoic acid										
613.00 > 569.00	4.549	4.549	0.0	1.000	982289	20.3	Target=7.49	102	91.8	
613.00 > 169.00	4.549	4.549	0.0	1.000	137568		7.14(3.75-11.24)		1942	
41 Perfluorotridecanoic acid										
663.00 > 619.00	4.769	4.760	0.009	1.048	869859	20.1	Target=5.71	100	122	
663.00 > 169.00	4.769	4.760	0.009	1.048	189918		4.58(2.85-8.56)		1296	
D 43 13C2 PFTeDA										
715.00 > 670.00	4.972	4.965	0.007	1.478	2342190	31.5		63.0	6445	
42 Perfluorotetradecanoic acid										
713.00 > 169.00	4.972	4.972	0.0	1.000	156115	25.0	Target=1.02	125	1349	
713.00 > 219.00	4.972	4.972	0.0	1.000	151655		1.03(0.51-1.54)		1724	
45 Perfluorohexadecanoic acid										
813.00 > 769.00	5.398	5.390	0.008	1.000	21647	0.1225	Target=5.23	0.0	7.2	
813.00 > 169.00	5.398	5.390	0.008	1.000	4382		4.94(2.62-7.85)		80.3	
D 44 13C2 PFHxDA										
815.00 > 770.00	5.398	5.390	0.008	1.605	2224634	33.6		67.3	4322	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Eurofins TestAmerica, Burlington

Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E017.d

Injection Date: 02-Aug-2019 05:57:57

Instrument ID: LC812

Lims ID: 480-156213-F-14-C MSD

Client ID: 356023-MW6B

Operator ID: lc812tech

ALS Bottle#: 10

Worklist Smp#: 17

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

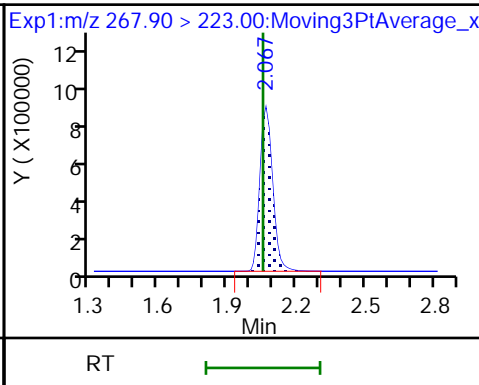
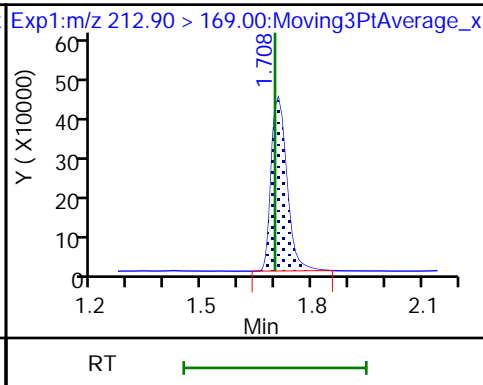
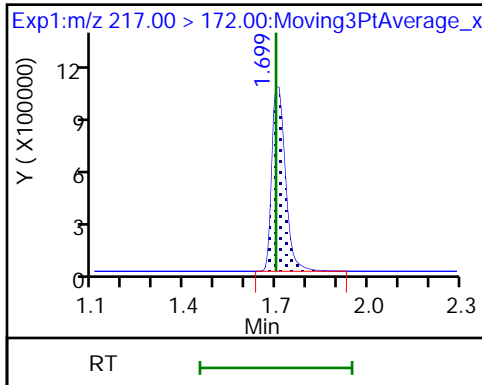
Method: PFC_LC812

Limit Group: LC_PFC_ICAL

D 1 13C4 PFBA

2 Perfluorobutanoic acid

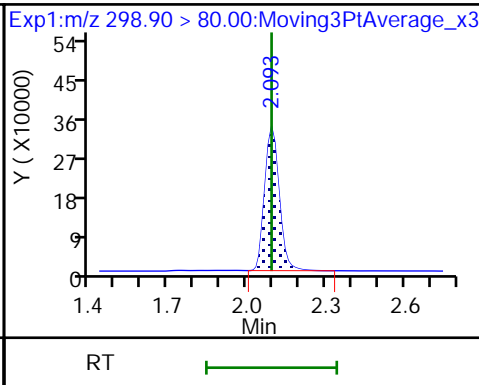
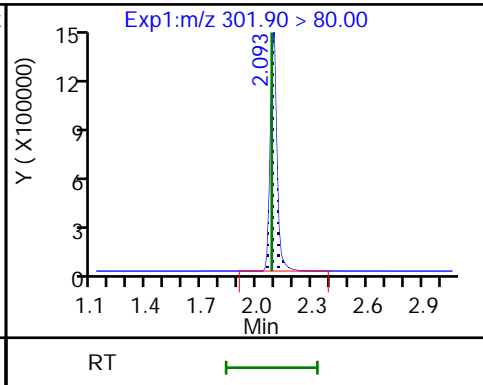
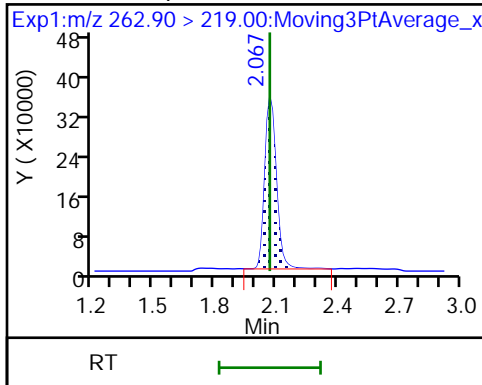
D 3 13C5 PFPeA



4 Perfluoropentanoic acid

D 47 13C3 PFBS

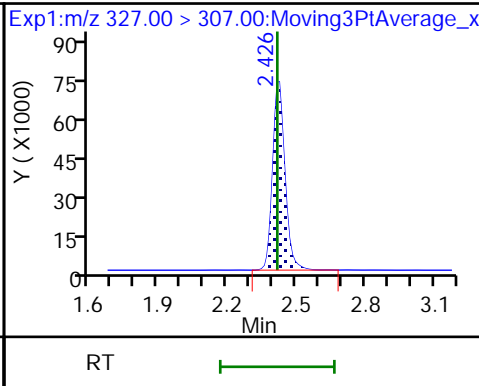
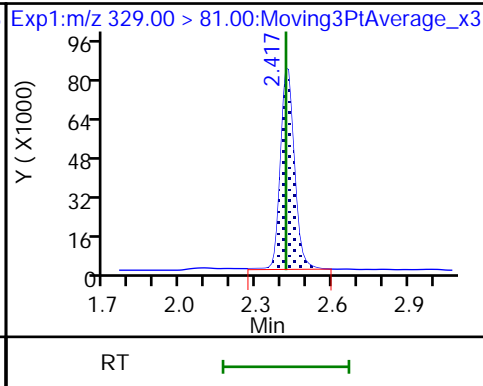
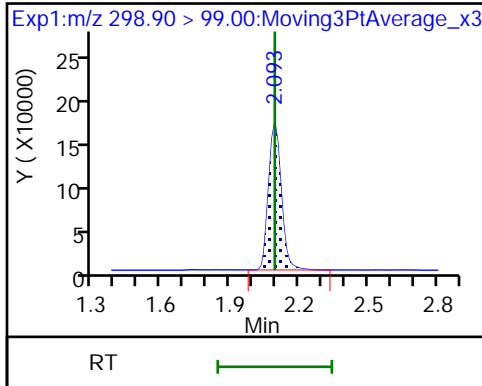
5 Perfluorobutanesulfonic acid



5 Perfluorobutanesulfonic acid

D 60 M2-4:2 FTS

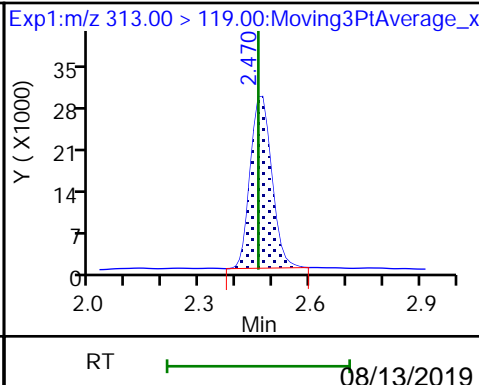
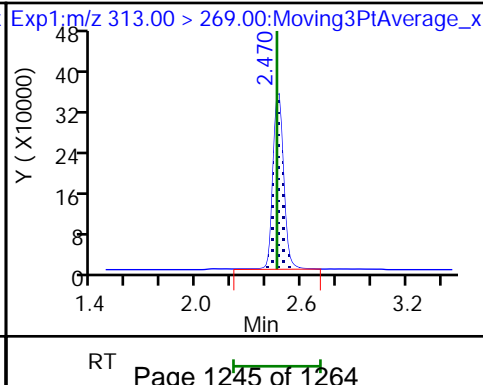
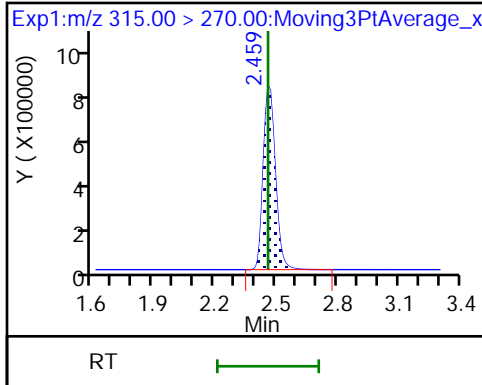
61 1H,1H,2H,2H-perfluorohexanesulfoni

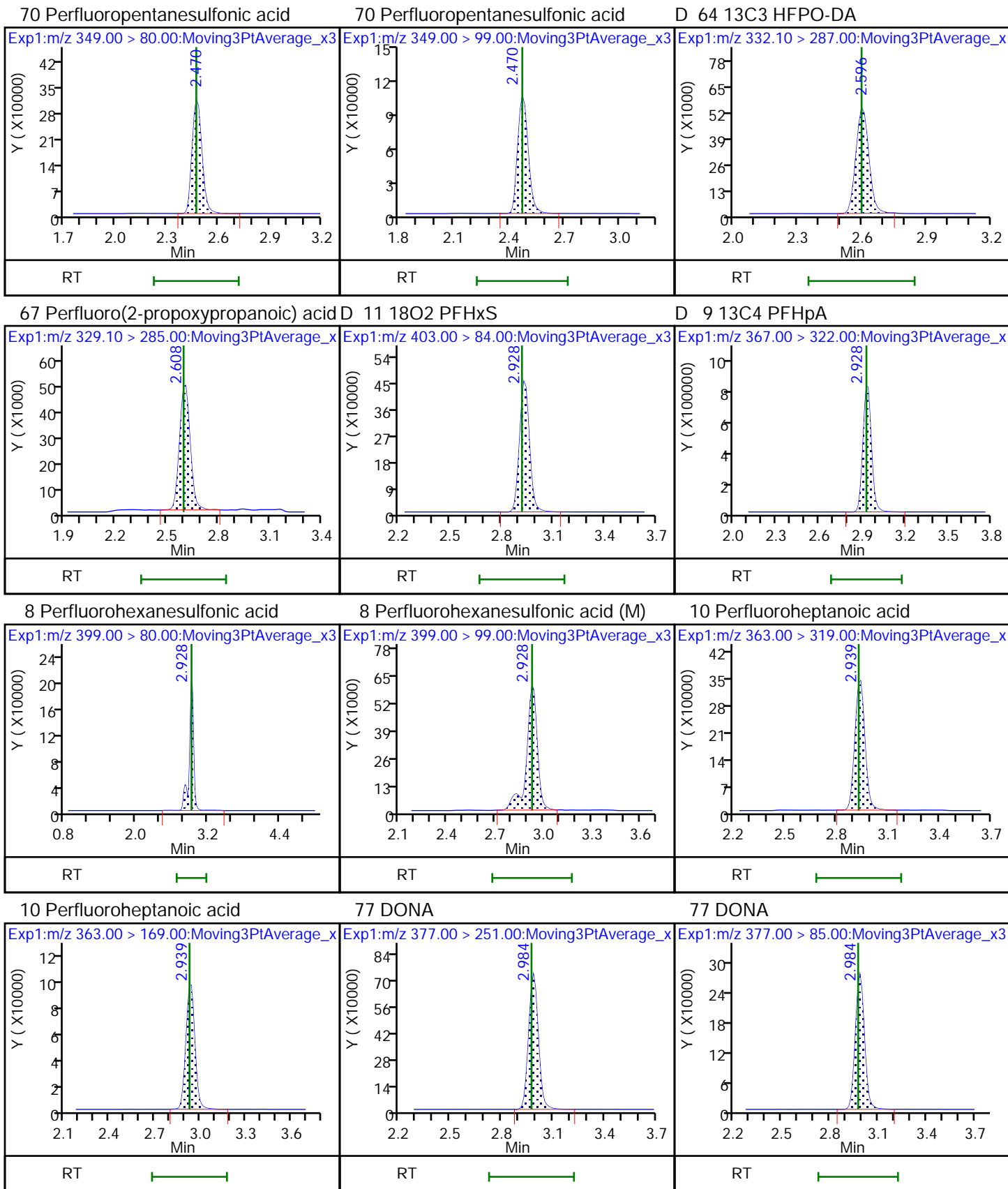


D 7 13C2 PFHxA

6 Perfluorohexanoic acid

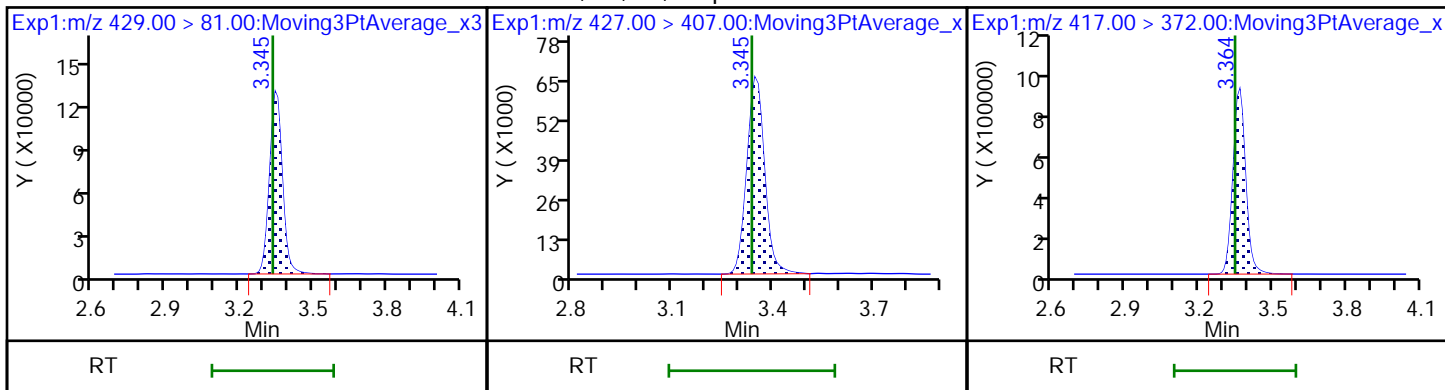
6 Perfluorohexanoic acid





D 12 M2-6:2 FTS

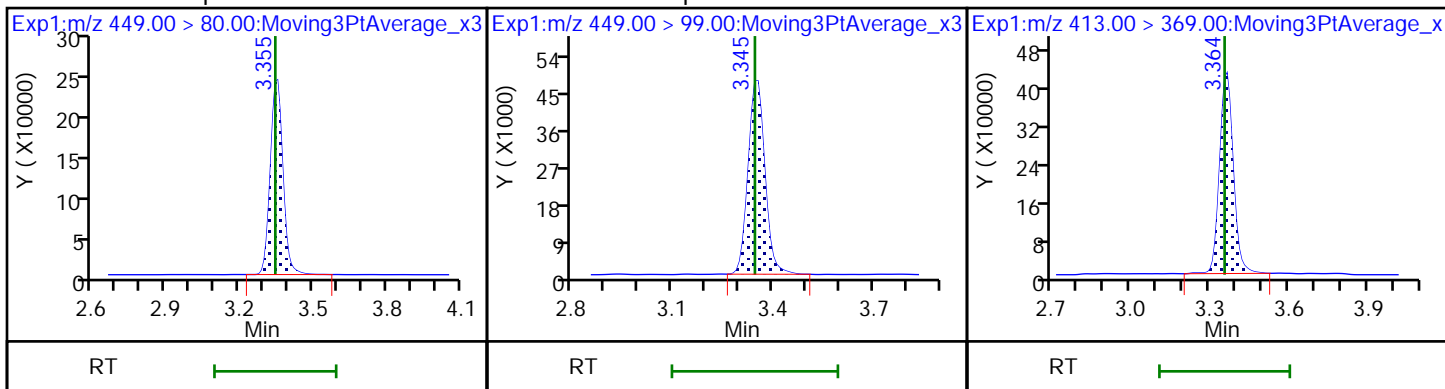
13 1H,1H,2H,2H-perfluorooctanesulfonD 14 13C4 PFOA



16 Perfluoroheptanesulfonic acid

16 Perfluoroheptanesulfonic acid

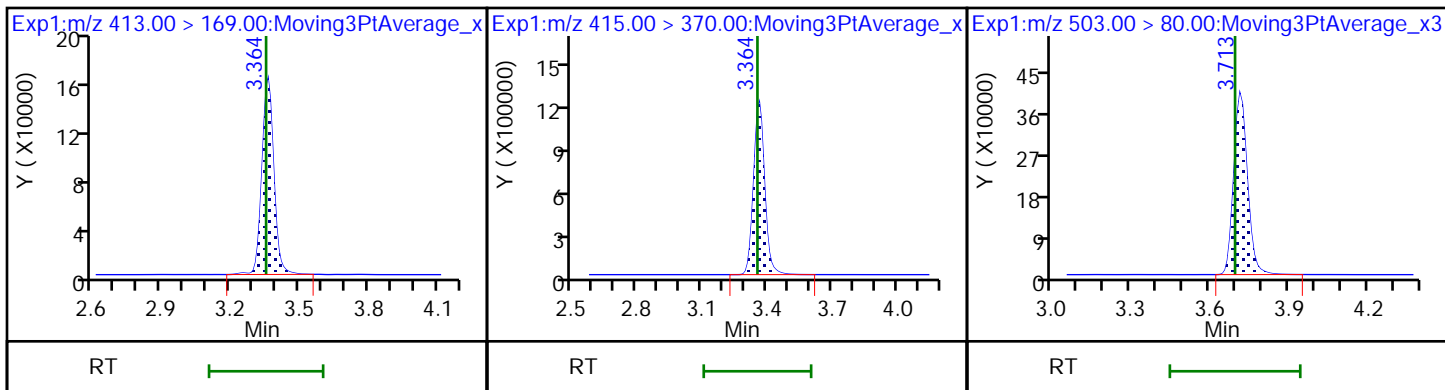
15 Perfluorooctanoic acid



15 Perfluorooctanoic acid

* 62 13C2 PFOA

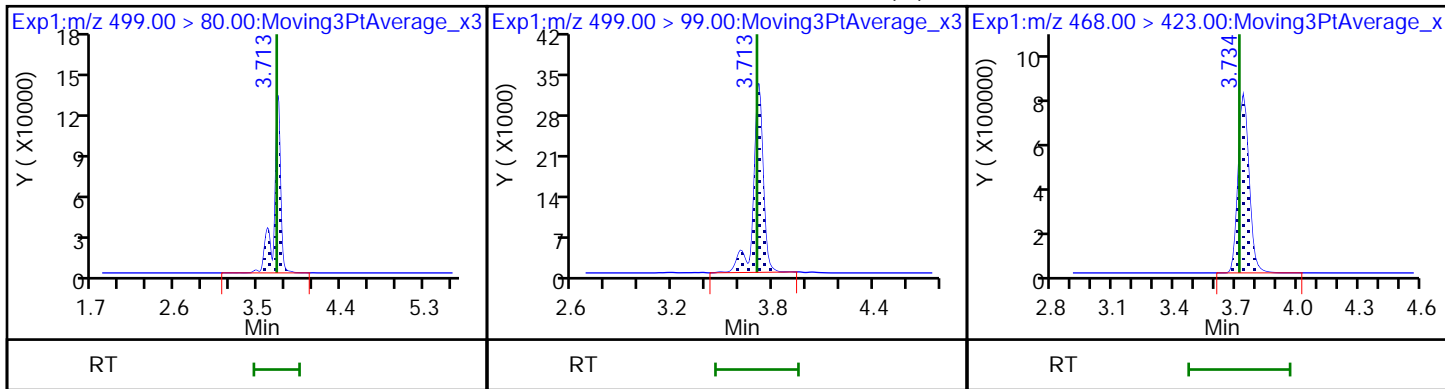
D 18 13C4 PFOS

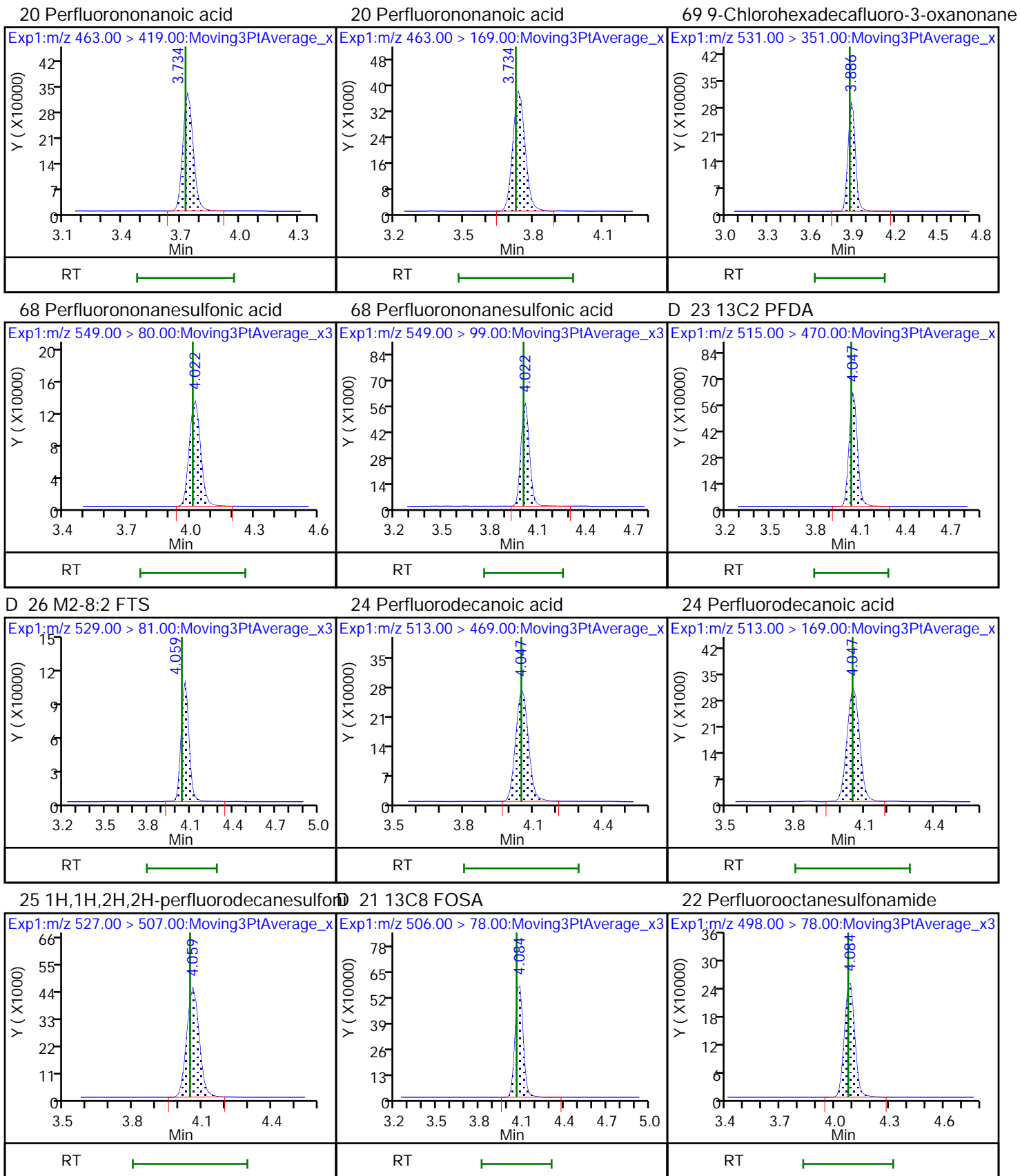


17 Perfluorooctanesulfonic acid

17 Perfluorooctanesulfonic acid (M)

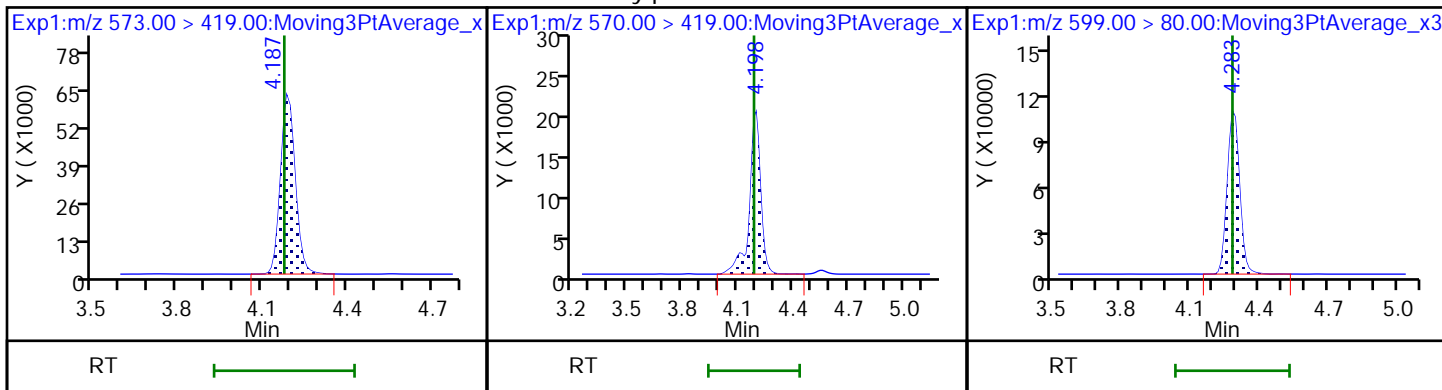
D 19 13C5 PFNA





D 27 d3-NMeFOSAA

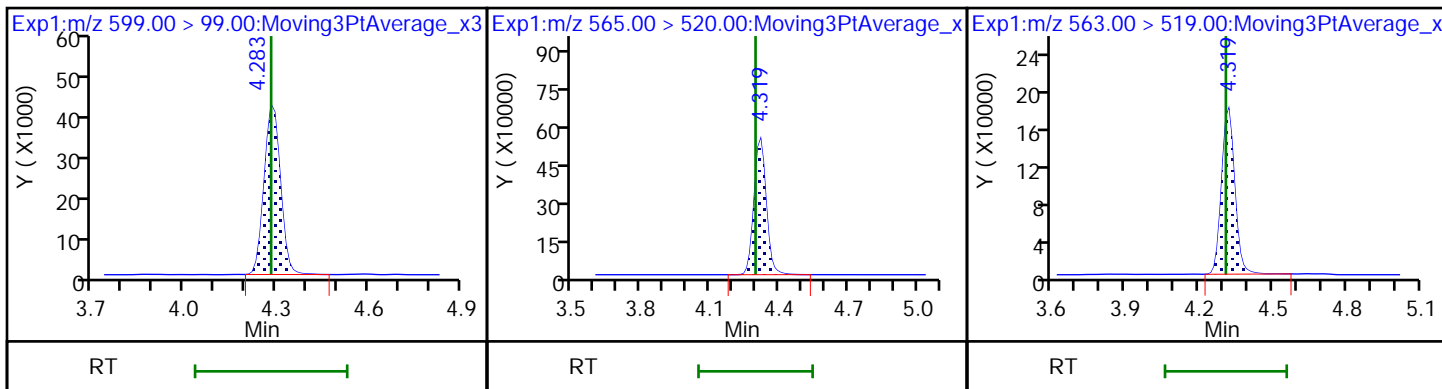
28 N-methylperfluorooctanesulfonamido 29 Perfluorodecanesulfonic acid



29 Perfluorodecanesulfonic acid

D 30 13C2 PFUoA

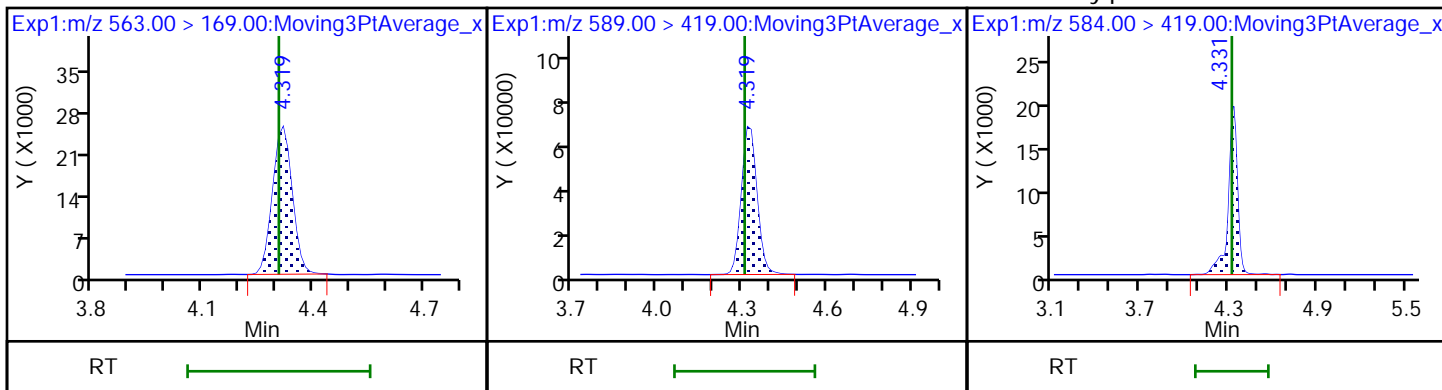
31 Perfluoroundecanoic acid



31 Perfluoroundecanoic acid

D 32 d5-NEtFOSAA

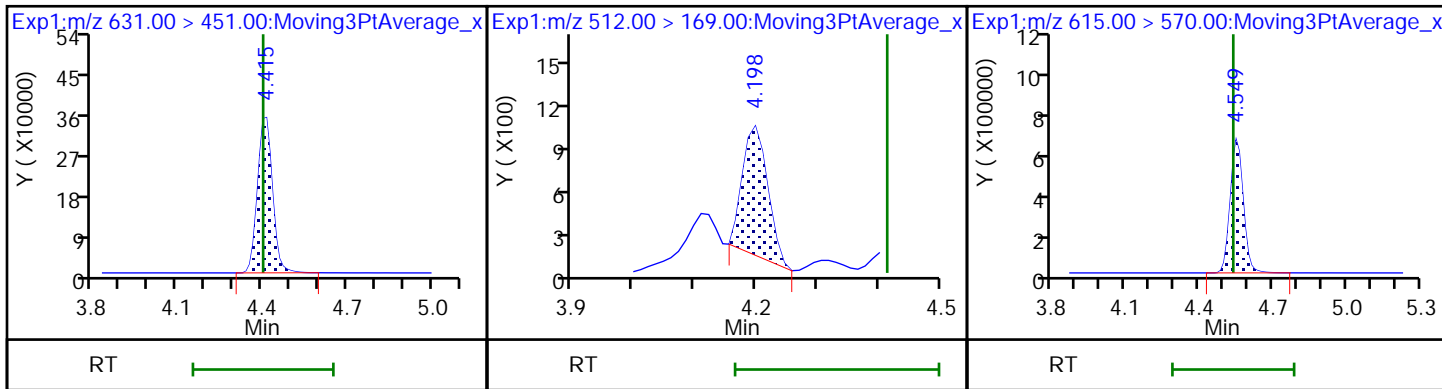
33 N-ethylperfluorooctanesulfonamido

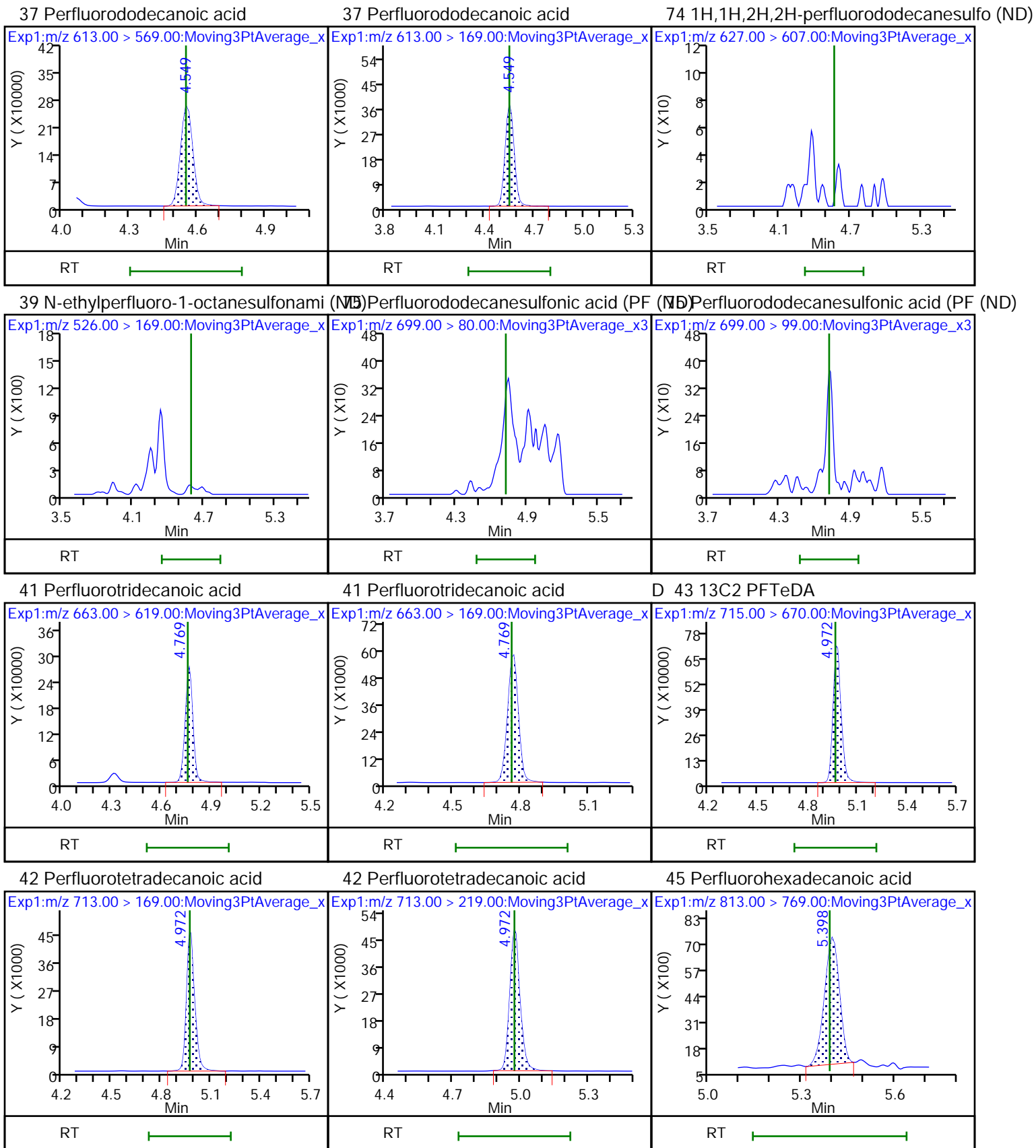


66 11-Chloroeicosafuoro-3-oxaundecan

35 MeFOSA

D 36 13C2 PFDoA

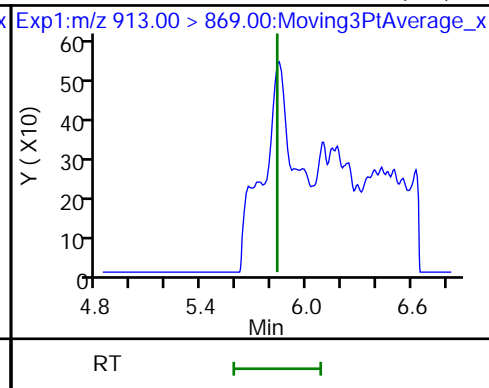
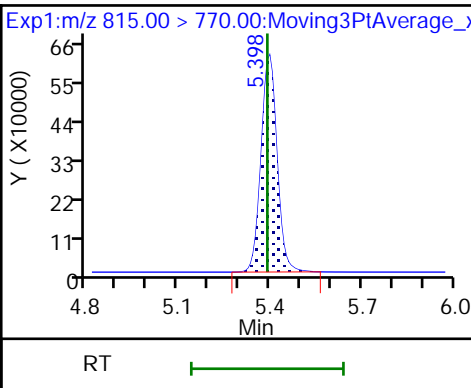
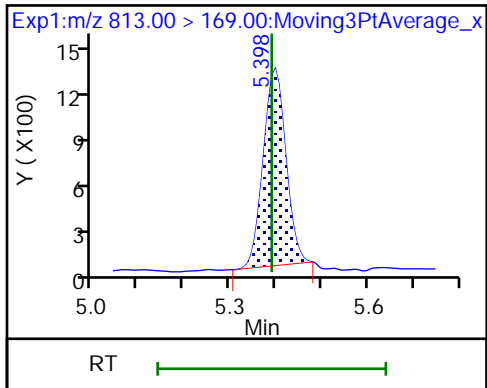




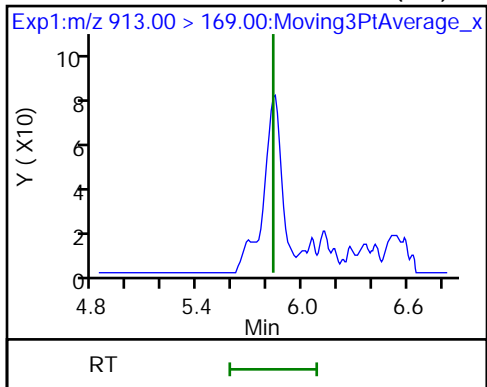
45 Perfluorohexadecanoic acid

D 44 13C2 PFHxDA

46 Perfluorooctadecanoic acid (ND)



46 Perfluorooctadecanoic acid (ND)



Eurofins TestAmerica, Burlington

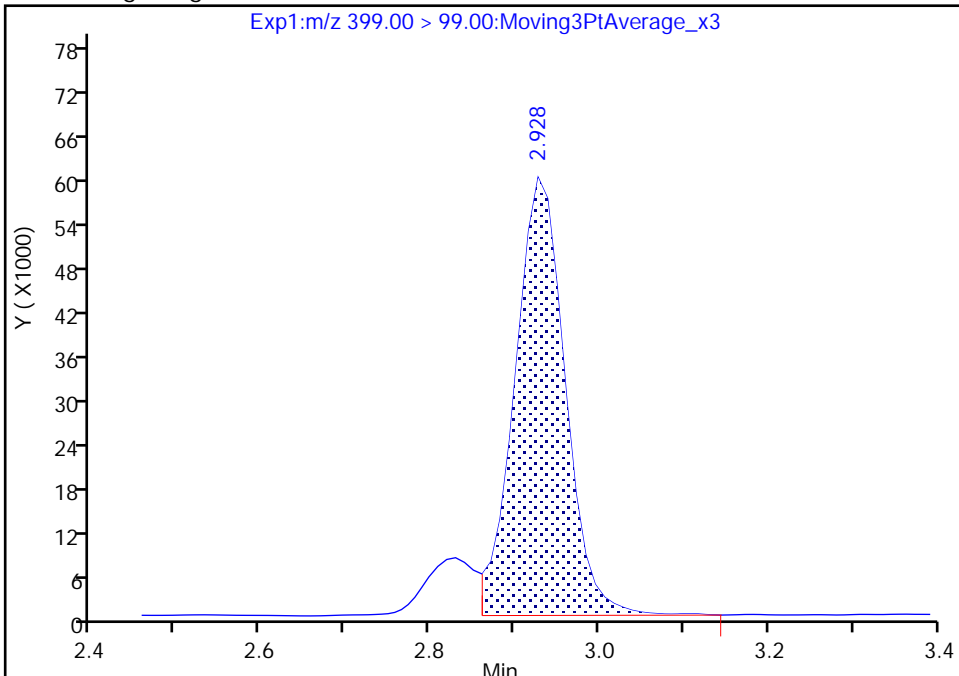
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E017.d
Injection Date: 02-Aug-2019 05:57:57 Instrument ID: LC812
Lims ID: 480-156213-F-14-C MSD
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 10 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

8 Perfluorohexanesulfonic acid, CAS: 355-46-4

Signal: 2

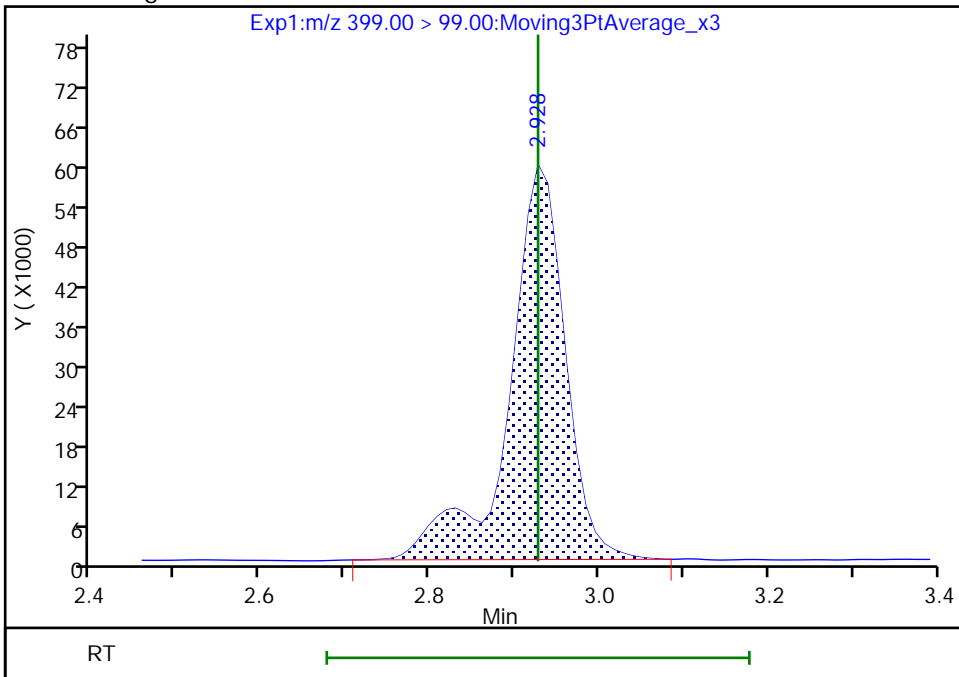
RT: 2.93
Area: 244719
Amount: 19.445327
Amount Units: ng/ml

Processing Integration Results



RT: 2.93
Area: 273551
Amount: 19.445327
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:21:14
Audit Action: Manually Integrated

Audit Reason: Isomers

Eurofins TestAmerica, Burlington

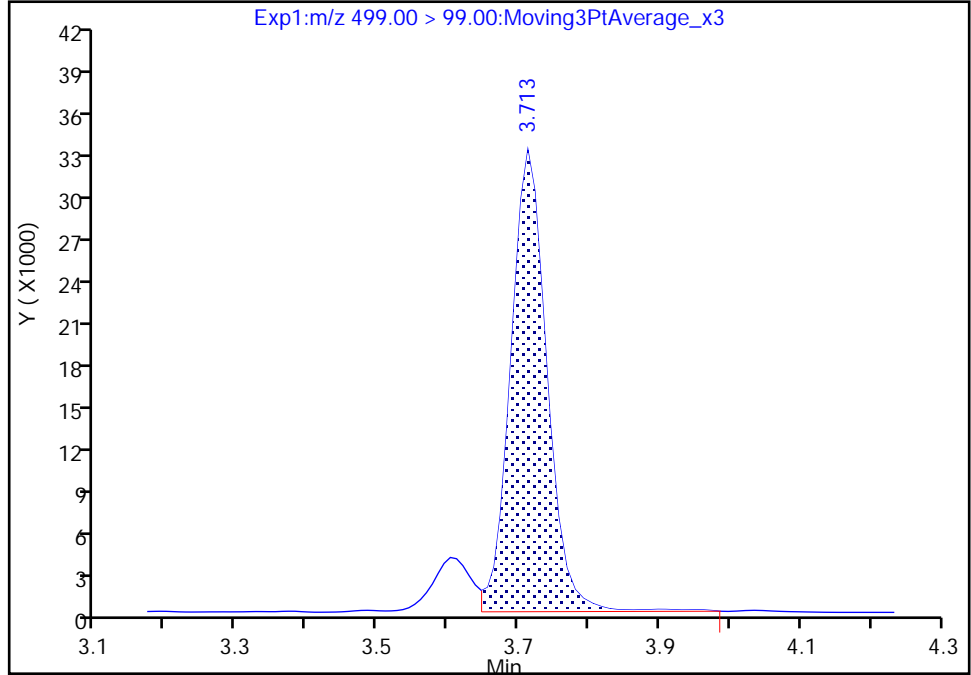
Data File: \\ChromNA\Burlington\ChromData\LC812\20190801-37095.b\SC080119E017.d
Injection Date: 02-Aug-2019 05:57:57 Instrument ID: LC812
Lims ID: 480-156213-F-14-C MSD
Client ID: 356023-MW6B
Operator ID: lc812tech ALS Bottle#: 10 Worklist Smp#: 17
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: PFC_LC812 Limit Group: LC_PFC_ICAL
Column: C-18 (4.60 mm) Detector: EXP1

17 Perfluorooctanesulfonic acid, CAS: 1763-23-1

Signal: 2

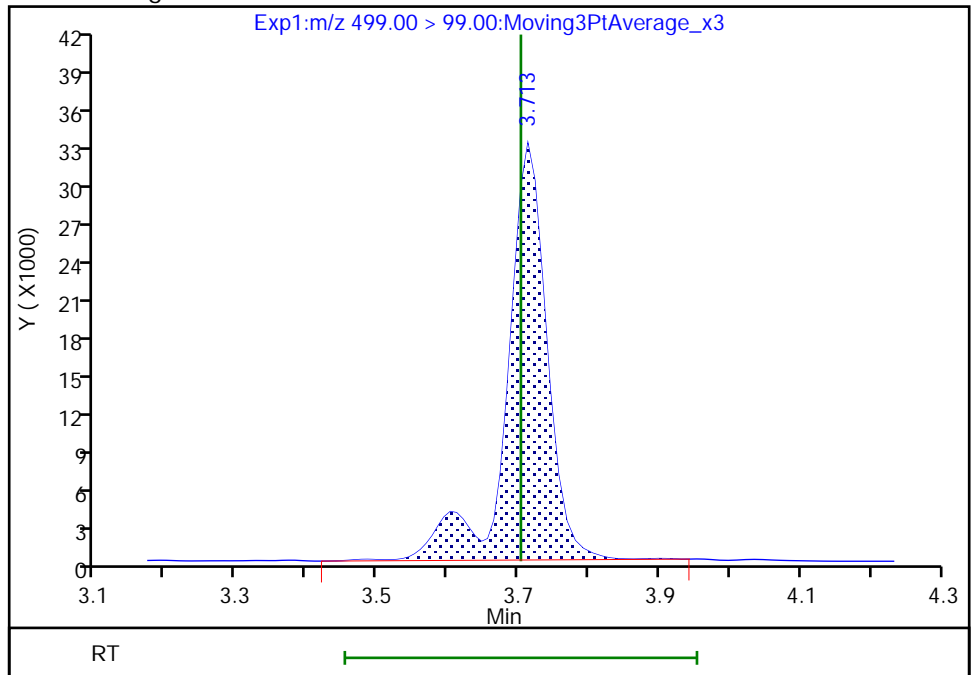
RT: 3.71
Area: 117842
Amount: 21.497902
Amount Units: ng/ml

Processing Integration Results



RT: 3.71
Area: 131175
Amount: 21.497902
Amount Units: ng/ml

Manual Integration Results



Reviewer: manopan, 06-Aug-2019 17:21:29

Audit Action: Manually Integrated

Audit Reason: Isomers

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1

SDG No.: _____

Instrument ID: LC812 Start Date: 07/26/2019 08:45

Analysis Batch Number: 145525 End Date: 07/26/2019 12:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/26/2019 08:45	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 08:53	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:01	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:09	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:17	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:25	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:33	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:42	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:50	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 09:58	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 10:06	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 10:14	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 10:22	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 10:30	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 10:38	1		C-18 4.6 (mm)
Blk ICB		07/26/2019 10:46	1		C-18 4.6 (mm)
IC 200-145525/17		07/26/2019 10:54	1	SC072619A017.d	C-18 4.6 (mm)
IC 200-145525/18		07/26/2019 11:02	1	SC072619A018.d	C-18 4.6 (mm)
IC 200-145525/19		07/26/2019 11:10	1	SC072619A019.d	C-18 4.6 (mm)
ICIS 200-145525/20		07/26/2019 11:18	1	SC072619A020.d	C-18 4.6 (mm)
IC 200-145525/21		07/26/2019 11:26	1	SC072619A021.d	C-18 4.6 (mm)
IC 200-145525/22		07/26/2019 11:34	1	SC072619A022.d	C-18 4.6 (mm)
ICB 200-145525/23		07/26/2019 11:42	1		C-18 4.6 (mm)
ICV 200-145525/24		07/26/2019 11:50	1	SC072619A024.d	C-18 4.6 (mm)
ZZZZZ		07/26/2019 11:58	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 12:06	1		C-18 4.6 (mm)
MDLV 200-145161/6-A		07/26/2019 12:14	1		C-18 4.6 (mm)
MDLV 200-145161/7-A		07/26/2019 12:22	1		C-18 4.6 (mm)
MDLV 200-145161/8-A		07/26/2019 12:30	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 12:38	1		C-18 4.6 (mm)
ZZZZZ		07/26/2019 12:46	1		C-18 4.6 (mm)
CCV 200-145525/32		07/26/2019 12:54	1		C-18 4.6 (mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1

SDG No.: _____

Instrument ID: LC812 Start Date: 08/01/2019 14:18

Analysis Batch Number: 145757 End Date: 08/01/2019 17:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICB 200-145757/1		08/01/2019 14:18	1	SC080119A001.d	C-18 4.6 (mm)
CCVL 200-145757/2		08/01/2019 14:26	1	SC080119A002.d	C-18 4.6 (mm)
CCV 200-145757/3 CCVIS		08/01/2019 14:34	1	SC080119A003.d	C-18 4.6 (mm)
ZZZZZ		08/01/2019 14:42	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 14:50	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 14:58	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 15:06	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 15:14	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 15:22	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 15:30	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 15:38	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 15:46	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 15:54	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 16:02	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 16:10	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 16:18	1		C-18 4.6 (mm)
CCV 200-145757/17		08/01/2019 16:26	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 16:34	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 16:42	1		C-18 4.6 (mm)
ZZZZZ		08/01/2019 17:30	5		C-18 4.6 (mm)
ZZZZZ		08/01/2019 17:47	50		C-18 4.6 (mm)
CCV 200-145757/28		08/01/2019 17:55	1		C-18 4.6 (mm)

LCMS ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Burlington Job No.: 480-156213-1

SDG No.: _____

Instrument ID: LC812 Start Date: 08/02/2019 03:49

Analysis Batch Number: 145761 End Date: 08/02/2019 06:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-145761/1		08/02/2019 03:49	1	SC080119E001.d	C-18 4.6 (mm)
MB 200-145382/1-A		08/02/2019 03:57	1	SC080119E002.d	C-18 4.6 (mm)
LCS 200-145382/2-A		08/02/2019 04:05	1	SC080119E003.d	C-18 4.6 (mm)
480-156213-1		08/02/2019 04:13	1	SC080119E004.d	C-18 4.6 (mm)
480-156213-2		08/02/2019 04:21	1	SC080119E005.d	C-18 4.6 (mm)
480-156213-3		08/02/2019 04:29	1	SC080119E006.d	C-18 4.6 (mm)
480-156213-4		08/02/2019 04:37	1	SC080119E007.d	C-18 4.6 (mm)
480-156213-5		08/02/2019 04:45	1	SC080119E008.d	C-18 4.6 (mm)
480-156213-6		08/02/2019 04:53	1	SC080119E009.d	C-18 4.6 (mm)
480-156213-7		08/02/2019 05:01	1	SC080119E010.d	C-18 4.6 (mm)
480-156213-11		08/02/2019 05:09	1	SC080119E011.d	C-18 4.6 (mm)
CCV 200-145761/12		08/02/2019 05:17	1	SC080119E012.d	C-18 4.6 (mm)
480-156213-12		08/02/2019 05:25	1	SC080119E013.d	C-18 4.6 (mm)
480-156213-13		08/02/2019 05:33	1	SC080119E014.d	C-18 4.6 (mm)
480-156213-14		08/02/2019 05:41	1	SC080119E015.d	C-18 4.6 (mm)
480-156213-14 MS		08/02/2019 05:49	1	SC080119E016.d	C-18 4.6 (mm)
480-156213-14 MSD		08/02/2019 05:57	1	SC080119E017.d	C-18 4.6 (mm)
480-156213-15		08/02/2019 06:06	1	SC080119E018.d	C-18 4.6 (mm)
480-156213-16		08/02/2019 06:14	1	SC080119E019.d	C-18 4.6 (mm)
480-156213-17		08/02/2019 06:22	1	SC080119E020.d	C-18 4.6 (mm)
480-156213-18		08/02/2019 06:30	1	SC080119E021.d	C-18 4.6 (mm)
480-156213-19		08/02/2019 06:38	1	SC080119E022.d	C-18 4.6 (mm)
CCV 200-145761/24		08/02/2019 06:54	1	SC080119E024.d	C-18 4.6 (mm)

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Burlingt Job No.: 480-156213-1

SDG No.: _____

Batch Number: 145382 Batch Start Date: 07/23/19 10:21 Batch Analyst: Bourdeau, Timothy P

Batch Method: 3535 Batch End Date: 07/23/19 15:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	LCMPFCIDA21 00012	LCPFAS27 MS 00011
MB 200-145382/1		3535, 537 (modified)		250 g	0 g	250 mL	0.5 mL	25 uL	
LCS 200-145382/2		3535, 537 (modified)		250 g	0 g	250 mL	0.5 mL	25 uL	25 uL
480-156213-F-1	356023-MW8B	3535, 537 (modified)	T	319.63 g	27.43 g	292.2 mL	0.5 mL	25 uL	
480-156213-F-2	356023-MW8BD	3535, 537 (modified)	T	318.27 g	27.45 g	290.8 mL	0.5 mL	25 uL	
480-156213-F-3	356023-MW16	3535, 537 (modified)	T	342.15 g	27.67 g	314.5 mL	0.5 mL	25 uL	
480-156213-F-4	356023-MW14B 150	3535, 537 (modified)	T	337.60 g	27.33 g	310.3 mL	0.5 mL	25 uL	
480-156213-F-5	356023-MW12B 190	3535, 537 (modified)	T	326.94 g	26.77 g	300.2 mL	0.5 mL	25 uL	
480-156213-F-6	356023-MW11B	3535, 537 (modified)	T	332.34 g	27.04 g	305.3 mL	0.5 mL	25 uL	
480-156213-F-7	356023-MW11C	3535, 537 (modified)	T	336.89 g	27.51 g	309.4 mL	0.5 mL	25 uL	
480-156213-F-11	356023-MW5B	3535, 537 (modified)	T	341.31 g	28.04 g	313.3 mL	0.5 mL	25 uL	
480-156213-G-12	356023-ERT4	3535, 537 (modified)	T	333.18 g	26.86 g	306.3 mL	0.5 mL	25 uL	
480-156213-F-13	356023-MW4	3535, 537 (modified)	T	338.99 g	27.48 g	311.5 mL	0.5 mL	25 uL	
480-156213-F-14	356023-MW6B	3535, 537 (modified)	T	311.86 g	27.28 g	284.6 mL	0.5 mL	25 uL	
480-156213-F-14 MS	356023-MW6B	3535, 537 (modified)	T	300.00 g	27.26 g	272.7 mL	0.5 mL	25 uL	25 uL
480-156213-F-14 MSD	356023-MW6B	3535, 537 (modified)	T	315.33 g	27.52 g	287.8 mL	0.5 mL	25 uL	25 uL
480-156213-F-15	356023-MW15B	3535, 537 (modified)	T	311.15 g	27.58 g	283.6 mL	0.5 mL	25 uL	
480-156213-F-16	356023-EB1	3535, 537 (modified)	T	332.18 g	27.41 g	304.8 mL	0.5 mL	25 uL	
480-156213-F-17	356023-MW1B	3535, 537 (modified)	T	340.19 g	26.95 g	313.2 mL	0.5 mL	25 uL	
480-156213-F-18	356023-MW5R	3535, 537 (modified)	T	326.05 g	27.38 g	298.7 mL	0.5 mL	25 uL	
480-156213-F-19	356023-MW7R	3535, 537 (modified)	T	333.99 g	27.12 g	306.9 mL	0.5 mL	25 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.

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Burlingt Job No.: 480-156213-1

SDG No.: _____

Batch Number: 145382 Batch Start Date: 07/23/19 10:21 Batch Analyst: Bourdeau, Timothy P

Batch Method: 3535 Batch End Date: 07/23/19 15:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCPFCSuppIDA 00001	PFAS21 IS Stk 00010				
MB 200-145382/1		3535, 537 (modified)		25 uL	5 uL				
LCS 200-145382/2		3535, 537 (modified)		25 uL	5 uL				
480-156213-F-1	356023-MW8B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-2	356023-MW8BD	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-3	356023-MW16	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-4	356023-MW14B 150	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-5	356023-MW12B 190	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-6	356023-MW11B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-7	356023-MW11C	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-11	356023-MW5B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-G-12	356023-ERT4	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-13	356023-MW4	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-14	356023-MW6B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-14 MS	356023-MW6B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-14 MSD	356023-MW6B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-15	356023-MW15B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-16	356023-EB1	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-17	356023-MW1B	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-18	356023-MW5R	3535, 537 (modified)	T	25 uL	5 uL				
480-156213-F-19	356023-MW7R	3535, 537 (modified)	T	25 uL	5 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.

537 (modified)

LCMS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Burlingt Job No.: 480-156213-1

SDG No.: _____

Batch Number: 145382 Batch Start Date: 07/23/19 10:21 Batch Analyst: Bourdeau, Timothy P

Batch Method: 3535 Batch End Date: 07/23/19 15:59


Batch Notes	
Balance ID	M02926
First End time	07/23/2019 11:45
Manifold ID	IDA 3 & 4
Rinse Solvent Lot	1294588
Rinse Solvent Name	Hexane
Solvent Lot #	1299627
Solvent Name	Methanol (0.3% NH4OH)
SPE Cartridge Lot ID	Lot 004539007A
SPE Cartridge Type	Oasis WAX 500mg
Analyst ID - Spike Analyst	TPB
Analyst ID - Spike Witness Analyst	AH
First Start time	07/23/2019 11:15

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

Client Information	Sampler: <i>J. Rawcliffe, J. Desjarlais</i>	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-132335-29845.1
Client Contact: Julie Ricardi	Phone: <i>(207-828-3614 (J Rawcliffe))</i>	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 2
Company: Wood E&I Solutions Inc	<i>(207-415-6211 (Cell))</i>			Job #:

Address: 511 Congress Street	Due Date Requested:	 480-156213 Chain of Custody	Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)
City: Portland	TAT Requested (days):		
State, Zip: ME, 04112	PO #: CallOut 136396		
Phone: <i>207-828-3608 (J Ricardi)</i>	WO #:		
Email: julie.ricardi@woodplc.com	Project #: 48020492		
Project Name: Mohonk Rd. #356023 - PFAS	SSOW#:		
Site: <i>Mohonk LTM - N-15 DEC</i>			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Analysis Requested				Total Number of containers	Special Instructions/Note:
					Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL list VOAs	8270D - SIM MS_ID - 1,4-Dioxane		
356023 - <i>mw 8B</i>	<i>7/9/19</i>	<i>1320</i>	<i>G</i>	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 8BD</i>		<i>1320</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 16</i>		<i>1710</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 14B150</i>		<i>1150</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 12B190</i>	<i>7/10/19</i>	<i>1727</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 11B</i>		<i>1137</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 11C</i>		<i>1523</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 1801</i>		<i>1110</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 1802</i>		<i>1170</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 1803</i>		<i>1130</i>		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
356023 - <i>mw 5B</i>	<i>7/11/19</i>	<i>1310</i>	<i>✓</i>	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Possible Hazard Identification	<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) <i>Category B Deliverable</i>		Special Instructions/QC Requirements: <i>EquiSEZ (include testbook)</i>	

Empty Kit Relinquished by: <i>Jerry Sullivan</i>	Date: <i>7/12/19</i>	Time: <i>1445</i>	Company: <i>WOOD</i>	Received by: <i>Raf Lopez</i>	Date/Time: <i>7/12/19 1445</i>	Company: <i>ETA</i>
Relinquished by: <i>Raf Lopez</i>	Date/Time: <i>7/12/19 1700</i>	Company: <i>ETA</i>	Received by: <i>C. Walker</i>	Date/Time: <i>7/13/19 0900</i>	Company: <i>TAB</i>	

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: <i>2.5 3.1 2.0 2.9 #1</i>
--	-------------------	---

Client Information	Sampler: <i>J. Kowalczyk, J. Desjardais</i>	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-132335-29845.2
	Client Contact: Julie Ricardi	Phone: <i>JLR 207-828-3614</i> <i>207-415 6211 (cell)</i>		

Company: Wood E&I Solutions Inc	Analysis Requested	Job #:	
Address: 511 Congress Street			Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)
City: Portland			
State, Zip: ME, 04112			
Phone: <i>207-828-3608 (J. Ricardi)</i>			
Email: julie.ricardi@woodplc.com			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TCL list VOAs				Total Number of containers	Special Instructions/Note:
							8260C - TCL list VOAs	8270D - SIM MS ID - 1,4-Dioxane	PFC_IDA - PFAS, Standard List (21 Analytes)	8260C - TCL list OLM04.2		
356023 - ERT4	7/11/19	1120	G	Water			A	N	N	N		
356023 - MW4		1447		Water								
356023 - MW6B		1315		Water								Extra volume for MS/MSD
356023 - MW15B	7/12/19	0930		Water								
356023 - EB1		0945		Water								Equipment Blank
356023 - MW1B		1115		Water								
356023 - MW5R		1110		Water								
356023 - MW7R		1130		Water								
356023 - TB1	7/9/19	1200		Water								
356023				Water								
356023				Water								

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) *Catagory B Belveinels* Special Instructions/QC Requirements: *Equis BZ (include test batch)*

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: <i>7/12/19 1445</i>	Company: <i>WOOD</i>	Received by: <i>[Signature]</i>
Relinquished by: <i>[Signature]</i>	Date/Time: <i>7/12/19 1700</i>	Company: <i>ETA</i>	Date/Time: <i>7/12/19 1445</i>
Relinquished by: <i>[Signature]</i>	Date/Time: <i>7/12/19 1700</i>	Company: <i>ETA</i>	Date/Time: <i>7/13/19 0900</i>

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
---------------------------------------	-------------------	---

Page 1262 of 1264

08/13/2019

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-156213-1

Login Number: 156213
List Number: 1
Creator: Harper, Marcus D

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	WOOD
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 480-156213-1

Login Number: 156213
List Number: 2
Creator: Lavigne, Scott M

List Source: Eurofins TestAmerica, Burlington
List Creation: 07/17/19 09:43 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1130695
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK**

1.0 INTRODUCTION

Groundwater samples were collected in July 2019 at the Mohonk Road Industrial Plant in High Falls, New York, and shipped to TestAmerica Laboratories (TAL Buffalo) in Amherst, New York, for analysis. Analyses for volatile organic compounds (VOCs) and 1,4-dioxane were performed by TAL Buffalo. Analyses for per- and polyfluorinated alkyl substances (PFAS) were performed by TAL Burlington located in Burlington, Vermont. Samples were analyzed by one or more of the following methods:

- Volatile Organic Compounds (VOCs) by USEPA Method 8260C
- 1,4-Dioxane by USEPA Method 8270D-Selected Ion Monitoring (SIM)-Isotope Dilution (ID)
- PFAS by Modified USEPA Method 537

Results were reported in the following sample delivery groups (SDGs):

- 480-156213-1

Sample data included in this chemistry review is presented in the following tables:

- Table 1 – Summary of Samples and Analytical Methods
- Table 2 – Summary of Analytical Results
- Table 3 – Summary of Qualification Actions

A summary of table notes applicable to Tables 1, 2, and 3 is presented just before Table 1.

Laboratory deliverables included:

- Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005)

The Category A review included the following evaluations. Data review checklists are provided as Attachment A.

- Lab Report Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- QC Blanks
- Laboratory Control Samples (LCS)
- Matrix Spike and Matrix Spike Duplicate (MS/MSD)

- Field Duplicates
- Surrogate Recoveries
- Reporting Limits
- Electronic Data Qualification and Verification

The following laboratory data qualifiers or data review qualifiers are used in the final data presentation:

U = target analyte is not detected at or above the reporting limit
J = concentration is estimated

2.0 POTENTIAL DATA LIMITATIONS

Based on the Category A Review conducted the data meets the data quality objectives; however, the following potential limitations were identified:

VOCs

- Results for acetone and methylene chloride were qualified non-detect (U) in a subset of samples based on contamination in the trip blank and/or equipment blank.
- VOC samples collected from locations ERT-4, MW-4, MW-5B, and MW-5R were analyzed at dilutions due to target compound concentrations. Detection limits are elevated due to dilution. Actual detection limits are listed on Table 2.

1,4-Dioxane

- Detections of 1,4-dioxane in a subset of samples were qualified estimated (J) based on sample extraction one day after expiration of the holding time.

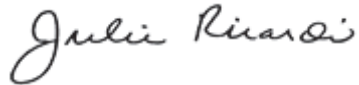
PFAS

- The detection of perfluorooctanesulfonic acid (PFOS) in sample 356023-MW4 is qualified estimated (J) based on an ion ratio that failed laboratory criteria. However, the result is reported because peaks observed for the two mass transitions are within the expected retention time windows.

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

Data Validator: Julie Ricardi



Date: 9/12/2019

Reviewed by: Chris Ricardi, NRCC-EAC



Date: 9/13/19

Standard Table Notes:

Sample Type (QC Code)

FS – field sample
FD – field duplicate
TB – trip blank
EB – equipment blank
FB – field blank

Matrix

GW – ground water
BW – blank water
TW – tap water
SV – soil vapor
SED - sediment

Units

mg/L – milligrams per liter
ng/L – nanograms per liter
µg/L – micrograms per liter
mg/kg – milligrams per kilogram
µg/kg – micrograms per kilogram
µg/m³ – micrograms per cubic meter

Qualifiers

U – not detected above quantitation limit
J – estimated quantity
J+ - estimated quantity, biased high
J- - estimated quantity, biased low
R – data unusable

Fraction

T – total
D – dissolved
N – normal

Qualification Reason Codes

BL1 – method blank qualifier
BL2 – field or trip blank qualifier
CCV – continuing calibration verification recovery outside limits
CCV%D – continuing calibration verification percent difference exceeds goal
CCVRRF – continuing calibration relative response factor low
CI – chromatographic interference present
DCPD – dual column percent difference exceeds limit
E – result exceeds calibration range
FD – field duplicate precision goal exceeded
FP – false positive interference
HT – holding time for prep or analysis exceeded
HTG – holding time for prep or analysis grossly exceeded
ICV – initial calibration verification recovery outside limit
ICVRRF – initial calibration verification relative response factor low
ICVRS D – initial calibration verification % relative standard deviation exceeds goal
ISH – internal standard response greater than limit
ISL – internal standard response less than limit
LCSH – laboratory control sample recovery high
LCSL – laboratory control sample recovery low
LCSRPD – laboratory control sample/duplicate relative % difference precision goal exceeded
LD – lab duplicate precision goal exceeded
MSH – matrix spike and/or MS duplicate recovery high
MSL – matrix spike and/or MS duplicate recovery low
MSRPD – matrix spike/duplicate relative % difference precision goal exceeded
N – analyte identification is not certain
PEM – performance evaluation mixture exceeds limit
PM – sample percent moisture exceeds EPA guideline
SD – serial dilution result exceeds percent difference limit
SP – sample preservation/collection does not meet method requirement
SSH – surrogate recovery high
SSL – surrogate recovery low
TD – dissolved concentration exceeds total

**TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
 CATEGORY A REVIEW
 JULY 2019 GROUNDWATER SAMPLING PROGRAM
 MOHONK ROAD INDUSTRIAL PLANT
 HIGH FALLS, NEW YORK**

Lab SDG	Location	Field Sample ID	Sample Date	Method Class		PFAS 537 Mod N Param_Count	VOCs SW8260C N Param_Count	1,4-Dioxane SW8270D-SIM N Param_Count
				Media	Qc Code			
480-156213-1	ERT-4	356023-ERT4	7/11/2019	GW	FS	21	51	1
480-156213-1	MW-11B	356023-MW11B	7/10/2019	GW	FS	21	51	1
480-156213-1	MW-11C	356023-MW11C	7/10/2019	GW	FS	21	51	1
480-156213-1	MW-12B	356023-MW12B 190	7/9/2019	GW	FS	21	51	1
480-156213-1	MW-14B	356023-MW14B 150	7/9/2019	GW	FS	21	51	1
480-156213-1	MW-15B	356023-MW15B	7/12/2019	GW	FS	21	51	1
480-156213-1	MW-16	356023-MW16	7/9/2019	GW	FS	21	51	1
480-156213-1	MW-18-1	356023-MW1801	7/11/2019	GW	FS		51	1
480-156213-1	MW-18-2	356023-MW1802	7/11/2019	GW	FS		51	1
480-156213-1	MW-18-3	356023-MW1803	7/11/2019	GW	FS		51	1
480-156213-1	MW-1B	356023-MW1B	7/12/2019	GW	FS	21	51	1
480-156213-1	MW-4	356023-MW4	7/11/2019	GW	FS	21	51	1
480-156213-1	MW-5B	356023-MW5B	7/11/2019	GW	FS	21	51	1
480-156213-1	MW-5R	356023-MW5R	7/12/2019	GW	FS	21	51	1
480-156213-1	MW-6B	356023-MW6B	7/11/2019	GW	FS	21	51	1
480-156213-1	MW-7R	356023-MW7R	7/12/2019	GW	FS	21	51	1
480-156213-1	MW-8B	356023-MW8B	7/9/2019	GW	FS	21	51	1
480-156213-1	MW-8B	356023-MW8BD	7/9/2019	GW	FD	21	51	1
480-156213-1	QC	356023-EB1	7/12/2019	BW	EB	21	51	1
480-156213-1	QC	356023-TB1	7/9/2019	BW	TB		51	

Created by: KSM 9/4/19

Checked by: JAR 9/11/19

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

Method	Parameter	SDG Location Sample Date Sample ID Qc Code Units	480-156213-1 ERT-4 7/11/2019 356023-ERT4 FS		480-156213-1 MW-11B 7/10/2019 356023-MW11B FS		480-156213-1 MW-11C 7/10/2019 356023-MW11C FS		480-156213-1 MW-12B 7/9/2019 356023-MW12B 190 FS	
			Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8270D-SIM	1,4-Dioxane	ug/l	12		3.1		1.8		9.2	J
537 Mod	6:2 Fluorotelomer sulfonate (6:2 FTS)	ng/l	16	U	16	U	16	U	17	U
537 Mod	8:2 Fluorotelomer sulfonate (8:2 FTS)	ng/l	16	U	16	U	16	U	17	U
537 Mod	N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ng/l	16	U	16	U	16	U	17	U
537 Mod	N-methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	ng/l	16	U	16	U	16	U	17	U
537 Mod	Perfluorobutanesulfonic acid (PFBS)	ng/l	1.5	J	1.6	U	1.6	U	1.2	J
537 Mod	Perfluorobutanoic acid (PFBA)	ng/l	7.4		1.6	U	1.6	U	1.7	
537 Mod	Perfluorodecanesulfonic acid (PFDS)	ng/l	1.6	U	1.6	U	1.6	U	1.7	U
537 Mod	Perfluorodecanoic acid (PFDA)	ng/l	1.6	U	1.6	U	1.6	U	1.7	U
537 Mod	Perfluorododecanoic acid (PFDoA)	ng/l	1.6	U	1.6	U	1.6	U	1.7	U
537 Mod	Perfluoroheptanesulfonic acid (PFHpS)	ng/l	1.6	U	1.6	U	1.6	U	1.7	U
537 Mod	Perfluoroheptanoic acid (PFHpA)	ng/l	2.5		1.6	U	1.6	U	0.84	J
537 Mod	Perfluorohexanesulfonic acid (PFHxS)	ng/l	1.1	J	1.6	U	1.6	U	0.67	J
537 Mod	Perfluorohexanoic acid (PFHxA)	ng/l	5.7		1.6	U	1.6	U	1.7	
537 Mod	Perfluorononanoic acid (PFNA)	ng/l	1	J	1.6	U	1.6	U	1.7	U
537 Mod	Perfluorooctanesulfonic acid (PFOS)	ng/l	4.5		1.6	U	1.6	U	2.8	
537 Mod	Perfluorooctanoic acid (PFOA)	ng/l	6.8		0.53	J	0.56	J	3.1	
537 Mod	Perfluoropentanoic acid (PFPeA)	ng/l	7.8		1.6	U	1.6	U	1.7	
537 Mod	Perfluorotetradecanoic acid (PFTeDA)	ng/l	1.6	U	1.6	U	1.6	U	1.7	U
537 Mod	Perfluorotridecanoic acid (PFTrDA)	ng/l	1.6	U	1.6	U	1.6	U	1.7	U
537 Mod	Perfluoroundecanoic acid (PFUnDA)	ng/l	0.61	J	1.6	U	1.6	U	1.7	U
537 Mod	Perfluorooctanesulfonamide (FOSA)	ng/l	8.2	U	8.2	U	8.1	U	8.3	U
SW8260C	1,1,1-Trichloroethane	ug/l	3100		1.4		2.2		5.3	
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	78		2.4		0.8	J	10	
SW8260C	1,1-Dichloroethene	ug/l	280		4.9		3.2		15	

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	ERT-4		MW-11B		MW-11C		MW-12B	
		Sample Date	7/11/2019		7/10/2019		7/10/2019		7/9/2019	
		Sample ID	356023-ERT4		356023-MW11B		356023-MW11C		356023-MW12B 190	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,2,3-Trichlorobenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	2000	U	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	500	U	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	250	U	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	250	U	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	130	U	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	500	U	10	U	10	U	10	U
SW8260C	Benzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Bromodichloromethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	50	U	1	U	1	U	1	U
SW8260C	Bromomethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	50	U	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	50	U	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	50	U	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	50	U	1	U	1	U	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	50	U	1	U	1	U	1	U

**TABLE 2 - ANALYTICAL SUMMARY
 CATEGORY A REVIEW
 JULY 2019 GROUNDWATER SAMPLING PROGRAM
 MOHONK ROAD INDUSTRIAL PLANT
 HIGH FALLS, NEW YORK**

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	ERT-4		MW-11B		MW-11C		MW-12B	
		Sample Date	7/11/2019		7/10/2019		7/10/2019		7/9/2019	
		Sample ID	356023-ERT4		356023-MW11B		356023-MW11C		356023-MW12B 190	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Dichlorodifluoromethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	50	U	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	50	U	1	U	1	U	1	U
SW8260C	Styrene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Toluene	ug/l	50	U	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	50	U	1	U	1	U	1	U
SW8260C	trans-1,3-Dichloropropene	ug/l	50	U	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	140		0.93	J	0.64	J	3.5	
SW8260C	Trichlorofluoromethane	ug/l	50	U	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	50	U	1	U	1	U	1	U
SW8260C	Xylenes, Total	ug/l	100	U	2	U	2	U	2	U

* = lab qualifier; LCS recovery outside control limits

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

Method	Parameter	SDG Location Sample Date Sample ID Qc Code Units	480-156213-1 MW-14B 7/9/2019 356023-MW14B 150 FS		480-156213-1 MW-15B 7/12/2019 356023-MW15B FS		480-156213-1 MW-16 7/9/2019 356023-MW16 FS		480-156213-1 MW-18-1 7/11/2019 356023-MW1801 FS	
			Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8270D-SIM	1,4-Dioxane	ug/l	3.4	J	5.9		4.2	J	1	
537 Mod	6:2 Fluorotelomer sulfonate (6:2 FTS)	ng/l	16	U	18	U	16	U		
537 Mod	8:2 Fluorotelomer sulfonate (8:2 FTS)	ng/l	16	U	18	U	16	U		
537 Mod	N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ng/l	16	U	18	U	16	U		
537 Mod	N-methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	ng/l	16	U	18	U	16	U		
537 Mod	Perfluorobutanesulfonic acid (PFBS)	ng/l	2.8		0.72	J	1.6	U		
537 Mod	Perfluorobutanoic acid (PFBA)	ng/l	3		1.4	J	1.6	U		
537 Mod	Perfluorodecanesulfonic acid (PFDS)	ng/l	1.6	U	1.8	U	1.6	U		
537 Mod	Perfluorodecanoic acid (PFDA)	ng/l	1.6	U	1.8	U	1.6	U		
537 Mod	Perfluorododecanoic acid (PFDoA)	ng/l	1.6	U	1.8	U	1.6	U		
537 Mod	Perfluoroheptanesulfonic acid (PFHpS)	ng/l	1.6	U	1.8	U	1.6	U		
537 Mod	Perfluoroheptanoic acid (PFHpA)	ng/l	1.1	J	1.8	U	1.6	U		
537 Mod	Perfluorohexanesulfonic acid (PFHxS)	ng/l	1.4	J	1.8	U	1.6	U		
537 Mod	Perfluorohexanoic acid (PFHxA)	ng/l	3.1		1.8	U	1.6	U		
537 Mod	Perfluorononanoic acid (PFNA)	ng/l	0.92	J	1.8	U	1.6	U		
537 Mod	Perfluorooctanesulfonic acid (PFOS)	ng/l	2.5		1.8	U	1.6	U		
537 Mod	Perfluorooctanoic acid (PFOA)	ng/l	4.4		0.89	J	0.52	J		
537 Mod	Perfluoropentanoic acid (PFPeA)	ng/l	2.9		1.8	U	1.6	U		
537 Mod	Perfluorotetradecanoic acid (PFTeDA)	ng/l	1.6	U	1.8	U	1.6	U		
537 Mod	Perfluorotridecanoic acid (PFTrDA)	ng/l	1.6	U	1.8	U	1.6	U		
537 Mod	Perfluoroundecanoic acid (PFUnDA)	ng/l	1.6	U	1.8	U	1.6	U		
537 Mod	Perfluorooctanesulfonamide (FOSA)	ng/l	8.1	U	8.8	U	7.9	U		
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	26		13		1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1		8.3		2.2		1.1	
SW8260C	1,1-Dichloroethene	ug/l	0.66	J	19		10		1	U

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	MW-14B		MW-15B		MW-16		MW-18-1	
		Sample Date	7/9/2019		7/12/2019		7/9/2019		7/11/2019	
		Sample ID	356023-MW14B 150		356023-MW15B		356023-MW16		356023-MW1801	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	10	U	10	U	10	U	10	U
SW8260C	Benzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U	1	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U	1	U

**TABLE 2 - ANALYTICAL SUMMARY
 CATEGORY A REVIEW
 JULY 2019 GROUNDWATER SAMPLING PROGRAM
 MOHONK ROAD INDUSTRIAL PLANT
 HIGH FALLS, NEW YORK**

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	MW-14B		MW-15B		MW-16		MW-18-1	
		Sample Date	7/9/2019		7/12/2019		7/9/2019		7/11/2019	
		Sample ID	356023-MW14B 150		356023-MW15B		356023-MW16		356023-MW1801	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U	1	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	1	U
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	1	U	1.2		1.3		1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	1	U	1	U	1	U	1	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U	2	U

* = lab qualifier; LCS recovery outside control limits

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

Method	Parameter	SDG Location Sample Date Sample ID Qc Code Units	480-156213-1 MW-18-2 7/11/2019 356023-MW1802 FS		480-156213-1 MW-18-3 7/11/2019 356023-MW1803 FS		480-156213-1 MW-1B 7/12/2019 356023-MW1B FS		480-156213-1 MW-4 7/11/2019 356023-MW4 FS	
			Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8270D-SIM	1,4-Dioxane	ug/l	1.3		1.4		0.2 U		6.4	
537 Mod	6:2 Fluorotelomer sulfonate (6:2 FTS)	ng/l					16 U		16 U	
537 Mod	8:2 Fluorotelomer sulfonate (8:2 FTS)	ng/l					16 U		16 U	
537 Mod	N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ng/l					16 U		16 U	
537 Mod	N-methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	ng/l					16 U		16 U	
537 Mod	Perfluorobutanesulfonic acid (PFBS)	ng/l					0.67 J		1.7	
537 Mod	Perfluorobutanoic acid (PFBA)	ng/l					3.1		6.9	
537 Mod	Perfluorodecanesulfonic acid (PFDS)	ng/l					1.6 U		1.6 U	
537 Mod	Perfluorodecanoic acid (PFDA)	ng/l					1.6 U		1.6 U	
537 Mod	Perfluorododecanoic acid (PFDoA)	ng/l					1.6 U		1.6 U	
537 Mod	Perfluoroheptanesulfonic acid (PFHpS)	ng/l					1.6 U		1.6 U	
537 Mod	Perfluoroheptanoic acid (PFHpA)	ng/l					1.6 U		2.2	
537 Mod	Perfluorohexanesulfonic acid (PFHxS)	ng/l					1.6 U		0.72 J	
537 Mod	Perfluorohexanoic acid (PFHxA)	ng/l					0.76 J		6.3	
537 Mod	Perfluorononanoic acid (PFNA)	ng/l					1.6 U		0.42 J	
537 Mod	Perfluorooctanesulfonic acid (PFOS)	ng/l					0.6 J		2.1 J	
537 Mod	Perfluorooctanoic acid (PFOA)	ng/l					2		6.4	
537 Mod	Perfluoropentanoic acid (PFPeA)	ng/l					1 J		12	
537 Mod	Perfluorotetradecanoic acid (PFTeDA)	ng/l					1.6 U		1.6 U	
537 Mod	Perfluorotridecanoic acid (PFTrDA)	ng/l					1.6 U		1.6 U	
537 Mod	Perfluoroundecanoic acid (PFUnDA)	ng/l					1.6 U		1.6 U	
537 Mod	Perfluorooctanesulfonamide (FOSA)	ng/l					8 U		8 U	
SW8260C	1,1,1-Trichloroethane	ug/l	1 U		1 U		1 U		1100	
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1 U		1 U		1 U		20 U	
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	1 U		1 U		1 U		20 U	
SW8260C	1,1,2-Trichloroethane	ug/l	1 U		1 U		1 U		20 U	
SW8260C	1,1-Dichloroethane	ug/l	1.4		1.4		1 U		23	
SW8260C	1,1-Dichloroethene	ug/l	0.46 J		0.43 J		1 U		130	

**TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK**

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	MW-18-2		MW-18-3		MW-1B		MW-4	
		Sample Date	7/11/2019		7/11/2019		7/12/2019		7/11/2019	
		Sample ID	356023-MW1802		356023-MW1803		356023-MW1B		356023-MW4	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U	800	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U	200	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U	100	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U	100	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U	50	U
SW8260C	Acetone	ug/l	10	U	10	U	10	U	200	U
SW8260C	Benzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U	20	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U	20	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U	20	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U	20	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	20	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U	20	U

**TABLE 2 - ANALYTICAL SUMMARY
 CATEGORY A REVIEW
 JULY 2019 GROUNDWATER SAMPLING PROGRAM
 MOHONK ROAD INDUSTRIAL PLANT
 HIGH FALLS, NEW YORK**

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	MW-18-2		MW-18-3		MW-1B		MW-4	
		Sample Date	7/11/2019		7/11/2019		7/12/2019		7/11/2019	
		Sample ID	356023-MW1802		356023-MW1803		356023-MW1B		356023-MW4	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U	20	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U	20	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Tetrachloroethene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U	20	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	20	U
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	20	U
SW8260C	Trichloroethene	ug/l	1	U	1	U	1	U	390	
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U	20	U
SW8260C	Vinyl chloride	ug/l	1	U	1	U	1	U	20	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U	40	U

* = lab qualifier; LCS recovery outside control limits

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

Method	Parameter	SDG Location Sample Date Sample ID Qc Code Units	480-156213-1 MW-5B 7/11/2019 356023-MW5B FS		480-156213-1 MW-5R 7/12/2019 356023-MW5R FS		480-156213-1 MW-6B 7/11/2019 356023-MW6B FS		480-156213-1 MW-7R 7/12/2019 356023-MW7R FS	
			Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8270D-SIM	1,4-Dioxane	ug/l	10		6.1		0.76		2.3	
537 Mod	6:2 Fluorotelomer sulfonate (6:2 FTS)	ng/l	16 U		17 U		18 U		16 U	
537 Mod	8:2 Fluorotelomer sulfonate (8:2 FTS)	ng/l	16 U		17 U		18 U		16 U	
537 Mod	N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ng/l	16 U		17 U		18 U		16 U	
537 Mod	N-methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	ng/l	16 U		17 U		18 U		16 U	
537 Mod	Perfluorobutanesulfonic acid (PFBS)	ng/l	1 J		0.42 J		1.8 U		0.72 J	
537 Mod	Perfluorobutanoic acid (PFBA)	ng/l	4.2		1.2 J		1.6 J		1.4 J	
537 Mod	Perfluorodecanesulfonic acid (PFDS)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluorodecanoic acid (PFDA)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluorododecanoic acid (PFDoA)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluoroheptanesulfonic acid (PFHpS)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluoroheptanoic acid (PFHpA)	ng/l	1 J		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluorohexanesulfonic acid (PFHxS)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluorohexanoic acid (PFHxA)	ng/l	2.7		0.65 J		1.5 J		1.6 U	
537 Mod	Perfluorononanoic acid (PFNA)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluorooctanesulfonic acid (PFOS)	ng/l	2		0.74 J		1.8 U		0.97 J	
537 Mod	Perfluorooctanoic acid (PFOA)	ng/l	2.4		1.2 J		0.92 J		1.5 J	
537 Mod	Perfluoropentanoic acid (PFPeA)	ng/l	3.7		0.89 J		2		0.77 J	
537 Mod	Perfluorotetradecanoic acid (PFTeDA)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluorotridecanoic acid (PFTrDA)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluoroundecanoic acid (PFUnDA)	ng/l	1.6 U		1.7 U		1.8 U		1.6 U	
537 Mod	Perfluorooctanesulfonamide (FOSA)	ng/l	8 U		8.4 U		8.8 U		8.1 U	
SW8260C	1,1,1-Trichloroethane	ug/l	1800		110		8.2		41	
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	40 U		2 U		1 U		1 U	
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	40 U		2 U		1 U		1 U	
SW8260C	1,1,2-Trichloroethane	ug/l	40 U		2 U		1 U		1 U	
SW8260C	1,1-Dichloroethane	ug/l	42		6.7		1 U		14	
SW8260C	1,1-Dichloroethene	ug/l	200		24		1.8		5.7	

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	MW-5B		MW-5R		MW-6B		MW-7R	
		Sample Date	7/11/2019		7/12/2019		7/11/2019		7/12/2019	
		Sample ID	356023-MW5B		356023-MW5R		356023-MW6B		356023-MW7R	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,2,3-Trichlorobenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	1600	U	80	U	40	U	40	U
SW8260C	2-Butanone	ug/l	400	U	20	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	200	U	10	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	200	U	10	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	100	U	5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	400	U	20	U	10	U	10	U
SW8260C	Benzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Bromodichloromethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Bromoform	ug/l	40	U	2	U	1	U	1	U
SW8260C	Bromomethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	40	U	2	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	40	U	2	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Chloroethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Chloroform	ug/l	40	U	2	U	1	U	1	U
SW8260C	Chloromethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	40	U	2	U	1	U	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	40	U	2	U	1	U	1	U

**TABLE 2 - ANALYTICAL SUMMARY
 CATEGORY A REVIEW
 JULY 2019 GROUNDWATER SAMPLING PROGRAM
 MOHONK ROAD INDUSTRIAL PLANT
 HIGH FALLS, NEW YORK**

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	MW-5B		MW-5R		MW-6B		MW-7R	
		Sample Date	7/11/2019		7/12/2019		7/11/2019		7/12/2019	
		Sample ID	356023-MW5B		356023-MW5R		356023-MW6B		356023-MW7R	
		Qc Code	FS		FS		FS		FS	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Dichlorodifluoromethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	40	U	2	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	40	U	2	U	1	U	1	U
SW8260C	Styrene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Toluene	ug/l	40	U	2	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	40	U	2	U	1	U	1	U
SW8260C	trans-1,3-Dichloropropene	ug/l	40	U	2	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	87		7.6		1	U	0.94	J
SW8260C	Trichlorofluoromethane	ug/l	40	U	2	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	40	U	2	U	1	U	1	U
SW8260C	Xylenes, Total	ug/l	80	U	4	U	2	U	2	U

* = lab qualifier; LCS recovery outside control limits

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

Method	Parameter	SDG Location Sample Date Sample ID Qc Code Units	480-156213-1 MW-8B 7/9/2019 356023-MW8B FS		480-156213-1 MW-8B 7/9/2019 356023-MW8BD FD		480-156213-1 QC 7/9/2019 356023-TB1 TB		480-156213-1 QC 7/12/2019 356023-EB1 EB	
			Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8270D-SIM	1,4-Dioxane	ug/l	2.4	J	2.4	J			0.2	U
537 Mod	6:2 Fluorotelomer sulfonate (6:2 FTS)	ng/l	17	U	17	U			16	U
537 Mod	8:2 Fluorotelomer sulfonate (8:2 FTS)	ng/l	17	U	17	U			16	U
537 Mod	N-ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)	ng/l	17	U	17	U			16	U *
537 Mod	N-methyl perfluorooctane sulfonamidoacetic acid (N-MeFOSAA)	ng/l	17	U	17	U			16	U
537 Mod	Perfluorobutanesulfonic acid (PFBS)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorobutanoic acid (PFBA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorodecanesulfonic acid (PFDS)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorodecanoic acid (PFDA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorododecanoic acid (PFDoA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluoroheptanesulfonic acid (PFHpS)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluoroheptanoic acid (PFHpA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorohexanesulfonic acid (PFHxS)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorohexanoic acid (PFHxA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorononanoic acid (PFNA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorooctanesulfonic acid (PFOS)	ng/l	0.53	J	1.7	U			1.6	U
537 Mod	Perfluorooctanoic acid (PFOA)	ng/l	0.56	J	0.65	J			1.6	U
537 Mod	Perfluoropentanoic acid (PFPeA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorotetradecanoic acid (PFTeDA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorotridecanoic acid (PFTrDA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluoroundecanoic acid (PFUnDA)	ng/l	1.7	U	1.7	U			1.6	U
537 Mod	Perfluorooctanesulfonamide (FOSA)	ng/l	8.6	U	8.6	U			8.2	U
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U	1	U	1	U	1	U

TABLE 2 - ANALYTICAL SUMMARY
CATEGORY A REVIEW
JULY 2019 GROUNDWATER SAMPLING PROGRAM
MOHONK ROAD INDUSTRIAL PLANT
HIGH FALLS, NEW YORK

Method	Parameter	SDG Location Sample Date Sample ID Qc Code Units	480-156213-1 MW-8B 7/9/2019 356023-MW8B FS		480-156213-1 MW-8B 7/9/2019 356023-MW8BD FD		480-156213-1 QC 7/9/2019 356023-TB1 TB		480-156213-1 QC 7/12/2019 356023-EB1 EB	
			Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	10	U	10	U	4.1	J	10	
SW8260C	Benzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U*	1	U*
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U*	1	U*

**TABLE 2 - ANALYTICAL SUMMARY
 CATEGORY A REVIEW
 JULY 2019 GROUNDWATER SAMPLING PROGRAM
 MOHONK ROAD INDUSTRIAL PLANT
 HIGH FALLS, NEW YORK**

		SDG	480-156213-1		480-156213-1		480-156213-1		480-156213-1	
		Location	MW-8B		MW-8B		QC		QC	
		Sample Date	7/9/2019		7/9/2019		7/9/2019		7/12/2019	
		Sample ID	356023-MW8B		356023-MW8BD		356023-TB1		356023-EB1	
		Qc Code	FS		FD		TB		EB	
Method	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U	0.6	J
SW8260C	Styrene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U	1	U
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	1	U	1	U	1	U	1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	1	U	1	U	1	U	1	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U	2	U

* = lab qualifier; LCS recovery outside control limits

**TABLE 3 - QUALIFICATION ACTION SUMMARY
 CATEGORY A REVIEW
 JULY 2019 GROUNDWATER SAMPLING PROGRAM
 MOHONK ROAD INDUSTRIAL PLANT
 HIGH FALLS, NEW YORK**

SDG	Analysis Method	Lab Sample ID	Location	Field Sample ID	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Validation Code	Units
480-156213-1	SW8270D-SIM	480-156213-1	MW-8B	356023-MW8B	1,4-Dioxane	2.4	H E	2.4	J	HT	ug/l
480-156213-1	SW8270D-SIM	480-156213-2	MW-8B	356023-MW8BD	1,4-Dioxane	2.4	H E	2.4	J	HT	ug/l
480-156213-1	SW8270D-SIM	480-156213-3	MW-16	356023-MW16	1,4-Dioxane	4.2	H	4.2	J	HT	ug/l
480-156213-1	SW8270D-SIM	480-156213-4	MW-14B	356023-MW14B 150	1,4-Dioxane	3.4	H	3.4	J	HT	ug/l
480-156213-1	SW8270D-SIM	480-156213-5	MW-12B	356023-MW12B 190	1,4-Dioxane	9.2	H	9.2	J	HT	ug/l
480-156213-1	SW8260C	480-156213-11	MW-5B	356023-MW5B	Methylene chloride	22	J	40	U	BL2	ug/l
480-156213-1	SW8260C	480-156213-12	ERT-4	356023-ERT4	Methylene chloride	35	J	50	U	BL2	ug/l
480-156213-1	537 Mod	480-156213-13	MW-4	356023-MW4	Perfluorooctanesulfonic acid (PFOS)	2.1	I	2.1	J	EMPC	ng/l
480-156213-1	SW8260C	480-156213-13	MW-4	356023-MW4	Methylene chloride	14	J	20	U	BL2	ug/l
480-156213-1	SW8260C	480-156213-17	MW-1B	356023-MW1B	Acetone	6.1	J	10	U	BL2	ug/l
480-156213-1	SW8260C	480-156213-18	MW-5R	356023-MW5R	Methylene chloride	1.2	J	2	U	BL2	ug/l

ATTACHMENT A

VOCs

PROJECT CATEGORY A REVIEW RECORD

Project: Mohonk July 2019 LTM

Method: SW-846 8260B

Laboratory: TAL

SDG(s): 400-56213-1

Date: 9/9/19

Reviewer: JULIE RICARDI

Review Level CATEGORY A

1. **Case Narrative Review and COC/Data Package Completeness** COMMENTS
Were problems noted? See attached; no qual
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)
2. **Holding time and Sample Collection**
All samples were analyzed within the 14 day holding time. YES NO (circle one)
3. **QC Blanks**
Are method blanks free of contamination? YES NO (circle one)
Are Trip blanks free of contamination? YES NO (circle one)
TB-1: Acetone 4.15 ^{ug}; MWIB else ND
Are Rinse blanks free of contamination? YES NO NA (circle one)
EB-1: Acetone 10 ^{ug}; MeCl2 0.6 J ^{ug} → subset; Acetone MWIB
4. **Matrix Spike - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35)** MWIB
Were MS/MSDs submitted/analyzed? YES NO MWIB MS/MSD; No else ND
Were all results within the Region II limits? YES NO NA (circle one) qual
Att High bias for subset; ND in samples; no qual
5. **Field Duplicates - Region II Limits (water RPD 50, soil RPD 100)** qual
Were Field Duplicates submitted/analyzed? YES NO 356023 - MW8B/356023 - MW8BD;
Were all results within Region II Limits? YES NO NA (circle one) OK
6. **Reporting Limits: Were samples analyzed at a dilution?** YES NO (circle one)
Elevated RL for samples: 356023 -
-ERT4 (50x)
7. **Electronic Data Review and Edits**
Does the EDD match the Form Is? YES NO (circle one)
-MW4 (20x)
-MW5B (40x)
-MW5R (2x)
8. **Table Review**
Table 1 (Samples and Analytical Methods)
Table 2 (Analytical Results)
Table 3 (Qualification Actions)
Were all tables produced and reviewed? YES NO (circle one)
due to target compd concentrations (1,1,1-TRA)
Table 4 (TICs) Did lab report TICs? YES NO (circle one)
9. Surrogate OK 80-120
10. LCS: See attached 70-130; no qual

Sample Summary

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-156213-1	356023-MW8B	Water	07/09/19 13:20	07/13/19 09:00	
480-156213-2	356023-MW8BD	Water	07/09/19 13:20	07/13/19 09:00	
480-156213-3	356023-MW16	Water	07/09/19 17:10	07/13/19 09:00	
480-156213-4	356023-MW14B 150	Water	07/09/19 11:50	07/13/19 09:00	
480-156213-5	356023-MW12B 190	Water	07/09/19 17:27	07/13/19 09:00	
480-156213-6	356023-MW11B	Water	07/10/19 11:37	07/13/19 09:00	
480-156213-7	356023-MW11C	Water	07/10/19 15:23	07/13/19 09:00	
480-156213-8	356023-MW1801	Water	07/11/19 11:10	07/13/19 09:00	
480-156213-9	356023-MW1802	Water	07/11/19 11:20	07/13/19 09:00	
480-156213-10	356023-MW1803	Water	07/11/19 11:30	07/13/19 09:00	
480-156213-11	356023-MW5B	Water	07/11/19 13:10	07/13/19 09:00	
480-156213-12	356023-ERT4	Water	07/11/19 11:20	07/13/19 09:00	
480-156213-13	356023-MW4	Water	07/11/19 14:47	07/13/19 09:00	
480-156213-14	356023-MW6B	Water	07/11/19 13:15	07/13/19 09:00	
480-156213-15	356023-MW15B	Water	07/12/19 09:30	07/13/19 09:00	
480-156213-16	356023-EB1	Water	07/12/19 09:45	07/13/19 09:00	
480-156213-17	356023-MW1B	Water	07/12/19 11:15	07/13/19 09:00	
480-156213-18	356023-MW5R	Water	07/12/19 11:10	07/13/19 09:00	
480-156213-19	356023-MW7R	Water	07/12/19 11:30	07/13/19 09:00	
480-156213-20	356023-TB1	Water	07/09/19 12:00	07/13/19 09:00	

**Job Narrative
480-156213-1**

Receipt

The samples were received on 7/13/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 1.7° C, 2.0° C, 2.5° C, 2.9° C and 3.1° C.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13) and 356023-MW5R (480-156213-18). Elevated reporting limits (RLs) are provided. ↑ RLs

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-482537 recovered above the upper control limit for Dibromochloromethane and 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW11C (480-156213-7), 356023-MW1801 (480-156213-8), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW6B (480-156213-14), 356023-MW15B (480-156213-15), 356023-EB1 (480-156213-16), 356023-MW1B (480-156213-17), 356023-MW5R (480-156213-18), 356023-MW7R (480-156213-19) and 356023-TB1 (480-156213-20). ✓

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-482537 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW11C (480-156213-7), 356023-MW1801 (480-156213-8), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW6B (480-156213-14), 356023-MW15B (480-156213-15), 356023-EB1 (480-156213-16), 356023-MW1B (480-156213-17), 356023-MW5R (480-156213-18), 356023-MW7R (480-156213-19) and 356023-TB1 (480-156213-20). ✓

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-482537 recovered outside control limits for the following analytes: Dibromochloromethane and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW11C (480-156213-7), 356023-MW1801 (480-156213-8), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW6B (480-156213-14), 356023-MW15B (480-156213-15), 356023-EB1 (480-156213-16), 356023-MW1B (480-156213-17), 356023-MW5R (480-156213-18), 356023-MW7R (480-156213-19) and 356023-TB1 (480-156213-20). ✓

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

GC/MS Semi VOA

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for samples 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW6B (480-156213-14[MS]) and 356023-MW6B (480-156213-14[MSD]) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope. ✓

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for samples 356023-MW11C (480-156213-7), 356023-MW1802 (480-156213-9), 356023-MW1803 (480-156213-10) and 356023-MW7R (480-156213-19) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope. ✓

Method(s) 8270D SIM ID: The following samples were diluted to bring the concentration of target analytes within the calibration range: 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4), 356023-MW12B 190 (480-156213-5), 356023-MW11B (480-156213-6), 356023-MW5B (480-156213-11), 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13), 356023-MW15B (480-156213-15) and 356023-MW5R (480-156213-18). Elevated reporting limits (RLs) are provided. ↑ RLs

Method(s) 8270D SIM ID: The 1,4-Dioxane result reported for samples 356023-ERT4 (480-156213-12), 356023-MW4 (480-156213-13) and 356023-MW5R (480-156213-18) have an E flag qualifier indicating the results are over the calibration range on the raw data. The actual amounts are within the calibration range; however, the E flag is generated based upon the bias corrected concentration. The LIMS system calculates a bias correction based on the recovery of the 1,4-Dioxane-d8 isotope. ✓

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

LCMS

gn 9/9/19

LCMS

Method(s) 537 (modified): The continuing calibration verification (CCV) associated with batch 200-145761 recovered outside acceptance criteria, low biased, for 8:2 FTS. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. ✓

Method(s) 537 (modified): The Ion Ratio associated with PFOS fails our in-house defined limits for the following sample 356023-MW4 (480-156213-13), however the result is being reported because the peaks observed for both mass transitions are within the expected retention time windows for the branched chain isomers in our calibration mix. Since many of these isomers are at very low levels in our mixed calibration source (many are less than 5% of the solution), it's difficult to project how the different isomers responses differ at higher levels, so we don't feel comfortable rejecting the detect based upon the ratio.

EMPC
J

Method(s) 537 (modified): The laboratory control sample (LCS) associated with preparation batch 200-145382 and analytical batch 200-145761 was outside acceptance criteria for N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA). Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

See
LCS 3

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

MS(MSD)

Organic Prep for 1,4-Dioxane

Summaries

Method(s) 3510C: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the preparation of the following samples within holding time: 356023-MW8B (480-156213-1), 356023-MW8BD (480-156213-2), 356023-MW16 (480-156213-3), 356023-MW14B 150 (480-156213-4) and 356023-MW12B 190 (480-156213-5).

J/UJ

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

HT.
1,4-Dioxane
- 1 thru -5

Jr
9/10/19

QC Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: MB 480-482537/7
 Matrix: Water
 Analysis Batch: 482537

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/17/19 21:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/17/19 21:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/17/19 21:43	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		07/17/19 21:43	1
4-Bromofluorobenzene (Surr)	105		73 - 120		07/17/19 21:43	1
Dibromofluoromethane (Surr)	102		75 - 123		07/17/19 21:43	1
Toluene-d8 (Surr)	97		80 - 120		07/17/19 21:43	1

Lab Sample ID: LCS 480-482537/5
 Matrix: Water
 Analysis Batch: 482537

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

70-130

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1-Trichloroethane	25.0	27.4		ug/L		110	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.7		ug/L		107	61 - 148
1,1,2-Trichloroethane	25.0	26.0		ug/L		104	76 - 122
1,1-Dichloroethane	25.0	24.9		ug/L		100	77 - 120
1,1-Dichloroethene	25.0	24.7		ug/L		99	66 - 127
1,2,3-Trichlorobenzene	25.0	26.7		ug/L		107	75 - 123
1,2,4-Trichlorobenzene	25.0	27.8		ug/L		111	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	30.7		ug/L		123	56 - 134
1,2-Dibromoethane	25.0	26.8		ug/L		107	77 - 120
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	25.9		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	24.7		ug/L		99	76 - 120
1,3-Dichlorobenzene	25.0	25.1		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 120
1,4-Dioxane	500	550		ug/L		110	50 - 150
2-Butanone (MEK)	125	145		ug/L		116	57 - 140
2-Hexanone	125	147		ug/L		118	65 - 127
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	71 - 125
Acetone	J+ (u) for EB, TB; no wals	125	176	ug/L		141	56 - 142
Benzene		25.0	23.9	ug/L		96	71 - 124
Bromochloromethane		25.0	25.6	ug/L		102	72 - 130
Bromodichloromethane		25.0	29.0	ug/L		116	80 - 122
Bromoform	J+ (ND)	25.0	35.8 *	ug/L		143	61 - 132
Bromomethane		25.0	19.0	ug/L		76	55 - 144
Carbon disulfide		25.0	25.5	ug/L		102	59 - 134
Carbon tetrachloride		25.0	28.8	ug/L		115	72 - 134
Chlorobenzene	ju 9/10/19	25.0	25.0	ug/L		100	80 - 120
Chloroethane		25.0	17.8	ug/L		71	69 - 136
Chloroform		25.0	24.3	ug/L		97	73 - 127
Chloromethane		25.0	20.5	ug/L		82	68 - 124
cis-1,2-Dichloroethene		25.0	24.6	ug/L		99	74 - 124
cis-1,3-Dichloropropene		25.0	25.2	ug/L		101	74 - 124

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: LCS 480-482537/5
 Matrix: Water
 Analysis Batch: 482537

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	70-130		%Rec. Limits
					D	%Rec	
Cyclohexane	25.0	25.7		ug/L		103	59-135
Dibromochloromethane	25.0	33.0	*	ug/L		132	75-125
Dichlorodifluoromethane	25.0	18.1		ug/L		73	59-135
Ethylbenzene	25.0	25.2		ug/L		101	77-123
Isopropylbenzene	25.0	24.8		ug/L		99	77-122
Methyl acetate	50.0	49.6		ug/L		99	74-133
Methyl tert-butyl ether	25.0	24.6		ug/L		98	77-120
Methylcyclohexane	25.0	25.5		ug/L		102	68-134
Methylene Chloride	25.0	27.2		ug/L		109	75-124
Styrene	25.0	24.7		ug/L		99	80-120
Tetrachloroethene	25.0	28.2		ug/L		113	74-122
Toluene	25.0	24.3		ug/L		97	80-122
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	73-127
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	80-120
Trichloroethene	25.0	24.3		ug/L		97	74-123
Trichlorofluoromethane	25.0	20.2		ug/L		81	62-150
Vinyl chloride	25.0	20.2		ug/L		81	65-133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		77-120
4-Bromofluorobenzene (Surr)	107		73-120
Dibromofluoromethane (Surr)	100		75-123
Toluene-d8 (Surr)	98		80-120

Lab Sample ID: 480-156213-14 MS
 Matrix: Water
 Analysis Batch: 482537

Client Sample ID: 356023-MW6B
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	70-130		%Rec. Limits
				Result	Qualifier		D	%Rec	
1,1,1-Trichloroethane	8.2	F1	25.0	40.3	F1	ug/L		128	73-126
1,1,1,2-Tetrachloroethane	ND		25.0	26.3		ug/L		105	76-120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.8		ug/L		115	61-148
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	76-122
1,1-Dichloroethane	ND		25.0	28.0		ug/L		112	77-120
1,1-Dichloroethene	1.8		25.0	31.3		ug/L		118	66-127
1,2,3-Trichlorobenzene	ND		25.0	27.7		ug/L		111	75-123
1,2,4-Trichlorobenzene	ND		25.0	27.6		ug/L		111	79-122
1,2-Dibromo-3-Chloropropane	ND	F1	25.0	32.4		ug/L		129	56-134
1,2-Dibromoethane	ND		25.0	27.0		ug/L		108	77-120
1,2-Dichlorobenzene	ND		25.0	26.4		ug/L		106	80-124
1,2-Dichloroethane	ND		25.0	27.8		ug/L		111	75-120
1,2-Dichloropropane	ND		25.0	26.9		ug/L		108	76-120
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		105	77-120
1,4-Dichlorobenzene	ND		25.0	26.0		ug/L		104	78-124
1,4-Dioxane	ND		500	499		ug/L		100	50-150
2-Butanone (MEK)	ND		125	140		ug/L		112	57-140
2-Hexanone	ND		125	140		ug/L		112	65-127
4-Methyl-2-pentanone (MIBK)	ND		125	133		ug/L		107	71-125

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: 480-156213-14 MS

Matrix: Water

Analysis Batch: 482537

Client Sample ID: 356023-MW6B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	70-130		%Rec. Limits
				Result	Qualifier		D	%Rec	
Acetone	ND		125	158		ug/L		126	56-142
Benzene	ND		25.0	26.1		ug/L		104	71-124
Bromochloromethane	ND		25.0	28.2		ug/L		113	72-130
Bromodichloromethane	ND	F1	25.0	31.0	F1	ug/L		124	80-122
Bromoform	J+ (ND)	* F1	25.0	33.5	F1	ug/L		134	61-132
Bromomethane	ND		25.0	22.9		ug/L		92	55-144
Carbon disulfide	ND		25.0	27.6		ug/L		110	59-134
Carbon tetrachloride	J+ (ND)		25.0	33.3		ug/L		133	72-134
Chlorobenzene	ND		25.0	26.2		ug/L		105	80-120
Chloroethane	ND		25.0	22.8		ug/L		91	69-136
Chloroform	ND		25.0	27.1		ug/L		108	73-127
Chloromethane	ND		25.0	24.5		ug/L		98	68-124
cis-1,2-Dichloroethene	ND		25.0	27.2		ug/L		109	74-124
cis-1,3-Dichloropropene	ND		25.0	25.9		ug/L		104	74-124
Cyclohexane	ND		25.0	28.0		ug/L		112	59-135
Dibromochloromethane	J+ (ND)	* F1	25.0	32.8	F1	ug/L		131	75-125
Dichlorodifluoromethane	ND		25.0	21.1		ug/L		85	59-135
Ethylbenzene	ND		25.0	26.6		ug/L		107	77-123
Isopropylbenzene	ND		25.0	26.5		ug/L		106	77-122
Methyl acetate	ND		50.0	48.9		ug/L		98	74-133
Methyl tert-butyl ether	ND		25.0	25.5		ug/L		102	77-120
Methylcyclohexane	ND		25.0	27.8		ug/L		111	68-134
Methylene Chloride	ND		25.0	28.0		ug/L		112	75-124
Styrene	ND		25.0	26.0		ug/L		104	80-120
Tetrachloroethene	ND	F1	25.0	30.0		ug/L		120	74-122
Toluene	ND		25.0	25.9		ug/L		104	80-122
trans-1,2-Dichloroethene	ND		25.0	28.4		ug/L		114	73-127
trans-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	80-120
Trichloroethene	ND		25.0	28.0		ug/L		112	74-123
Trichlorofluoromethane	J+ (ND)		25.0	25.4		ug/L		102	62-150
Vinyl chloride	9/10/19 ND		25.0	25.7		ug/L		103	65-133

Surrogate	MS MS %Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		77 - 120
4-Bromofluorobenzene (Surr)	103		73 - 120
Dibromofluoromethane (Surr)	103		75 - 123
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 480-156213-14 MSD

Matrix: Water

Analysis Batch: 482537

Client Sample ID: 356023-MW6B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec. Limits	RPD	Limit
				Result	Qualifier						
1,1,1-Trichloroethane	8.2	F1	25.0	39.9	F1	ug/L		127	73-126	1	15
1,1,1,2-Tetrachloroethane	ND		25.0	26.2		ug/L		105	76-120	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.1		ug/L		112	61-148	2	20
1,1,2-Trichloroethane	ND		25.0	26.0		ug/L		104	76-122	1	15
1,1-Dichloroethane	ND		25.0	27.9		ug/L		112	77-120	0	20

Eurofins TestAmerica, Buffalo

QC Sample Results

Client: New York State D.E.C.
Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

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

Lab Sample ID: 480-156213-14 MSD

Matrix: Water

Analysis Batch: 482537

Client Sample ID: 356023-MW6B

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
1,1-Dichloroethene	1.8		25.0	30.4		ug/L		114	66 - 127	3	16	
1,2,3-Trichlorobenzene	ND		25.0	28.0		ug/L		112	75 - 123	1	20	
1,2,4-Trichlorobenzene	ND		25.0	28.3		ug/L		113	79 - 122	2	20	
1,2-Dibromo-3-Chloropropane	J+ (ND)	ND F1	25.0	33.9	F1	ug/L		(136)	56 - 134	5	15	
1,2-Dibromoethane	ND		25.0	27.6		ug/L		110	77 - 120	2	15	
1,2-Dichlorobenzene	ND		25.0	26.6		ug/L		106	80 - 124	1	20	
1,2-Dichloroethane	ND		25.0	27.3		ug/L		109	75 - 120	2	20	
1,2-Dichloropropane	ND		25.0	26.2		ug/L		105	76 - 120	3	20	
1,3-Dichlorobenzene	ND		25.0	26.4		ug/L		105	77 - 120	1	20	
1,4-Dichlorobenzene	ND		25.0	26.0		ug/L		104	78 - 124	0	20	
1,4-Dioxane	ND		500	559		ug/L		112	50 - 150	11	20	
2-Butanone (MEK)	ND		125	143		ug/L		115	57 - 140	3	20	
2-Hexanone	ND		125	144		ug/L		115	65 - 127	3	15	
4-Methyl-2-pentanone (MIBK)	ND		125	137		ug/L		109	71 - 125	2	35	
Acetone	ND		125	155		ug/L		124	56 - 142	2	15	
Benzene	ND		25.0	26.1		ug/L		104	71 - 124	0	13	
Bromochloromethane	ND		25.0	27.5		ug/L		110	72 - 130	3	15	
Bromodichloromethane	ND	F1	25.0	31.3	F1	ug/L		125	80 - 122	1	15	
Bromoform	J+ (ND)	* F1	25.0	34.9	F1	ug/L		(140)	61 - 132	4	15	
Bromomethane	ND		25.0	22.3		ug/L		89	55 - 144	3	15	
Carbon disulfide	ND		25.0	27.3		ug/L		109	59 - 134	1	15	
Carbon tetrachloride	J+ (ND)		25.0	33.5		ug/L		(134)	72 - 134	1	15	
Chlorobenzene	ND		25.0	26.5		ug/L		106	80 - 120	1	25	
Chloroethane	ND		25.0	23.9		ug/L		96	69 - 136	5	15	
Chloroform	ND		25.0	26.8		ug/L		107	73 - 127	1	20	
Chloromethane	ND		25.0	23.9		ug/L		96	68 - 124	2	15	
cis-1,2-Dichloroethene	ND		25.0	26.7		ug/L		107	74 - 124	2	15	
cis-1,3-Dichloropropene	ND		25.0	26.0		ug/L		104	74 - 124	0	15	
Cyclohexane	ND		25.0	27.7		ug/L		111	59 - 135	1	20	
Dibromochloromethane	J+ (ND)	* F1	25.0	33.7	F1	ug/L		(135)	75 - 125	3	15	
Dichlorodifluoromethane	ND		25.0	20.7		ug/L		83	59 - 135	2	20	
Ethylbenzene	ND		25.0	27.2		ug/L		109	77 - 123	2	15	
Isopropylbenzene	ND		25.0	26.8		ug/L		107	77 - 122	1	20	
Methyl acetate	ND		50.0	48.9		ug/L		98	74 - 133	0	20	
Methyl tert-butyl ether	ND		25.0	25.6		ug/L		103	77 - 120	0	37	
Methylcyclohexane	ND		25.0	27.4		ug/L		109	68 - 134	2	20	
Methylene Chloride	ND		25.0	26.9		ug/L		108	75 - 124	4	15	
Styrene	ND		25.0	26.5		ug/L		106	80 - 120	2	20	
Tetrachloroethene	J+ (ND)	ND F1	25.0	30.7	F1	ug/L		123	74 - 122	2	20	
Toluene	9/16/14	ND	25.0	26.2		ug/L		105	80 - 122	1	15	
trans-1,2-Dichloroethene	ND		25.0	28.7		ug/L		115	73 - 127	1	20	
trans-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	80 - 120	2	15	
Trichloroethene	ND		25.0	27.0		ug/L		108	74 - 123	3	16	
Trichlorofluoromethane	ND		25.0	25.2		ug/L		101	62 - 150	1	20	
Vinyl chloride	ND		25.0	25.6		ug/L		102	65 - 133	1	15	

70-130

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		77 - 120

1,4-Dioxane
SVOC

NYSDEC PROJECT CATEGORY A REVIEW RECORD

Project: Mohonk July 2019 LTM
Method: SW-846 8270D - SIM; 1,4-Dioxane SIM/Isotope Dilution
Laboratory and SDG(s): TAL SDG# 480-156213-1
Date: 9/9/19
Reviewer: JULIE RICARDI
Review Level CATEGORY A

1. **Case Narrative Review and Data Package Completeness** COMMENTS
Were problems noted? YES NO (circle one)
See attached narrative notes submit qualified E due to
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one) final IS
adjusted conc
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one) over calibration
curve; however mass
2. **Holding time and Sample Collection**
Were all water samples extracted within the 7 day holding time, and/or soil within 14 days? YES NO (circle one) of target.
No; samples -1 thru -5 extracted 1 day
3. **QC Blanks** outside HT
Are method blanks free of contamination? YES NO (circle one) analyze is within
upper range of
Are field blanks free of contamination? YES NO NA (circle one) calibration. E
quals removed
EB-1: ND during validation.
4. **Matrix Spike** (water & soil limits: Base/neutral 50-140; Acid 30-140; RPD water = 20; RPD soil = 35)
Were MS/MSDs submitted/analyzed? YES NO MW6B MS/MSD: OK
Were all results were within limits? YES NO NA (circle one)
5. **Field Duplicates** (RPD limits = water:50, soil:100) 356023-MW8B/356023 -
Were Field Duplicates submitted/analyzed? YES NO MW8BD: OK
Were RPDs within criteria. YES NO NA (circle one)
6. **Reporting Limits:** Were samples analyzed at a dilution? YES NO (circle one)
for 1,4-D concentrations; OK
7. **Electronic Data Review and Edits:** Does the EDD match the Form Is? YES NO (circle one)
8. **Table Review**
Table 1 (Samples and Analytical Methods)
Table 2 (Analytical Results)
Table 3 (Qualification Actions)
Were all tables produced and reviewed? YES NO (circle one)

9. 1,4-dioxane-d8: all w/in lab limits 15-110%; actual
recoveries 28% - 45%; no quals

10. LCS: OK (115% recovery 1,4-dioxane)

PFAS

NYSDEC PROJECT CATEGORY A REVIEW RECORD

Project: Mohonk July 2019 LTM

Method: Modified 537

Laboratory and SDG(s): TAL SDG# 480-156213-1

Date: 9/9/19

Reviewer: JULIE RICARDI

Review Level CATEGORY A

1. **Case Narrative Review and Data Package Completeness** COMMENTS
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
MW1801, MW1802, MW1803 specified PFAS on COC due to field error;
Are Field Sample IDs and Locations assigned correctly? YES NO (circle one) corrected w/ lab -
See attached narrative comments re EMPC result J no
PFAS
2. **Holding time and Sample Collection**
Were all water samples extracted within the 14 day holding time, and extracts analyzed within 28 days? YES NO (circle one)
analyzed for these fluoride wells.
3. **QC Blanks**
Are method blanks free of contamination? YES NO (circle one)
Are field reagent blanks free of contamination? YES NO NA (circle one)
4. **Matrix Spike** (water & soil limits: lab limits)
Were MS/MSDs submitted/analyzed? YES NO MW6B MS/MSD: OK
Were all results were within limits? YES NO NA (circle one)
5. **Field Duplicates** (RPD limits = water:50, soil:100)
Were Field Duplicates submitted/analyzed? YES NO MW8B/MW8BD: OK; all ND
or < RL
Were RPDs within criteria? YES NO NA (circle one)
6. **Reporting Limits:** Were samples analyzed at a dilution? YES NO (circle one)
7. **Electronic Data Review and Edits:** Does the EDD match the Form I's? YES NO (circle one)
8. **Table Review**
Table 1 (Samples and Analytical Methods)
Table 2 (Analytical Results)
Table 3 (Qualification Actions)
Were all tables produced and reviewed? YES NO (circle one)
9. IS/Surr: (Isotope Dilution) - All within lab limits 25-150/
50-150; All LCS recoveries in control or no impact
10. LCS (lab limits 70-130/50-150); See attached; no qual

QC Sample Results

Client: New York State D.E.C.
 Project/Site: Mohonk Rd. #356023 Groundwaters

Job ID: 480-156213-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	Lab Sample ID: LCS 200-145382/2-A	Client Sample ID: Lab Control Sample
								Matrix: Water	Prep Type: Total/NA
								Analysis Batch: 145761	Prep Batch: 145382
								%Rec.	
Perfluorobutanoic acid (PFBA)	40.0	41.6		ng/L		104	50 - 150		
Perfluoropentanoic acid (PFPeA)	40.0	39.5		ng/L		99	50 - 150		
Perfluorohexanoic acid (PFHxA)	40.0	40.7		ng/L		102	70 - 130		
Perfluoroheptanoic acid (PFHpA)	40.0	43.2		ng/L		108	70 - 130		
Perfluorooctanoic acid (PFOA)	40.0	42.8		ng/L		107	70 - 130		
Perfluorononanoic acid (PFNA)	40.0	42.0		ng/L		105	70 - 130		
Perfluorodecanoic acid (PFDA)	40.0	40.8		ng/L		102	70 - 130		
Perfluoroundecanoic acid (PFUnA)	40.0	41.6		ng/L		104	70 - 130		
Perfluorododecanoic acid (PFDoA)	40.0	42.4		ng/L		106	70 - 130		
Perfluorotridecanoic acid (PFTriA)	40.0	45.0		ng/L		112	70 - 130		
Perfluorotetradecanoic acid (PFTeA)	40.0	48.5		ng/L		121	70 - 130		
Perfluorobutanesulfonic acid (PFBS)	35.4	36.5		ng/L		103	70 - 130		
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.2		ng/L		99	70 - 130		
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.0		ng/L		102	50 - 150		
Perfluorodecanesulfonic acid (PFDS)	38.6	34.9		ng/L		90	50 - 150		
Perfluorooctanesulfonic acid (PFOS)	37.1	40.9		ng/L		110	70 - 130		
Perfluorooctanesulfonamide (FOSA)	40.0	42.1		ng/L		105	50 - 150		
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	51.4		ng/L		128	70 - 130		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	52.6 *		ng/L		132	70 - 130	J+	(ND)
6:2 FTS	37.9	32.5		ng/L		86	50 - 150		
8:2 FTS	38.3	26.1		ng/L		68	50 - 150		9/10/19

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C8 FOSA	70		25 - 150
13C4 PFBA	104		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	100		50 - 150
13C4 PFHpA	100		50 - 150
13C4 PFOA	87		50 - 150
13C5 PFNA	104		50 - 150
13C2 PFDA	104		50 - 150
13C2 PFUnA	93		50 - 150
13C2 PFDoA	79		50 - 150
13C2 PFTeDA	59		50 - 150
13C3 PFBS	96		50 - 150
18O2 PFHxS	93		50 - 150
13C4 PFOS	99		50 - 150
d3-NMeFOSAA	76		50 - 150
d5-NEtFOSAA	71		50 - 150

Client Information		Sampler: <i>J. Rawcliffe, J. Desjardais</i>		Lab PM: Stone, Judy L		Carrier Tracking No(s):		COC No: 480-13235-29845.1	
Client Contact: Julie Ricardi		Phone: <i>207-828-3614 (J Rawcliffe)</i>		E-Mail: judy.stone@testamericainc.com				Page: Page 1 of 2	
Company: Wood E&I Solutions Inc		Due Date Requested:						Job #:	
Address: 511 Congress Street		TAT Requested (days):						Preservation Codes:	
City: Portland								M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
State, Zip: ME, 04112		PO #: CallOut 138396							
Phone: <i>207-828-3608 (J Ricardi)</i>		WO #:							
Email: julie.ricardi@woodplc.com		Project #: 48020492							
Project Name: Mohonk Rd. #356023 - PFAS		SSOW#:							
Site: <i>Mohonk LTM - N-15 DEC</i>									

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested				Total Number of Containers	Special Instructions/Note:	
							8260C - TCL list VOAS	8270D - SIM, MS, ID - 1,4-Dioxane	PFIC_IDA - PFAS, Standard List (21 Analytes)	8260C - TCL list OLM042			
356023 - <i>mw 8B</i>	<i>7/9/19</i>	<i>1320</i>	<i>G</i>	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
356023 - <i>mw 8BD</i>		<i>1320</i>		Water									
356023 - <i>mw 1b</i>		<i>1710</i>		Water									
356023 - <i>mw 14B150</i>		<i>1150</i>		Water									
356023 - <i>mw 12B190</i>	<i>↓</i>	<i>1727</i>		Water									
356023 - <i>mw 11B</i>	<i>7/10/19</i>	<i>1137</i>		Water									
356023 - <i>mw 11C</i>	<i>↓</i>	<i>1523</i>		Water									<i>not collected; FLUTE wells</i>
356023 - <i>mw 1801</i>	<i>11.</i>	<i>1110</i>		Water									
356023 - <i>mw 1802</i>	<i>↓</i>	<i>1120</i>		Water									
356023 - <i>mw 1803</i>	<i>↓</i>	<i>1130</i>		Water									
356023 - <i>mw 5B</i>	<i>7/11/19</i>	<i>1310</i>	<i>↓</i>	Water									

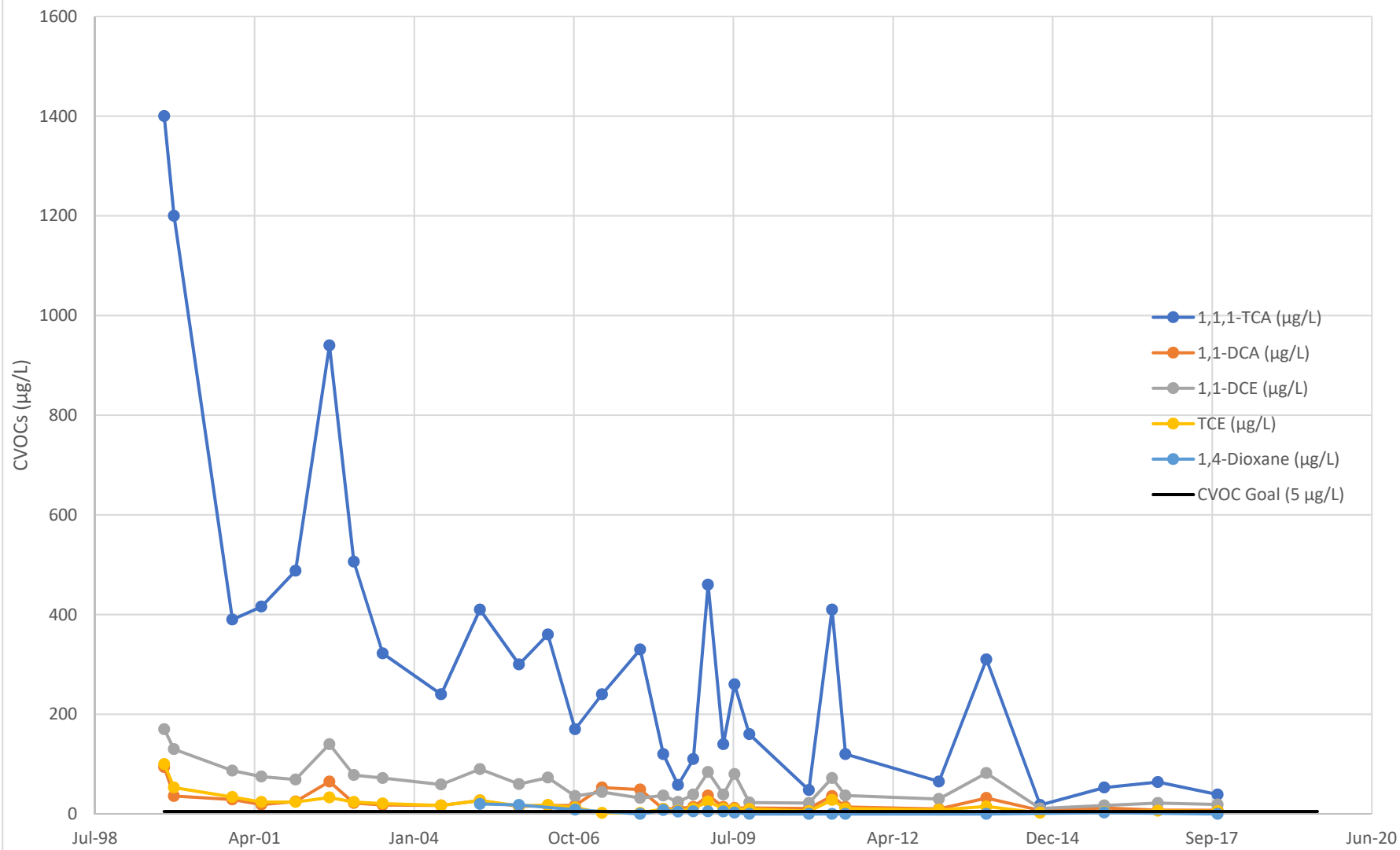
Possible Hazard Identification				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab
Deliverable Requested: I, II, III, IV, Other (specify) <i>Category B Deliverable</i>				Special Instructions/QC Requirements: <i>EQVSEZ (include test batch)</i>			
Empty Kit Relinquished by: <i>Jerry Kuboff</i>		Date: <i>7/12/19 1445</i>		Time: <i>1700</i>		Method of Shipment:	
Relinquished by: <i>Raul Zedler</i>		Date/Time: <i>7/12/19 1445</i>		Company: <i>WJDD</i>		Received by: <i>Raul Zedler</i>	
Relinquished by: <i>Raul Zedler</i>		Date/Time: <i>7/12/19 1700</i>		Company: <i>ETA</i>		Received by: <i>C. Wallace</i>	
Relinquished by:		Date/Time:		Company:		Received by:	

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: <i>2.5 3.1 2.0 2.9 #1</i>
--	-------------------	---

ATTACHMENT D

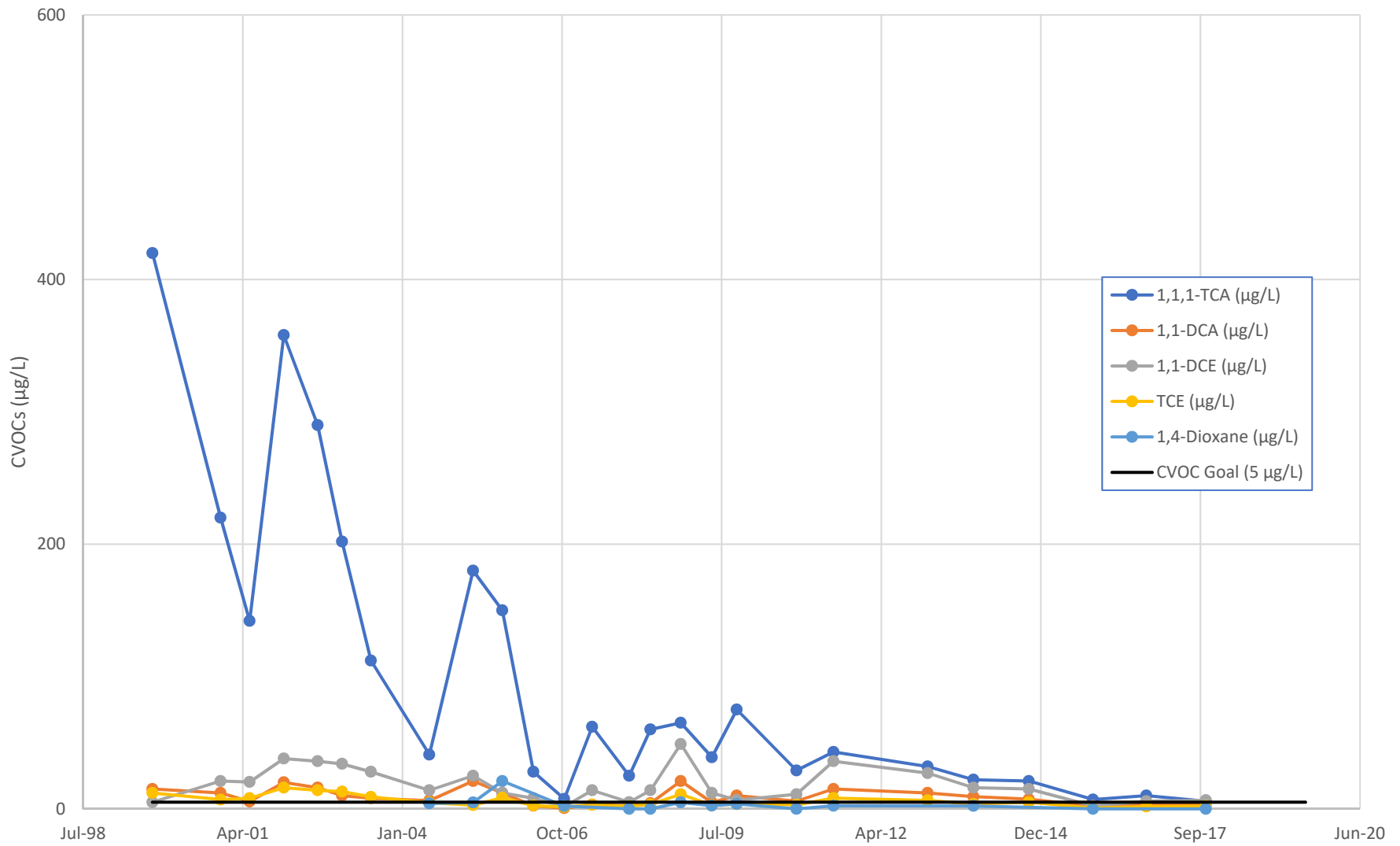
CONCENTRATION TREND PLOTS

ERT-1



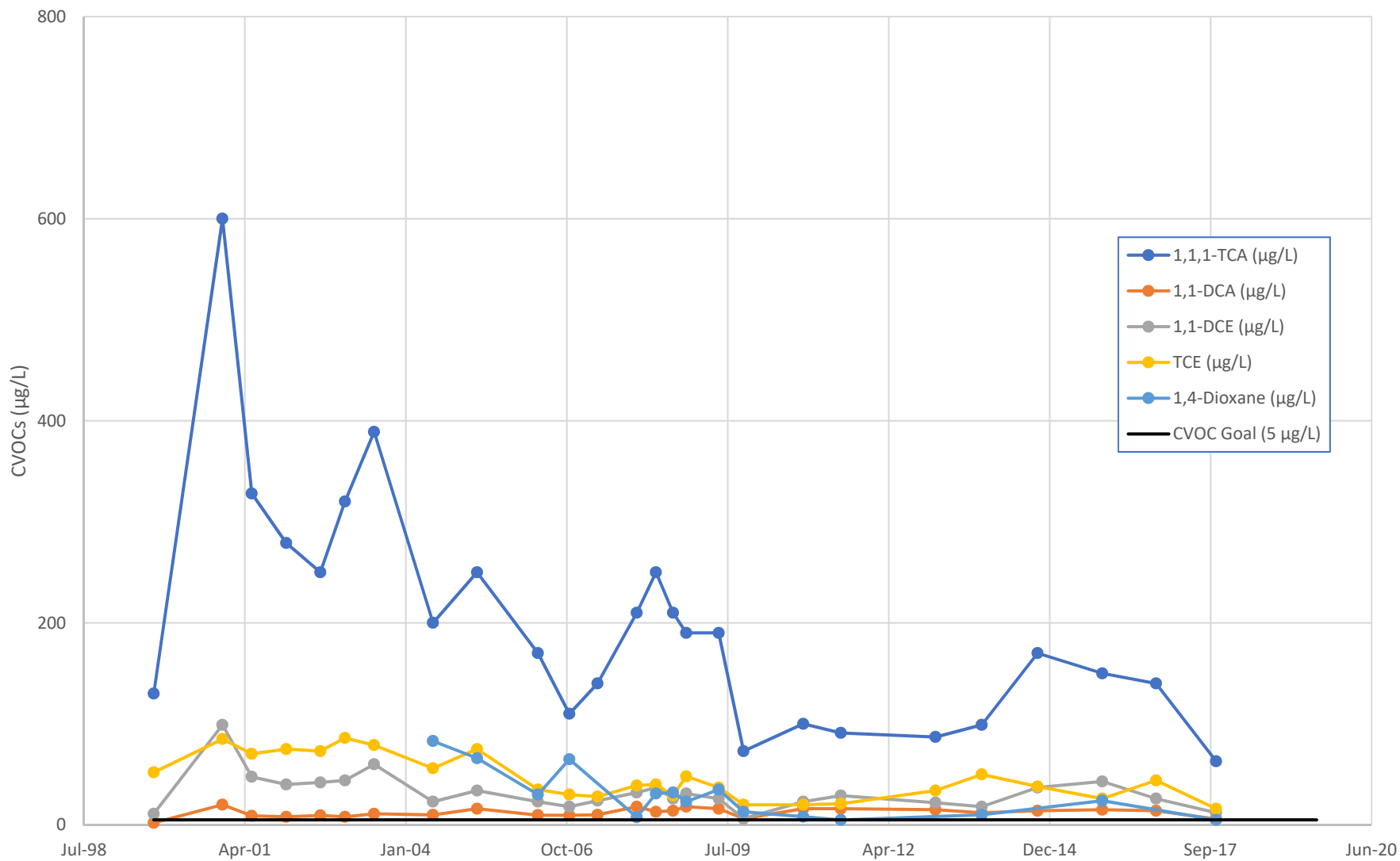
Note: Results that were not detected above the reporting limit are presented as zero.

ERT-2



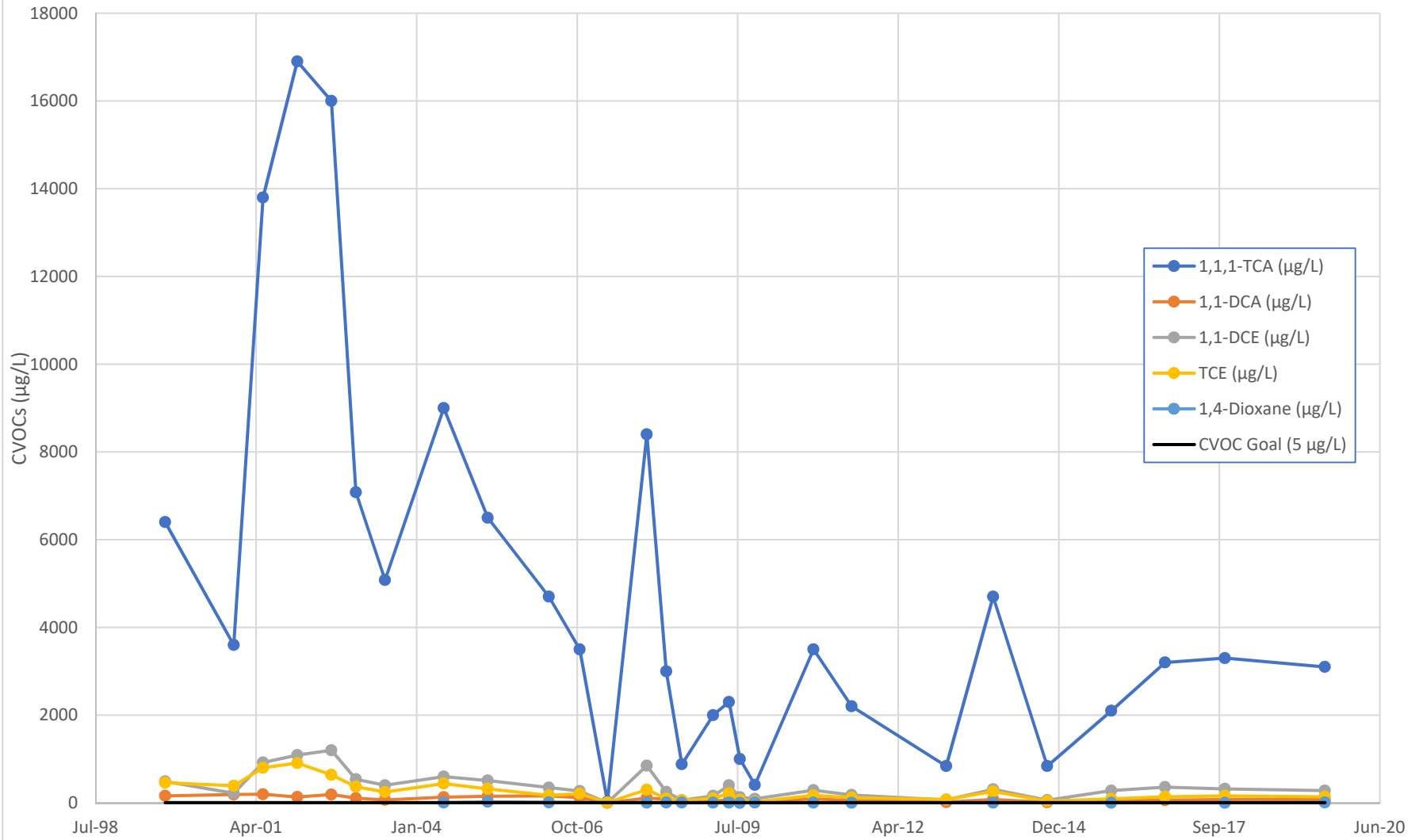
Note: Results that were not detected above the reporting limit are presented as zero.

ERT-3



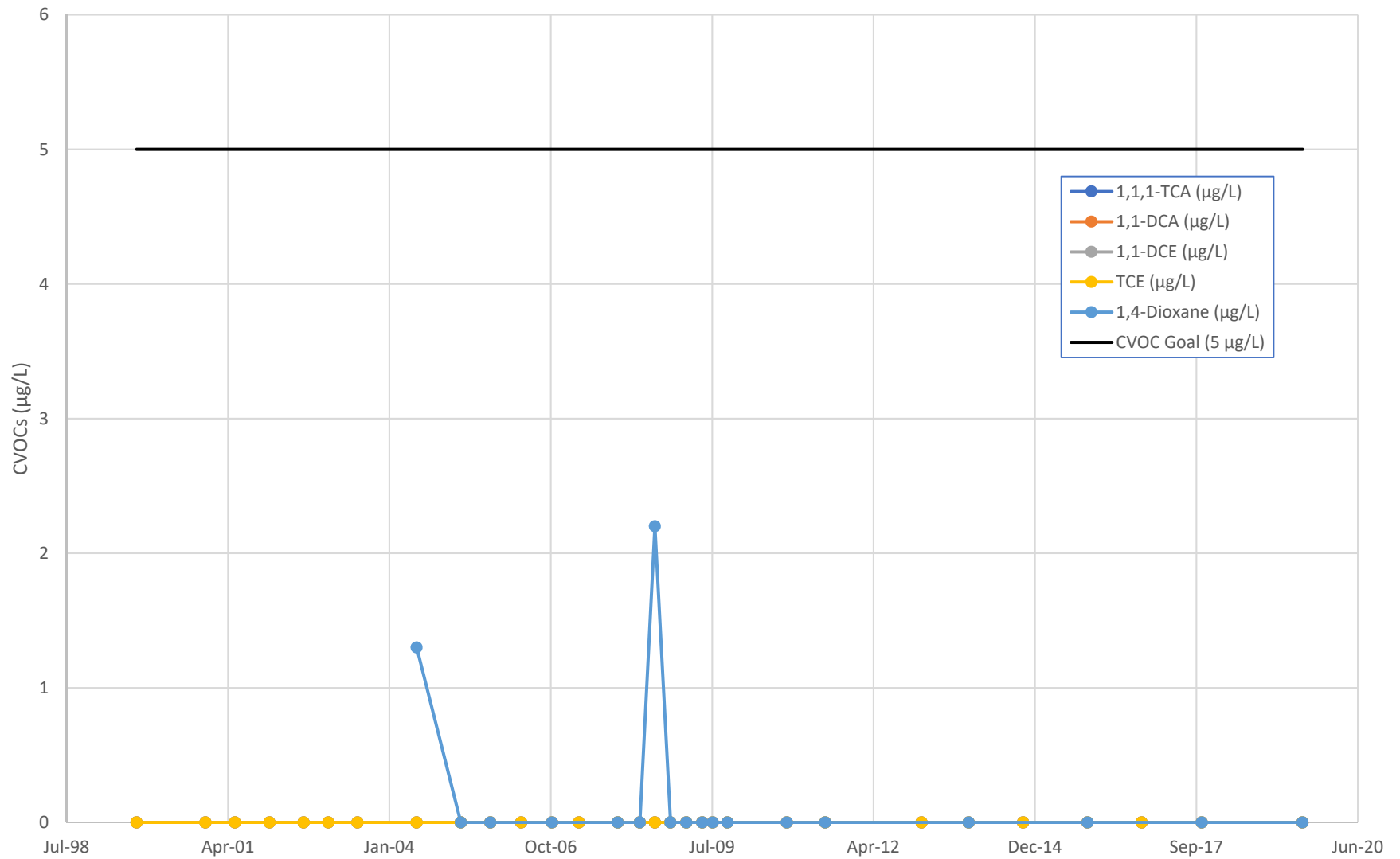
Note: Results that were not detected above the reporting limit are presented as zero.

ERT-1



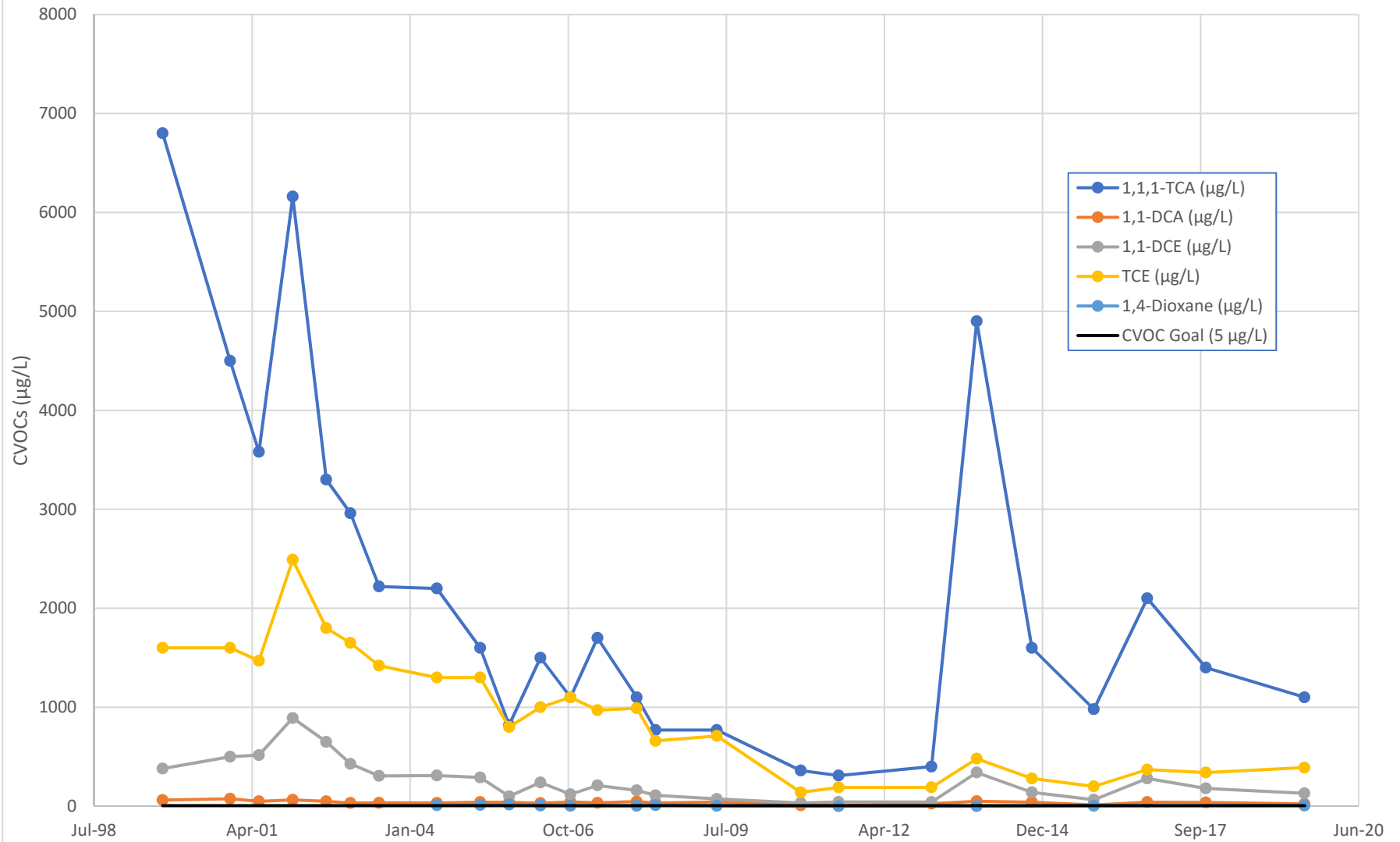
Note: Results that were not detected above the reporting limit are presented as zero.

MW-1B



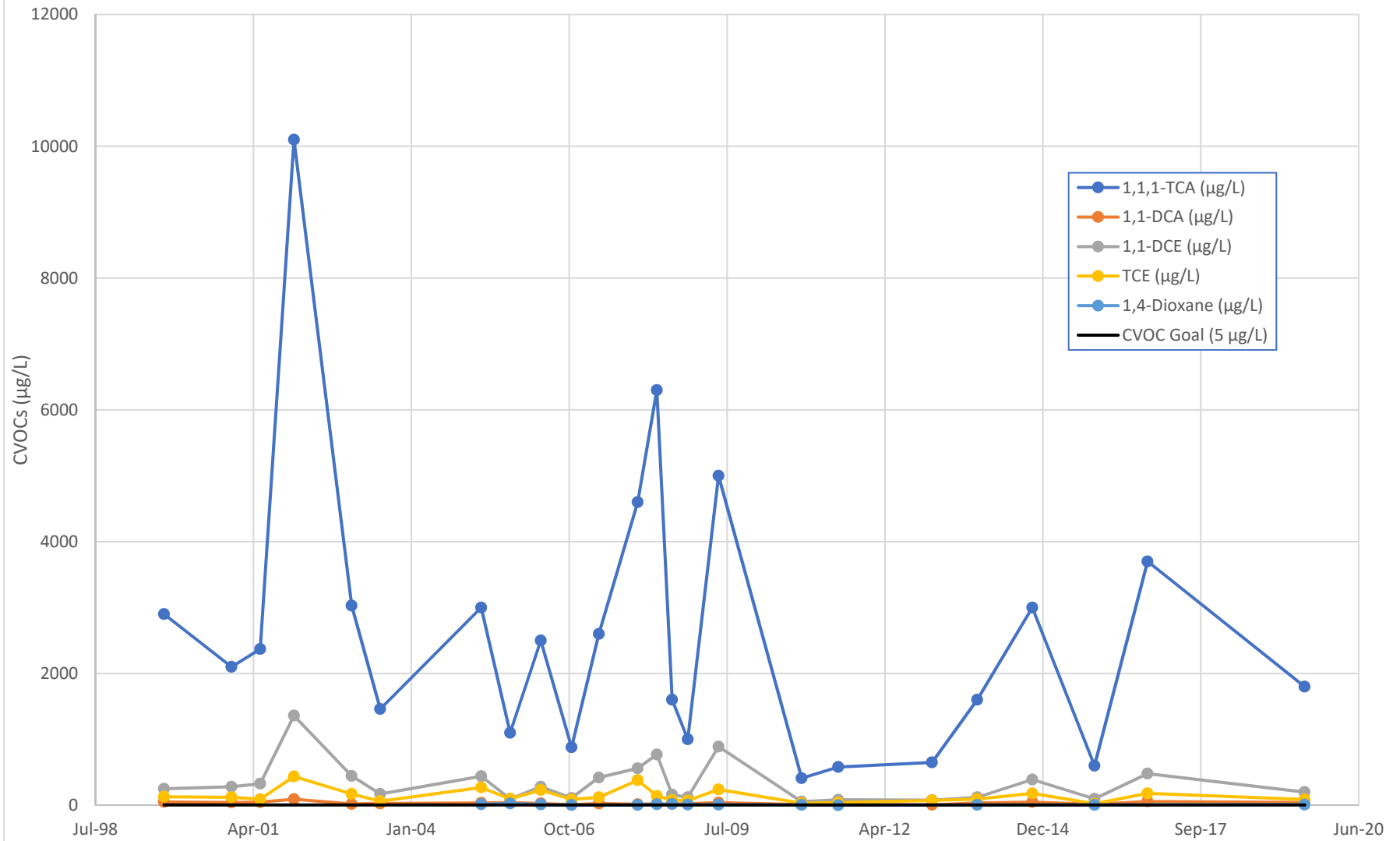
Note: Results that were not detected above the reporting limit are presented as zero.

MW-4



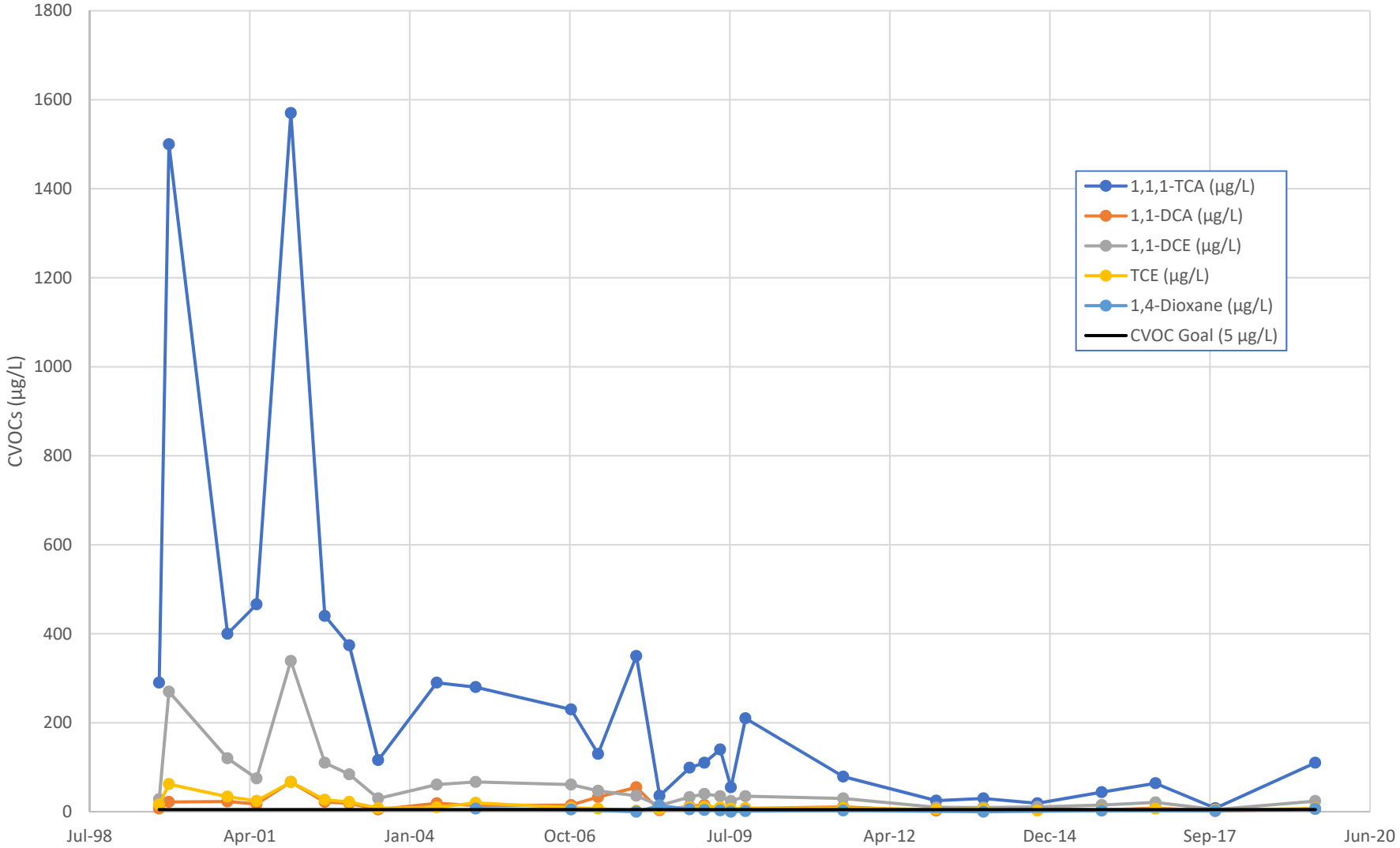
Note: Results that were not detected above the reporting limit are presented as zero.

MW-5B



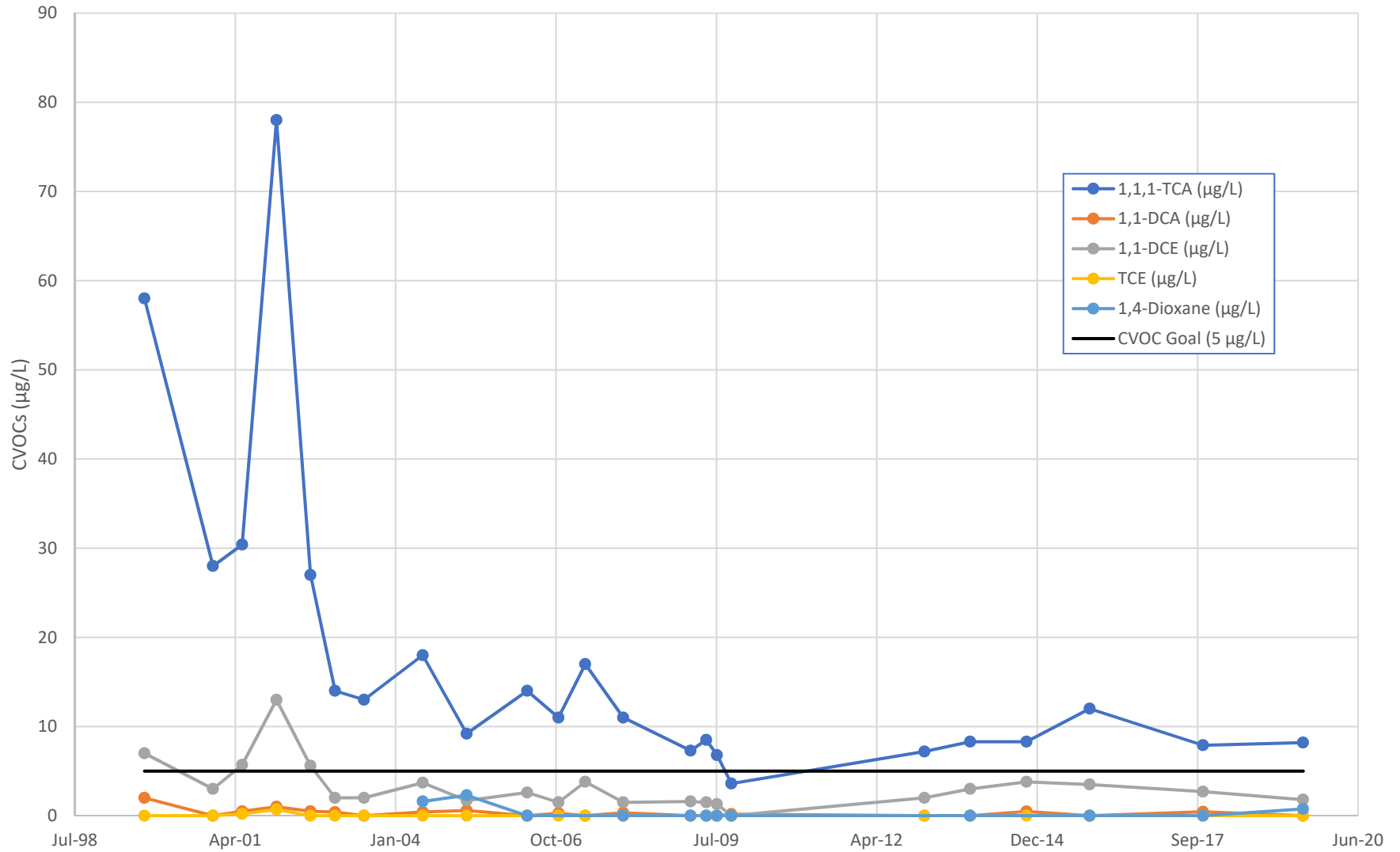
Note: Results that were not detected above the reporting limit are presented as zero.

MW-5R



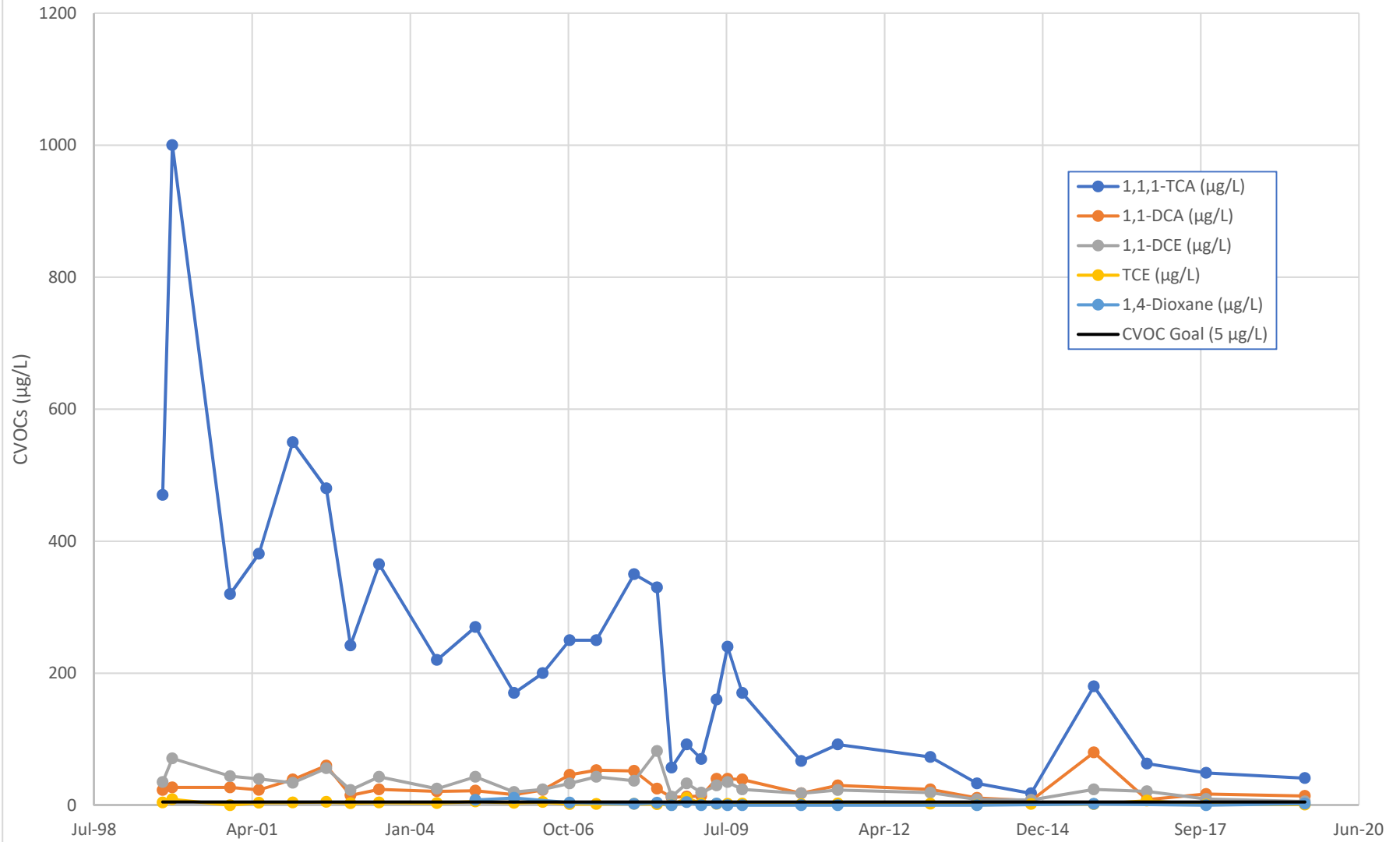
Note: Results that were not detected above the reporting limit are presented as zero.

MW-6B



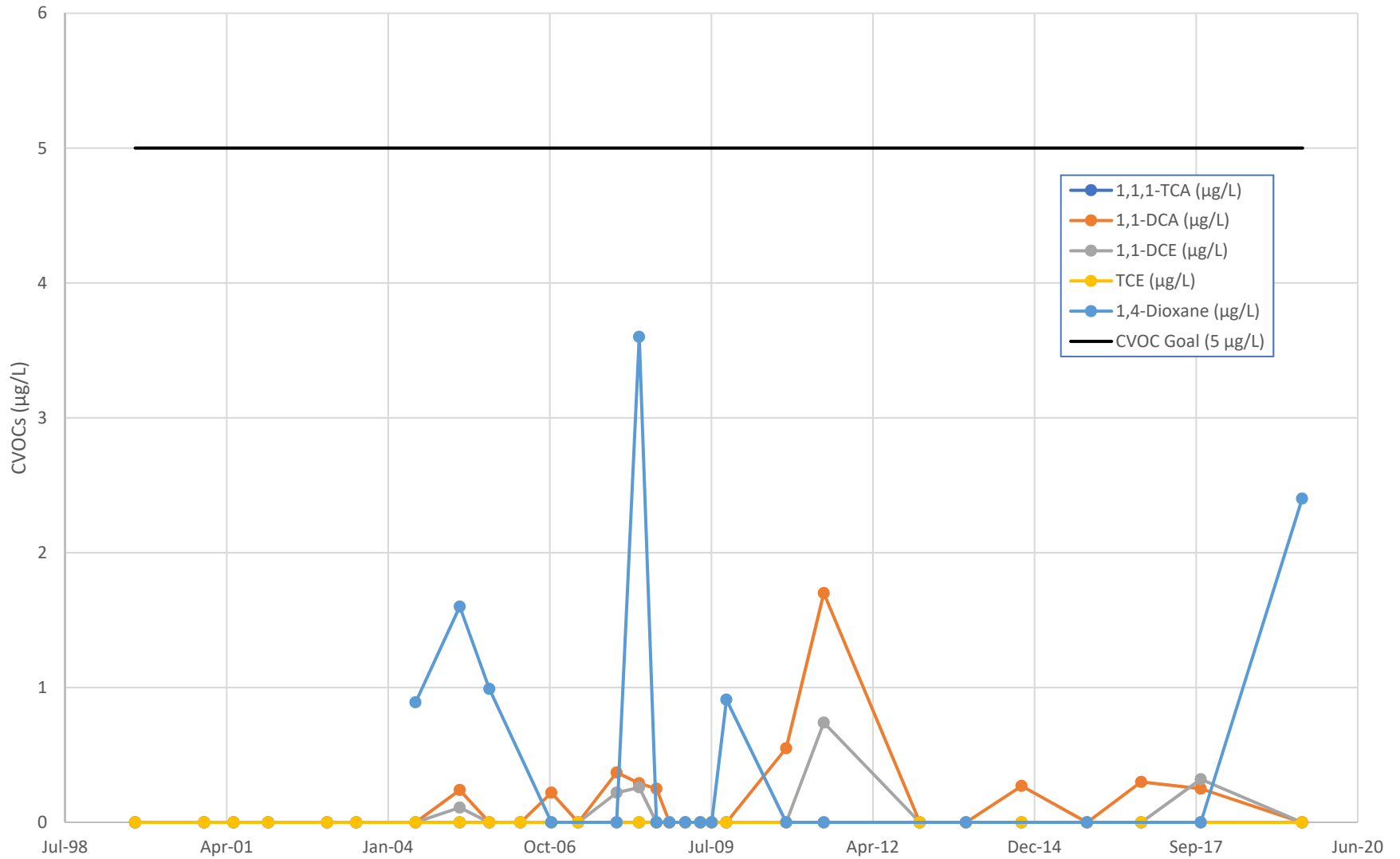
Note: Results that were not detected above the reporting limit are presented as zero.

MW-7R



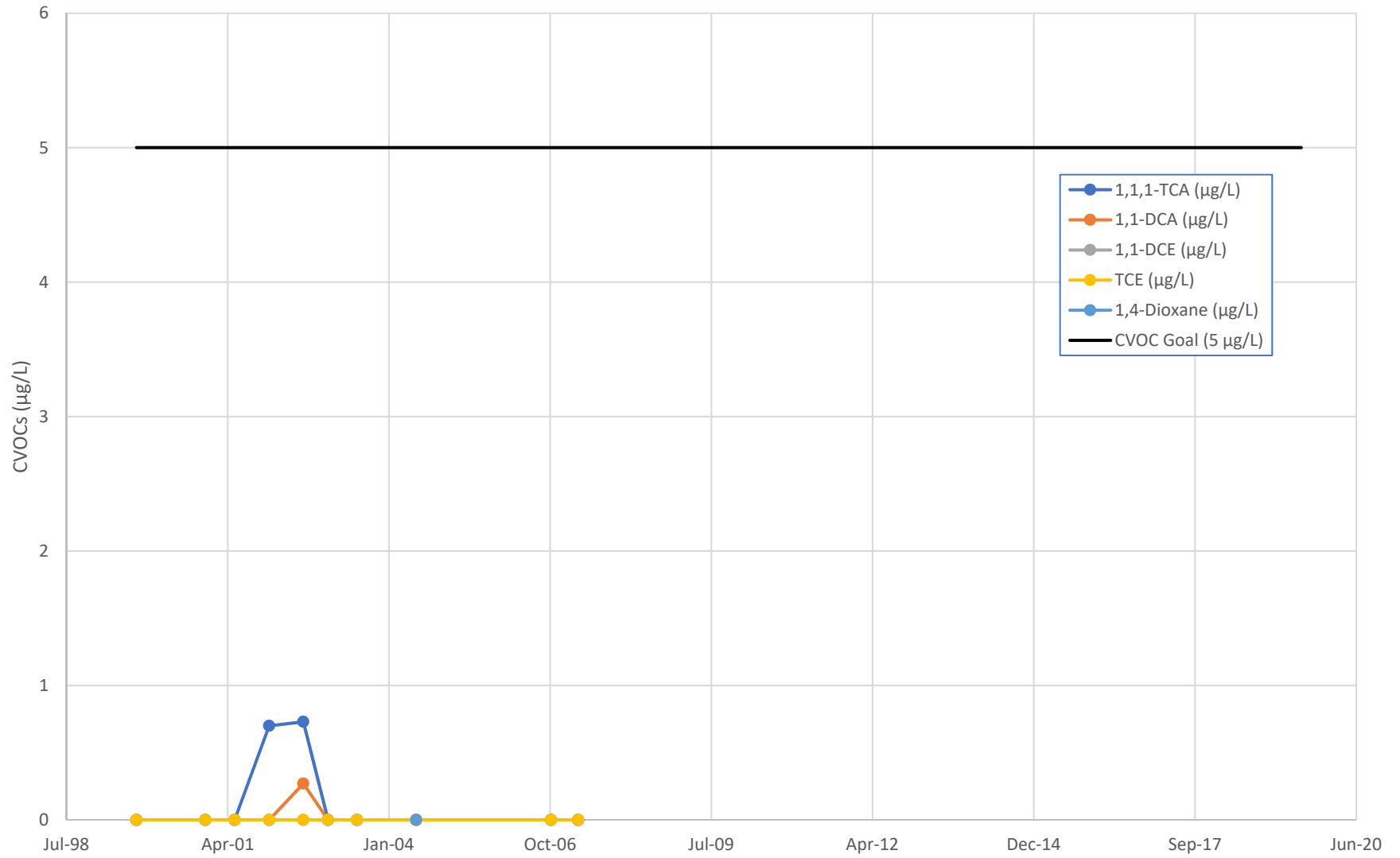
Note: Results that were not detected above the reporting limit are presented as zero.

MW-8B



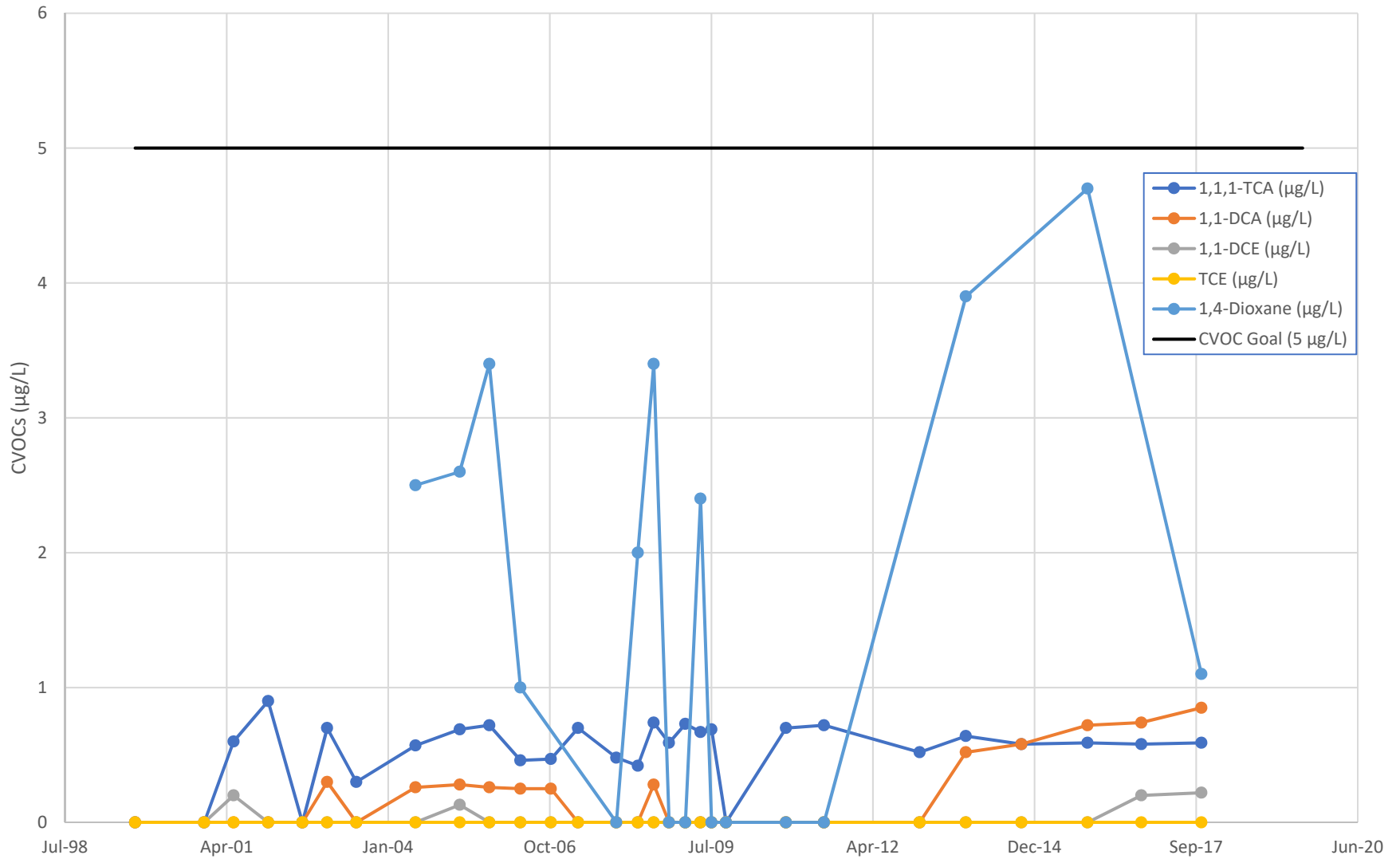
Note: Results that were not detected above the reporting limit are presented as zero.

MW-9



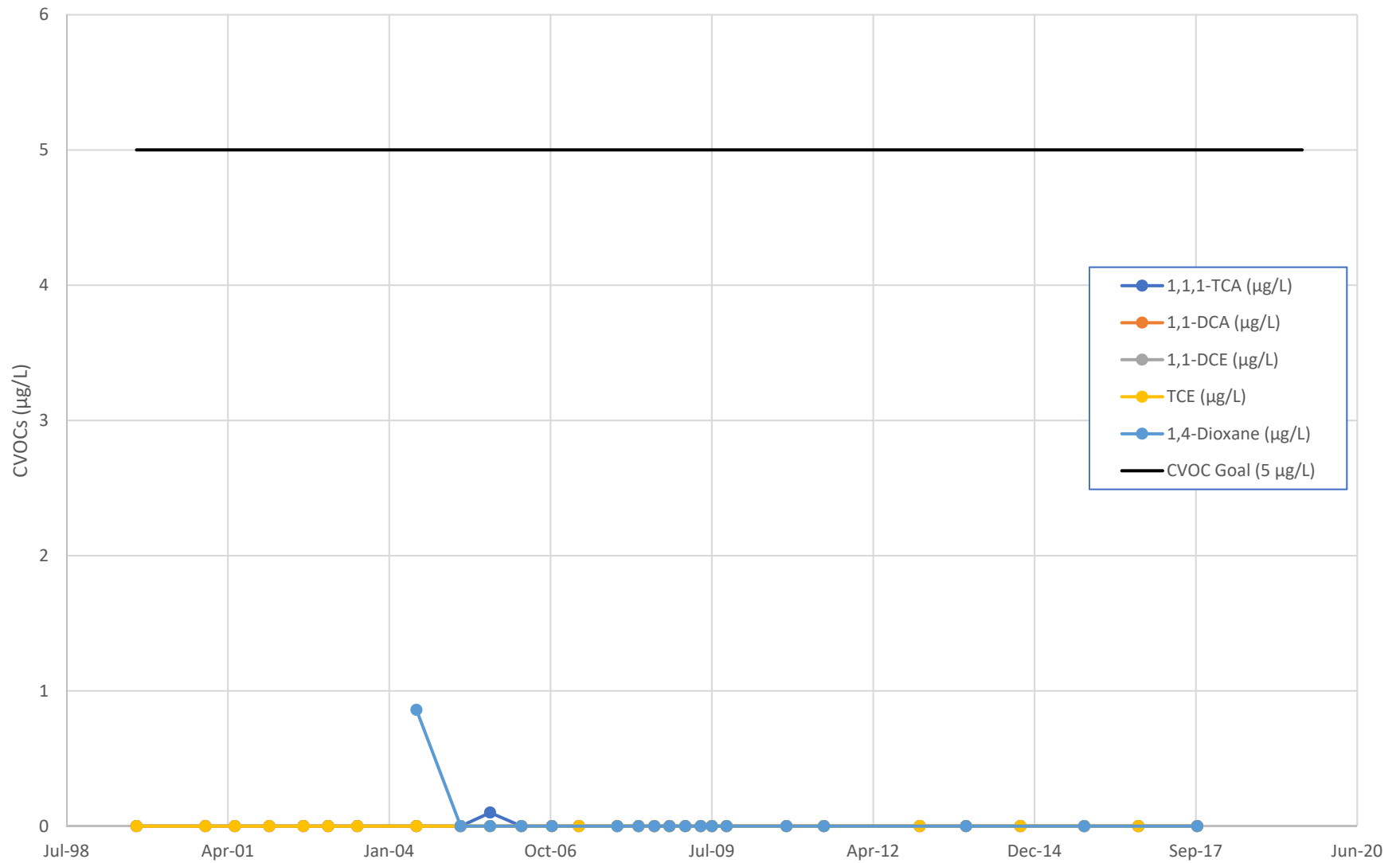
Note: Results that were not detected above the reporting limit are presented as zero.

MW-9B



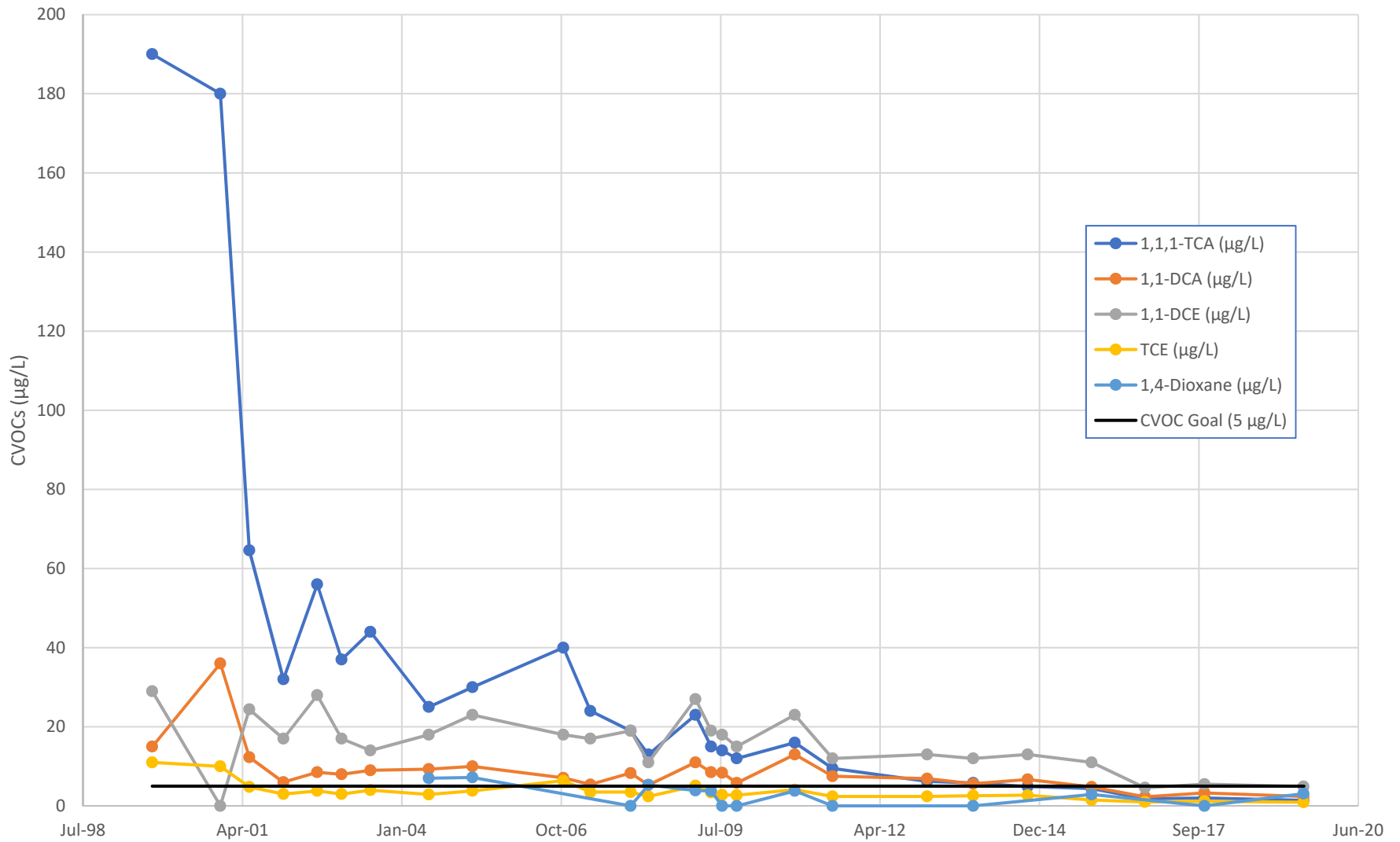
Note: Results that were not detected above the reporting limit are presented as zero.

MW-10B



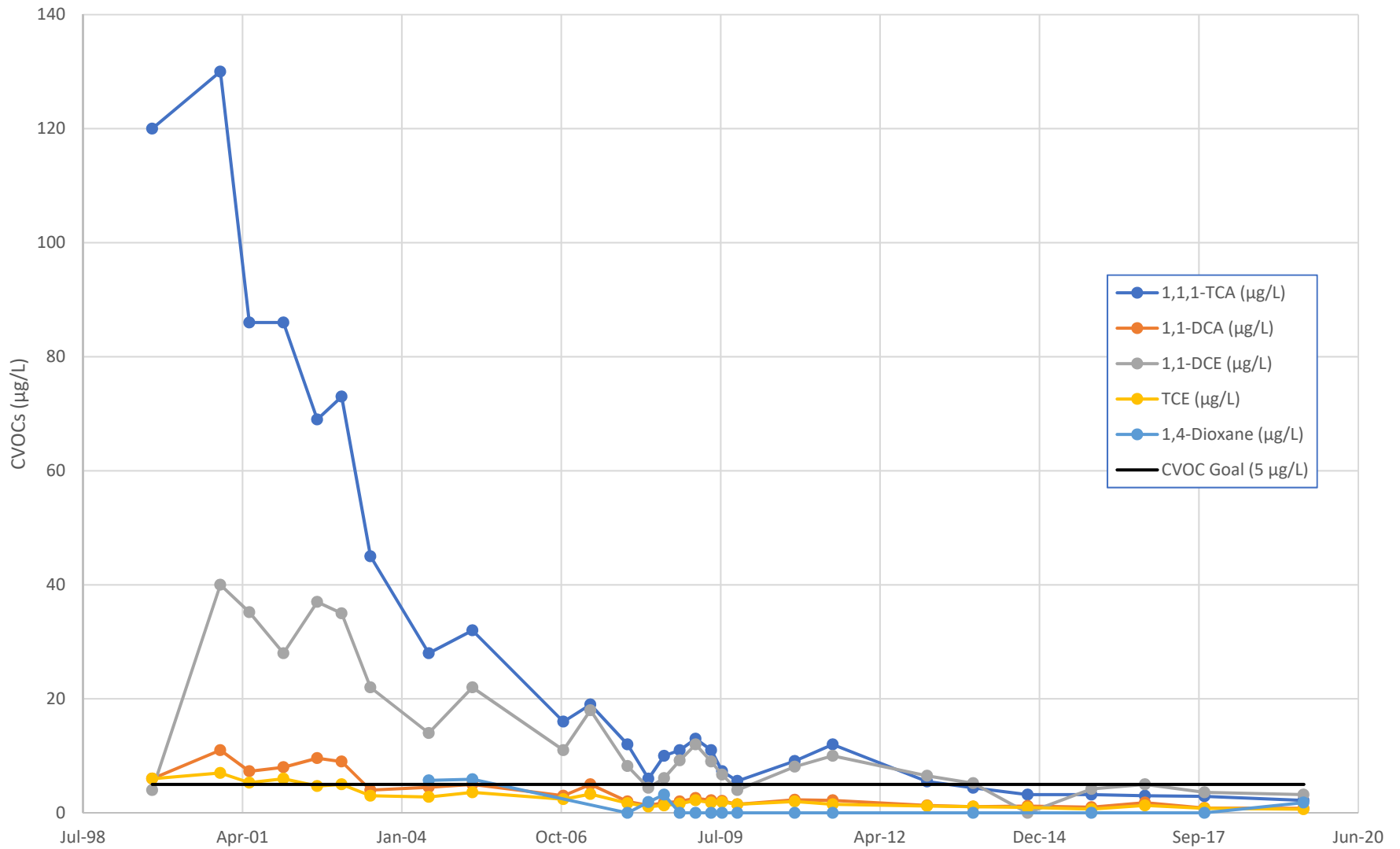
Note: Results that were not detected above the reporting limit are presented as zero.

MW-11B



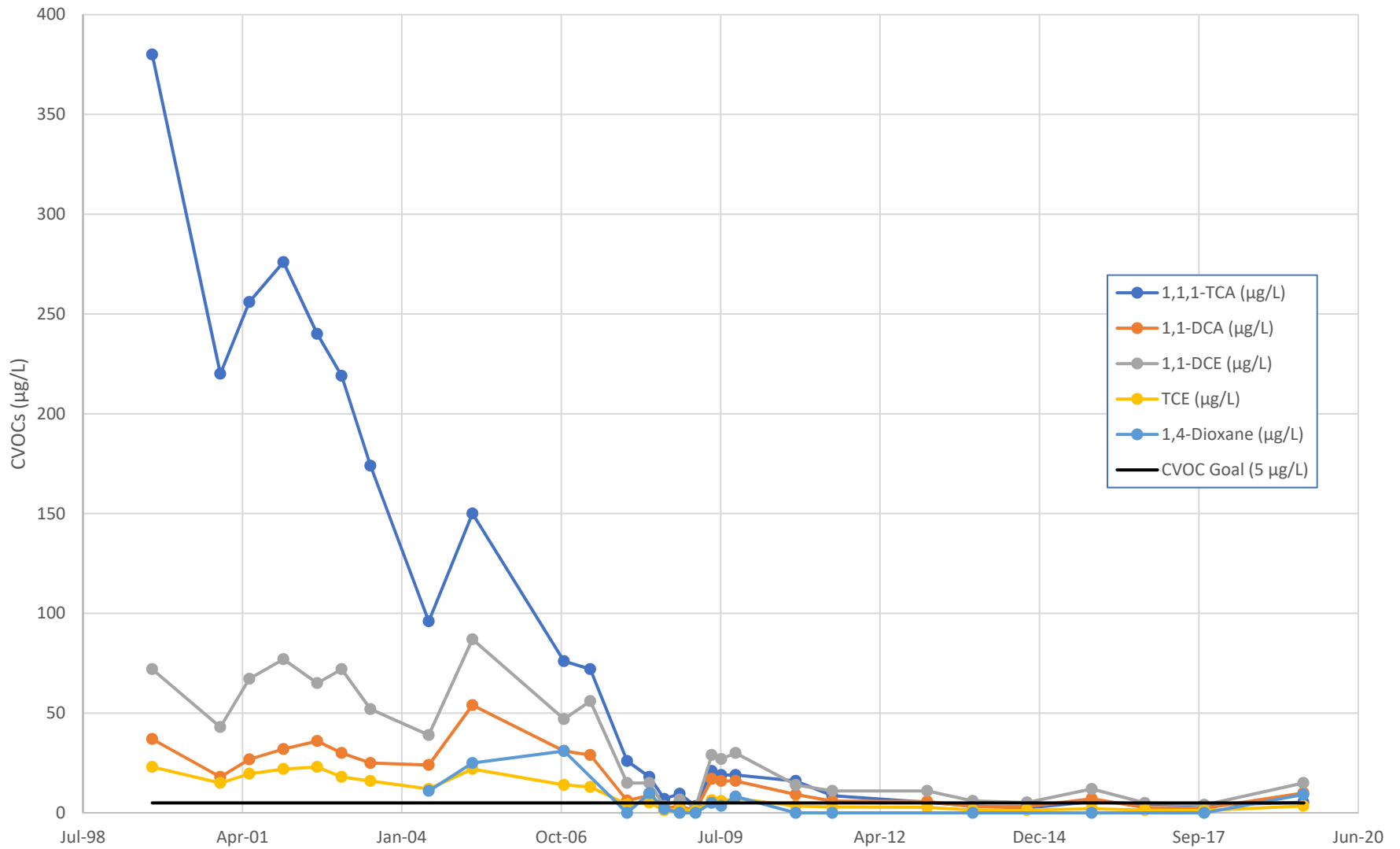
Note: Results that were not detected above the reporting limit are presented as zero.

MW-11C



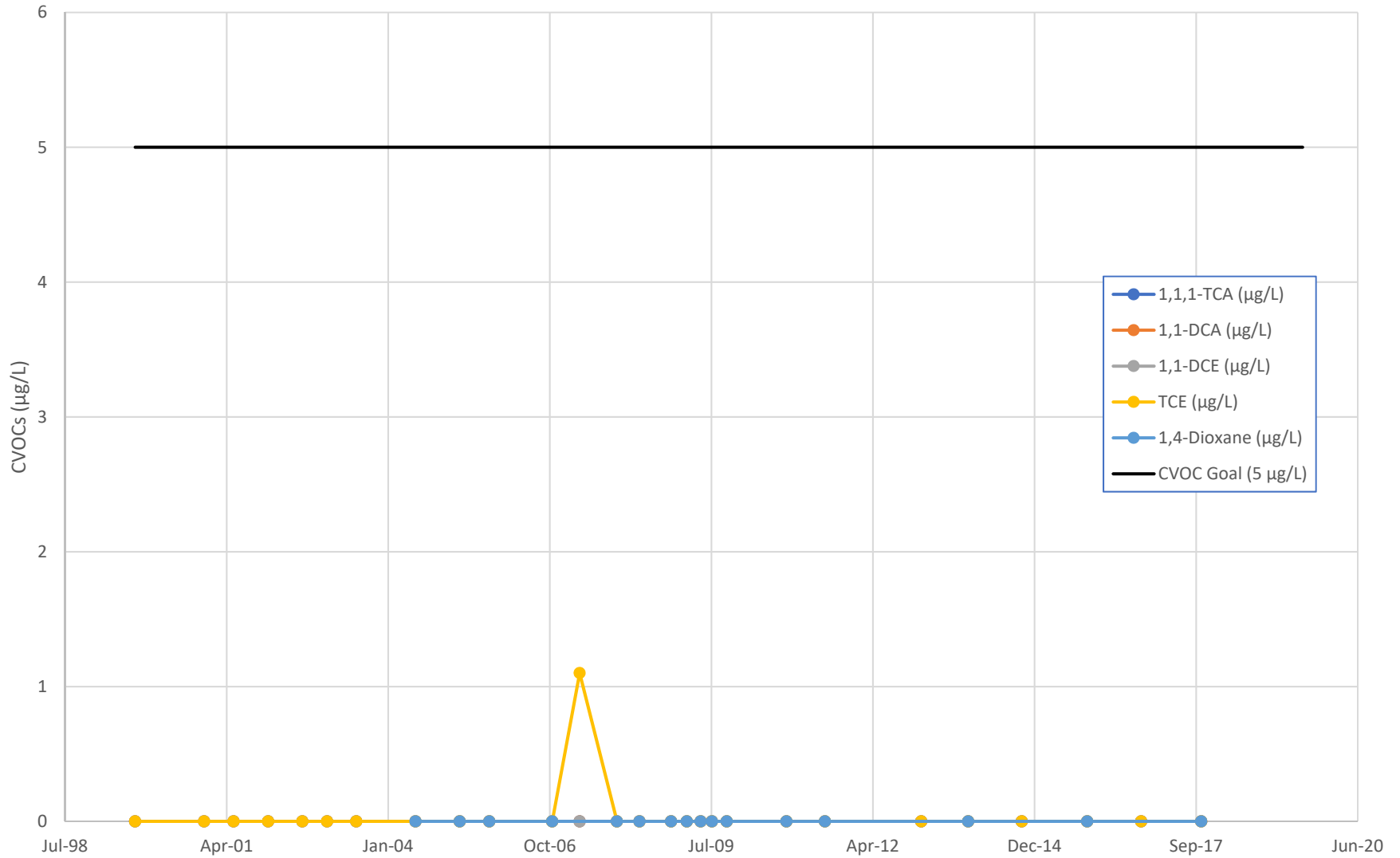
Note: Results that were not detected above the reporting limit are presented as zero.

MW-12B



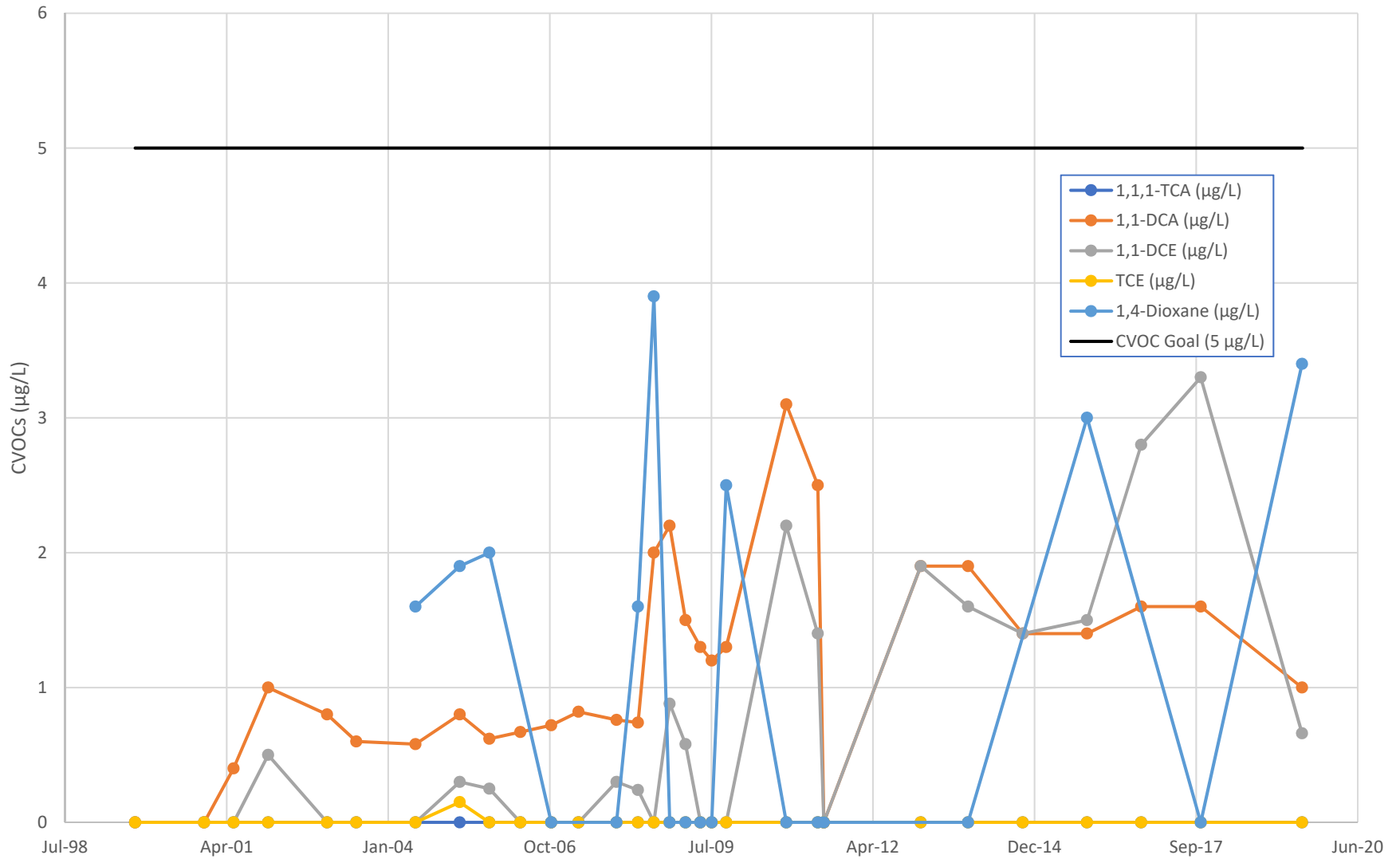
Note: Results that were not detected above the reporting limit are presented as zero.

MW-13B



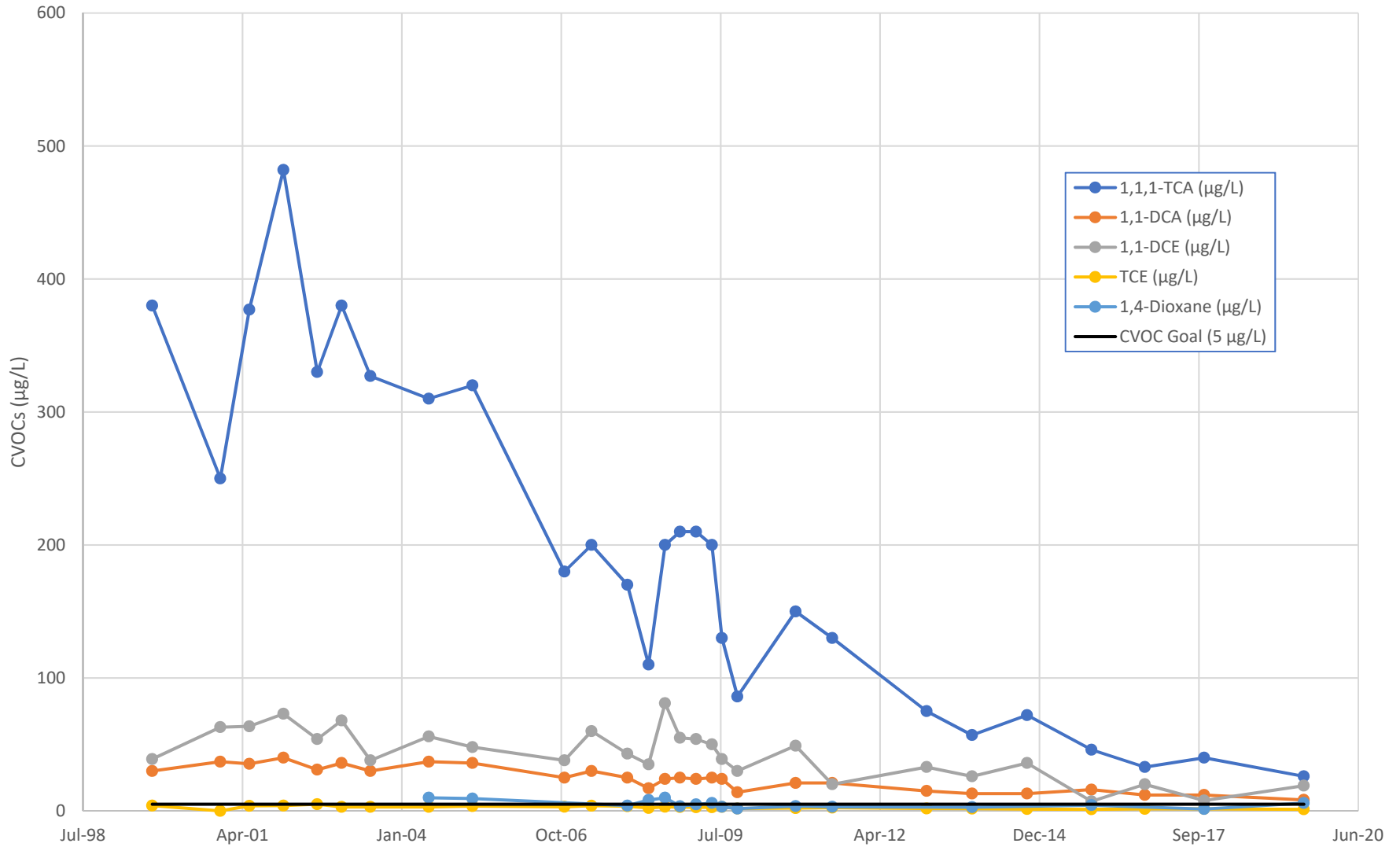
Note: Results that were not detected above the reporting limit are presented as zero.

MW-14B



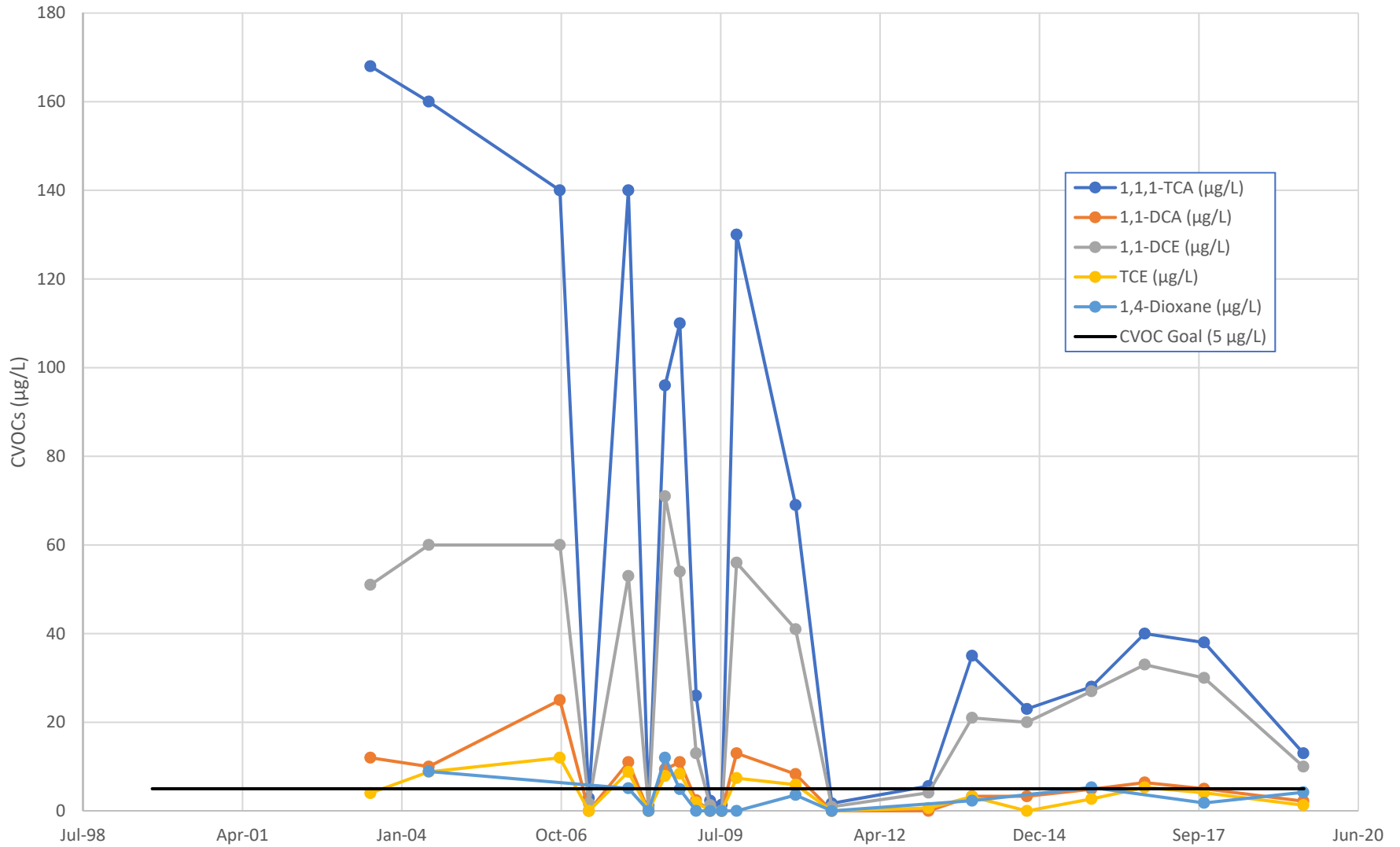
Note: Results that were not detected above the reporting limit are presented as zero.

MW-15B



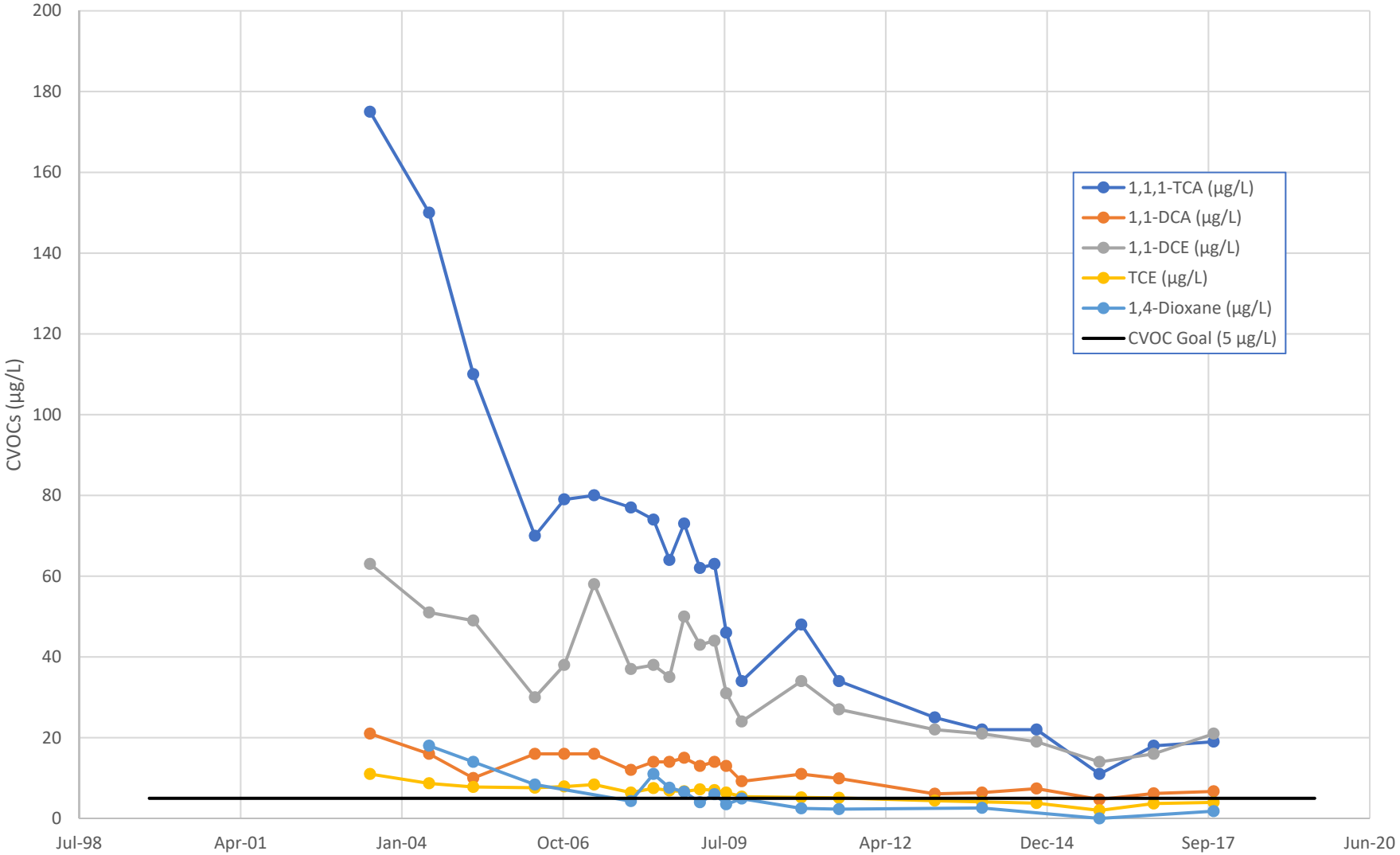
Note: Results that were not detected above the reporting limit are presented as zero.

MW-16



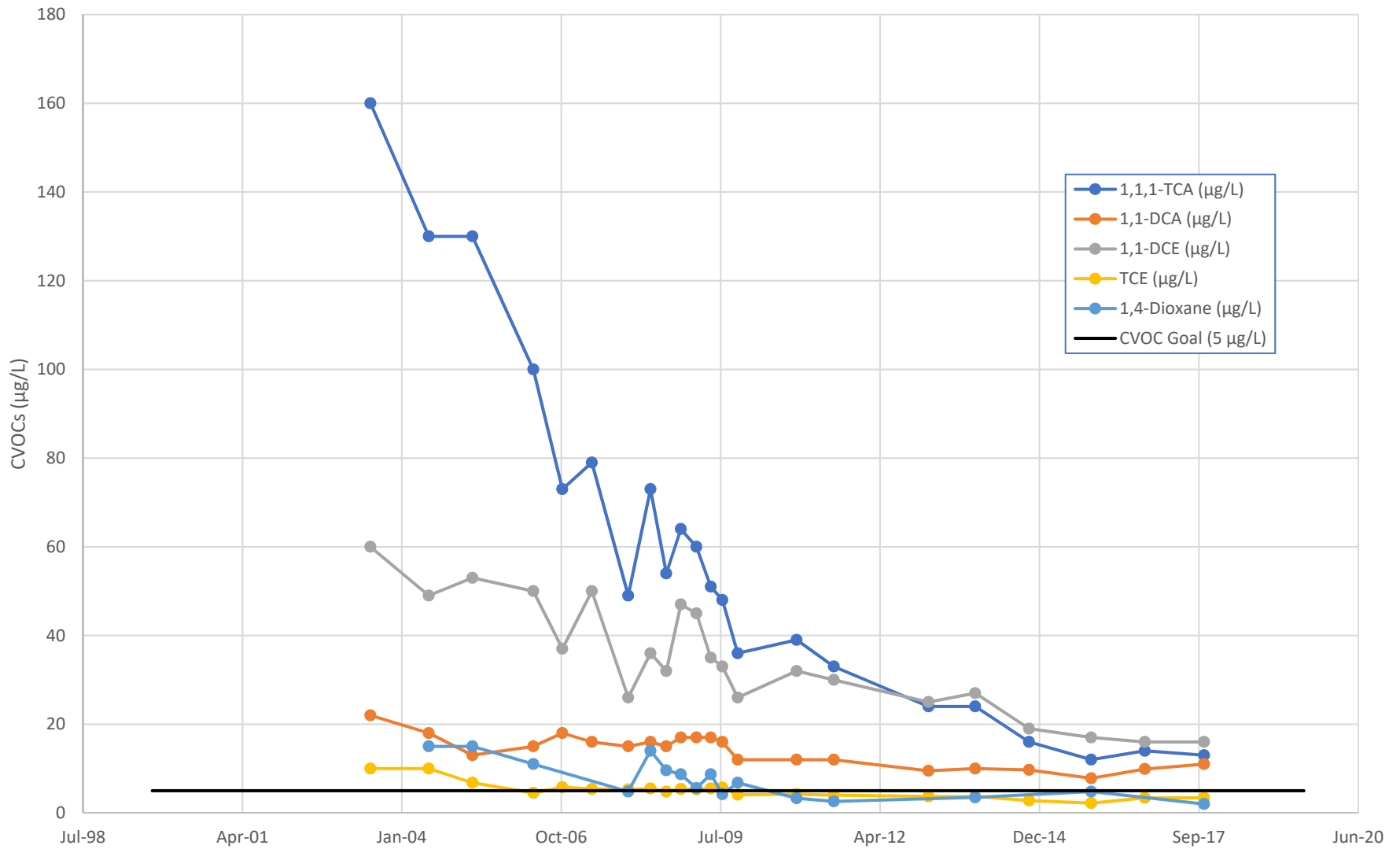
Note: Results that were not detected above the reporting limit are presented as zero.

MW-17-1



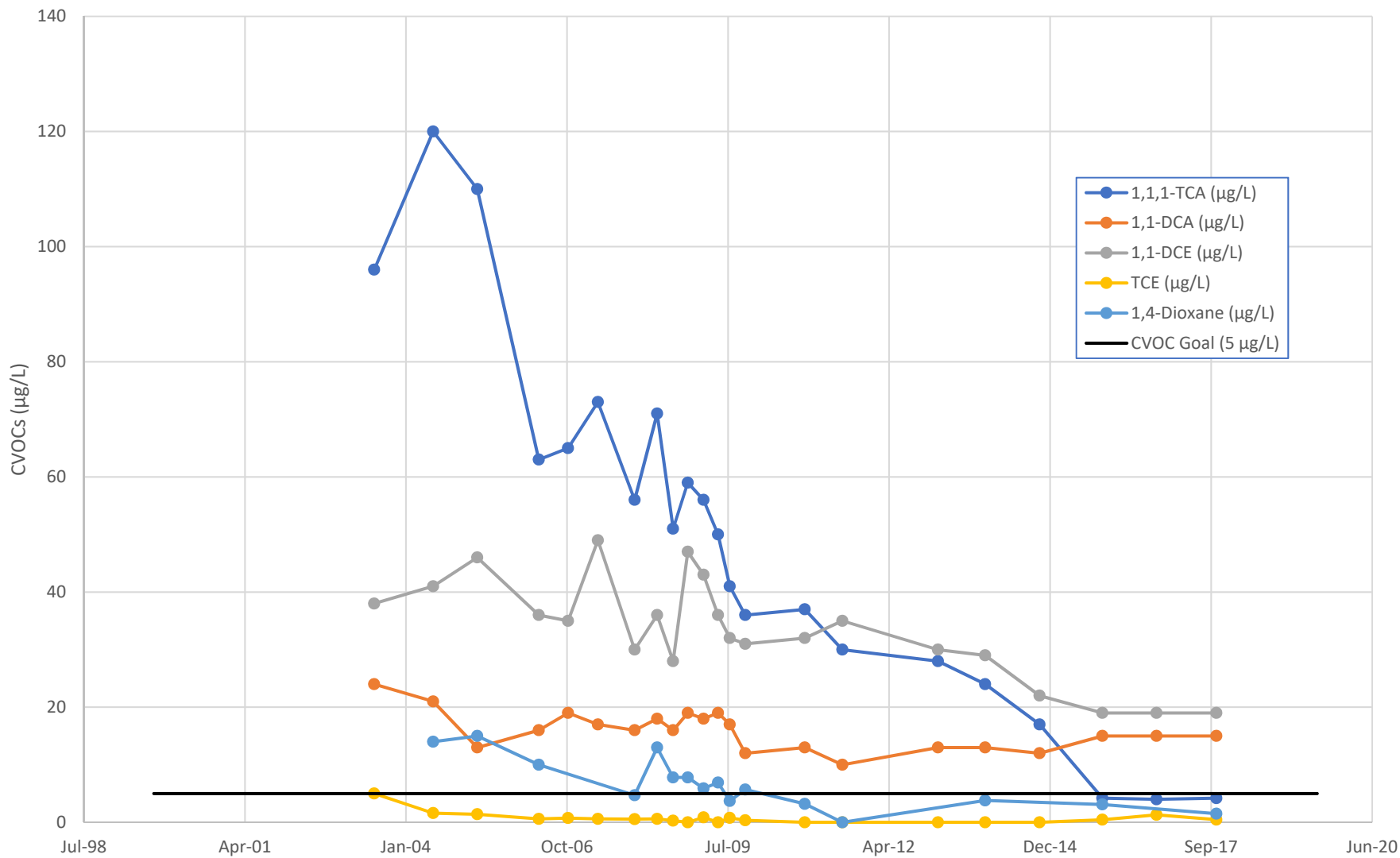
Note: Results that were not detected above the reporting limit are presented as zero.

MW-17-2



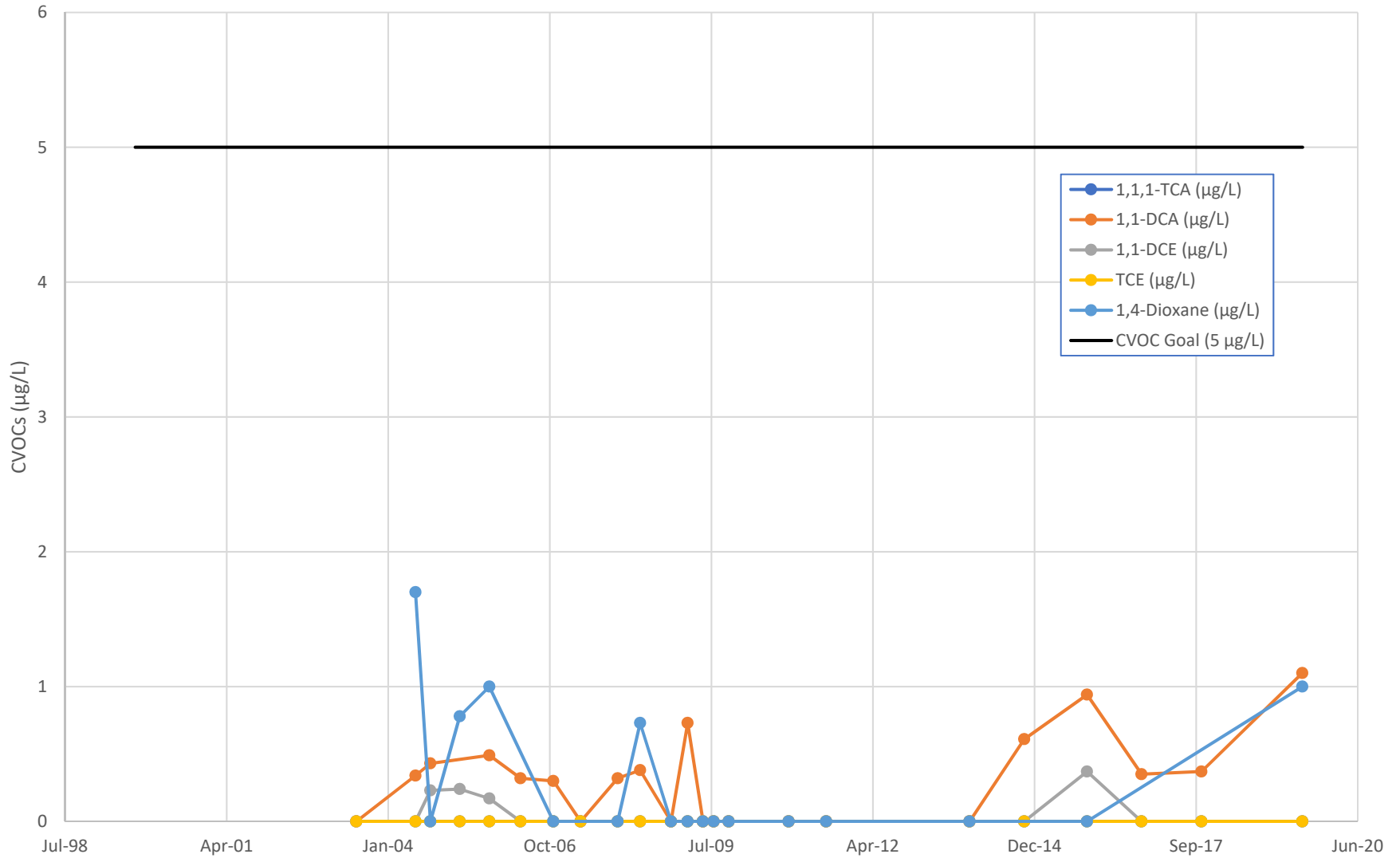
Note: Results that were not detected above the reporting limit are presented as zero.

MW-17-3



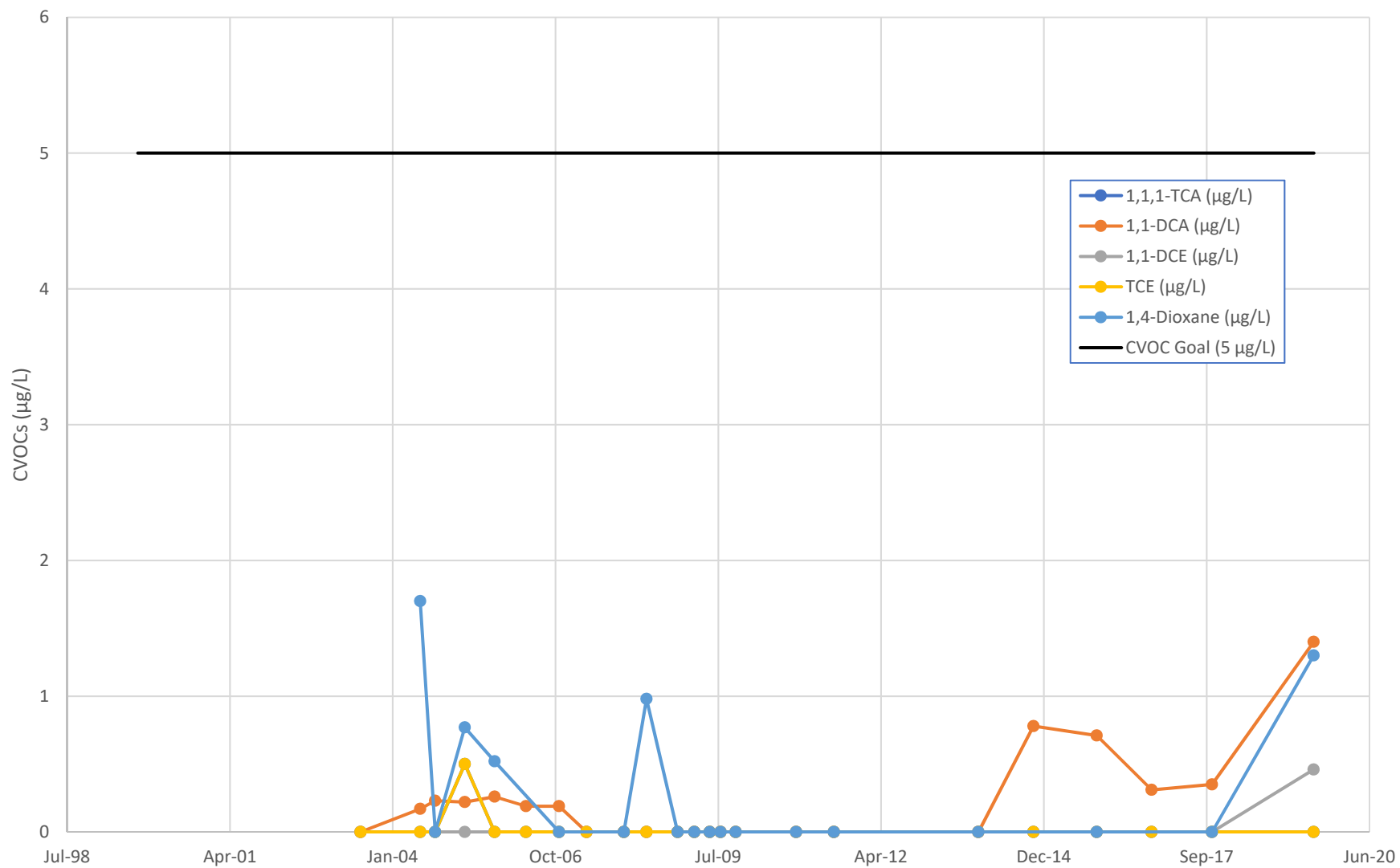
Note: Results that were not detected above the reporting limit are presented as zero.

MW-18-1



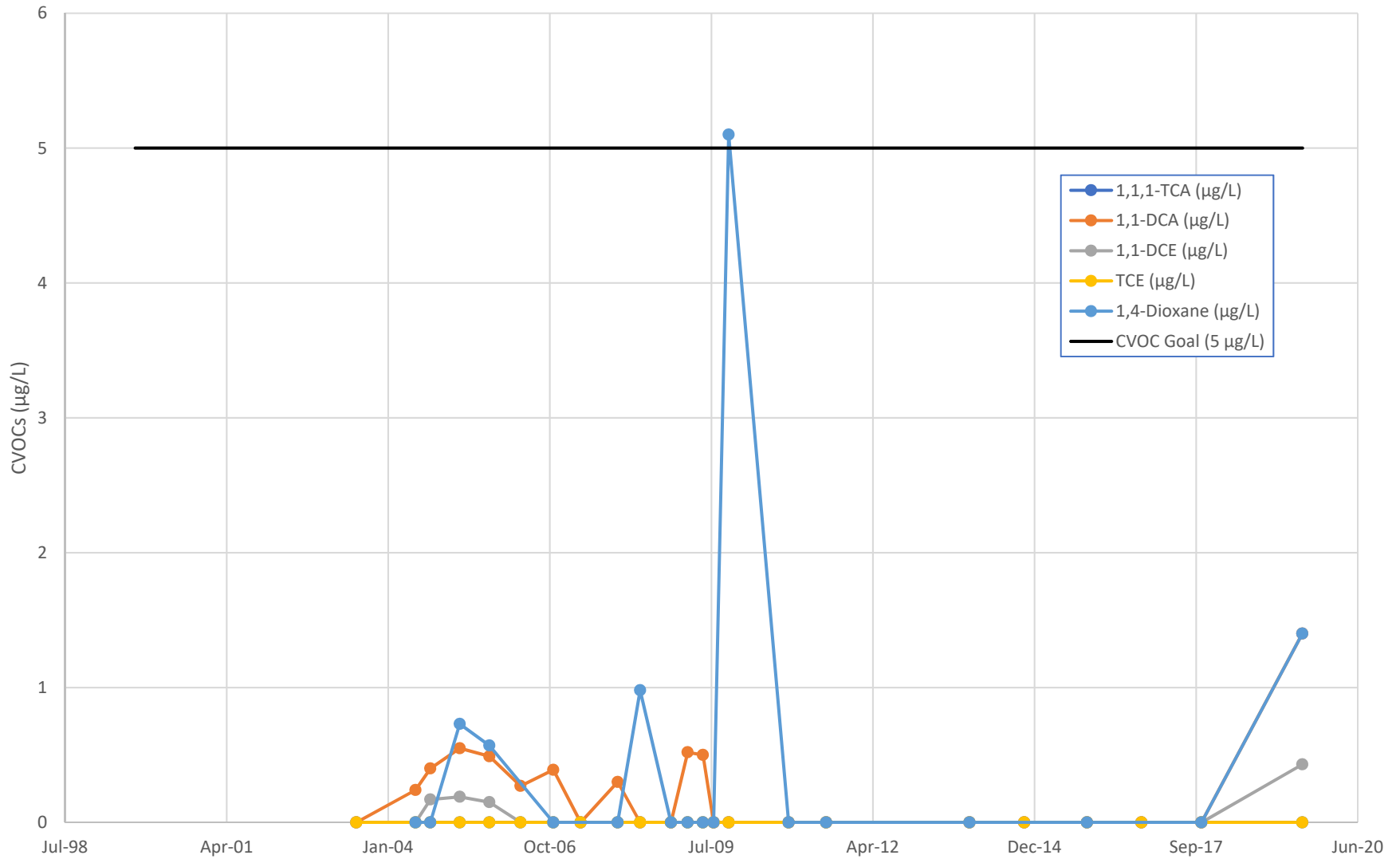
Note: Results that were not detected above the reporting limit are presented as zero.

MW-18-2



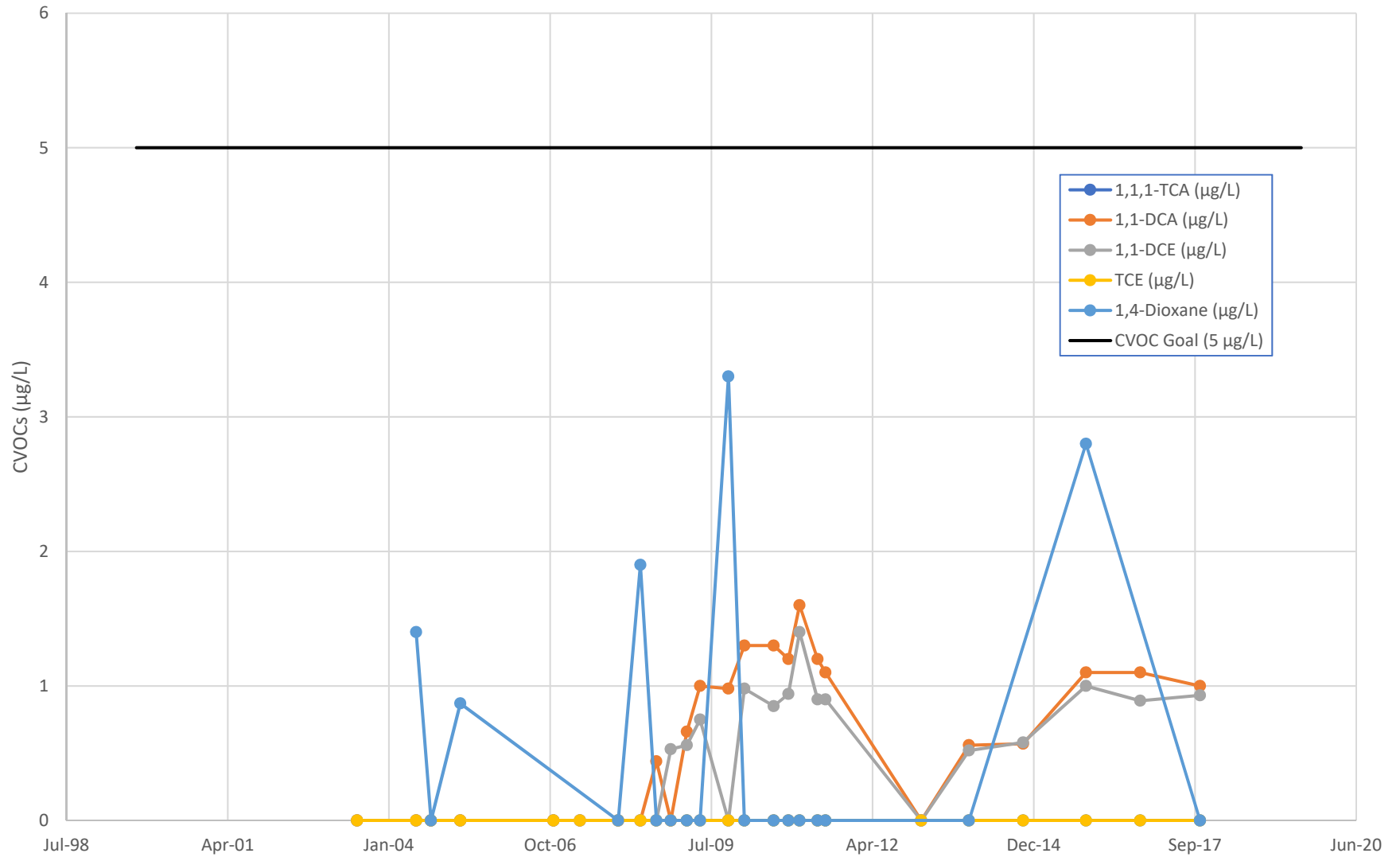
Note: Results that were not detected above the reporting limit are presented as zero.

MW-18-3



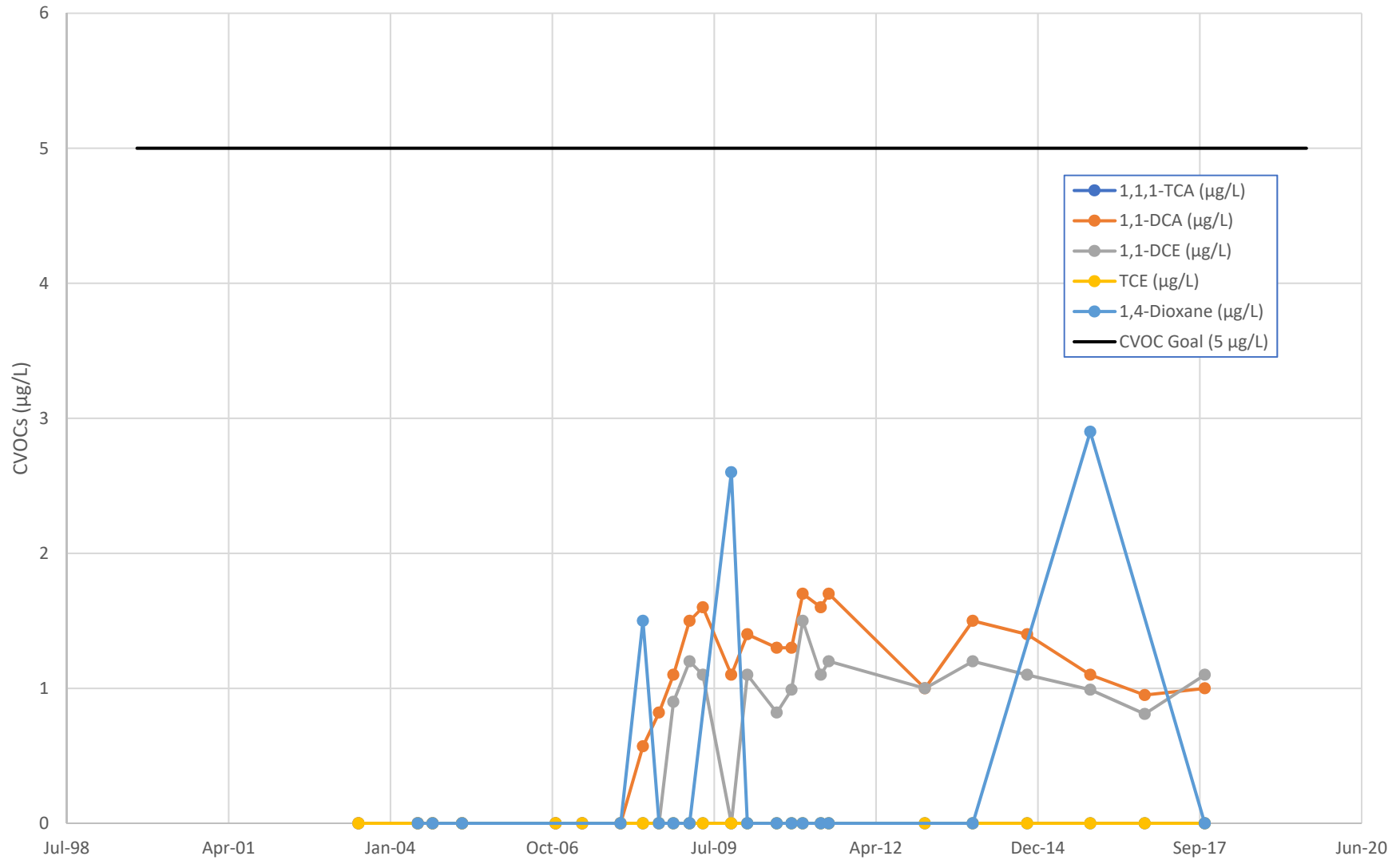
Note: Results that were not detected above the reporting limit are presented as zero.

MW-19-1



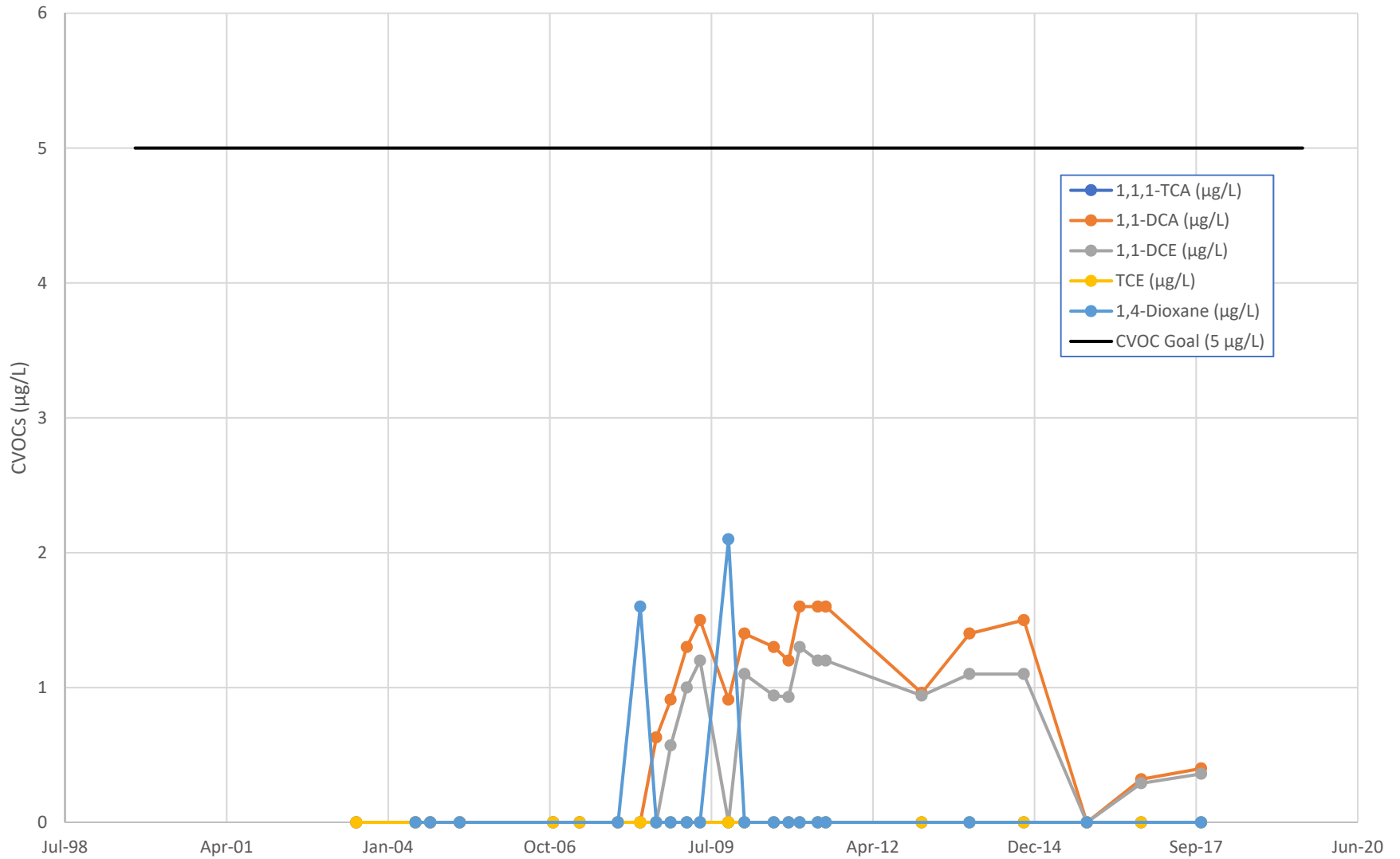
Note: Results that were not detected above the reporting limit are presented as zero.

MW-19-2



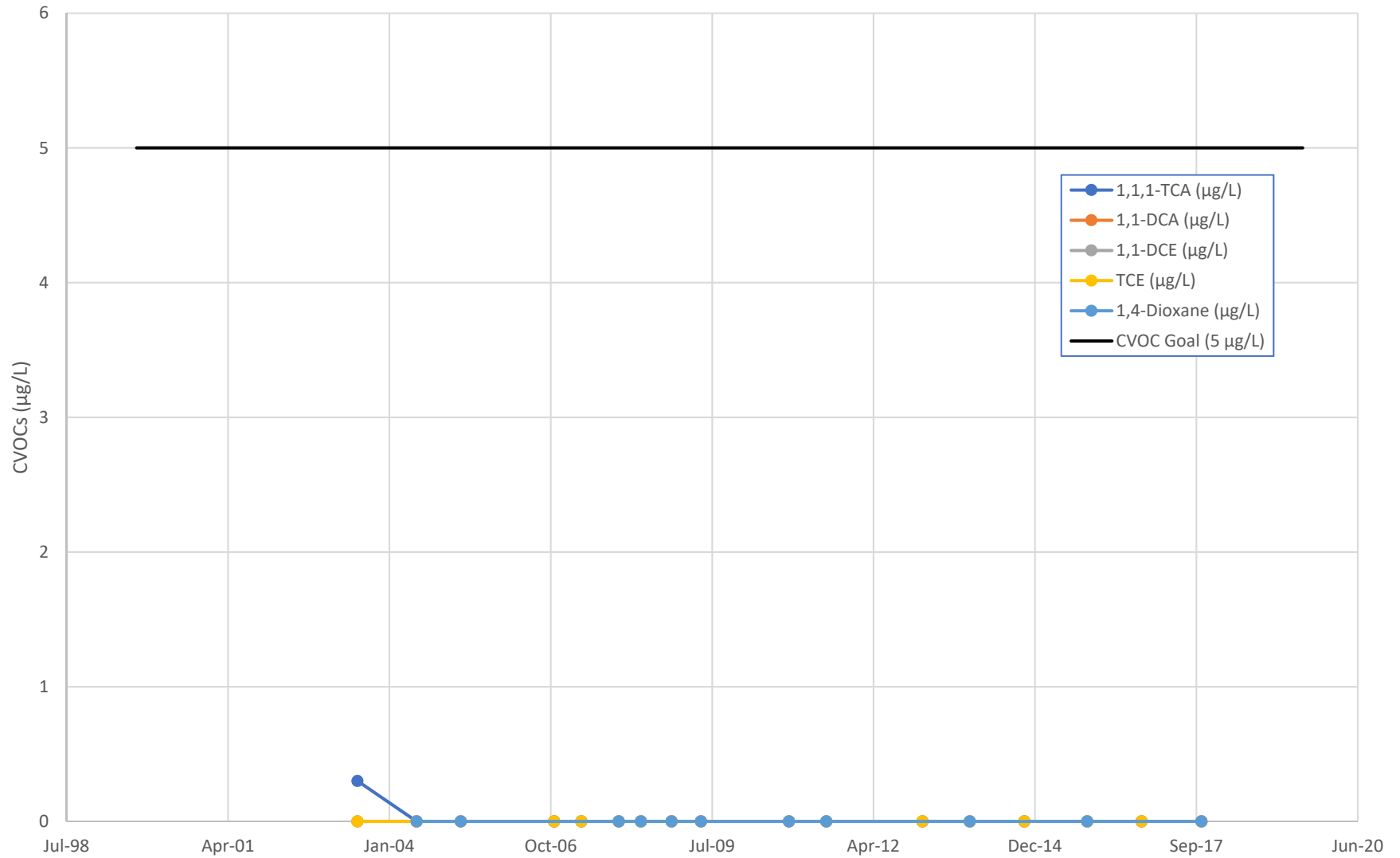
Note: Results that were not detected above the reporting limit are presented as zero.

MW-19-3



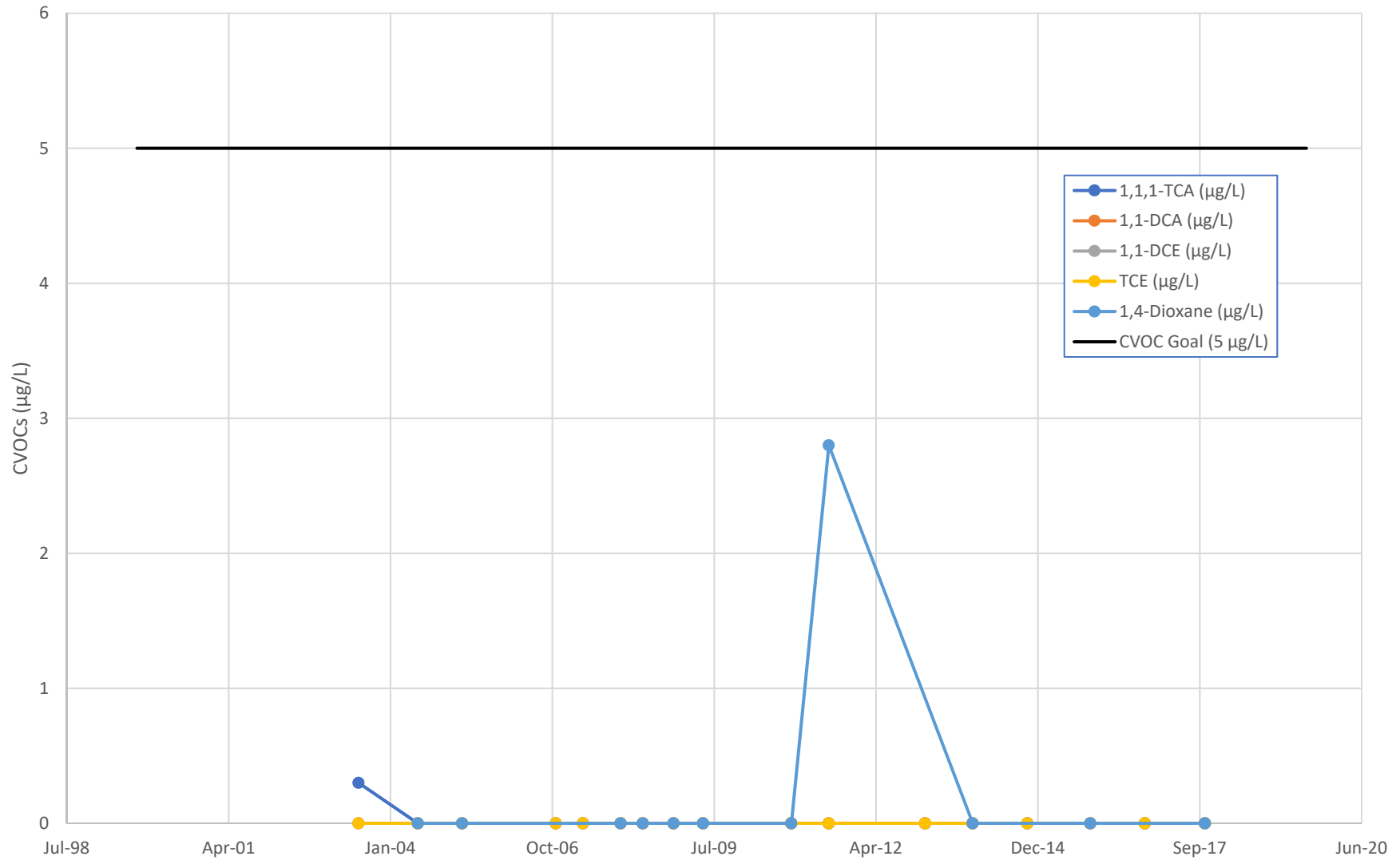
Note: Results that were not detected above the reporting limit are presented as zero.

MW-20-1



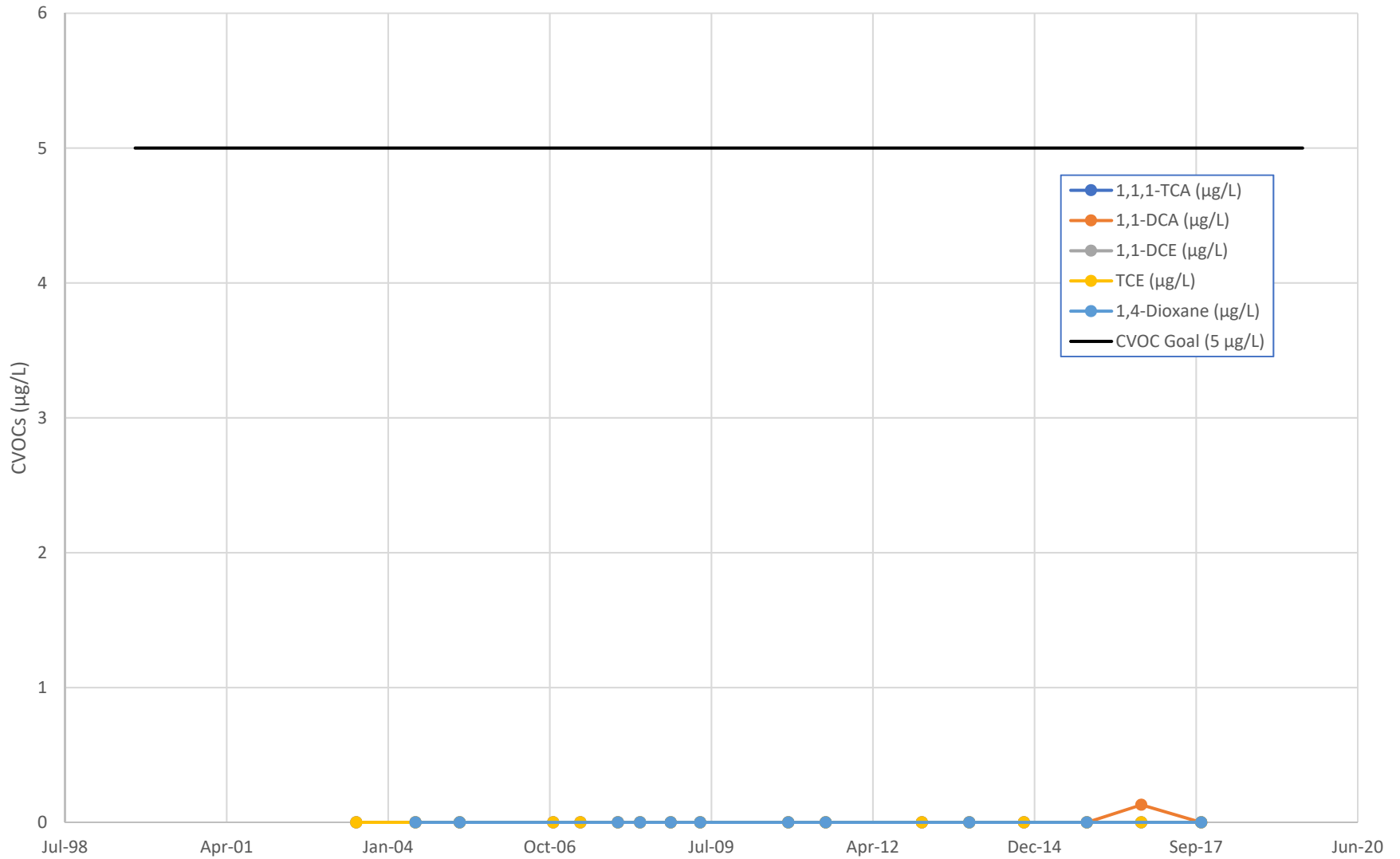
Note: Results that were not detected above the reporting limit are presented as zero.

MW-20-2



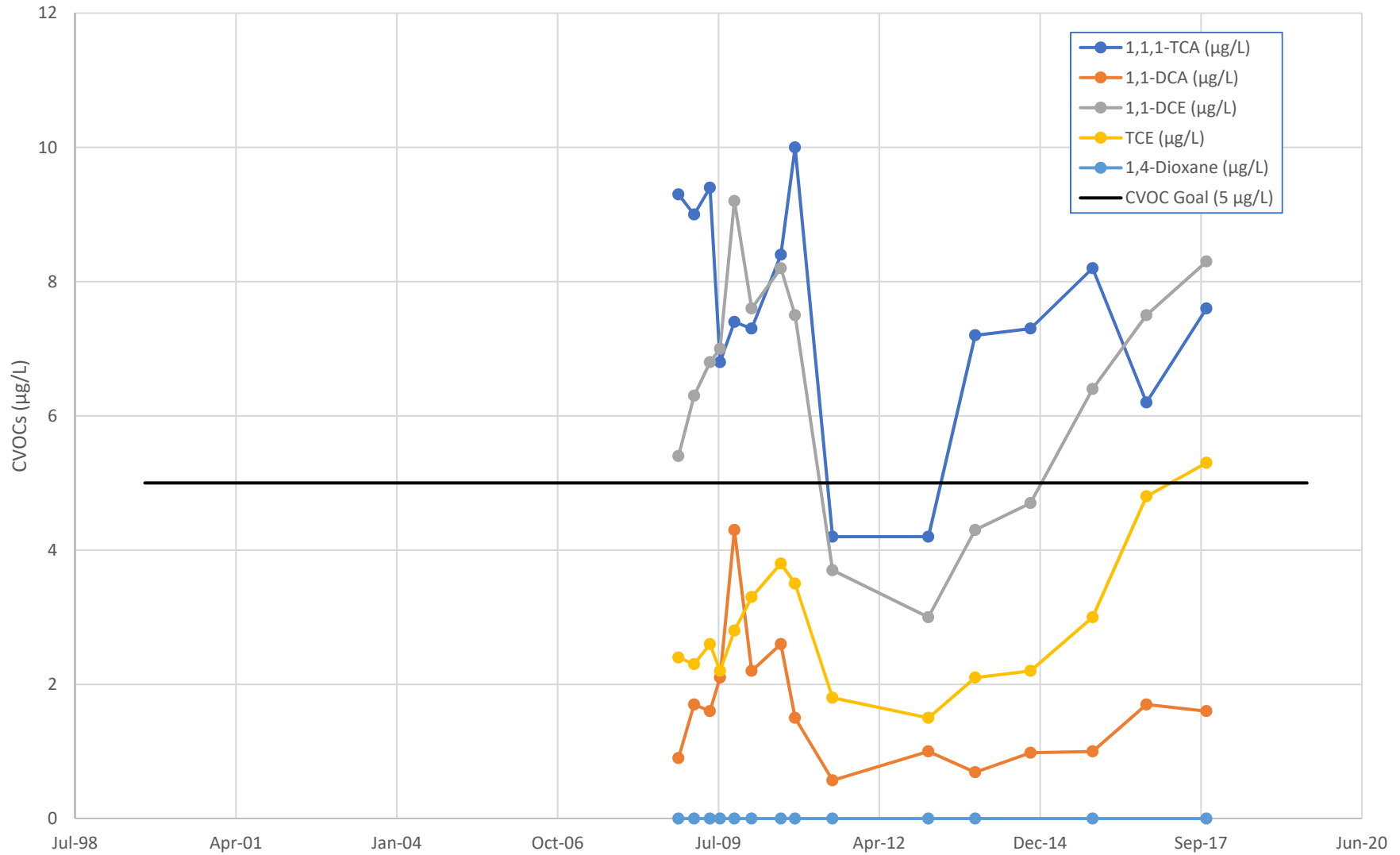
Note: Results that were not detected above the reporting limit are presented as zero.

MW-20-3



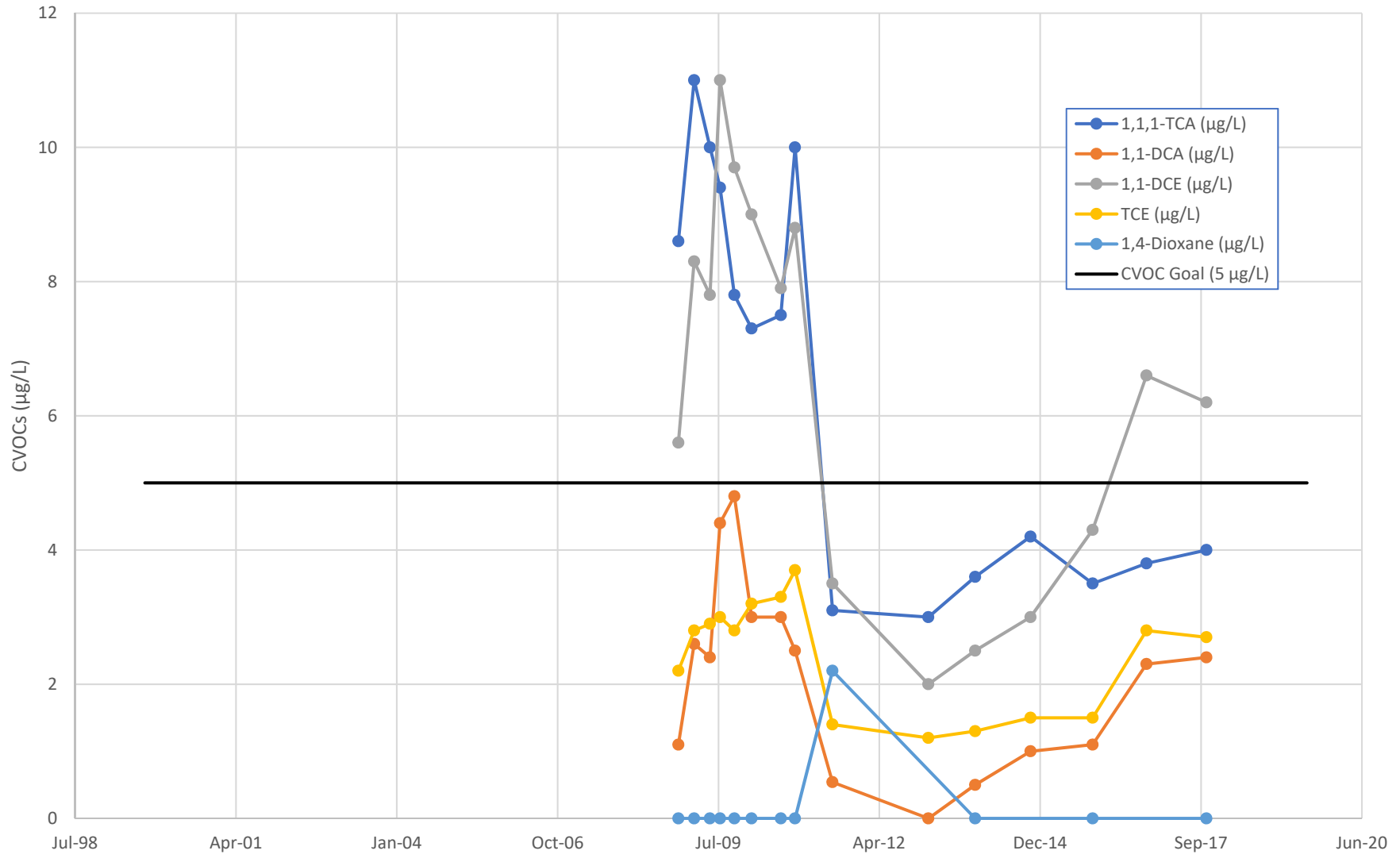
Note: Results that were not detected above the reporting limit are presented as zero.

MW-21-1



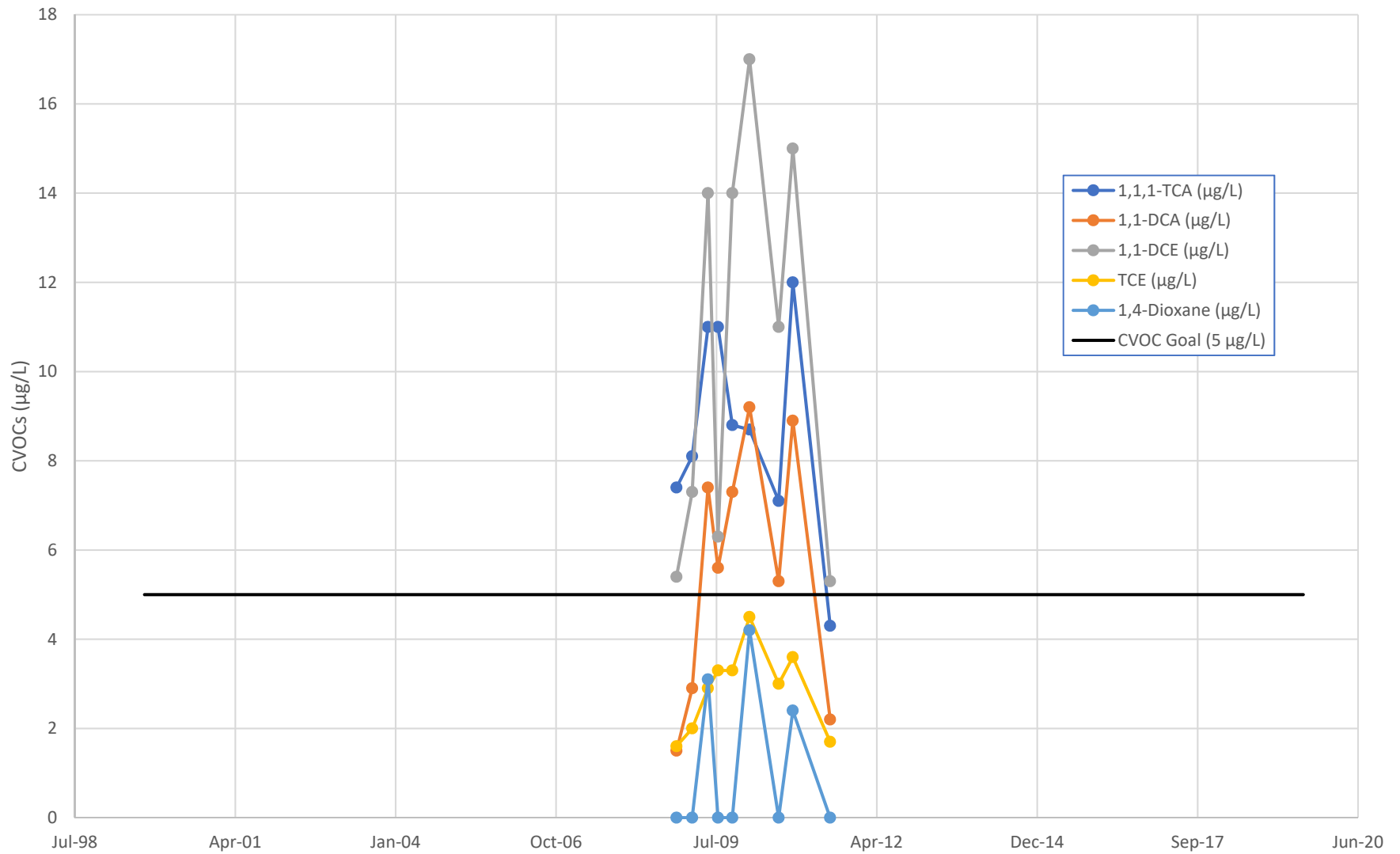
Note: Results that were not detected above the reporting limit are presented as zero.

MW-21-2



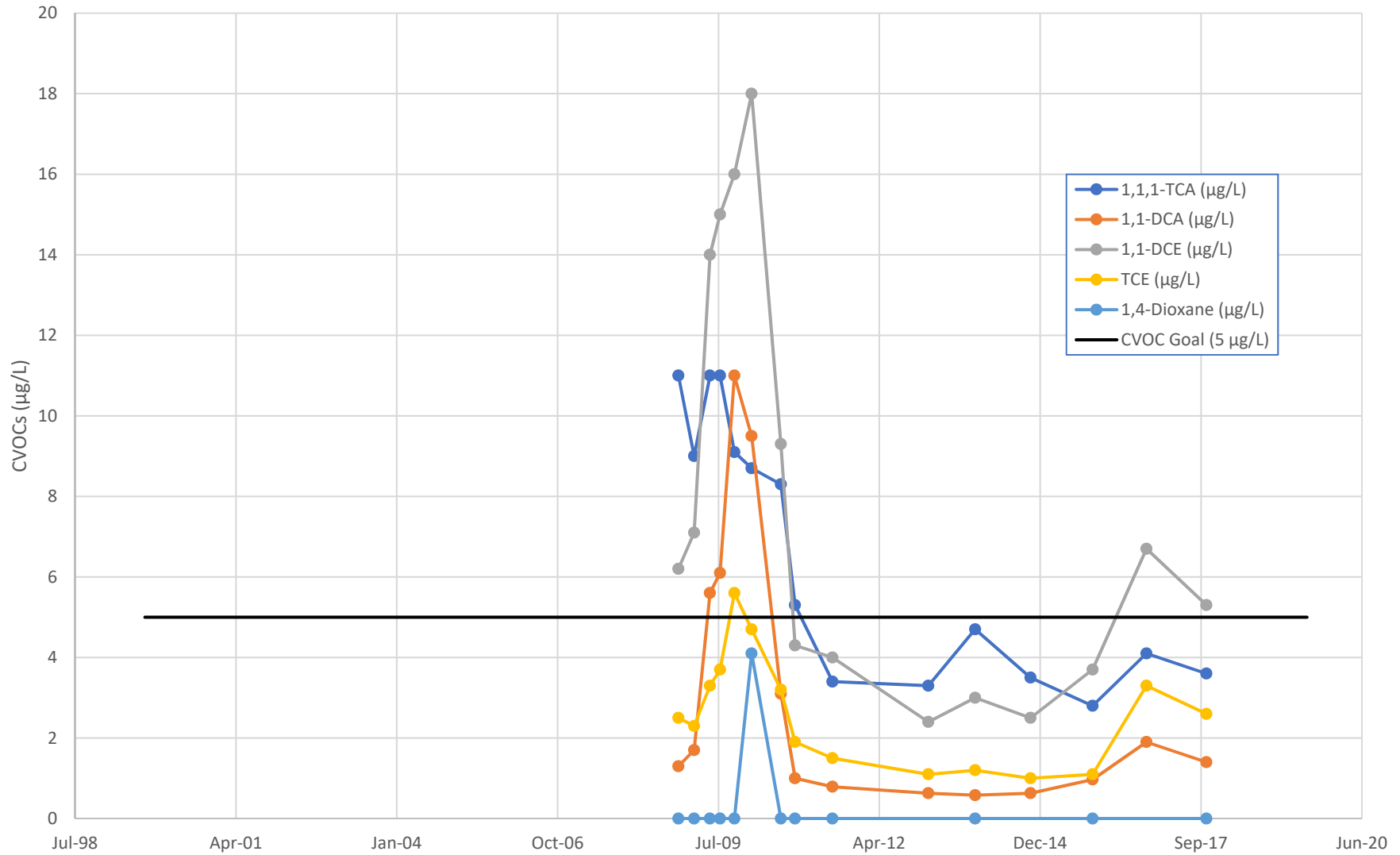
Note: Results that were not detected above the reporting limit are presented as zero.

MW-21-3



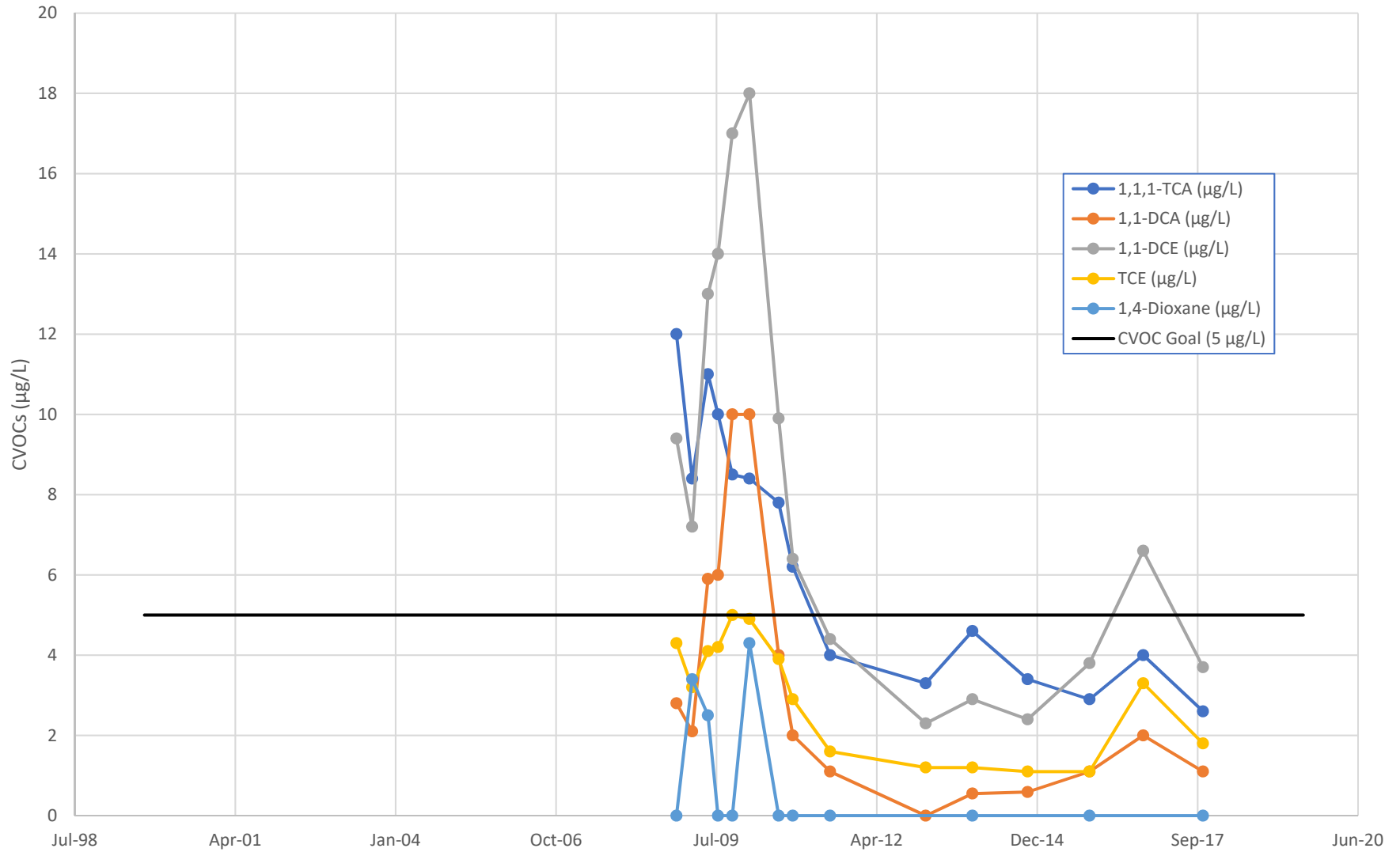
Note: Results that were not detected above the reporting limit are presented as zero.

MW-21-4



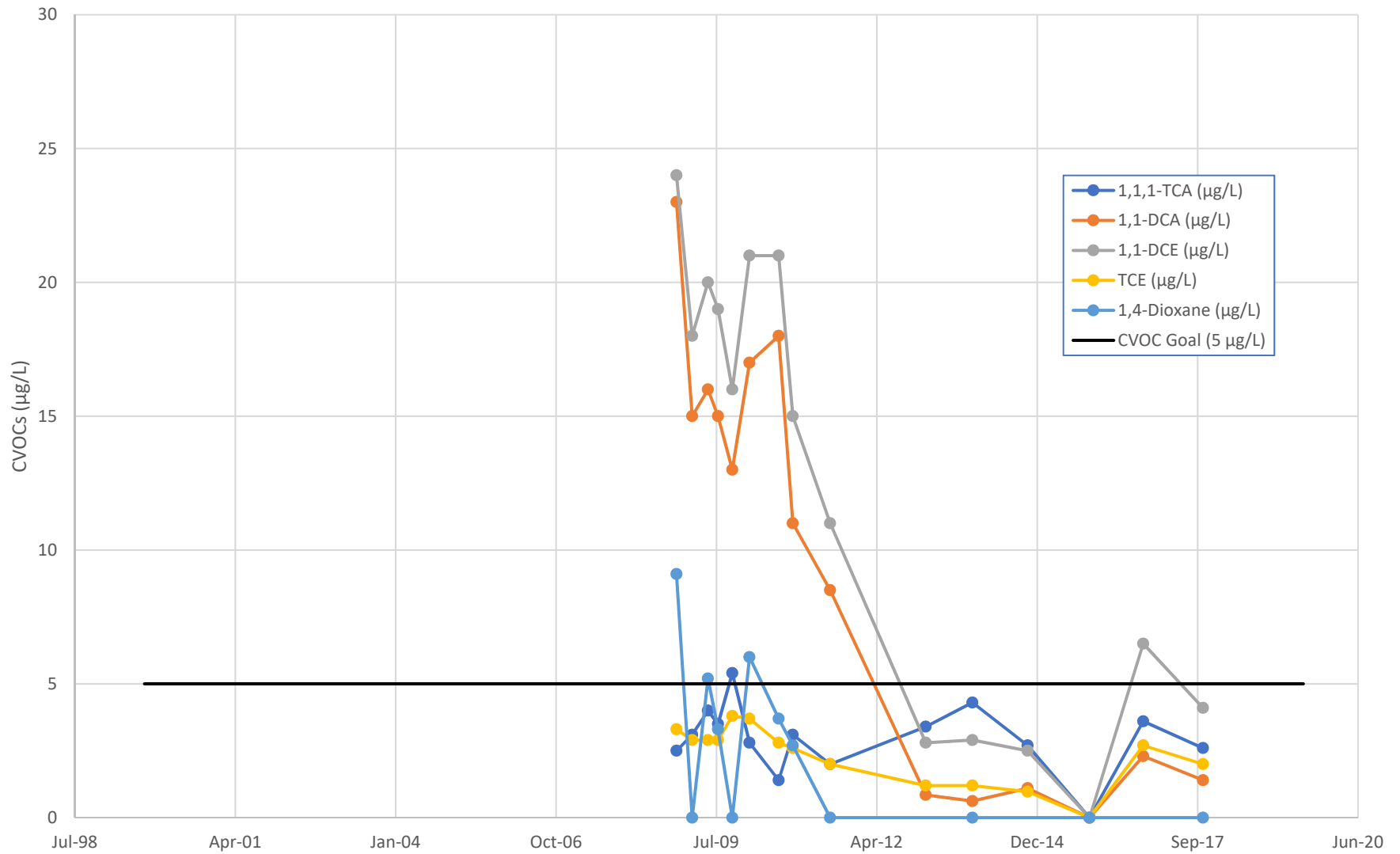
Note: Results that were not detected above the reporting limit are presented as zero.

MW-21-5



Note: Results that were not detected above the reporting limit are presented as zero.

MW-21-6



Note: Results that were not detected above the reporting limit are presented as zero.